## **Findings and Critical Appraisal Tables**

## Review question 1. Home based intermediate care:

- a) What is the effectiveness and cost effectiveness of home based intermediate care?
- b) What are the views and experiences of people using services, their families and carers in relation to home based intermediate care?
- c) What are the views and experiences of health, social care and other practitioners about home based intermediate care?

## Research question 1 – Findings tables – Effectiveness

## 1. Crotty M, Giles LC, Halbert J et al. (2008) Home versus day rehabilitation: A randomised controlled trial. Age and Ageing 37: 628-33

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: 'To	Participants: Service users and	Findings - effect sizes:	Overall assessment
assess the effect of	their families, partners and carers	NB. Effect sizes not reported by the authors.	of internal validity:
home versus day	- Medically stable patients	Effect sizes presented here were calculated	+
rehabilitation on	referred for ambulatory	by the review team.	
patient outcomes'	rehabilitation at discharge from		Overall assessment
(p628).	hospital. Patients were eligible if	Service user related outcomes –	of external validity:
" ,	they were assessed as requiring	Mass: Day hospital rehabilitation – baseline	++
Methodology: RCT -	at least 12 rehabilitation sessions	72.3 (SD=16.9); 3 months 74.0 (SD=14.5);	
Participants	by a rehabilitation triage nurse.	change -0.2 (SD=3.7). Home based	Overall validity
randomised to	Reasons for admission to acute	rehabilitation - baseline 75.5 (SD=19.4); 3	rating:
hospital based day	care included stroke, knee	months 75.1 (SD=18.6); change -0.7	+
rehabilitation or	replacement, or 'other	(SD=4.1).	
home based	neurological injury' (p630).	Effect sizes for mass: Baseline: d=0.1757;	
rehabilitation.		95% Confidence Interval -0.0 838 to 0.4353;	
	Sample characteristics:	3-months: d = 0.0659; 95% CI -0.1933 to	
Country: Australia –	Age - Day hospital	0.325; Change: d = -0.128; 95% CI -0.3873 to	
Adelaide.	rehabilitation – Mean age 71.2	0.1314.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Source of funding: Government - South Australian Department of Health.	years (SD=3.4). Home based rehabilitation – Mean age 72.2 years (SD=14.8).  • Sex - Total sample – Female 52% (n=120). Male 48% (n=109). Not reported by group.  • Ethnicity - Not reported.  • Religion/belief - Not reported.  • Disability - Not reported.  • Long term health condition - Not reported.  • Sexual orientation - Not reported.  • Socioeconomic position - Living alone – Day hospital rehabilitation n=46 (40.7%). Home based rehabilitation n=45 (38.8%). No home services - Day hospital rehabilitation n=90 (79.6%). Home based rehabilitation n=96 (82.8%).  Sample size:  • Comparison numbers - Home based rehabilitation n=116 randomised; n=114 assessed at 3 month follow-up; n=112 assessed at 6 month follow-up.	Quality of life (mental) measured using the Short-Form-36 (SF-36): Day hospital rehabilitation – baseline 47.1 (SD=10.9); 3 months 47.3 (SD=12.2); change -0.02 (SD=12.3). Home based rehabilitation - baseline 47.9 (SD=10.6); 3 months 46.7(SD = 12.4); change -1.4 (SD=11.4).  Effect sizes for Quality of life (mental) measured using SF-36: Baseline: d=0.0744; 95% CI = -0.1847 to 0.3336; 3-months: d=-0.0488; 95% CI -0.3079 to 0.2103; Change: d=-0.1164; 95% CI -0.3757 to 0.1428.  Between group differences in change in scores between baseline and 3 months – No significant difference.  Quality of life (physical) measured using the Short-Form-36 (SF-36): Day hospital rehabilitation – baseline 36.8 (SD=10.5); 3 months 42.6 (SD=10.2); change 5.9 (SD=9.5). Home based rehabilitation - baseline 36.2 (SD=9.8); 3 months 42.7 (SD=10.0); change 6.9 (SD=8.9).  Effect sizes of Quality of life (physical) measured using the SF-36 measure: Baseline: d=-0.0591; 95% CI -0.3182 to 0.2;	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	<ul> <li>Intervention numbers - Day hospital rehabilitation n=113 randomised; n=108 assessed at 3 month follow-up; n=106 assessed at 6 month follow-up.</li> <li>Sample size - N=229 randomised; N=222 assessed at 3 month follow-up; N=218 assessed at 6 month follow-up.</li> </ul>	3-months: d=0.0099; 95% CI -0.2492 to 0.269; Change: d=0.1087; 95% CI -0.1506 to 0.3679.  Between group differences in change in scores between baseline and 3 months – No significant difference.  Functional competence in activities of daily living (motor) measured using the	
	<ul> <li>Intervention:</li> <li>Intervention category - Day hospital based rehabilitation.</li> <li>Describe intervention - A high-intensity rehabilitation programme based on a medical rehabilitation model delivered in a day hospital setting and an education session for carers.</li> <li>Delivered by - Not reported, simply described as interdisciplinary.</li> <li>Delivered to - Medically stable patients after discharge from acute care (the main reasons for admission were stroke, knee replacement, or 'other neurological injury').</li> </ul>	Assessment of Motor and Process Skills:  Day hospital rehabilitation – baseline 0.40 (SD=0.8); 3 months 0.97 (SD=0.8); change 0.57 (SD=0.8). Home based rehabilitation - baseline 0.29 (SD=0.8); 3 months 0.91 (SD=0.8); change 0.62 (SD=0.8).  Effect sizes of motor and process skills (motor score): Baseline: d=-0.1375; 95% CI -0.3969 to 0.1219; 3-month: d=-0.075; 95% CI -0.3341 to 0.1841; Change: d=0.0625; 95% CI -0.1966 to 0.3216.  Between group differences in change in scores between baseline and 3 months – No significant difference.  Functional competence in activities of daily living (process) measured using the Assessment of Motor and Process Skills: Day hospital rehabilitation – baseline 0.54 (SD=0.6); 3 months 1.05 (SD=0.5); change	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Duration, frequency, intensity, etc         Three to 5 sessions per week lasting 3 hours. Although duration was not standardised the intervention was usually delivered for 4 to 6 weeks.     </li> <li>Key components and objectives of intervention - Individual or group rehabilitation sessions, multidisciplinary assessment and weekly case management meetings (including goal setting). The sessions included support from a rehabilitation medicine physician, dietetics, nursing support, occupational therapy, physiotherapy, psychology, social work, and speech therapy.</li> <li>Content/session titles - N/A</li> <li>Location/place of delivery - Day hospital.</li> </ul>	0.51 (SD=0.5). Home based rehabilitation -baseline 0.46 (SD=0.6); 3 months 1.00 (SD=0.5); change 0.54 (SD=0.5). Effect sizes in AMP (process) skills: Baseline: d=-0.1333; 95% CI -0.3927 to 0.126; 3 months: d=-0.1; 95% CI -0.3592 to 0.1592; Change: d=0.06; 95% CI -0.1991 to 0.3191. Between group differences in change in scores between baseline and 3 months – No significant difference.  Functional independence measured using the Functional Independence Measure (FIM): Day hospital rehabilitation – baseline 108.5 (SD=12.4); 3 months 118.1 (SD=8.1); change 9.6 (SD=9.0). Home based rehabilitation – baseline 108.1 (SD=8.4); 3 months 115.5 (SD=6.8); change 7.4 (SD=5.8). Effect sizes of FIM measures: Baseline: d= -0.0379; 95% CI -0.2969 to 0.2212; Discharge from programme: d=-0.3481; 95% CI = -0.6091 to -0.0871; Change: d=-0.2914; 95% CI -0.5518 to -0.00309	
	<ul> <li>Comparison intervention:</li> <li>Intervention category - Home based rehabilitation. A high-intensity rehabilitation</li> </ul>	Between group differences in scores at 3 months – Participants randomised to the day hospital rehabilitation programme had significantly higher scores on the Functional	

Research aims	PICO (population, intervention,	Findings	Overall validity
Research anns	programme based on a medical rehabilitation model delivered in the participants own home.  • Delivered by - Not reported, simply described as interdisciplinary. Delivered to - Medically stable patients after discharge from acute care (the main reasons for admission were stroke, knee replacement, or 'other neurological injury').  • Duration, frequency, intensity, etc Three to 5 sessions per week (length of each session not reported). Although duration was not standardised the intervention was usually delivered for 4 to 6 weeks.  • Key components and objectives of intervention — Individual rehabilitation sessions, multidisciplinary assessment and weekly case management meetings (including goal setting). The sessions included support from a rehabilitation medicine physician, dietetics, nursing support, occupational therapy, physiotherapy, psychology,	Independence Measure at 3 month follow-up than those randomised to the home based rehabilitation programme (p=0.01). Between group differences in change in scores between baseline and 3 months – Between baseline and 3 month follow-up, participants randomised to the day hospital rehabilitation programme made significantly greater improvements in scores on the Functional Independence Measure than those randomised to the home based rehabilitation programme (p=0.03). NB. In table 2 on p3 this measure is reported as being assessed at discharge, however in the authors' narrative they report this as being assessed at 3 month follow-up.  Maximal quadriceps strength: Day hospital rehabilitation – baseline 6.2 (SD=3.0); 3 months 10.9 (SD=5.8); change 4.7 (SD=5.0). Home based rehabilitation - baseline 6.5 (SD=3.5); 3 months 11.3 (SD= 5.4); change 4.8 (SD=4.5).  Effect sizes of Maximal quadriceps strength measures: Baseline: d=0.0919; 95% CI -0.1673 to 0.3511; 3 month: d=0.0714; 95% CI -0.1877 to 0.3306; Change: d=0.021; 95% CI -0.238 to 0.2801.	rating

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	social work, and speech therapy.  • Content/session titles – N/A.  • Location/place of delivery –	Between group differences in change in scores between baseline and 3 months – No significant difference.	
	Participants own homes.  Outcomes measured: Service user related outcomes –  • Mass.  • Quality of life (mental and physical) measured using the Short-Form-36. Change in	Mobility measured using the Timed Up and Go (TUG) test: Day hospital rehabilitation – baseline 35.9 (SD=43.8); 3 months 18.7 (SD=13.2); change -17.2 (SD=39.9). Home based rehabilitation - baseline 32.4 (SD=23.0); 3 months 23.2 (SD=28.1); change -11.4 (SD=23.0).	
	functional competence in activities of daily living (between baseline and 3 month follow-up) measured using the Assessment of Motor and Process Skills. Assessed by occupational therapist. Scores	Effect sizes in TUG test measures: Baseline: d=-0.1003; 95% CI -0.3596 to 0.1589; 3 months: d=0.2041; 95% CI -0.0556 to 0.4639; Change: d=0.1787; 95% CI -0.0809 to 0.4383. Between group differences in change in scores between baseline and 3 months – No significant difference.	
	<ul> <li>are given for both motor and process skills (ranging between -3 and 4).</li> <li>Functional independence measured using the Functional Independence Measure.</li> </ul>	<b>Mortality:</b> At 3 months follow-up there had been no deaths. At 6 months, 4 participants had died however between group differences and their statistical significance are not reported.	
	<ul> <li>Maximal quadriceps strength. Mobility measured using the Timed Up and Go test.</li> <li>Mortality.</li> </ul>	Carer related outcomes - Strain measured using the Carer Strain Index (CS): Day hospital rehabilitation – discharge 4.95 (SD=4.1); 3 months 4.92	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Family or caregiver related outcomes —  • Strain measured using the Carer Strain Index.  • Quality of life (mental and physical) measured using the Short-Form-36.  Service outcomes —  • Number of readmissions.  • Time to first readmission.  • Place of residence.  Follow-up: Three months and 6 months (the majority of outcomes are only measured at 3 months).  Costs? No. Costs or resource use information is not provided.	(SD=3.86); change – not measured. Home based rehabilitation – discharge 3.56 (SD=2.76); 3 months 4.25 (SD=3.10); change – not measured. Effect sizes of CS measures: Baseline: d=-0.3987; 95% CI -0.6603 to -0.1371; 3 months: d=-0.1917; 95% CI -0.4513 to 0.068; Change scores reported as 'not applicable'. Between group differences in scores at discharge from programme – Carers of participants randomised to the day hospital programme reported significantly higher Carer Strain Index scores at discharge than those randomised to the home based rehabilitation programme (p<0.05). Between group differences in scores at 3 month follow-up - No significant difference.  Carer Quality of life (physical) measured using the Short-Form-36(SF-36): Day hospital rehabilitation – baseline 52.67 (SD=10.36); 3 months 52.16 (SD=9.36); change -0.052 (SD=9.07). Home based rehabilitation - baseline 52.42 (SD=9.31); 3 months 50.94 (SD=9.40); change -1.48 (SD=5.29). Effect sizes of carer quality of life measured	rating
		using SF-36: Baseline: d=-0.0254; 95% CI -0.2845 to 0.2337; 3 months: d=-0.1301; 95%	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		CI -0.3894 to 0.1293; Change: d=-0.1297; 95% CI -0.3891 to 0.1296. Between group differences in change in scores between baseline and 3 months – No significant difference (statistical data not presented). Significance of between group differences in scores is not reported.	
		Quality of life (mental) measured using the Short-Form-36 (SF-36): Day hospital rehabilitation – baseline 44.65 (SD=11.81); 3 months 44.47 (SD=10.09); change -0.18 (SD=8.86). Home based rehabilitation – baseline 45.59 (SD=10.47); 3 months 44.69 (SD=11.08); change -0.90 (SD=8.71). Effect sizes of impact on carer's quality of life measured using SF-36: Baseline: d=0.0843; 95% CI -0.1749 to 0.3435; 3 month: d=0.0207; 95% CI -0.2383 to 0.2798; Change: d=0.082; 95% CI -0.1772 to 0.3411. Between group differences in change in scores between baseline and 3 months – No significant difference (statistical data not presented). Significance of between group differences in scores is not reported.	
		Service outcomes –	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Number of readmissions: Day hospital rehabilitation – Participants randomised to day hospital rehabilitation were significantly more likely than those randomised to the home based programme to be readmitted to hospital – relative risk ratio 2.1 (95% CI 1.2 to 3.9; p=0.012). 82.9% of readmissions in the day hospital rehabilitation group and 67.7% in the home based rehabilitation programme were considered to be probably/possibly related to the index admission.	
		Time to first readmission: Day hospital rehabilitation – Median time to first readmission was 25 days (95% CI 17.3 to 34.0). Home based rehabilitation - Median time to first readmission was 49 days (95% CI 25.3 to 54.3). Between group difference in median time to first readmission: There was a significant difference between groups, with participants randomised to the day hospital rehabilitation group being readmitted more quickly than those randomised to the home based rehabilitation programme ( <i>p</i> =0.050).	
		The authors report narratively that there was no significant interaction between ' the groups and age group, gender, marital status or carer status with respect to time to first	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		readmission' (p632). Statistical data not presented.	
		Place of residence: At 3 months 8 participants had moved into residential care permanently; at 6 months 5 other participants had moved into permanent residential placements however between group differences and their statistical significance are not reported.	
		Narrative findings – effectiveness: NB. Effect sizes are not presented.	
		Service user related outcomes –	
		Mass: Significance of between group differences in mass at 3 months follow-up and change in mass between baseline and 3 months follow-up are not reported.	
		Quality of life (mental) measured using the Short-Form-36: Between group difference in change in scores between baseline and 3 months – No significant difference. Significance of between group differences in scores at 3 months follow-up is not reported.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Quality of life (physical) measured using the Short-Form-36: Between group differences in change in scores between baseline and 3 months – No significant difference. Significance of between group differences in scores at 3 months follow-up is not reported.	
		Functional competence in activities of daily living (motor) measured using the Assessment of Motor and Process Skills: Between group differences in change in scores between baseline and 3 months – No significant difference (statistical data not presented). Significance of between group differences in scores at 3 months follow-up is not reported.	
		Functional competence in activities of daily living (process) measured using the Assessment of Motor and Process Skills: Between group differences in change in scores between baseline and 3 months – No significant difference (statistical data not presented). Significance of between group differences in scores at 3 months follow-up is not reported.	
		Functional independence measured using the Functional Independence Measure:	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Between group differences in scores at 3 months – Participants randomised to the day hospital rehabilitation programme had significantly higher scores on the Functional Independence Measure at 3 month follow-up than those randomised to the home based rehabilitation programme.  Between group differences in change in scores between baseline and 3 months – Between baseline and 3 month follow-up, participants randomised to the day hospital rehabilitation programme made significantly greater improvements in scores on the Functional Independence Measure than those randomised to the home based rehabilitation programme.	
		Maximal quadriceps strength: Between group differences in change in scores between baseline and 3 months – No significant difference (statistical data not presented).  Significance of between group differences in scores at 3 months follow-up is not reported.	
		Mobility measured using the Timed Up and Go test: Between group differences in change in scores between baseline and 3 months – No significant difference (statistical data not presented). Significance of between	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		group differences in scores at 3 months	
		follow-up is not reported.	
		Carer related outcomes –	
		Strain measured using the Carer Strain Index: Between group differences in scores at discharge from programme – Carers of participants randomised to the day hospital programme reported significantly higher Carer Strain Index scores at discharge than those randomised to the home based rehabilitation programme.  Between group differences in scores at 3 month follow-up - No significant difference (statistical data not presented).  Significance of between group differences in scores at 3 months follow-up is not reported.	
		Quality of life (physical) measured using the Short-Form-36: Between group differences in change in scores between baseline and 3 months – No significant difference (statistical data not presented). Significance of between group differences in scores at 3 months follow-up is not reported.	
		Quality of life (mental) measured using the Short-Form-36: Between group differences in change in scores between baseline and 3	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		months – No significant difference (statistical data not presented). Significance of between group differences in scores at 3 months follow-up is not reported.	
		Service outcomes - Number of readmissions: Participants randomised to day hospital rehabilitation were significantly more likely than those randomised to the home based programme to be readmitted to hospital.	
		Time to first readmission: Between group differences in median time to first readmission - There was a significant difference between groups, with participants randomised to the day hospital rehabilitation group being readmitted more quickly than those randomised to the home based rehabilitation programme.	
		The authors report narratively that there was no significant interaction between ' the groups and age group, gender, marital status or carer status with respect to time to first readmission' (p632).	
		Place of residence: At 3 months 8 participants had moved into residential care permanently; at 6 months 5 other participants	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		had moved into permanent residential	
		placements however between group	
		differences are not reported. Mortality: At 3	
		months follow-up there had been no deaths.	
		At 6 months, 4 participants had died but	
		between group differences are not reported.	

2. Jackson JC, Ely EW, Morey MC et al. (2012) Cognitive and physical rehabilitation of intensive care unit survivors: Results of the RETURN randomized controlled pilot investigation. Critical Care Medicine 40(4): 1088-97

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
Study aim: To test	Participants: Service users and	Findings - effect sizes:	Overall
he following	their families, partners and carers	NB. Effect sizes not provided. Findings	assessment of
nypothesis: in a cohort of ICU	- ICU survivors.	presented are median with p values.	internal validity:
survivors, a 'bundled' rehabilitation approach combining cognitive, physical, and functional rehabilitation could be developed and effectively delivered in the home using novel tele-video rechnology delivered via social workers and would result in greater improvement	<ul> <li>Sample characteristics:</li> <li>Age - Control: median 50 (46-69) Intervention: median 47 (41-63) Complete intervention patient: median 44 (41-63).</li> <li>Sex - Control: f, 62% (n=5) m, 38% (n=3); Intervention: f, 38% (n=5) m, 62% (n=8); Complete intervention patient: f, 71% (n=5) m, 29% (2).</li> <li>Ethnicity - Control: White, 88% (n=7) African-American, 12% (n=1) Intervention: White, 92% (n=12) African-American, 8%</li> </ul>	Cognitive function (TOWER): Intervention and control group participants performed similarly at study enrolment on the primary cognitive outcome measure.  Baseline - Control, 7.5 (4.5 - 9) - Intervention, 8.0 (6.5 - 10) p value 0.37 (not sig).  At 3-month follow-up (intervention group patients earning higher scores than controls): - Control, 7.5 (4.0 to 8.50) - Intervention, 13.0 (11.5 to 14.0) p value <0.01 (sig)  NB: The adjusted treatment effect (adjusted for baseline differences) is 5.0 (95% CI 2.5 to 7.5) adjusted p<0.01.	Overall assessment of external validity: ++  Overall validity rating: +

Research aims	PICO (population, intervention,	Findings	Overall validity
_	comparison, outcomes)		rating
functional outcomes	(n=1) Complete intervention	Baseline: Both groups performed similarly to	
in intervention than	patient: White, 86% (6) African-	one another) Control, 27.0 (13.5- 31.0) -	
control participants.	American, 14% (n=1).	Intervention, 13.0 (8.0- 15.0) p value 0.12 (not	
	Long term health condition -	sig).	
Methodology: RCT.	Not necessarily long term but	3 month: - Control, 16.0 (7.8-19.2) -	
This was a single-	the admission diagnosis:	Intervention, 8.0 (6.0- 13.5) p value 0.74 (not	
site, feasibility, pilot,	Control Intervention Complete	sig).	
randomized trial.	intervention patient		
	Sepsis/ARDS1 25% (2) 31% (4)	<b>MMSE:</b> baseline - Control, 27.0 (22.5- 28.2) -	
Country: United	29% (2) Acute MI2 0% (0) 8%	Intervention, 28.0 (25.0- 29.0) p value 0.54 3	
States.	(1) 14% (11) COPD/Asthma3	month MMSE - Control, 26.5 (24.8-28.5) -	
	0% (0) 8% (1) 0% (0) Renal	Intervention, 30.0 (29.0-30.0) p value 0.25	
Source of funding:	Failure 0% (0) 8% (1) 0% (0)	(not sig).	
Government –	Airway Protection 0% (0) 8%		
Funded in part by the	(1) 14% (1) Cardiogenic Shock/	Physical functioning – TUG (low is good) -	
National Institutes of	CHF4 12% (1) 15% (2) 14% (1)	Baseline - Control, 15 (12- 20) - Intervention,	
Health.	Cirrhosis 12% (1) 8% (1) 14%	18 (15-20) p value 0.47; 3 month TUG -	
	(1) ENT Surgery 12% (1) 0%	Control, 10.2 (9.2 -11.7) - Intervention, 9.0	
	(0) 0% (0) Transplants (excl	(8.5-11.8) p value 0.51 NOTE: the adjusted	
	Liver) 12% (1) 0% (0) 0% (0)	effect size (adjusted for baseline differences)	
	Hepatobiliary Surgery 12% (1)	is -1.1 (95% CI -4.1 to 2.0); adjusted p=0.51).	
	15% (2) 14% (1) Pulmonary	450 (1:1 : D.D. B. O. ( )	
	12% (1) 0% (0) 0% (0).	ABC (high score is good): Baseline - Control,	
		54 (28- 75) - Intervention, 68 (36-81) p value	
	Sample size -	0.58; 3 months ABC - Control, 83 (38- 91) -	
	• Comparison numbers: n=8.	Intervention, 82 (78- 89) p value 0.35 3.	
	Intervention numbers: 13 (but)	For the collection (Control of the Control of the C	
	complete intervention patients	Functional ability IADL (functional activities	
	n=7).	questionnaire - higher score is poorer	
		performance): baseline - Control, 7.0 (1.5-	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Intervention:	14.2) - Intervention, 0.0 (0.0-4.0) p value 0.14;	ruting
	Describe intervention - Three	3 month IADL - Control, 8.0 [6.0- 11.8] -	
	pronged RETURN intervention.	Intervention, 1.0 [0.0 - 2.5] p value 0.04	
	Comprehensive,	NOTE: the adjusted treatment effect (adjusted	
	multicomponent, in-home	for baseline differences) is -4.7 (95% CI -8.7	
	rehabilitation program which	to -0.6)	
	was developed with a specific		
	focus on the remediation of	ADL: baseline The group with little/ no	
	characteristic deficits among	dependency - Control, 75% (6) - Intervention,	
	ICU survivors (i.e., limitations in	71% (5) The group with moderate/ severe	
	cognition, strength and	dependency - Control, 25% (2) - Intervention,	
	endurance and functional	29% (2) 3 month ADL The group with little/ no	
	ability). The rehabilitation	dependency - Control, 75% (6) - Intervention,	
	intervention was provided over	100% (7) The group with moderate/ severe	
	a 12-week period post-	dependency - Control, 25% (2) - Intervention,	
	discharge in each patient's	0% (0) NOTE: adjusted treatment effect	
	home and integrated both	p=0.78	
	traditional 'face-to-face'		
	interventions as well as novel	Narrative findings – effectiveness:	
	telephonic and video-based		
	interventions. Total of 12 visits -	Cognitive function outcomes: Intervention	
	6 in-person visits for cognitive	and control group participants performed	
	rehabilitation and 6 televisits for	similarly at study enrolment on the primary	
	physical and functional	cognitive outcome measure, the TOWER. At	
	rehabilitation, (60-75 minutes in	3-month follow-up, a significant difference	
	length), with sessions following	between groups was observed, with the	
	an alternating format (i.e. first	intervention group patients earning higher	
	cognitive then physical-	scores than controls (3-months TOWER -	
	functional and so on). Televisits	Median/IQR - 13.0 [11.5 to 14.0] vs. 7.5 [4.0	
	used interactive 2-way		

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	videophones facilitated by an assistant in the home and/or were video recorded for	to 8.5], adjusted treatment effect 5.0 [95% CI 2.5 to 7.5], adjusted p<0.01).	
	subsequent review. Visits were supplemented with brief telephone calls by study personnel from relevant disciplines during alternate	Secondary measures of cognition: Both groups performed similarly to one another on the DEX and the MMSE at baseline and 3-month follow-up.	
	weeks. Participants completed a workbook between visits to help track compliance.  • Delivered by - Cognitive rehabilitation - a master's level	Physical functioning: On the TUG (lower scores are better), intervention and control participants earned similar scores at baseline (prior to intervention) (18 [15-20] vs. 15 [12-20]) and at 3-months (9.0 [8.5 vs. 11.8] vs.	
	psychology technician who was supervised by a licensed neuropsychologist. Physical rehabilitation - a remote bachelor's level exercise trainer supervised by a doctoral level	10.2 [9.2-11.7]). Although the intervention group improved slightly more than the control group these differences were not statistically significance adjusted treatment effect -1.1 [95% CI-4.1 to 2.0], adjusted p=0.51).	
	exercise physiologist who was communicating in "real time" with the patient via teletechnology and assistance of a trained social worker in the	<b>ABC:</b> Scores of self-efficacy did not differ between the 2 groups at baseline (68 [36-81] vs. 54 [28-75], p=0.58) nor at 3-months (82 [78-89] vs. 83 [38-91], p=0.35)	
	home. Functional rehabilitation - occupational therapist who was communicating in "real time" with the patient via teletechnology and with the	Functional ability – IADL: No statistically significant differences were noted in baseline IADL performance (prior to intervention) between intervention and control group participants. At 3-month follow-up, a statistically significant difference was	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	<ul> <li>assistance of a trained social worker in the home.</li> <li>Delivered to - ICU patients on discharge from hospital.</li> <li>Duration, frequency, intensity, etc 12 week period post discharge. A total of 12 visits - 6 in- person visits for cognitive</li> </ul>	observed between groups, with intervention participants demonstrating better IADL performance vs. controls (lower scores are better) (3-month FAQ 1.0 [0.0 – 2.5] vs. 8.0 [6.0 – 11.8], p=0.04), supported by an ANCOVA analyses showing an adjusted treatment effect of -4.7 (95% CI -8.7 to -0.6).	
	rehabilitation and 6 televisits for physical and functional rehabilitation, each 60-75 minutes in length, with sessions following an alternating format (i.e., first cognitive then physical-functional and so on).  • Key components and objectives of intervention - 1. Cognitive rehab - based on the Goal Management Training (GMT) protocol, a focused and theoretically derived stepwise approach to the rehabilitation of executive function shown to be effective in preliminary studies with other populations, which	Functional ability – ADL: With regard to ADLs, scores on the Katz ADL scale dichotomized into categories 'little or no dependency' and 'moderate to severe dependency' were similar between groups at enrolment (29% of intervention participants with 'moderate to severe dependency' vs. 25% of controls, p=0.88). At 3-month follow-up, none of the intervention participants reported experiencing 'moderate to severe dependency,' while 'moderate to severe dependency,' while 'moderate to severe dependency' was reported by a quarter (25%) of those in the control group, though after adjusting for baseline values, these differences were not statistically significant (adjusted p=0.78).	
	the researchers adapted for use in the home. Purpose of GMT - to improve a patient's executive function by increasing goal directed behaviour and helping	Conclusion: Using social workers/technicians and telemedicine to deliver a 3-pronged rehabilitation program to general medical and surgical ICU survivors in their homes resulted in superior executive functioning as compared	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	patients (a) learn to be	to usual care in this small pilot feasibility	
	reflective and (b) achieve	randomized trial. Intervention group	
	success in engaging complex	participants also reported improvements in the	
	tasks by dividing them into	performance of daily IADLs (managing	
	manageable units, so as to	money, making travel arrangements, following	
	increase the likelihood that	complex instructions, etc.). The benefits found	
	these tasks will be completed.	via this rehabilitation program together with	
	Physical Rehabilitation -	the novel components of delivery (in-home	
	Included 6 televideo visits (one	using social workers and technicians as well	
	every other week) and 6	as telemedicine), can serve as a template by	
	motivational telephone calls.	which to pave a road to future investigations	
	Each call followed a structured	and eventually a change in policy and practice	
	protocol to assess previously	towards survivors of critical care.	
	prescribed exercises, explore		
	and address potential barriers		
	to exercise, motivate and		
	encourage continued exercise		
	and advance previous		
	exercises as needed. In		
	between visits and calls, the		
	patients carried out exercises		
	independently. 3. Functional Rehabilitation - 4 televisits with		
	an OT who was communicating in 'real time' with the patient via		
	teletechnology and assistance		
	of a trained social worker in the		
	home, 4-6 supplementary		
	telephone calls, and participant		
	homework between sessions.		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	Two tactics were used for the		
	functional training: (a)		
	Education — helping the		
	participant understand the		
	relationship between 'person',		
	'environment', and 'activity'. (b)		
	'Action Plan' Development —		
	utilized for individual tasks,		
	based on a combination of the		
	therapist input and participant		
	homework. Homework focused		
	on specific tasks prioritized by		
	the study participant, with		
	worksheets designed to foster		
	problem-solving using the		
	'Person-Environment-Activity'		
	approach and application of the		
	principles taught in the		
	cognitive training and the		
	physical skills developed		
	through the exercise training to		
	the prioritized activities.		
	Location/place of delivery - In		
	the home including remotely via		
	two way interaction televisits		
	supported by an in home		
	assistant.		
	Comparison intervention - The		
	I •		
	Comparison intervention - The scope of 'usual care' interventions		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	employed with ICU survivors may		
	include physical therapy (PT),		
	occupational therapy (OT), and		
	nursing care, delivered to in-		
	patient, out-patient, or home-		
	health settings. Neither cognitive		
	therapy nor speech therapy with a		
	predominant cognitive focus is		
	considered "usual care" among		
	ICU survivors without frank		
	neurologic injuries.		
	Outcomes measured:		
	Service user related outcomes –		
	<ul> <li>Cognitive function - primary</li> </ul>		
	cognitive outcome measure		
	was TOWER). Physical		
	functioning - TUG (timed up		
	and go test).		
	<ul> <li>Functional ability - IADL and</li> </ul>		
	ADL (Katz ADL scale).		
	Costs? No.		

3. Mahomed NN, Davis AM, Hawker G et al. (2008) Inpatient compared with home-based rehabilitation following primary unilateral total hip or knee replacement: A randomized controlled trial. American Journal of Bone and Joint Surgery 90A(8): 1673-80

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
Study aim: The aim	Participants: Service users and	Findings - effect sizes: NB. Means and	Overall assessment
of the study was to	their families, partners and carers	standard deviation for SF-36 scores were	of internal validity:
evaluate the	- The study sample consisted of	presented in the report, but not effect sizes,	+
effectiveness and	participants who were undergoing	which were calculated by the review team.	
cost of home based,	unilateral hip or knee replacement		Overall assessment
compared with	for osteoarthritis, inflammatory	Pre-operative scores -	of external validity:
inpatient,	arthritis, or osteonecrosis, and	Physical function: Home based (M=26,	++
rehabilitation	therefore using intermediate care	SD=20) Inpatient (M=26, SD=21) p=0.93.	
following primary	services.	Physical component summary: Home	Overall validity
total hip or knee joint		based (M=29, SD=7) Inpatient (M=27, SD=7)	rating:
replacement.	Sample characteristics:	p = 0.13.	+
	Age - The mean age of	<b>Mental component summary:</b> Home based	
Methodology: RCT.	participants was 68 years.	(M=43, SD=11) Inpatient (M=45, SD=10)	
Participants were	<ul> <li>Sex - Approximately two-thirds</li> </ul>	p=0.15.	
randomly allocated to	of participants were women		
either home based	(the exact number is not	Three month follow-up -	
compared or	provided).	Physical function: Home based (M=47,	
inpatient	<ul> <li>Ethnicity - Approximately two-</li> </ul>	SD=25) Inpatient (M=49, SD=24) p=0.25.	
rehabilitation.	thirds of participants were	Physical component summary: Home	
	White (the exact number is not	based (M=34, SD=9) Inpatient (M=36,	
Country: Canada.	provided).	SD=10) p=0.11.	
	<ul> <li>Religion/belief – Not reported.</li> </ul>	Mental component summary: Home based	
Source of funding:	Disability - Not reported.	(M=44, SD=10) Inpatient (M=45, SD=11)	
Other - The authors	Long term health condition -	p=0.83.	
received outside	Participants were undergoing	Satisfaction: Home based (M=87, SD=15)	
funding or grants		Inpatient (M=89, SD=14) p=0.37.	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
from Physicians' Services Incorporated.	unilateral hip or knee replacement for osteoarthritis, inflammatory arthritis, or osteonecrosis.  Sexual orientation - Not reported.  Socioeconomic position - Approximately 50% of participants had postsecondary education (the exact number is not provided).	12 month follow-up - Physical function: Home based (M=57, SD=28) Inpatient (M=50, SD=27) p=0.11. Physical component summary: Home based (M=34, SD=9) Inpatient (M=39, SD=12) p=0.99. Mental component summary: Home based (M=45, SD=9) Inpatient (M=44, SD=10) p=0.80. Satisfaction: Home based (M=90, SD=14) Inpatient (M=90, SD=15) p=0.94.	
	<ul> <li>Sample size –</li> <li>Comparison numbers: n=119 (inpatient group), based on ITT analysis. The actual number that received the intervention was 95.</li> <li>Intervention numbers: n=115 (home based rehabilitation group), based on ITT analysis. The actual number that received the intervention was 139 (due to crossover patients).</li> <li>Sample size: n=234.</li> <li>Intervention:</li> </ul>	Effect sizes: Comparison 3 months after total joint replacement, using WOMAC (Western Ontario and McMaster Universities Osteoarthritis Index): Pain: d=0; 95% Confidence Interval (CI) -0.2563 to 0.2563; Stiffness: d=0.1; 95% CI -0.1565 to 0.3565; Physical function: d=0.0526; 95% CI -0.2037 to 0.309. Physical function: d=-0.0816; 95% CI -0.338 to 0.1748; Physical component summary: d=-0.21; 95% CI -0.467 to 0.047; Mental component summary: d=-0.0951; 95% CI -0.3515 to 0.1614; Satisfaction score: d=-0.1379; 95% CI -0.3945 to 0.1187. Twelve months after total joint replacement WOMAC: Pain: d=0.2204; 95% CI -0.0366 to 0.4775; Stiffness: d=0.1944; 95% CI	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	<ul> <li>Intervention category - The intervention was home based rehabilitation.</li> <li>Describe intervention - Those allocated to home based rehabilitation were referred to their Community Care Access Centre and managed along a multidisciplinary pathway that ensured that each participant was seen at home by a physiotherapist within 48 hours of discharge.</li> <li>Delivered by - Participants were referred to their Community Care Access Centre and managed along a multidisciplinary pathway.</li> <li>Delivered to - The intervention was delivered to participants who were undergoing unilateral hip or knee replacement for osteoarthritis, inflammatory arthritis, or osteonecrosis.</li> <li>Duration, frequency, intensity, etc Not reported.</li> <li>Key components and objectives of intervention - It is noted that the overall objective of home</li> </ul>	-0.0625 to 0.4513; Physical function: d=0.2105; 95% CI -0.0465 to 0.4675. Twelve months after total joint replacement Short Form-36: Physical function: d=0.2546; 95% CI -0.0027 to 0.5119; Physical component summary: d=0.0869; 95% CI -0.1695 to 0.3434; Mental component summary: d=0.105; 95% CI -0.1514 to 0.3615; Satisfaction score: d=0; 95% CI -0.2563 to 0.2563. Cost comparison (in 2006 Canadian dollars): Acute hospital costs: d=0.0948; 95% CI -0.1617 to 0.3512; Rehabilitation costs: d=-0.7769; 95% CI -1.0427 to -0.5111; Total episode-of-care costs: d=-0.3495; 95% CI -0.6077 to -0.0912.  Narrative findings – effectiveness: There were no differences in clinical outcomes at 3 and 12 months after surgery, with both groups achieving similar improvements in pain and function.	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	based rehabilitation is to reduce		
	health care costs, without		
	resulting in adverse patient		
	outcomes.		
	<ul> <li>Content/session titles - Not</li> </ul>		
	reported.		
	<ul> <li>Location/place of delivery - The</li> </ul>		
	intervention was delivered in		
	participants' homes.		
	<ul> <li>Describe comparison</li> </ul>		
	intervention - Those allocated		
	to the inpatient rehabilitation		
	group were transferred to 1 of 2		
	independent institutions		
	depending on the availability of		
	rehabilitation beds. Participants		
	were managed along previously		
	established care pathways, with		
	a target of a fourteen-day		
	length of stay. No further details		
	regarding the nature of the		
	intervention are provided.		
	Outcomes measured:		
	Service user related outcomes -		
	The condition of participants with		
	osteoarthritis of the knee and hip		
	was measured using the Western		
	Ontario and McMaster		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	Universities Arthritis Index		
	(WOMAC; Bellamy et al. 1988).		
	Health status was measured		
	using the Short Form-36 (SF-36;		
	Ware et al. 1993).		
	Satisfaction with services -		
	Patient satisfaction was assessed		
	using the Hip and Knee		
	Satisfaction Scale (Mahomed et		
	al. 1998).		
	Follow-up: Participants were		
	assessed at baseline, 3 and 12		
	months.		
	Costs? Economic evaluation - full		
	or partial. Direct health care costs		
	were evaluated for acute care		
	hospitals, inpatient rehabilitation		
	hospitals, and home based		
	rehabilitation services. These		
	were calculated by multiplying per		
	diem costs from the respective		
	institutions with the actual length		
	of stay for each patient. Patient-		
	level costs for services provided		
	by home care were obtained		
	using the centralised data		
	system.		

4. Parker SG, Oliver P, Pennington M et al. (2009) Rehabilitation of older patients: Day hospital compared with rehabilitation at home. A randomised controlled trial. Health Technology Assessment 13(39): DOI 10.3310/hta13390

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
Aim of the study	Participants: Service users and	Findings - effect sizes:	Overall
(write in): The study	their families, partners and	Service user related outcomes –	assessment of
aimed to test the	carers.		internal validity:
hypothesis that '	<ul> <li>Service users - Individuals of</li> </ul>	Three months follow-up (observed case	+
older people and their	any age referred for	data set) –	
informal carers are	multidisciplinary services with a	Activities of daily living measured using	The failure to carry
not disadvantaged by	permanent address within the	the Nottingham Extended Activities of	out 12 month follow-
home-based	service's catchment area.	Daily Living Scale (total score): No	up assessments for
rehabilitation relative	Reasons for referral included	significant difference between groups - mean	some participants,
to day hospital	stroke, falls and mobility	estimated difference (adjusted for baseline	high rate of attrition
rehabilitation' (piii).	assessment, and orthopaedic	scores) -2.79; 95% Confidence Interval -7.84	and lack of sufficient
	rehabilitation.	to 1.90; p=0.228.	power mean that it is
Methodology: RCT.	Carers - Some participants had		not possible to
Participants	informal carers, the majority of	Anxiety measured using the Hospital	award a higher
randomised to either	whom were related to the	Anxiety and Depression Scale: No	score.
home based or day	service user.	significant difference between groups - mean	Ossanall
hospital based		estimated difference (adjusted for baseline	Overall
multidisciplinary	Sample characteristics:	scores) 0.047; 95% CI -1.466 to 1.559;	assessment of
rehabilitation. This	Age - Mean age of service user	p=0.951.	external validity:
paper also includes a literature review of	(in years) at first interview (SD;	Danraggian magazired using the Hagnital	++
studies of day	min-max) - Control 76 (11; 53-	Depression measured using the Hospital Anxiety and Depression Scale: No	Overall validity
hospital services for	95). Intervention 74 (11; 43-	significant difference between groups - mean	rating:
older people (some of	88). 65 years or younger (%) -	estimated difference (adjusted for baseline	tallig.
which include home	Control 19.0. Intervention 21.4.	scores) 1.374; 95% CI –0.039 to 2.786;	'
based	66-74 years (%) - Control 14.3.	p=0.056.	
care/rehabilitation as	Intervention 19.0. 75-84 years	P 0.000.	
oar of ferradilitation as	(%) - Control 42.9. Intervention		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
a comparison) however this data has not been extracted as all included studies were published before 2005 (the publication date specified in the NCCSC review protocol.  Country - United Kingdom. Four services across England (Chippenham, North Tyneside, Newcastle upon Tyne, Barnsley).  Source of funding: Government - Health Technology Assessment programme.	<ul> <li>45.2. 85 years or older (%) - Control 23.8. Intervention 14.3. Mean age of carer (in years) at first interview (SD; min-max) - Control 64 (12.67; 39-93). Intervention 64 (10; 43-86).</li> <li>Sex - Service user - Female (%) - Control 45.2. Intervention 45.2. Carer - Female (%) - Control 60.9. Intervention 82.6.</li> <li>Ethnicity - Not reported for service users or their carers.</li> <li>Religion/belief - Not reported for service users or their carers.</li> <li>Disability - Not reported for service users or their carers.</li> <li>Long term health condition - Not reported for service users or their carers.</li> <li>Sexual orientation - Not reported for service users or their carers.</li> <li>Socioeconomic position - Not reported for service users or their carers. Carer relationship to service user (%): Spouse - control = 61. Intervention = 48. Child - control = 22.</li> </ul>	Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire): Significant difference between groups in favour of the control - mean estimated difference (adjusted for baseline scores) 0.122; 95% CI –0.002 to 0.242; p=0.047.  Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale): No significant difference between groups - mean estimated difference (adjusted for baseline scores) - 2.559; 95% CI –9.371 to 4.254; p=0.456.  Six months follow-up (observed case data set) – Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score): No significant difference between groups - mean estimated difference (adjusted for baseline scores) -2.139; 95% CI -6.870 to 2.592; p=0.370.  Activities of daily living measured using the Nottingham Extended Activities of Daily Living mobility subscale: No significant difference between groups - mean	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Intervention = 22. Friend -	estimated difference (adjusted for baseline	
	control = 9. Intervention = 17.	scores) -0.58; 95% CI -2.59 to 1.42; p=0.564.	
	Other - control = 9. Intervention	A stigition of dollar living management union	
	= 13.	Activities of daily living measured using the Nottingham Extended Activities of	
	Sample size –	Daily Living kitchen subscale: No	
	Comparison numbers:	significant difference between groups - mean	
	Randomised n=42 service	estimated difference (adjusted for baseline	
	users; received intervention n=42; analysed at 3 months	scores) -0.40; 95% Cì -1.90 to 1.11; p=0.601.	
	n=35; analysed at 6 months	Activities of daily living measured using	
	n=33; analysed at 12 months	the Nottingham Extended Activities of	
	n=17. The number of carers	Daily Living domestic subscale: No	
	who participated is unclear	significant difference between groups - mean	
	although it appears that there	estimated difference (adjusted for baseline	
	were 23 in each group (it is not clear if any of these were lost	scores) -0.91; 95% CI -2.31 to 0.49; p=0.198.	
	to follow-up).	Activities of daily living measured using	
	Intervention numbers:	the Nottingham Extended Activities of	
	Randomised n=47 service	Daily Living leisure subscale: No significant	
	users; received intervention	difference between groups - mean estimated	
	n=42; analysed at 3 months n=	difference (adjusted for baseline scores) -	
	37; analysed at 6 months n=	0.11; 95% CI -1.41 to 1.20; p=0.872.	
	32; analysed at 12 months	11	
	n=26. The number of carers	Household activities of daily living	
	who participated is unclear	measured using the Nottingham Extended	
	although it appears that there	Activities of Daily Living domestic and	
	were 23 in each group (it is not	<b>kitchen subscales (composite):</b> No significant difference between groups - mean	
	clear if any of these were lost	significant difference between groups - mean	
	to follow-up).		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Sample size: Randomised n=89; received intervention n=44; analysed at 3 months	estimated difference (adjusted for baseline scores) -1.38; 95% CI -3.88 to 1.12; p=0.273.	
	n=72; analysed at 6 months n=65; analysed at 12 months n=43. The number of carers who participated is unclear although it appears that there were 23 in each group (it is not clear if any of these were lost	Anxiety measured using the Hospital Anxiety and Depression Scale: No significant difference between groups - mean estimated difference (adjusted for baseline scores) -0.578; 95% CI -2.409 to 1.253; p=0.530.	
	to follow-up).	Depression measured using the Hospital Anxiety and Depression Scale: No	
	<ul> <li>Intervention:</li> <li>Intervention category - Home based multidisciplinary rehabilitation.</li> </ul>	significant difference between groups - mean estimated difference (adjusted for baseline scores) 1.033; 95% CI –0.441 to 2.507; p=0.166.	
	Describe intervention – Not reported in detail. The authors state these services usually involved input from at least occupational therapy and physiotherapy in the participant's own home.  Delivered by The authors	Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire): No significant difference between groups - mean estimated difference (adjusted for baseline scores) 0.023; 95% CI –0.114 to 0.161; p=0.735.	
	<ul> <li>Delivered by – The authors describe the services as multidisciplinary.</li> <li>North Tyneside: Services staffed by occupational therapists, physiotherapists,</li> </ul>	Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale): No significant difference between groups - mean estimated difference (adjusted for baseline scores) - 1.601; 95% CI –8.809 to 5.607; p=0.659.	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	social workers, assistants,		
	administrative staff and 'other'.	Proportion of participants classifying	
	Chippenham: Services staffed	themselves as having experienced a	
	by occupational therapists,	problem in 1 of the five domains of health	
	physiotherapists, assistants,	related quality of life measured using the	
	and administrative staff.	EUROQUOL 5 dimensions (adjusted for	
	Newcastle upon Tyne:	baseline proportions) at six months:	
	Services staffed by 'other form	<b>Mobility</b> – No significant difference between	
	of nurse' (as opposed to	groups - adjusted odds ratio 1.16; 95% CI	
	community nurses, acute	0.24 to 5.51; p=0.852. <b>Usual activities –</b> No	
	hospital nurses or community	significant difference between groups -	
	hospital nurses), a hospital	adjusted odds ratio 0.33; 95% CI 0.09 to 1.23;	
	doctor, occupational therapists,	p=0.100.	
	physiotherapists, social	<b>Self-care</b> – No significant difference between	
	workers, assistants,	groups - adjusted odds ratio 0.65; 95% CI	
	administrative staff, and 'other'.	0.22 to 1.89; p=0.431.	
	Barnsley: Services staffed by	Pain/discomfort – No significant difference	
	physiotherapists only but the	between groups - adjusted odds ratio 2.18;	
	authors note that ' in practice	95% CI 0.64 to 7.41; p=0.212.	
	the physiotherapists work	Anxiety/depression – No significant	
	closely with colleagues from	difference between groups - adjusted odds	
	multiple disciplines to meet	ratio 0.34; 95% CI 0.11 to 1.05; p=0.060.	
	assessed needs for individual		
	patients' (p23).	Likelihood of being classified as a clinical	
	<ul> <li>Delivered to – Older people</li> </ul>	case of anxiety or depression (adjusted for	
	referred for multi-disciplinary	baseline proportions) at six months:	
	rehabilitation. The services	<b>Anxiety</b> – No significant difference between	
	could be specialised (e.g.	groups - adjusted odds ratio 1.22; 95% CI	
	stroke specific) or be provided	0.376 to 3.97; p=0.739.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	to participants with multiple disabilities.  • Duration, frequency, intensity, etc Not reported clearly. The revised protocol states that the researchers expected that 95% of participants would have completed rehabilitation by 16 weeks however in their discussion of costs the authors report that most ' but not all patients had completed their rehabilitation programme at 213 days' (p33).  • Key components and objectives of intervention - Not reported.  • Content/session titles - N/A.  • Location/place of delivery - Participant's own home.  Comparison intervention:  • Day hospital based multidisciplinary rehabilitation. Details are not reported except to state that these services typically provided rehabilitation, and functional assessment, as	Depression – No significant difference between groups - adjusted odds ratio 0.86; 95% CI 0.29 to 2.60; p=0.793.  Effect of place of care on outcomes at six months (post hoc analysis adjusting for baseline scores) – Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score): Care provided in the home is not inferior to care provided in the day hospital.  Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire): Care provided in the home is not inferior to care provided in the day hospital.  Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale): Care provided in the day hospital.  Anxiety measured using the Hospital Anxiety and Depression Scale: It is not possible to reject the null hypothesis that home based rehabilitation is inferior to day hospital based rehabilitation.  Depression measured using the Hospital Anxiety and Depression Scale: Care provided in the home is not inferior to care	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	well as medical, nursing,	provided in the day hospital. NB Effect on	
	respite and social care.	other outcomes not measured/not reported.	
	<ul> <li>Delivered by - The authors</li> </ul>		
	describe the services as	Six months follow-up – last observation	
	multidisciplinary.	carried forward analysis –	
	North Tyneside: Services	Activities of daily living measured using	
	staffed by acute hospital	the Nottingham Extended Activities of	
	nurses, 'other form of nurse',	Daily Living Scale (total score): No	
	hospital doctor, occupational	significant difference between groups - mean	
	therapists, physiotherapists,	estimated difference (adjusted for baseline	
	social workers, assistants,	scores) -3.222; 95% CI -7.687 to 1.243;	
	administrative staff and 'other'.	p=0.155.	
	Chippenham: Services staffed	Health related quality of life measured	
	by GPs, acute hospital nurses,	using the EUROQUOL 5 dimensions	
	community hospital nurses,	(questionnaire): No significant difference	
	hospital doctors, occupational	between groups - mean estimated difference	
	therapists, physiotherapists,	(adjusted for baseline scores) 0.011; 95% CI -	
	and assistants.	0.109 to 0.131; p=0.857.	
	Newcastle upon Tyne:	Health related quality of life measured	
	Services staffed by acute	using the EUROQUOL 5 dimensions	
	hospital nurses, 'other form of	(visual analogue scale): No significant	
	nurse', hospital doctors,	difference between groups - mean estimated	
	occupational therapists,	difference (adjusted for baseline scores) -	
	physiotherapists, social	2.937; 95% CI –8.991 to 3.117; p=0.337.	
	workers, assistants,	Anxiety measured using the Hospital	
	administrative staff, and 'other'	Anxiety and Depression Scale: No	
	Barnsley: Services staffed by	significant difference between groups - mean	
	acute hospital nurses, hospital	estimated difference (adjusted for baseline	
	doctors, occupational	scores) -0.347; 95% CI -1.843 to 1.160; p=0.648.	

therapists, physiotherapists, and administrative staff.  • Delivered to - Older people referred for multi-disciplinary rehabilitation.	Depression measured using the Hospital Anxiety and Depression Scale: Significant difference between groups in favour of the intervention - mean estimated difference	
<ul> <li>Duration, frequency, intensity, etc Not reported in detail. The authors note that sessions usually last for half a day or a full day.</li> <li>Key components and objectives of intervention - Not reported.</li> <li>Content/session titles - N/A.</li> <li>Location/place of delivery - Day hospital (no further details provided)</li> </ul>	(adjusted for baseline scores) 1.357; 95% CI 0.050 to 2.663; p=0.042.  Twelve months follow-up (observed case data set) – Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score): No significant difference between groups - mean estimated difference (adjusted for baseline scores) 1.39; 95% CI -6.11 to 8.88; p=0.710.  Anxiety measured using the Hospital Anxiety and Depression Scale: No	
Outcomes measured:	significant difference between groups - mean estimated difference (adjusted for baseline scores) 0.223; 95% CI -1.906 to 2.351;	
Service user related outcomes –  • Activities of daily living was measured using the Nottingham Extended Activities of Daily Living Scale (Nouri and Lincoln, 1987). This scale contains 4 dimensions which each include a number of items	p=0.834.  Depression measured using the Hospital Anxiety and Depression Scale: No significant difference between groups - mean estimated difference (adjusted for baseline scores) -0.167; 95% CI -2.423 to 2.089; p=0.882.  Health related quality of life measured	
	usually last for half a day or a full day.  • Key components and objectives of intervention - Not reported.  • Content/session titles - N/A.  • Location/place of delivery - Day hospital (no further details provided).  Outcomes measured:  Service user related outcomes —  • Activities of daily living was measured using the Nottingham Extended Activities of Daily Living Scale (Nouri and Lincoln, 1987). This scale contains 4 dimensions which	data set) – Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score): No significant difference between groups - mean estimated difference (adjusted for baseline scores) 1.39; 95% CI -6.11 to 8.88; p=0.710.  Anxiety measured using the Hospital Anxiety and Depression Scale: No significant difference between groups - mean estimated difference (adjusted for baseline scores) 0.223; 95% CI -1.906 to 2.351; p=0.834.  Depression measured using the Hospital Anxiety and Depression Scale: No significant difference (adjusted for baseline scores) 0.223; 95% CI -1.906 to 2.351; p=0.834.  Depression measured using the Hospital Anxiety and Depression Scale: No significant difference between groups - mean estimated difference (adjusted for baseline scores) -0.167; 95% CI -2.423 to 2.089; p=0.882.  Health related quality of life measured

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	scales; mobility (six items);	between groups - mean estimated difference	
	kitchen (five items); domestic	(adjusted for baseline scores) 0.147; 95% CI	
	(five items); and leisure (six	-0.051 to 0.345; p=0.141.	
	items). Each response to the	Health related quality of life measured	
	individual item was assigned a	using the EUROQUOL 5 dimensions	
	score from 0-3 which was	(visual analogue scale): No significant	
	combined to produce a score	difference between groups - mean estimated	
	for each dimension. These	difference (adjusted for baseline scores)	
	were then combined to	6.315; 95% CI –3.184 to 15.815; p=0.187.	
	produce an overall score for		
	activities of daily living. These	At end of rehabilitation programme	
	ranged from 0-66; and higher	(observed case data set) –	
	scores corresponded to greater		
	levels of independence.	Therapist-rated level of rehabilitation	
	<ul> <li>Anxiety and depression was</li> </ul>	measured using the Therapy Outcomes	
	measured using the Hospital	Measure.	
	Anxiety and Depression Scale	Impairment – No significant differences	
	(Zigmond and Snaith, 1983).	between groups - Mann-Whitney U test	
	This consists of 2 subscales	188.50; p=0.455.	
	measuring anxiety (seven	Activity - No significant differences between	
	items) and depression (seven	groups - Mann-Whitney U test 211.50;	
	items). Scores on each	p=0.613.	
	subscale are combined to	Social participation - No significant	
	create a total score ranging	differences between groups - Mann-Whitney	
	from 0 (no problems) to 21 (lots	U test 199.0; p=0.421.	
	of problems). Scores of 8 or	Wellbeing - No significant differences	
	more are generally perceived	between groups - Mann-Whitney U test	
	to be associated with greater	218.00; p=0.718.	
	likelihood of clinical diagnosis.	Deposted magazine ANOVA	
		Repeated measures ANOVA -	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)     Health related quality of life	Activities of daily living measured using	rating
	was measured using the	the Nottingham Extended Activities of	
	EUROQUOL (Bowling 1995).	Daily Living Scale (total score) –	
	Includes a visual analogue	Group effect: No significant difference	
	scale which respondents use to	between groups; p=0.898.	
	rate their health on a scale of 0	Follow-up effect: No significant effect of time;	
	(worst health imaginable) to	p=0.877. Group x follow-up interaction effect:	
	100 (best health imaginable);	No significant effect of group x time	
	and 5 questionnaire items	interaction; p=0.410.	
	relating to 5 dimensions of	•	
	health (anxiety and depression,	Anxiety measured using the Hospital	
	mobility, pain or discomfort,	Anxiety and Depression Scale –	
	self-care, and usual activities).	Group effect: No significant difference	
	Responses to each of these	between groups; p=0.180.	
	items are 'no problems', 'some	Follow-up effect: Significant effect of time; p =	
	problems', or 'cannot perform	0.001. Group x follow-up interaction effect: No	
	task' which results in a possible	significant effect of group x time interaction;	
	3 <sup>5</sup> =243 health states. These	p=0.219.	
	states can then be transformed		
	into a weighted health state	Depression measured using the Hospital	
	index. The authors also used	Anxiety and Depression Scale –	
	the questionnaire items to	Group effect: No significant difference	
	determine the number of	between groups; p=0.725. Follow-up effect:	
	participants who experienced	Significant effect of time; p=0.017. Group x	
	difficulties in any of these areas	follow-up Interaction effect: No significant effect of group x time interaction; p=0.225.	
	over the follow-up period (on the advice of the scale's	enection group & time interaction, p=0.225.	
	publishers).	Health related quality of life measured	
	<ul><li>Therapist-rated level of</li></ul>	using the EUROQUOL 5 dimensions	
	rehabilitation was measured	(questionnaire) –	

Research aims	PICO (population, intervention,	Findings	Overall validity
	using the Therapy Outcomes	Croup effect: No significant difference	rating
	Measure (Enderby and John,	Group effect: No significant difference between groups; p=0.815. Follow-up effect:	
	1997). Includes 4 dimensions	No significant effect of time; p=0.677. Group x	
	' impairment (degree of	follow-up interaction effect: Significant effect	
	severity of disorder),	of group x time interaction p=0.002.	
	disability/activity (degree of	or group x time interaction p=0.002.	
	limitation), social participation	Health related quality of life measured	
	(degree of psychosocial	using the EUROQUOL 5 dimensions	
	engagement) and well-being	(visual analogue scale) –	
	(effect on emotion/level of	Group effect: No significant difference	
	distress) – with each dimension	between groups; p=0.954. Follow-up effect:	
	scored on an 11-point ordinal	No significant effect of time; p=0.217. Group x	
	scale (0–5, including half-	follow-up Interaction effect: No significant	
	points). Lower scores indicate	effect of group x time interaction; p=0.956.	
	higher levels of impairment'	l choose of group x time intoraction, p c.coc.	
	(p25). Scores were classified	Last observation carried forward analysis -	
	as 0.0 and 0.5 was classified	Last observation sarried forward undrysis	
	as profound; 1.0-1.5 severe	Effect of place of care on outcomes at six	
	1.0-1.5; severe/moderate 2.0-	months (post hoc analysis adjusting for	
	2.5; moderate 3.0-3.5; mild 4.0-	baseline scores) -	
	4.5; and normal 5.	Activities of daily living measured using	
	,	the Nottingham Extended Activities of	
	Family or caregiver related	Daily Living Scale (total score): Care	
	outcomes –	provided in the home is not inferior to care	
	Carer psychological wellbeing	provided in the day hospital.	
	was measured using the General	Health related quality of life measured	
	Health Questionnaire-30	using the EUROQUOL 5 dimensions	
	(Bowling 1995). Consists of 30	(questionnaire): Care provided in the home	
	items each with a possible	is not inferior to care provided in the day	
	response of 'better/healthier than	hospital.	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	normal'; 'same as usual';	Health related quality of life measured	
	'worse/more than usual' to 'much	using the EUROQUOL 5 dimensions	
	worse/more than usual'. Each	(visual analogue scale): Care provided in	
	item was scored between 0 and 3	the home is not inferior to care provided in the	
	and individual scores were	day hospital.	
	combined to produce a single	Anxiety measured using the Hospital	
	index score. Higher scores	Anxiety and Depression Scale: It is not	
	corresponded to greater severity	possible to reject the null hypothesis that	
	of condition.	home based rehabilitation is inferior to day	
		hospital based rehabilitation.	
	Service outcomes –	Depression measured using the Hospital	
	<ul> <li>Frequency of hospital</li> </ul>	Anxiety and Depression Scale: Care	
	admissions for each participant	provided in the home is not inferior to care	
	were recorded during the 12	provided in the day hospital.	
	month follow-up period using	NB Effect on other outcomes not	
	local hospital information	measured/not reported.	
	systems.	Comparison between estimated group	
	Length of stay for those     The stay of the stay	differences derived from observed case	
	participants admitted to	data set (primary analysis), intention to	
	hospital during the follow-up	1	
	period were recorded using	treat analysis, and mixed models for repeated measures (using all available	
	local hospital information	, . · · · · · · · · · · · · · · · · · ·	
	systems.	data) –	
	Falls a 0.0 said 40 s iii	Activities of daily living measured using	
	Follow-up: 3, 6 and 12 months	the Nottingham Extended Activities of	
	post-randomisation.	Daily Living Scale (total score): Observed	
		case data set: Mean difference -2.139 (95%	
	Costs? Cost information -	CI -6.870 to 2.592). Last observation carried	
	Includes data on costs and	forward data set: Mean difference -3.222	
	resource use.	(95% -7.687 CI to 1.243). Mixed models for	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		repeated measures analysis: Mean difference	
		-4.150 (95% -10.083 CI to 1.784).	
		Health related quality of life measured	
		using the EUROQUOL 5 dimensions	
		(questionnaire): Observed case data set:	
		Mean difference 0.023 (95% CI -0.114 to	
		0.161). Last observation carried forward data	
		set: Mean difference 0.011 (95% CI -0.109 to	
		0.131). Mixed models for repeated measures	
		analysis: Mean difference 0.161 (95% CI -	
		0.007 to 0.329).	
		Health related quality of life measured	
		using the EUROQUOL 5 dimensions	
		(visual analogue scale): Observed case data	
		set: Mean difference -1.601 (95% CI -8.809 to	
		5.607). Last observation carried forward data	
		set: Mean difference -2.937 (95% CI -8.991 to	
		3.117). Mixed models for repeated measures	
		analysis: Unable to obtain estimates due to	
		data set limitations.	
		Anxiety measured using the Hospital	
		Anxiety and Depression Scale: Observed	
		case data set: Mean difference -0.578 (95%	
		CI -2.409 to 1.253). Last observation carried	
		forward data set: Mean difference -0.347	
		(95% CI -1.843 to 1.160). Mixed models for	
		repeated measures analysis: Mean difference	
		-0.213 (95% CI -2.393 to 1.968).	
		Depression measured using the Hospital	
		Anxiety and Depression Scale: Observed	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		case data set: Mean difference 1.033 (95% CI -0.441 to 2.507). Last observation carried forward data set: Mean difference 1.357 (95% CI 0.050 to 2.663). Mixed models for repeated measures analysis: Mean difference 2.280 (95% CI 0.185 to 4.374).	
		Family or caregiver related outcomes - Carer psychological wellbeing measured using the General Health Questionnaire (observed case data set):  Three months follow-up - No significant difference between groups - mean difference -2.04; 95% CI -10.89 to 6.80; p=0.644.  Six months follow-up (observed case data set) - Carer psychological wellbeing measured using the General Health Questionnaire: No significant difference between groups - mean difference -0.883; 95% CI -10.75 to 8.979; p=0.857.  Twelve months follow-up (observed case data set) - Carer psychological wellbeing measured using the General Health Questionnaire: No significant difference between groups - mean difference -0.239; 95% CI -8.73 to 8.251; p=0.954.	
		Service outcomes -  Resource use at six months -	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Use of primary care: Participants in the control group used significantly less primary care than those in the intervention group - p=0.02. Outpatient visits: No significant difference between groups - p=0.71.  Emergency ambulance use: No significant difference between groups - p=0.84.  Patient transportation service use: No significant difference between groups - p=0.76.  Home visits (not including GP): No significant difference between groups - p=0.21.  Drugs (£): No significant difference between groups - p=0.61.  Nursing home stay (days): No significant difference between groups - p=0.32.  Day care use (days): No significant difference between groups - p=0.61.  Private care expenditure (£): No significant difference between groups - p=0.85.  Home assistance (£): No significant difference between groups - p=0.59.  Home assistance excluding outlier participant: No significant difference between groups -	_
		p=0.76. Informal care (hours): No significant difference between groups - p=0.68.	
		Resource use at twelve months –	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Use of primary care: No significant difference	
		between groups - p=0.44.	
		Outpatient visits: No significant difference	
		between groups - p=0.87.	
		Emergency ambulance use: No significant	
		difference between groups - p=1.	
		Patient transportation service use: No	
		significant difference between groups - p=0.48.	
		Home visits (not including GP): No significant	
		difference between groups - p=0.27.	
		Drugs (£): No significant difference between	
		groups - p=0.46.	
		Nursing home stay (days): No significant	
		difference between groups - p=0.63.	
		Day care use (days): No significant difference	
		between groups - p=0.37.	
		Private care expenditure (£): No significant	
		difference between groups - p=0.89.	
		Home assistance (£): No significant difference	
		between groups - p=0.97.	
		Home assistance excluding outlier participant:	
		No significant difference between groups -	
		p=0.87.	
		Informal care (hours): No significant difference	
		between groups - p=0.88.	
		Frequency of hospital admissions over 12	
		month follow-up period: No significant	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		difference between groups - odds ratio 0.75; 95% CI 0.62 to 3.47; p=0.383.	
		Length of stay for participants who had at least 1 hospital admission during 12 month follow-up period: No significant difference between groups - mean difference 9.3 days; 95% CI -12.5 to 31.1 days.	
		Duration of stay per hospital admission during 12 month follow-up period: No significant difference between groups – control = 15.8 days vs intervention = 16.4 days; p=0.936.	
		Effect of place of care on number of hospital admissions over 12 month follow-up period: No significant effect of place of care - expβ=0.68; 95% CI 0.41 to 1.12; p=0.130.	
		Narrative findings – effectiveness –	
		Service user related outcomes –  Three months follow-up (observed case data set) –  Activities of daily living measured using the	
		Nottingham Extended Activities of Daily Living Scale (total score): No significant difference between groups. Anxiety measured using the Hospital Anxiety and Depression Scale: No significant difference between groups.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Depression measured using the Hospital Anxiety and Depression Scale: No significant difference between groups.	
		Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire): Significant difference between groups in favour of the control.	
		Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale): No significant difference between groups.	
		Six months follow-up (observed case data set) - Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score): No significant difference between groups.	
		Activities of daily living measured using the Nottingham Extended Activities of Daily Living mobility subscale: No significant difference between groups.	
		Activities of daily living measured using the Nottingham Extended Activities of Daily Living kitchen subscale: No significant difference between groups.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Activities of daily living measured using the Nottingham Extended Activities of Daily Living domestic subscale: No significant difference between groups.	
		Activities of daily living measured using the Nottingham Extended Activities of Daily Living leisure subscale: No significant difference between groups.	
		Household activities of daily living measured using the Nottingham Extended Activities of Daily Living domestic and kitchen subscales (composite): No significant difference between groups.	
		Anxiety measured using the Hospital Anxiety and Depression Scale: No significant difference between groups.  Depression measured using the Hospital Anxiety and Depression Scale: No significant difference between groups.	
		Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire): No significant difference between groups.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale): No significant difference between groups.	
		Proportion of participants classifying themselves as having experienced a problem in 1 of the five domains of health related quality of life measured using the EUROQUOL 5 dimensions (adjusted for baseline proportions) at six months:  Mobility – No significant difference between groups.  Usual activities – No significant difference between groups.  Self-care – No significant difference between groups. Pain/discomfort – No significant difference between groups.  Anxiety/depression – No significant difference between groups.	
		Likelihood of being classified as a clinical case of anxiety or depression (adjusted for baseline proportions) at six months:  Anxiety – No significant difference between groups. Depression – No significant difference between groups.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Effect of place of care on outcomes at six months (post hoc analysis adjusting for baseline scores) — Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score): Care provided in the home is not inferior to care provided in the day hospital. Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire): Care provided in the home is not inferior to care provided in the day hospital. Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale): Care provided in the home is not inferior to care provided in the day hospital. Anxiety measured using the Hospital Anxiety and Depression Scale: It is not possible to reject the null hypothesis that home based rehabilitation is inferior to day hospital based rehabilitation. Depression measured using the Hospital Anxiety and Depression Scale: Care provided in the home is not inferior to care provided in the day hospital. NB Effect on other outcomes not measured/not reported.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Six months follow-up – last observation carried forward analysis – Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score): No significant difference between groups. Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire): No significant difference between groups. Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale): No significant difference between groups. Anxiety measured using the Hospital Anxiety and Depression Scale: No significant difference between groups. Depression measured using the Hospital Anxiety and Depression Scale: Significant difference between groups in favour of the intervention.	
		Twelve months follow-up (observed case data set) – Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score): No significant difference between groups.  Anxiety measured using the Hospital Anxiety and Depression Scale: No significant difference between groups.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Depression measured using the Hospital Anxiety and Depression Scale: No significant difference between groups. Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire): No significant difference between groups. Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale): No significant difference between groups.	
		At end of rehabilitation programme (observed case data set) – Therapist-rated level of rehabilitation measured using the Therapy Outcomes Measure. Impairment - No significant differences between groups. Activity - No significant differences between groups. Social participation - No significant differences between groups. Wellbeing - No significant differences between groups.	
		Repeated measures ANOVA – Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score) - Group effect: No significant difference between groups. Follow- up effect: No significant effect of time.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Group x follow-up interaction effect: No significant effect of group x time interaction. Anxiety measured using the Hospital Anxiety and Depression Scale – Group effect: No significant difference between groups. Follow-up effect: Significant effect of time; p=0.001. Group x follow-up interaction effect: No significant effect of group x time interaction. Depression measured using the Hospital Anxiety and Depression Scale – Group effect: No significant difference between groups. Follow-up effect: Significant effect of time. Group x follow-up Interaction effect: No significant effect of group x time interaction. Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire)	
		Group effect: No significant difference between groups. Follow-up effect: No significant effect of time. Group x follow-up interaction effect: Significant effect of group x time interaction p= 0.002. Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale) —	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	•	Group effect: No significant difference	-
		between groups. Follow-up effect: No	
		significant effect of time.	
		Group x follow-up Interaction effect: No	
		significant effect of group x time interaction.	
		Last observation carried forward analysis	
		-	
		Effect of place of care on outcomes at six	
		months (post hoc analysis adjusting for	
		baseline scores) - Activities of daily living	
		measured using the Nottingham Extended	
		Activities of Daily Living Scale (total score):	
		Care provided in the home is not inferior to	
		care provided in the day hospital.	
		Health related quality of life measured using	
		the EUROQUOL 5 dimensions	
		(questionnaire): Care provided in the home is	
		not inferior to care provided in the day	
		hospital.	
		Health related quality of life measured using	
		the EUROQUOL 5 dimensions (visual	
		analogue scale): Care provided in the home is	
		not inferior to care provided in the day	
		hospital.	
		Anxiety measured using the Hospital Anxiety	
		and Depression Scale: It is not possible to	
		reject the null hypothesis that home based	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		rehabilitation is inferior to day hospital based rehabilitation. Depression measured using the Hospital Anxiety and Depression Scale: Care provided in the home is not inferior to care provided in the day hospital. NB Effect on other outcomes not measured/not reported.	
		Comparison between estimated group differences derived from observed case data set (primary analysis), intention to treat analysis, and mixed models for repeated measures (using all available data) –  The authors compared results derived from different analysis methods and found that mean effects were generally larger when derived from the mixed models for repeated measures analysis or last observation carried forward data set.	
		Family or caregiver related outcomes –  Carer psychological wellbeing (observed case data set) – measured using the General Health Questionnaire:  Three months follow-up - No significant difference between groups.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	companison, outcomes)	Six months follow-up – Carer psychological wellbeing measured using the General Health Questionnaire: No significant difference between groups.  Twelve months follow-up – Carer psychological wellbeing measured using the General Health Questionnaire: No significant difference between groups.	ruung
		Resource use at six months –  Use of primary care: Participants in the control group used significantly less primary care than those in the intervention group.  Outpatient visits: No significant difference between groups. Emergency ambulance use: No significant difference between groups. Patient transportation service use: No significant difference between groups. Home visits (not including GP): No significant difference between groups.  Drugs (£): No significant difference between groups. Nursing home stay (days): No significant difference between groups.  Day care use (days): No significant difference between groups.  Private care expenditure (£): No significant difference between groups.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Home assistance (£): No significant difference between groups. Home assistance excluding outlier participant: No significant difference between groups. Informal care (hours): No significant difference between groups.	
		Resource use at twelve months – Use of primary care: No significant difference between groups. Outpatient visits: No significant difference between groups. Emergency ambulance use: No significant difference between groups. Patient transportation service use: No significant difference between groups. Home visits (not including GP): No significant difference between groups. Drugs (£): No significant difference between groups. Nursing home stay (days): No significant difference between groups. Day care use (days): No significant difference between groups. Private care expenditure (£): No significant difference between groups. Home assistance (£): No significant difference between groups. Home assistance excluding outlier participant: No significant difference between groups. Informal care (hours): No significant difference between groups.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Frequency of hospital admissions over 12 month follow-up period: No significant difference between groups. Length of stay for participants who had at least 1 hospital admission during 12 month follow-up period: No significant difference between groups. Duration of stay per hospital admission during 12 month follow-up period: No significant difference between groups.	
		Effect of place of care on number of hospital admissions over 12 month follow-up period: No significant effect of place of care.	

## 5. Thorsen AM, Widen Holmqvist L, Von Koch L (2006) Early Supported Discharge and continued rehabilitation at home after stroke: 5-year follow-up of resource use. Journal of Stroke and Cerebrovascular Diseases 15(4): 139-43

	O (population, intervention, parison, outcomes)	Findings	Overall validity rating
of the study was to assess the effect of Early Supported Discharge on use of health care and social service resources 5 years their factors.	icipants: Service users and families, partners and rs. Participants were service s after stroke.  ple characteristics: ge - The mean age of articipants was 72 years. ex - This is not reported.	Findings - effect sizes:  A difference in the mean total length of hospitalisation was observed (51 days in control group vs. 32 days in Early Supported Discharge group; mean difference -19.2 [95% CI -35.7 to -2.7] p=0.02).  Participants in the CRG used outpatient rehabilitation more frequently than Early	Overall assessment of internal validity:  Overall assessment of external validity:

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
This is 1 of 2 follow-up studies, the first of which explores changes in perceived health status over the 5 years after stroke onset (Ytterberg et al. 2010), thus providing an overall picture.  Methodology: RCT. This study followed-up an RCT that was conducted in 2000. Participants were randomised to Early Supported Discharge or conventional rehabilitation.  Country: Sweden.  Source of funding: Other - The study was supported by grants from the	<ul> <li>Ethnicity - This is not reported.</li> <li>Religion/belief - This is not reported.</li> <li>Disability - This is not reported.</li> <li>Long term health condition - There was a greater proportion of patients in the Early Supported Discharge group with a history of conditions associated with stroke, particularly transient ischemic attack and diabetes mellitus.</li> <li>Sexual orientation - This is not reported.</li> <li>Socioeconomic position - This is not reported.</li> <li>Sample size -</li> <li>Comparison numbers: n=24.</li> <li>Intervention numbers: n=30.</li> <li>Sample size: 54 participants were followed-up in this study.</li> <li>Intervention:</li> <li>Describe intervention - Early supported discharge from hospital and continued rehabilitation at home.</li> </ul>	Supported Discharge group participants (mean difference -11.8 [95% CI -22.8 to -0.7, p=.04), including physiotherapy in primary care (mean difference -4.7 [95% CI -9.2 to -0.1] p=.05).  Narrative findings — effectiveness: A significant difference in mean total length of hospitalisation was present at 5 year follow-up. In addition to this, participants in the Early Supported Discharge group used less resources than participants in the control group.  There was no difference between the 2 groups in the use of community-based social service or informal care for the period of the previous 6 months.	Overall validity rating: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Swedish Association of Neurologically Disabled, the Swedish Stroke Association, Solstickan Foundation, and the Center for Health Care Sciences, Karolinska Institutet.	<ul> <li>Delivered by - The intervention was delivered by an outreach team of occupational therapists, physiotherapists, and a speech and language therapist.</li> <li>Delivered to - The intervention was delivered to participants allocated to the Early Supported Discharge condition.</li> <li>Duration, frequency, intensity, etc The mean duration of the intervention program was 14 weeks and the mean number of home visits was 12.</li> <li>Key components and objectives of the intervention were to reduce the risk of death or dependency, shorten the length of hospitalisation, improve independence in extended activities of daily living (ADL), and increase satisfaction with services and the likelihood of living at home.</li> <li>Content/session titles - The content of the intervention was</li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	decided upon together with the participant and his or her family, however, the most common foci of home visits were speech and communication, ADL, and ambulation.  • Location/place of delivery - The intervention was delivered in participants' homes.		
	Comparison intervention: Participants in the comparison intervention received their rehabilitation in the stroke department until discharge. The content and duration of this did not adhere to a standardised program, but rather reflected services available within the District Health Authority.		
	Outcomes measured:  Service outcomes - This study's main outcome measure was the effect of Early Supported Discharge services on use of health care and social service resources 5 years after		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	stroke. The following measures were used to gather data - a computerised register of Stockholm County Council - telephone conversations and consultation visits - interviews with participants and/or their spouses.		
	Follow-up: Participants were assessed at baseline and followed-up 5 years later.		
	Costs? No. No calculation of cost was performed of the 5 year resource use of health care.		

## 6. Ytterberg C, Thorsen AM, Liljedahl M et al. (2010) Changes in perceived health between one and five years after stroke: A randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the Neurological Sciences 294: 86-8

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To explore perceived health status in people with stroke who received Early Supported	Participants: Service users and their families, partners and carers - Participants were service users who had been diagnosed with first or recurrent stroke, according to the World Health	Findings - effect sizes: Effect sizes not reported by the authors. Effect sizes presented here were calculated by the review team. There was no difference between the groups at 1 or 5 years after stroke with regard to Sickness Impact Profile total, except for a higher impact	Overall assessment of internal validity: + Conclusions are in

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Discharge, with those who received conventional rehabilitation, over 5 years after stroke onset.  NB. This is 1 of 2 follow-up studies, the second of which explores the effect of Early Supported Discharge services on use of health care and social service resources 5 years after stroke onset (Thorsen et al., 2006), thus providing an overall picture.  Methodology: RCT. This study followed-up an RCT that was conducted in 2000. Participants were randomised to Early Supported	Organization's clinical criteria for acute stroke.  Sample characteristics:  Age - Follow-up age was 71 in the home rehabilitation group and 70 in the conventional rehabilitation group.  Sex - 13 women were in the home rehabilitation group, 8 women were in the conventional rehabilitation group.  Ethnicity - 25 participants in the home rehabilitation were Swedish, as were 20 from the conventional rehabilitation group. Other ethnicities are not reported.  Religion/belief – Not reported.  Disability - Not reported.  Sexual orientation - Not reported.  Socioeconomic position - Three participants from the home rehabilitation group were classed as 'working', as were 4 from the conventional rehabilitation group.	in the home rehabilitation group at 1 year after stroke with regard to communication (p=0.01) and at 5 years after stroke with regard to eating (p=0.04).  Sickness Impact Profile total did not change significantly between 1 and 5 years in the home rehabilitation group, whereas it deteriorated significantly (p=0.05) in the conventional rehabilitation group.  Body care deteriorated in the conventional rehabilitation group (p=0.03) and emotional behaviour was improved in both groups (home rehabilitation group, p=0.04; conventional rehabilitation group, p=0.04).  Baseline characteristics of patients in the home rehabilitation group (HRG) and the conventional rehabilitation group (CRG) assessed with regard to perceived health 5 years after stroke: Timed 10m walk: d=0.1803: 95% Confidence Interval -0.3792 to 0.7398; Nine-Hole Peg Test right, pegs/min: d = -0.2466; 95% CI -0.8071 to 0.3139; Nine-Hole Peg Test left, pegs/min: d = 0.1776; 95% CI -0.3819 to 0.7371.  Narrative findings – effectiveness: There	line with study findings, which suggest that the long term outcome with regard to perceived health status is more favourable after Early Supported Discharge than after conventional rehabilitation.  Overall assessment of external validity: ++  Overall validity rating: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Discharge or conventional rehabilitation.  Country: Sweden.  Source of funding: Other - The study was supported by grants from the Swedish Stroke Association and from the Swedish Council for working life and social research (FAS).	<ul> <li>Sample size –</li> <li>Comparison numbers: At baseline, n=41 and at follow-up (5 years later), n=24 - although only 22 were assessed with regards to perceived health.</li> <li>Intervention numbers: At baseline, n=42 and at follow-up (5 years later), n=30 - although only 28 were assessed with regards to perceived health.</li> <li>Sample size: N=83 (before allocation). The total number of participants that were assessed with regards to perceived health was 50.</li> </ul>	was no difference in perceived health between the groups at 1 or 5 years after stroke with regard to Sickness Impact Profile total and the physical and psychosocial dimensions. Perceived health did not significantly change between 1 and 5 years in the home rehabilitation group whereas it had deteriorated significantly in the conventional rehabilitation group.	
	<ul> <li>Intervention:         <ul> <li>Describe intervention - Early supported discharge from hospital and continued rehabilitation at home. Further details are not provided in this study.</li> <li>Delivered by - A multidisciplinary team.</li> </ul> </li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Delivered to - Participants allocated to the intervention condition (n=42).</li> <li>Duration, frequency, intensity, etc.</li> <li>Details about the intervention are not provided in this study.</li> <li>Key components and objectives of intervention - Details about the intervention are not provided in this study, however, it is noted that the overall purpose of Early Supported Discharge is to reduce long term dependency and also admission to institutional care as well as reducing the length of hospital stay.</li> <li>Content/session titles - Details about the intervention are not provided in this study.</li> <li>Location/place of delivery - Details about the intervention are not provided in this study.</li> <li>Comparison intervention:</li> </ul>		
	Conventional rehabilitation.		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Details are not provided in this study.		
	Outcomes measured:		
	Service user related outcomes - Perceived health status of service users was measured.		
	<b>Follow-up:</b> Follow-up was at 3 months, 6 months, 1 and 5 years after stroke.		
	Costs? No.		

## Review question 1 – Findings tables – the views and experiences of people using services, their families and carers

## 1. Ariss S (2014) National audit for intermediate care: Patient reported experiences, 2014. Sheffield: University of Sheffield

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To obtain views and experiences from	Participants: Service users and their families, partners and carers. People using intermediate	Narrative findings – qualitative and views and experiences data:	Overall assessment of internal validity:
people using intermediate care by	care (bed based, home based or reablement).	NB. The report is published without page numbers so these cannot be provided with the	-

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
asking the following survey question: 'Do you feel that there is something that	Sample size: 908 (356 of whom were people using home based intermediate care).	quotes. Statements about ways that the service might be improved were coded into 8 distinct themes, which emerged from the data. They're listed here in descending order, starting with	Overall assessment of external validity:
could have made	Intervention:	the 1 cited most frequently.	
your experience of	Describe intervention - Home		Overall validity
the service better?'	based intermediate care. The author does not provide a	Joined up, appropriate services: This theme included communication and coordination	rating:
Methodology:	description in this report	within and between services, timeliness or	
Survey.	although we know that in the	information about waiting times, continuity of	
	broader audit, home based	carers, discharge arrangements, and	
Country: UK –	intermediate care is defined as	knowledgeability and information provision	
England.	follows - community based	about other appropriate services.	
	services provided to service		
Source of funding:	users in their own home/care	Supporting quotes:	
Government.	home. These services will	Communication between services including	
	usually offer assessment and	information sharing – "Hours spent on assessment + no one passed on their notes so	
	interventions supporting admission avoidance, faster	process very repetitive - exhausting!"	
	recovery from illness, timely	process very repetitive - extrausting:	
	discharge from hospital and	Long wait between discharge and start of home	
	maximising independent living.	based intermediate care – "I was discharged	
	Services are usually delivered	from hospital late on a Thursday, assessed on	
	by the multi-disciplinary team,	the Friday but, with the weekend intervening no	
	but predominantly by health	OT equipment was delivered until Monday at	
	professionals and carers (in	the earliest. This meant that we had to cope for	
	care homes).	nearly 4 days without aids."	
	Delivered by - The author does		
	not provide a description of	Abrupt end to the service - "When my care was	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	who delivers the services in this report although we know that in the broader audit, home based intermediate care is	near an end. It was very chaotic. I was told by the carer treatment would be stopped the next day."	
	described as being delivered by multi-disciplinary teams, but predominantly by health professionals and carers (in care homes).	<b>Timing of visits:</b> The timing of visits was often inappropriate, unexpected or inconsistent, and secondly more time or greater frequency of visits was considered necessary.	
	<ul> <li>Duration, frequency, intensity, etc Details not provided in this report but according to the NAIC, up to 6 weeks (though there will be individual exceptions).</li> </ul>	Supporting quotes: Service led, not needs led – " wasn't my fault I needed care at weekend. Just dumped at weekend survival what's happened to public services it's a 24hour care service now it's gone to Monday-Friday 9-5."	
	Key components and objectives of intervention -     Details not provided in this	Pattern/ frequency of visits – "More frequent visits only in the first two/three weeks of my injury".	
	report but according to the NAIC, the aims of home based IC are: Intermediate care assessment and interventions supporting admission avoidance, faster recovery from illness, timely discharge from hospital and maximising	Communication regarding timings of visits/lack of control over daily life — "I know it is hard for the nurses to get here but if you could make it definitely morning or afternoon as I found I had to cancel appointments as I didn't know when they were actually coming am or pm."	
	independent living.  • Location/place of delivery - Details not provided in this	Personal communication and attention: Included lack of appropriate or consistent information about services or care,	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	report but according to the NAIC, people's own homes including care homes.	inappropriate or disrespectful communication, lack of discharge information, and feelings that service-users were not being listened to, or their needs understood.	
		Supporting quotes: Not knowing what to expect – "If I had notice of when they would start visiting and their objectives I was rather surprised."	
		User involvement in decisions/ goal planning – "I think there is a balance to be struck between user and practitioner in making decisions about body therapy and outcomes, and I don't think you have that balance right yet."	
		Length of service: Many respondents report anxiety or concern about the support finishing too early, before they feel adequately able to support themselves. Personal health and safety issues were also a concern. For many service-users, discharge from the service is seen as an end to their contact with any support services, which could reflect a lack of access to appropriate long-term, low-level support.	
		Supporting quotes: The service was perceived to have been terminated too early – "I had a broken hip just discharged and	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		received 1 visit only. I would have liked more longer term involvement support to regain full mobility asap but a 45 min one off visit was all I was allowed. Very poor."  - "My legs are weak and shaky. Whilst the carers were here I had more confidence and my walking was improving I would have liked there help for a bit longer".  - "I felt I still needed support and staff could have continued until I was more confident in myself (stopped at 4 weeks)".	
		Staffing: The main concerns were lack of provider continuity, and shortage of staff. Impacts on many other important aspects of care, such as rushed visits, not enough time to share information, unpredictable and inappropriate visit times, inconsistent standards of care and lack of understanding about individuals' needs.	
		Supporting quotes: Impact of lack of continuity – "To have same person who knew your case".	
		Personal care: No particular themes for home based intermediate care in relation to personal care - just individual reasons for unmet needs – "I have not achieved all that was intended i.e. I	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		am unable to go shopping because a) I am unable to walk without 2 sticks is am unable to carry any shopping and b) have not the confidence to go far on my own. So far I have been unable to walk as far as the local shop."  Therapy and assessment: The responses for home based services specifically mentioned more physiotherapy as an identified area of service improvement, "I wanted physiotherapy to help me to walk unaided but I was put on a waiting list!"	

2. Cobley CS, Fisher RJ, Chouliara N et al. (2013) A qualitative study exploring patients' and carers' experiences of Early Supported Discharge services after stroke. Clinical Rehabilitation 27(8): 750-7

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To investigate patients' and carers'	<b>Participants:</b> Service users and their families, partners and carers - Stroke patients and carers.	Narrative findings – qualitative and views and experiences data:	Overall assessment of internal validity:
experiences of Early	•	Early Supported Discharge specific themes:	+
Supported	Sample characteristics:		
Discharge services and inform future Early Supported Discharge service development and	<ul> <li>Age - The mean (SD) age of patients after stroke was 69.85 ± 13.42 years and mean (SD) age of carers was 72.79 ± 14.10.</li> </ul>	Satisfaction with rehabilitation exercises: Almost all interviewees (17 of 19) reported feeling satisfied with the various exercises they had been taught and left to complete, enabling optimal functional recovery. Patients often	Overall assessment of external validity:
provision.		commented on the benefits of receiving	With the caveat

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Methodology: Qualitative study - semi structured interviews with patients and carers.	<ul> <li>Sex - Sex of stroke patients not reported. 13 of the carers (87%) were women.</li> <li>Sample size: 19 patients and 9 carers.</li> </ul>	therapeutic sessions both within and outside the home environment, "The team were encouraging and motivating and would take me on a walk to make sure I could get on a bus and that I was able to cross the road, things like that" (interview 12, patient: p753).	about Early Supported Discharge being outside the NAIC definition.  Overall validity
Country: United Kingdom - England, Nottinghamshire.  Source of funding: Government – NIHR.	Intervention: Patients were recruited from 2 stroke units. Participants included those who had been referred to Early Supported Discharge and those who were not. Early Supported Discharge is not described in this paper.	Home as a better arena for rehabilitation: There was a consensus of preference among participants (15 of 19) for returning to their home environment as soon as possible. Home was described as a more private and individualized arena for rehabilitation. It was perceived to be more focused toward rehabilitation outcomes, "it was good to be given walks around the house and getting used to things that are here, such as steps and obstacles. And that has helped in that respect, getting back into the house" (interview 3, patient: p753).  Time not being a carer: Respite time for the carer emerged as a significant and prominent theme. Five of 9 reported that the therapeutic sessions between patient and the Early Supported Discharge (clinicians) team enabled them to engage in their own activities. By contrast, 2 carers described feeling housebound as the team were not with the	rating: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		patient long enough to enable sufficient respite time for the carer (interview 4, carer: p753).	
		Speed of response: Sixteen of 19 patients reported feeling positively surprised with the seamless transition between hospital and home setting, with the first Early Supported Discharge home visit being made within 24 hours of hospital discharge. However 1 participant had to wait several days for the Early Supported Discharge team to make their initial visit, "It was a few days of me coming from hospital. I was left without any help at all from the Thursday to the Monday I sort of had to fend for myself I wished it could have started earlier than it did" (interview 12, patient: p753).	
		Intensity of therapy: The intensity of rehabilitation, up to 4 visits per day, 7 days per week for a duration of 6 weeks was received very positively by virtually every respondent (18 of 19). The consistency and regularity of visits provided a sense of security during such a lifechanging transitional period.	
		Satisfaction with provision and delivery of equipment: There was a general consensus (10 of 19) among participants that the equipment provided	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		was useful and delivered in a timely manner. Nevertheless, 1 patient found the equipment provided unsuitable and 1 patient was disappointed at being promised aids that never materialized: "they're really struggling to get these aids. So they said, we'll probably get you a sock aid to help you put your socks on, but I didn't get one" (interview 4, patient: p754).	
		Disjointed transition between early supported discharge and future services: Some patients felt that the 6-week cut off from Early Supported Discharge was abrupt and not continuous enough. Furthermore, some patients transferred onto further services did not feel that this transition was always well managed, " all of a sudden it's like, 'Oh, we've referred you to the hospital again to get the physio', which has took, like, 3 months. So I've had intense physio for 6 weeks and then, for 3 months, I've had nothing" (interview 2, patient: p754).	
		Common themes in both cohorts of interviews:	
		Limited support in dealing with carer strain: On discharge, carers are left feeling exhausted and physically strained with no time for leisure	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		and social activities. They have to take on new roles and responsibilities and come to terms with new relationships e.g. from wife to carer. Many respondents indicated that they felt thrown into the caring role without receiving enough support from the community stroke teams. They stressed the need for services to consider and address carers' issues, "I'm very disappointed that they didn't offer to help me, because obviously he would have had to go into a home or somewhere if I wasn't doing it. So I mean I'm saving them a lot of money and time" (interview 6, carer: p754).  Lack of education and training of carers: Twelve of 15 carers reported being poorly informed regarding the extent of support available after discharge, "I don't think they told me anything, I was just left out in the cold, I didn't have a clue what was going on" (interview 6, carer: p754). The training of carers in how best to physically support the patient was described as inadequate, "I wasn't physically shown the best way to support him, it was all trial and error" (interview 8, carer: p754). Carers also highlighted their difficulty in coping with the stroke patients' emotional and psychological needs.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Inadequate provision and delivery of information: In several interviews, both patients (15 of 26) and carers (10 of 14) expressed their concerns about their limited understanding of stroke and its causes, secondary preventative measures, and lifestyle changes, "I wouldn't have a clue what was normal, what wasn't normalwho to ask for help and advice. I mean the internet's okay, but it only takes it so far. Sometimes you need a person to put it into terms that you understand. Because it's stressful when you don't know what's going on" (interview 8, patient: p754).	
		Both patients and carers spoke of the difficulties they had encountered in accessing information concerning welfare benefits, carer allowance, statutory and informal support. Many participants felt information wasn't delivered in an appropriate format and they felt it was provided too late.	

## 3. McLeod E, Bywaters P, Tanner D et al. (2008) For the sake of their health: Older service users' requirements for social care to facilitate access to social networks following hospital discharge. British Journal of Social Work 38: 73-90

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The evaluation did not aim to assess the effectiveness of social rehabilitation as a model and method of practice per se, nor its impact on reducing hospital readmission.  However, it provided the opportunity to study older service users' requirements for social care to facilitate access to social networks and support post-hospital discharge.  Methodology: Qualitative study - Data on service user experiences and views were collected mainly via	<ul> <li>Participants:</li> <li>Service users and their families, partners and carers - Service users.</li> <li>Professionals/practitioners - Project coordinators from the 5 Age Concern pilots.</li> <li>Sample characteristics:</li> <li>Age - Ranged from 57 to 101. Most were in their seventies and eighties, with a few either in their sixties or nineties.</li> <li>Sex - Only 2 out of seventeen service users completing interviews or feedback questionnaires were men. In the sample of case records, there were also fewer men (eighteen) than women (twenty-six).</li> <li>Ethnicity - Only 1 member of a minority ethnic group was included in the sample, reflecting feedback from project co-ordinators that a disproportionately low</li> </ul>	Narrative findings – qualitative and views and experiences data:  Safe transition - essential preliminary to reengagement socially: An essential requirement to older service users re-engaging with social networks following hospital discharge was safe transition between hospital and home. Several project co-ordinators encountered service users who had been discharged too soon and were too ill to cope at home. Project co-ordinators also gave several examples illustrating the need for improved levels of funding and co-ordination of health and social care services, to avert risks to health in the transfer from hospital to home.  Example – "One Social Rehabilitation worker had made an appointment with a potential service user for the morning after her discharge. The service user had multiple health problems and could not walk. When the Social Rehabilitation worker arrived she found the woman sitting in her hallway. She had been left at the bottom of her garden drive by the hospital transport the day before. Despite her leg being in plaster, she had managed to get	Overall assessment of internal validity: + Overall assessment of external validity: ++ Overall validity rating: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
questionnaires with a small number of telephone interviews. Also analysis of service records plus interviews with project coordinators.  Country: UK.  Source of funding: Not reported.	percentage of members of minority ethnic groups accessed the service.  • Long term health condition - Illhealth leading to the most recent A&E attendance or hospitalization was associated with long-term conditions such as heart disease. Health issues tended to take the form of multiple problems combined with various forms of impairment such as stroke, together with hearing impairment and heart conditions. There was little evidence of service users with Alzheimer's disease using the HACSR service.  • Sexual orientation - Service records contained no information relating to service users' sexual orientation. Nor did this emerge as an issue in interviews or questionnaires.  Sample size: Seventeen service users and 5 project coordinators.	herself into the house but could not get anywhere else. She had sat, in her hospital clothes, on an upright chair in her hall all night, without food or drink" (Project A, p80).  Assistance with practical home care/personal care: A large proportion of service users (ten out of seventeen) identified needing 'low-level' practical assistance in the home from the social rehabilitation project e.g. vacuuming, general cleaning They said this not only assisted their recovery by maintaining personal and home care when they were physically incapacitated, but it helped restore their morale in a situation of social isolation: "I was in quite a lot of pain also I was very depressed it was a wonderful help which got me through a very difficult time. I had no family or close friends" (Project C, p81).  Although direct home care provision didn't fit the 'classic' social rehabilitation service model (focusing on service users gaining access to social networks and assisting service users to undertake tasks themselves gradually), project co-ordinators recognized that it was in service users' interests to meet this need, and accepted it as integral to the social rehabilitation service. They also appreciated	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Intervention:</li> <li>Describe intervention - The authors do not provide a clear description of the 5 projects.</li> </ul>	that it could be a prerequisite for service users being able to engage in social contact outside their home –	
	However, pieced together from the paper, the projects, as a whole can be described as: 'providing feedback on older service users' views and experience related to social care social care following	"Quite often people say, 'The thing I would most like help with is cleaning, because then I have got a bit more time perhaps to go out'How the home looks to some people is so important, it gives them the confidence to face the world again" (Project C, p81).	
	hospital discharge. Second, the HACSR projects in question were primarily framed in terms of enhancing older service users' engagement with social networks and the exchange of social support. Their explicit brief was to provide social rehabilitation as an integral part	Advocacy to assist access to material and social resources: There were several examples in which service users needed social care project workers to act as advocates in negotiations with key organizations and networks, to obtain material and social resources important to their health and well-being, for example, help obtaining benefits.	
	of social care after hospital discharge. The social rehabilitation approach aims to provide: "Programmes of timelimited intervention to help them (service users) restore confidence and skills lost through injury, bereavement or other trauma or loss and to	Example - 1 service user had been expected to go into residential care after leaving hospital. However, she didn't want this as she'd always been very independent. She had dysphasia (a profound hearing impairment) and some degree of cognitive impairment when tired. She could not manage paying bills and often forgot what she had gone for when out shopping: "The SR worker accompanied the service user to the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	focus upon motivation and the restoration of valued social roles and networks" (Le Mesurier 2003 p7). 'Therefore, the issue of access to social networks was central to practice' (p77). Also, older service users were encouraged to specify as precisely as possible their chosen objectives for the social rehabilitation service.  • Delivered by - Mainly volunteers although they were supplemented by paid workers	bank and facilitated discussion between her and the bank manager about how paying the bills could be managed. Obtaining food was also problematic. The voluntary agency's shopping service offered a solution, but involved using the telephone. As well as finding suitable adaptations for the phone, the SR worker arranged for a worker associated with the shopping service to be trained to understand the service user on the phone. She also negotiated arrangements for the service user to telephone at her preferred times. Eventually the service user was able to audio-order and use aide memoires concerning what she wanted to purchase" (Project C, p82).	
	<ul> <li>who provided the social care input.</li> <li>Delivered to - Older people following discharge from hospital.</li> <li>Duration, frequency, intensity, etc. – 1 to 1 and a half hours weekly (not that this is for the social rehab 'element). Six to 8 weeks in duration.</li> <li>Key components and objectives of intervention - The objective, although not explicitly stated as such is to</li> </ul>	Social care as educational assistance: Unlike advocacy, educational assistance to help service users acquire skills which they have never needed before, or re-acquire skills forgotten or 'lost' through lack of confidence or practice, is not conventionally provided either directly by social workers or through services arranged by them. However to overcome barriers to social life, this educational assistance is very important.  Example - "One service user wanted to resume visits to the betting shop which had been the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	provide social rehabilitation as an integral part of social care after hospital discharge.  • Location/place of delivery - People's homes, with visits to outside locations as desired by the service user (e.g. town, betting shop).	hub of his social life before hospitalisation. However, his seriously impaired mobility necessitated use of a taxi and he had no experience of using taxis. The volunteer provided basic instruction and soon the service user was able to order taxis and resume his former life" (Project C, p83). In several cases, service users needed reassurance and encouragement from project workers to begin or resume using mobility aids:  Example - "One service user had a mobility scooter but was too nervous to drive it. She and the project worker agreed that the worker would walk alongside her for a couple of trips. After this the service user was able to drive the scooter independently" (Project A, p83).  Addressing psychological barriers to entry to social networks: Some service users needed assistance to tackle psychological barriers to entry to social networks. Meeting these requirements needed sensitive, painstaking, interpersonal contact on the part of the workers. The processes identified by the study embodied a task-centred approach in that it included the agreement of clearly defined goals reflecting service users' priorities, and manageable stages of activity to reach such	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		goals.	
		Example - "After the death of her husband, 1 service user could not go outside without holding someone's arm. Ultimately the goal was for her to feel confident enough to go out on her own, but the first task towards this was just walking down the drive without linking arms. The next goals were walking from 1 lamp-post to another, then walking to the local shops, in each case accompanied, but not linking arms. Eventually the woman had acquired enough confidence to go on holiday with her family" (Project E, p84).	
		Access to health care organisations and networks: Alongside assistance to access social networks more generally, older service users also required assistance to access specialized health care providers. 1 volunteer provided personal support to ensure that a service user kept up his exercise programme following cardiac surgery and another service user with impaired mobility and sensory impairment was accompanied to the dentist to commence regular dental treatment, with the project worker facilitating her communication.	
		Choice: Service users appreciated the degree	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		of choice in terms of objectives and service delivery offered by the project. The Social Rehabilitation approach was anti-ageist, resisting threats to well-being from assumptions that older service users would fit into 'standard issue' community care services. 1 woman had been encouraged to go to a day centre following discharge. However the day centre transport arrived too early - she wanted to get up later in the day (a privilege of being retired). Also, she'd rather go to the park. The social rehabilitation worker therefore took her electric wheelchair with them to the park and accompanied her on walks, building to a point where she'd be able to go out independently.	
		<b>Friendship:</b> Service users' appreciation of the quality of interpersonal contact that volunteers offered radiated from their feedback, "A real person comes into your home and becomes your friend" (Project A, p85).	
		The prime aim of this project was not to provide a befriending service, but to facilitate access to social networks. However, in the context of relative social isolation, the elements of contact with a friend, provided by interaction with project workers, were particularly valued by service users.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Time: Service users were happy with the frequency and length of visits, averaging 1 to 1½ hours, weekly, they complained that the duration of the HACSR service—6 to 8 weeks, on average—was too short. Their first reason for this was that they had still felt unable to cope without assistance when the service ended. Second, service users regretted the loss of the quality of friendship that had characterized personal contact with project workers, at the end of the relatively short timescale of the project.	

# 4. Mitchell F, Dobson C, McAlpine A et al. (2011) Intermediate care: Lessons from a demonstrator project in Fife. Journal of Integrated Care 19(1): 26-36

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The objectives of the demonstrator pilot were to further develop the Fifewide intermediate care system, to increase capacity, flexibility and responsiveness.	Participants: Service users and their families, partners and carers. Professionals/practitioners - Eighteen survey respondents.  Sample size: Twelve service users and 18 staff.  Intervention:	Findings – effectiveness: Thirty-four patients were assessed as part of the extended access hours project. As a result, 11 hospital patients were supported to go home in the out-of-hours period, and 3 clients were supported to remain at home following a medical emergency, which prevented hospital admission.  Narrative findings – qualitative and views and experiences data:	Overall assessment of internal validity:  Overall assessment of external validity: ++

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
The aim of the patient interviews was to increase service user involvement in the development of the intermediate care system. The aim of the staff survey is to report on staff experience of the extended access service.	Describe intervention - The demonstrator project increased the availability of access to the existing intermediate care services in 1 locality in Fife. The extended access arrangements were focused on the integrated response team (IRT). IRT provides a rehabilitation service to support people after discharge from acute hospital, or prevent inappropriate admissions to hospital. This service is	Personalised care - All the patients questioned felt that the service listened to them, and that care and support were provided at a time and a frequency that suited them. The responses indicated that the team delivered a flexible, person-centred service that treated patients with respect.  Feeling safe - All patients said that they felt safe when receiving the intermediate care service, and continue to feel safe, "I preferred to be at home and felt very safe at home. I felt safe knowing someone was coming in to help	Overall validity rating:
Methodology: Qualitative study - Face to face service user interviews and a staff survey.  Source of funding: Government - The Scottish government funded the demonstrator project, which included the interviews reported here.	provided in the patient's home over a 14-day period. A multidisciplinary team, from health and social work, provides assessment from 09.00–17.00 Monday–Friday, and generic rehabilitation assistants provide daily support between the hours of 08.00 and 22.00 every day. The availability of professional staff to provide assessment and care management was extended to Wednesday, Thursday and Friday evenings	me" (p30).  ADL improvements - The results provide strong evidence that the service enabled patients to return to their previous level of ability in activities of daily living. Patients commented that they felt more confident in their ability to cope at home.  Social activities - All the patients had returned to the social activities that they had managed before their recent hospital admission, and all those interviewed were managing to get out of their home.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	until 19.00, and on Saturdays from 09.00–14.00. These times were based on information from the local hospital Accident and Emergency Department and data on week-end referral patterns to community health services provided by the primary care emergency service.  • Delivered by - A multidisciplinary team, from health and social work, provides assessment from 09.00–17.00 Monday– Friday, and generic rehabilitation assistants provide daily support between the hours of 08.00 and 22.00 every day.  • Delivered to - 'Frail older people with complex needs'.  • Duration, frequency, intensity, etc Integrated Response Teams provide a rehabilitation service to support people after discharge from acute hospital, or prevent inappropriate admissions to hospital. This service is provided in the	Staff experience - Staff were asked what they were able to provide during the extended access hours that could not be done within standard working hours. The responses indicated that arranging afternoon discharges from hospital and discharges on Saturdays, and the ability to complete professional assessments during these extended hours, enabled more flexibility in the intermediate care system (p30-1).  Positive comments were made about the advantages of staff working across teams and being able to follow patients through their care journey. Negative comments referred to the difficulties in working across organisational boundaries and being unfamiliar with operational systems.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	patient's home over a 14-day period.  • Location/place of delivery - People's own homes.		
	Outcomes measured: Service outcomes - Destination after assessment (admission avoidance and hospital discharge) - although it should be noted that these outcomes are not linked to the interview participants.		

5. Townsend J, Godfrey M, Moore J (2006) Careful thoughts: Recognising and supporting older carers in intermediate care. Research Policy and Planning 24(1): 39-52

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The aim of the study was to explore the nature of informal caring relationships and	Participants: Service users and their families, partners and carers - People using intermediate care services and their carers.	Narrative findings – qualitative and views and experiences data:  Five types of caregiving relationships were identified:	Overall assessment of internal validity:
interactions between service users, carers and intermediate care services.	Sample characteristics:  • Age - The mean age of service users was 79 years. Carers ranged in age from 29-82 years, with 14 aged over 60.	1) The temporary carer. 2) Reciprocal supporter through gentle decline: "Constance is a wonderful person; she's always done everything for us. I tell her we take a copy from herI go down every day and ask if there	Overall assessment of external validity:

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Methodology: Qualitative study. This was a qualitative study of in-depth interviews with people using intermediate care services and their carers.  Country: UK.  Source of funding: Government - The study is funded by the Department of Health and the Medical Research Council.	<ul> <li>Sex - Service users were predominantly female (the exact number is not reported). The sex of carers is not reported.</li> <li>Ethnicity - The ethnicity of service users is not reported. One carer was of African Caribbean origin and the remainder were white British.</li> <li>Religion/belief - Not reported.</li> <li>Disability - Not reported.</li> <li>Long term health condition - Not reported.</li> <li>Sexual orientation - Not reported.</li> <li>Socioeconomic position - Not reported.</li> <li>Socioeconomic position - Not reported.</li> <li>Sample size: Not clear. This is not made explicit, however, 64 service users were interviewed - as were 21 carers.</li> <li>Costs? No. There is no information on costs.</li> </ul>	is anything to do but I don't do anything now. I just keep her company to walk out, keep her on her feet but some days she's tired out" (p43).  3) Shared disrupted lives.  4) Long term carer.  5) Caregiver as care-receiver: "It was unbelievablemy husband had collapsed really because he realised how dependent he was on mewhen I walked in with a slingIt affected him dreadfullyThey organised everythinghelped us get up, dressed, organised a mealYou don't realise what you can't do when you have lost the use of your right hand nothing. Looking back, we'd have been in care" (p44).  Themes relating to service responses within intermediate care and in handing over to longer-term support were also identified:  1) Intermediate care.  2) Getting the service user going again: "I said I can't have him home until he can walk because I'm nearly 80. I couldn't move him to the toilet" (p45).  3) Reassurance and confidence building.  4) Personal communication "The nursing home really was a wonderful place I went in at different times - popped in during the morning or the afternoon and there was the same	Overall validity rating: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		careOnce or twice I had a word with the nurses just to make sure she wasn't covering anything up because if you ask Constance how she is, she'll always say, 'Fine'" (p46).  5) Carer education.  6) Baton-passing to mainstream services "They never asked me about things - just told me ways that they could make it easier for me, like the pension being put in the bank" (p47).	

#### Review question 1 – Findings tables – Health, social care and other practitioners' views and experiences

1. Chouliara N, Fisher RJ, Kerr M et al. (2014) Implementing evidence-based stroke Early Supported Discharge services: A qualitative study of challenges, facilitators and impact. Clinical Rehabilitation 28: 370-7

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To report the views of health professionals and commissioners working with a stroke Early Supported Discharge service in relation to the impact of the service and the factors which '	Participants: Professionals/practitioners - Practitioners, managers and commissioners in roles which led to involvement with 1 of the 2 Early Supported Discharge services. This included practitioners involved in delivery of the services, individuals involved in commissioning or management of the services, and	Narrative findings – qualitative and views and experiences data: The interviews are described by the authors as semi-structured and aimed to cover 4 main topics. These were - the nature of the participants' involvement with the service, factors which had helped or hindered implementation, impact of the service, and suggested improvements. The authors report ' considerable overlap in the views of respondents' (p372).	Overall assessment of internal validity: +  The lack of detail in relation to contexts and participants, and the fact that data was only collected by 1 method means that

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
facilitate or impede the implementation of the service' (p370).  Methodology: Qualitative study - semi-structured interviews.  Country: UK-Nottinghamshire.  Source of funding Government - National Institute for		Facilitators –  The authors report that 5 participants from each site felt that maintaining a balance between flexibility and specificity with regard to eligibility criteria was an important means of ensuring that referrals were appropriate: "I think the criteria are good because they are not too defined or too loose; I think there are very few inappropriate people that come through" (Stroke Physician 1; p372).  Most participants also felt that the service should be adaptable to the context of local healthcare and be responsive to the variable level of need which exists: "No 2 stroke cases are ever going to be the same; our systems	•
Health Research Collaboration for Leadership in Applied Health Research and Care for Nottinghamshire, Derbyshire and Lincolnshire.	Sample size: n=35 (Site A n=17; Site B n=18). Participants are described as Early Supported Discharge stakeholders and their job roles are categorised as the following:- commissioning (Site A n=2; Site B n=4); service management (Site A n=4; Site B n=2); Early Supported Discharge Team Lead (Site A n=1; Site B n=2); Early Supported Discharge team member (Site A n=4; Site B	need to be reflective of that" (Commissioning 23; p372).  The authors note that in recognition of this the team at Site A used severity of disability as an eligibility criterion but prioritised ' the safety of the home environment and the identification of specific rehabilitation goals' (Authors, p372).  The authors report that a number of participants from Site A felt that it was important to be flexible in relation to the timescale of the intervention because rigidly adhering to 6	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	n=4); Stroke Physician (Site A n=1; Site B n=1); Acute Stroke Unit staff (Site A n=5; Site B	weeks was unnecessary in some cases and could delay new referrals.	
	n=2); Rehab Stroke Unit staff (Site A n=0; Site B n=3).	The authors also note that at Site B the intervention was sometimes extended in order to 'compensate' for the fact that the region did	
	<ul><li>Intervention:</li><li>Intervention category - Stroke</li><li>Early Supported Discharge</li></ul>	not have a specialised community based stroke rehabilitation service.	
	services.  Describe intervention - Little detail is provided in relation to the intervention, however in there discussion of relevant literature the authors note that Early Supported Discharge services are ' delivered by coordinated, multidisciplinary teams' (p371). The team at Site A can refer service users to a jointly managed	A significant number of participants felt that the role of rehabilitation assistants (usually Assistant Practitioners or Rehabilitation Support Workers) had improved the service because allowing these staff members to deliver routine and more repetitive exercises enabled more senior staff to focus on more specialised elements of care: "It's about being able to break down the role and make sure that the right skilled person is doing the right part of the intervention" (Early Supported Discharge Team Lead, 3; p373).	
	community stroke team; however there is no community stroke team linked to Site B.  • Delivered by - Both teams are described as multi-disciplinary and specialist. The team at Site A was composed of Stroke Physician; Physiotherapist;	The authors note that at Site A; Assistant Practitioners had greater responsibility than Rehabilitation Support Workers and were able to " progress rehabilitation goals or take over the care of less complex patients" (Authors, p373).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Occupational Therapist; Speech and Language Therapist; Stroke Nurse; Mental Health Nurse; Social Worker; Assistant Practitioner; Rehabilitation Support Worker; and Administrative Support. The team at Site B was composed of Stroke Physician; Physiotherapist; Occupational Therapist; Speech and Language Therapist; Stroke Nurse; Clinical Psychologist; Rehabilitation Support Worker; Administrative Support. NB Details on the numbers of professionals working in each role are not provided.  • Delivered to - Individuals who have experienced stroke. The study does not provide any details in relation to service users other than noting that each site used a range of eligibility criteria including 'Barthel Index ≥ 14/20; transfer independently or with assistance of one (+/-	The authors also report that participants felt that developing strong links with other services was vital to the success of the service; with professionals at Site B noting that this had enabled them to identify appropriate referrals:  "We've really endeavoured to build up a good relationship with the different organisations and I think the better that is, the better the team runs because you are getting referrals and good understanding" (Early Supported Discharge Team Lead, 29; p373).  Participants also identified a number of methods of improving communication and collaboration between services. Suggestions included joint meetings and training, as well as staff rotations: "We could have some rotational element between staff so you can really share that sort of approach and the learning" (Early Supported Discharge Team Lead, 3; p373).  Challenges - The authors report that hospital staff were sometimes viewed as being unwilling to make referrals to Early Supported Discharge services which was felt to result in unnecessarily long stays in hospital. Hospital staff voiced scepticism regarding the service,	rating
	equipment); sufficiently	which some attributed to a lack of knowledge in	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	medically fit to be managed at home; identified achievable rehabilitation goals' (p371). The main source of referrals for Site A was an acute hospital with a hyperacute stroke unit and linked specialist stroke rehabilitation wards. The main source of referrals for Site B was an acute hospital with an acute stroke unit only. Site A does not accept referrals from other sources, however Site B accepts referrals from a community hospital with a specialist stroke rehabilitation ward.  • Duration, frequency, intensity, etcEach team is described as providing 1-2 interventions per day for a total of up to 6 weeks (8am to 6pm, 7 days per week, patient caseload of 16).  • Key components and objectives of intervention - Not reported.  • Content/session titles - N/A	relation to its content and the outcomes it aimed to effect:  "Just getting a bit more understanding of what the content is so that we can decide that Early Supported Discharge is in the best interests of the patient" (Acute Stroke Unit Staff, 8; p374).  There was a lack of consensus between respondents in relation to when the decision to refer to Early Supported Discharge services should be made. Two participants at Site A felt that the decision should be made almost as soon as the person is admitted to an acute unit, whilst 4 other professionals at this site felt that making this decision even in the first 2 weeks after admission to an acute unit was problematic because recovery was still taking place.  The authors report that a number of commissioners felt that the position of Early Supported Discharge services in relation to other services in the stroke care pathway needed to be clarified:  "To be honest I am bit foggy about where Early Supported Discharge sits alongside intermediate care and re-enablement and how	

re married up." (Commissioning, 23,
icant proportion of respondents are d to have identified difficulties in g social care as a major barrier to the scharge process. Team members at which did not include a Social Worker) d that they had had to stop taking a due to these delays in arrangements "Patients were bottlenecking up at the end because their care packages t be ready; at 8 weeks we'd still got atients" (Service Management, 18,  Thors report that most professionals from elt that having a Social Worker on the elped to address these difficulties.  ants working at both sites also identified llenges resulting from a lack of nity based specialised services for als with more complex needs or greater f disability. This sometimes led to priate referrals: "Sometimes they think social care and we are notwe have ings above and beyond what we are ed to do" (Early Supported Discharge
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Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Professionals at Site B felt that this was a significant gap in the stroke care pathway: "Patients who need more intensity than an outpatient programme could provide or those for whom home environment is more suitable, fall into a black hole at the moment" (Early Supported Discharge Team Lead, 29, p374).  A number of respondents also highlighted the issue of duplicated assessments between services and suggested that information-sharing between hospitals and Early Supported Discharge services needed to be improved.  Impact of Early Supported Discharge services - The authors report that the majority of stakeholders across both sites viewed Early Supported Discharge as a positive service which could reduce hospital stays without hindering rehabilitation: "Patients are able to come out of the hospital sooner which is what they prefer, and they are able to continue specialist rehabilitation in their own environmentso they can have some of their normal life going on and have their family involved" (Early Supported Discharge Team Lead, 3, p374).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Respondents at Site B are reported to have identified Early Supported Discharge services as a means of addressing the gap in community based rehabilitation; whilst a number of professionals based at Site A felt that the service had improved links between acute and community stroke services:  "Transfer between the services has improved and works in a much more seamless way" (Service Management, 4, p374).	
		A large proportion of respondents emphasised the importance of community based specialised stroke care as a means of maximising recovery and ensuring continuity of care. Providing specialised care in the community was seen by many participants as a defining feature of Early Supported Discharge services:	
		"Having the knowledge to deal with stroke patients is what sets the service aside from other community services" (Acute Stroke Unit Staff, 16, p375). Many participants are reported to have identified home based rehabilitation as a useful model of care because it enables more accurate assessments of the individual in their own environment and has greater scope to be tailored to the needs of the individual:	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		"It is less about a body in a bed that needs a bit of fixing; to me, it feels more of a holistic service; just being in peoples' houses, seeing what problems they actually have and adapting the service around that" (Early Supported Discharge Team Member, 30, p375).	
		Participants are also reported to have felt that it was appropriate for Early Supported Discharge services to attempt to address any emotional or cognitive difficulties which a service user was experiencing as these may not have been apparent before discharge: "Even people that have minimal physical impairments can be really anxious because their whole life has changed" (Early Supported Discharge Team Lead, 29, p375).	
		However, fully addressing these issues was felt to be unlikely given the short timescale of the service. A small number of commissioners felt that the evidence base in relation to the effectiveness of Early Supported Discharge services needed to be strengthened, particularly in an economic climate which demands evidence of improved outcomes. It was suggested that this should determine whether Early Supported Discharge services	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		were: " the most efficient and effective way of providing rehabilitation and helping patients make the best of their recovery" (Commissioner, 34, p375). 1 professional commented that communication was also important in this respect: "We need more info on the outcomes of the interventionthey need to demonstrate what they can offerto sell themselves really" (Acute Stroke Unit Staff, 16, p375).	

2. Glasby J, Martin G, Regen E (2008) Older people and the relationship between hospital services and intermediate care: Results from a national evaluation. Journal of Interprofessional Care 22: 639-49

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: 'To explore the views of intermediate care	Participants: Professionals/practitioners - Key professionals involved in the	Narrative findings – qualitative and views and experiences data:	Overall assessment of internal validity:
leads on the benefits and challenges of implementing intermediate care	delivery, management and planning of intermediate care services across 5 sites.  Sample characteristics:	'Intermediate care as part of a spectrum of services and as a positive alternative to hospital' (p642) - The authors report that many respondents (working in a range of settings and including both managers and clinicians) noted	Lack of detail on context and participants; and
policy' (p642).  Methodology: Qualitative study -	<ul> <li>Age - Not reported.</li> <li>Sex - Not reported.</li> <li>Ethnicity - Not reported.</li> <li>Religion/belief - Not reported.</li> <li>Disability - Not reported.</li> </ul>	that intermediate care had developed as a response to pressures on acute care and the recognition that there was a ' need to do things differently' (Authors, p642).	sampling of 'key' managers and practitioners.

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Interviews and focus groups.  Country: UK. Five sites across the UK (including both rural and urban areas - no further details reported in this study).  Source of funding Government - Department of Health and the Medical Research Council.	<ul> <li>Long term health condition - Not reported.</li> <li>Sexual orientation - Not reported.</li> <li>Socioeconomic position - Not reported.</li> <li>Sample size: Sample size - Interviews = 61 participants; focus groups = 21 participants (across all 5 sites). No detail in relation to participants is provided except to note that the study draws on interviews with stakeholders working in acute care, intermediate care, primary care, and social services; and focus groups with frontline staff.</li> <li>Intervention:</li> </ul>	Intermediate care was seen by respondents as a positive development which fosters choice, and improves quality of life and independence which was more difficult to achieve in acute services which are often under pressure and tend lead to have dependency culture. The authors emphasise that respondents felt that the success of intermediate care depended on the extent to which it offered choice and flexibility to older people as part of a wide range of care for older people.  The authors also report that respondents felt that a service which enabled older people to regain their independence in a non-acute setting was valuable and enabled a more accurate assessment of an individual's level of dependency.  "Difficulties in the relationship with acute care: issues for hospital staff" (p643) - The	Overall assessment of external validity: ++  Overall validity rating: +
	Intervention category -     Intermediate care. The study     reports on interviews and focus     groups with key managers and     practitioners working in     intermediate care across 5     sites. It is not clear which     models of intermediate care     are provided at these sites.	authors report that some respondents felt that intermediate care services had in some instances been set up too rapidly and with only minimal input from hospital staff. Others felt that intermediate care the latest in a line of new projects that drained funding and shifted the focus from the importance of good practice:	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Describe intervention - No details are provided on the services delivered at each site.</li> <li>Delivered by - Not reported.</li> <li>Delivered to - No details are provided on the service users served by each site however the focus of the paper is intermediate care provided to older people.</li> <li>Duration, frequency, intensity, etc Not reported.</li> <li>Key components and objectives of intervention - Not reported.</li> <li>Content/session titles - N/A</li> <li>Location/place of delivery - Not reported.</li> </ul>	"I've been around far too long, I've seen so many new schemes come and go at the expense of good sound practice [Sometimes it's not because existing schemes aren't working well, but because] the government likes to have new money going to new schemes and these new schemes [are] at the expense of [existing] good practice" (Respondent at site 2, p643).  Some respondents are also reported to have been concerned that intermediate care represented a lower quality model of care and that services had been implemented before a sufficient evidence base had been developed.  There was disagreement regarding the impact which intermediate care services could have on acute resources, with some respondents suggesting that clinicians working in hospitals may focus on acute care only and therefore ' lose sight of the whole person' (Authors, p643).  In contrast, other respondents are reported to have felt that this was ' a more appropriate use of expensive acute capacity' (Authors, p643).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Respondents are also reported to have suggested that intermediate care services are seen as detached from mainstream services and that this perceived separation, coupled with hospital staffs and GPs poor understanding of intermediate care itself can resulted in low uptake.	
		Although the authors note that there had been attempts to promote intermediate care locally, respondents reported that the service was still unfamiliar to many professionals: "I just think people don't think about it naturally as it is fairly new. Services have been limited and where they are they are probably working at capacity because they are so limited so thinking of a route through intermediate care as an alternative to admitting somebody or discharge them into long-term care, people just don't think about it" (Respondent at Site 2, p644).	
		Other reasons for the perceived separation between mainstream services and intermediate care included eligibility criteria which were seen as too restrictive and allowed patients to be 'cherry-picked': "Well the unitsdo develop criteria, don't they, because they have to safeguard themselves by having so many exclusions that actually they become almost	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		impossible to use because busy clinicians can't maintain all the exclusion criteria at their fingertips. And if you refer and are rejected, next time you see a case you're going to think well, we'll do it as we always used to do" (Respondent at Site 1, p644).  'Difficulties in the relationship with acute care: issues for intermediate care staff' (p643) – Some respondents are reported to have felt that staff in acute settings were slow to adapt to new services, were uncomfortable referring to intermediate care because they perceived that this meant loss of control over 'their' patient, and had little knowledge about services which were available (which the authors note is exacerbated by regular changes in staffing):	
		"No I don't think safety is a problem, no. They just, I think these particular 2 [doctors] do not want to lose control of their patients. I think they see it as a threat, their patients going to somebody else, to a different Consultant" (Respondent at Site 1, p644).  "I think the other thing is that I would like to see	
		"I think the other thing is that I would like to see is that my colleagues in the hospital setting feel more integrated with the intermediate care	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		set up, which they don't at the moment They don't understand what is out there and it is just so difficult to keep people up to speed with new developments and changes" (Respondent at Site 5, p 644).  Respondents were also concerned that hospital staff saw intermediate care solely as a means of reducing pressure on acute care rather than a service which was appropriate for some but not all patients:	
		"[We get inappropriate referrals, particularly when there's] a bed panic, like there is today, and everybody will be told to go through the ward and find any patients and there will almost be a blanket referral [to intermediate care] for virtually anybody who is vaguely upright" (Respondent at Site 1, p645).	
		"I personally think we are perceived as someone that can empty a hospital bed and not as a continuation of the care" (Respondent at Site 5, p645).	
		The authors report that intermediate care staff sometimes felt under pressure to take referrals, including those which were inappropriate, as a means of ensuring that other professionals	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		accepted the new service:	
		"There is a pressure to use Intermediate Care services for things not fit for purpose. We are already being asked to put people in Intermediate Care places where there actually is not an Intermediate Care element to that. It is to get this person out of acute hospital bed" (Respondent at Site 2, p645).	
		The authors note that overall, ' concerns from community staff about the dominance and practices of acute services were a recurring theme' (Authors, p645). They also note that the feeling that intermediate care services could become a ' a dumping ground for secondary care' (respondent at site 1, p646) was common. Suggested solutions to some of the concerns raised by respondents included: greater involvement of geriatricians in intermediate care as a means of assuaging hospital staffs concerns regarding the quality of	
		care; joint review of eligibility criteria, rotational posts, greater information and publicity in relation to services as well as more proactive work by intermediate care staff to identify potential patients and greater in-reach in acute settings (e.g. full involvement in discharge meetings).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		The authors suggest that these solutions were all underpinned by the sense that there needed to be a cultural shift if acute services and intermediate care were to work effectively together:	
		"I think the interface between primary and secondary care is a concept and it doesn't function really, other than as a place of passing people from one to the other by paper, or e-mail or whatever. I think our view is that you will only get a real interface if it's a working environment where there is some sort of working link between people in the community and people in hospital so that you can start to develop an understanding between clinicians of what is possible and so you can have some commonality about risk sharing and risk management" (Respondent at site 2, p 646)	

#### Review question 1 – Findings tables – additional effectiveness data

1. Aimonino N, Tibaldi V, Barale S et al. (2007) Depressive symptoms and quality of life in elderly patients with exacerbation of chronic obstructive pulmonary disease or cardiac heart failure: Preliminary data of a randomized controlled trial. Archives of Gerontology and Geriatrics 44 (Suppl. 1): 7-12

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
Study aim: To	Participants: Service users and	Statistical data - service user related	Overall
evaluate mortality,	their families, partners and carers	outcomes -	assessment of
functional, cognitive,	- chronic obstructive pulmonary	Mortality: No significant difference between	internal validity:
affective status in	disease or acute congestive heart	geriatric home hospital service and general	-
elderly patients (<75	failure patients.	medical ward.	
years of age) with			Overall
chronic obstructive	Sample characteristics:	Depression scores: From baseline to 6 months	assessment of
pulmonary disease	<ul> <li>Age - mean age 81.7±8.0</li> </ul>	follow-up geriatric home hospital service 14.25	external validity:
or acute congestive	years.	to 12.44 (reduction of 1.81) vs. general medical	+
heart failure when	Sex - not reported.	ward 12.81 to 12.68 (reduction of 0.13)	
treated at home or	Ethnicity - not reported.	(significant, no p values given.)	Overall validity
in a general ward	Religion/belief - not reported.		rating:
after admission to	Disability - all elderly and	Nottingham Health Profile - quality of life: From	+
emergency	functionally impaired.	baseline to 6 months follow-up geriatric home	
department.	Long term health condition -	hospital service reduced from 18.89 to 16.79	
	chronic obstructive pulmonary	(improved score of 2.1) vs. general medical	
Methodology:	disease or acute congestive	ward reduced from 16.52 to 16.27 (improved	
Randomised	heart failure, with comorbidities.	score of 0.25) (significant, no p values given).	
controlled trial.	Sexual orientation - not	NB. Higher scores correspond to greater	
	reported.	number and more severe problems.	
Country: Not UK.	Socioeconomic position - not		
Italy.	reported.	Statistical data - service outcomes -	
		Hospital readmission at 6 months: A lower	
Source of funding:	Sample size:	readmission rate in geriatric home hospital	
Not reported.			

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	<ul> <li>Comparison, outcomes)</li> <li>Comparison numbers - General medical ward n=35. (16 chronic obstructive pulmonary disease; 19 congestive heart failure).</li> <li>Intervention numbers - Geriatric home hospital service – n=38 (19 chronic obstructive pulmonary disease; 19 congestive heart failure).</li> <li>Sample size – n=73.</li> <li>Intervention:         <ul> <li>Intervention category - Geriatric home hospital service.</li> <li>Describe intervention - Geriatric home hospital service, operating since 1985, a home based intervention and a service that provides diagnostic and therapeutic treatments by health care professionals in patient's home. It is a multidisciplinary team, including geriatricians, nurses, physiotherapists, social workers and counsellors, also medical consultation.</li> <li>Delivered by - Multidisciplinary team.</li> </ul> </li> </ul>	service 16.6% vs. general medical ward 26.6% (no p values given).  Lengths of treatment (days): A longer length of treatment in geriatric home hospital service 22.3±10.8 days vs. general medical ward 12.6±8.5 days (significant, no p values given).  Effect sizes: Home hospital service vs. general medical ward: Activities of Daily Living (ADL): d=0.3258; 95% Confidence Interval -0.1364 to 0.788; Instrumental Activities of Daily Living (IADL): d=-0.4432; 95% CI -0.908 to 0.0216; Geriatric Depression Scale (GDS): d=0.2725; 95% CI -0. 1888 to 0.7338; Nottingham Health Profile (NHP), a quality of life measure: d=0.2727; 95% CI -0.1886 to 0.734.	rating

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	<ul> <li>Delivered to - Chronic</li> </ul>		
	obstructive pulmonary disease		
	and congestive heart failure		
	patients.		
	<ul> <li>Duration, frequency, intensity,</li> </ul>		
	etc		
	not reported.		
	Key components and		
	objectives of intervention - not		
	reported.		
	Content/session titles - not		
	reported.		
	Location/place of delivery -		
	Geriatric homes where the		
	participants stay.		
	Comparison intervention:		
	General medical ward service in		
	hospital.		
	Outcomes measured:		
	Service user related outcomes –		
	<ul> <li>Activities of Daily Living.</li> </ul>		
	Instrumental Activities of Daily		
	Living.		
	Mini Mental State Examination.		
	Geriatric Depression Scale.		
	Mini Nutritional Assessment.		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	<ul> <li>Acute Physiology and Chronic Health Evaluation.</li> <li>Cumulative Illness Rating scale.</li> <li>Nottingham Health Profile - quality of life.</li> <li>Co-morbidity.</li> <li>Mortality.</li> </ul>		
	Service outcomes –  • Hospital readmission.  • Lengths of treatment.  Follow-up: 6 months.		
	Costs? No.		

### 2. Bjorkdahl A, Nilsson AL, Grimby G et al. (2006) Does a short period of rehabilitation in the home setting facilitate functioning after stroke? A randomized controlled trial. Clinical Rehabilitation 20: 1038-49

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To	Participants: Service users and	Statistical data - service user related	Overall
evaluate if 3 weeks	their families, partners and carers	outcomes – (NB. Effect sizes not reported by	assessment of
of rehabilitation in	- Young stroke patients.	the authors. Effect sizes presented here were	internal validity:
the home setting of		calculated by the review team.)	++
younger patients	Sample characteristics:	Assessment of Motor Skills scores (AMPS):	
with stroke would	Age - Median age 53 years	Both groups improved significantly from	Overall
improve activity	(range 27 to 64).	discharge to 1 year follow-up, no significant	assessment of
more than ordinary	• Sex - 44 men; 15 women.		external validity:

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
outpatient rehabilitation at the clinic and facilitate the rehabilitation process.  Methodology: Randomised controlled trial.  Country: Sweden.  Source of funding: Not reported.	<ul> <li>Ethnicity - not reported.</li> <li>Religion/belief - not reported.</li> <li>Disability - not reported.</li> <li>Long term health condition - All were stroke patients.</li> <li>Sexual orientation - Not reported.</li> <li>Socioeconomic position - Not reported.</li> <li>Sample size: <ul> <li>Comparison numbers - Control (day clinic group): n=29.</li> <li>Intervention numbers - Intervention (home group), n=30.</li> <li>Sample size - Total n=59.</li> </ul> </li> <li>Intervention: <ul> <li>Intervention category - Home rehabilitation.</li> <li>Describe intervention - The patients received 9 hours of training per week for 3 weeks after discharge from the rehabilitation ward, same as what was usually offered at the day clinic. In the home group family or friends and helpers</li> </ul> </li> </ul>	difference between the home group and the day clinic group.  Improvement occurred at different times – The home group improved significantly from discharge to 3 weeks, no significant change in clinic group during the intervention.  At discharge - home (n=30) - mean 1.45 (SD 0.99) vs. clinic (n=29) - mean 1.42 (SD 0.76). At 3 weeks - home (n=29) - mean 1.71 (SD 0.91) vs. clinic (n=29) - mean 1.52 (SD 0.71). At 3 months – home (n=28) - mean 2.02 (SD 1.08) vs. clinic (n=29) - mean 1.88 (SD 0.78). At 1 year - home (n=28) - mean 2.18 (SD 1.04) vs. clinic (n=29) - mean 2.28 (SD 0.94).  Effect sizes of home group vs. day clinic group, using ordinal scale:  AMPS Motor (logits) Cut-off 2.0: 3 weeks: d=0.2328; 95% Confidence Interval -0.2837 to 0.7493; 3 months: d=0.149; 95% CI -0.6206 to 0.4186.  Assessment of Process Skills scores: Overall, both groups improved significantly from discharge to 1 year follow-up, no significant difference between the home group and the day clinic group.	+ Overall validity rating: +

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	were involved and information	Improvement occurred at different times – The	
	was given to them and the	home group improved significantly between 3	
	patient about the stroke, its	months and 1 year.	
	consequences and how to deal		
	with them. An occupational	At discharge – home (n=30) - mean 1.00 (SD	
	therapist and a physiotherapist	0.73) vs. clinic (n=29) - mean 1.18 (SD 0.57).	
	offered individually tailored	At 3 weeks – home (n=29) - mean 1.26 (SD	
	training, based on the patient's	0.75) vs. clinic (n=29) - mean 1.37 (SD 0.53).	
	needs and desires and with	At 3 months – home (n=28) - mean 1.23 (SD	
	focus on activities in their	0.64) vs. clinic (n=29) - mean 1.54 (SD 0.53).	
	natural context, a top-down	At 1 year – home (n=28) - mean 1.55 (SD	
	approach. The content varied	0.76) vs. clinic (n=29) - mean 1.59 (SD 0.68).	
	from personal care to shopping		
	and trying out leisure activities.	Effect sizes of home group vs. day clinic group,	
	Since the training was taking	using ordinal scale, AMPS Process (logits)	
	place in the environment of the	Cut-off 1.0: Discharge: d=-0.2743; 95% CI	
	patient and according to needs	-0.7871 to 0.2385; 3 weeks: d=-0.1694; 95%	
	at that specific day, no specific	CI -0.685 to 0.3462; 3 months: d=-0.5285; 95%	
	training equipment was used.	CI -1.0568 to -0.0002; 1 year: d=-0.0555; 95%	
	Delivered by - Occupational	CI -0.5749 to 0.4639.	
	therapists and physiotherapists.		
	<ul> <li>Delivered to - Stroke patients</li> </ul>	On both AMPS scales a significantly higher	
	discharged home, and also to	percentage of the patients in the home group	
	family or friends and helpers.	than in the day clinic group reached the critical	
	<ul> <li>Duration, frequency, intensity,</li> </ul>	level of change at the end of the intervention,	
	etc Nine hours of training per	using the Kaplan-Meier curves.	
	week for 3 weeks.	E - C H-1	
	<ul> <li>Key components and</li> </ul>	Functional Independence Measure (FIM)	
	objectives of intervention - The	(motor) scores: Overall, both groups improved	
	intervention aimed to give	significantly from discharge to one-year follow-	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	support, information and training by both occupational therapists and physiotherapists in the home setting to transfer skills achieved in hospital into the home environment. A second aim was to describe the costs associated with the interventions.  • Content/session titles – N/A.  • Location/place of delivery – Home.	up. There were no significant differences between the 2 groups. Improvement occurred at different times. The clinic group improved significantly between 3 months and 1 year.  At discharge – home - (n=31) - mean 2.44 (SD 2.08) vs. clinic (n=30) - mean 2.38 (SD 1.70). At 3 weeks – home (n=30) - mean 2.83 (SD 2.05) vs. clinic (n=29) - mean 2.38 (SD 1.70). At 3 months – home (n=30) - mean 3.22 (SD 2.12) vs. clinic (n=29) - mean 2.86 (SD 1.90). At 1 year – home (n=29) - mean 3.14 (SD 2.07) vs. clinic (n=29) vs.	
	Comparison intervention: Day clinic (outpatient) rehabilitation. A multi-professional team (no details) offered training at the day clinic. The focus of the intervention in the day clinic group was more a bottom-up approach that focused on the	2.07) vs. clinic (n=29) - mean 2.99 (SD 1.76).  Effects sizes of FIM motor scores (logits): Discharge: d=0.0315; 95% CI -0.4705 to 0.5335; 3 weeks: d=0.2386; 95% CI -0.2736 to 0.7508; 3 months: d=0.1787; 95% CI -0.3328 to 0.6901; 1 year: d=0.0781; 95% CI -0.4368 to 0.593.	
	training of deficits or components of function (impairment) in order to generate better ability to perform daily life activities.	Functional Independence Measure (social-cognitive) scores: Overall, both groups improved significantly from discharge to one-year follow-up. There were no significant differences between the 2 groups.	
	Outcomes measured: Service user related outcomes –  • The Assessment of Motor and Process Skills to assess IADL.	Improvement occurred at different times. The clinic group improved significantly between discharge and 1 year.	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	<ul> <li>comparison, outcomes)</li> <li>The Functional Independence Measure to assess dependence.</li> <li>The Instrumental Activity Measure to assess dependence in everyday activity.</li> <li>Thirty-metre walking test.</li> <li>Neurological deficit using the National Institutes of Health Stroke Scale.</li> <li>Screening for cerebral functions.</li> <li>Service outcomes –</li> <li>Costs of home based rehabilitation and day clinic rehabilitation.</li> <li>Follow-up: At 3 weeks, 3 months and 1 year.</li> <li>Costs? Cost information.</li> </ul>	At discharge – home (n=31) - mean 2.32 (SD 1.65) vs. clinic (n=30) - mean 2.43 (SD 1.57). At 3 weeks – home (n=30) - mean 2.62 (SD 1.85) vs. clinic (n=29) - mean 2.94 (SD 1.57). At 3 months – home (n=30) - mean 2.65 (SD 1.70) vs. clinic (n=29) mean 3.04 (SD 1.48). At 1 year – home (n=29) mean 2.68 (SD 1.67) vs. clinic (n=29) - mean 3.29 (SD 1.50).  Effect sizes of FIM social-cognitive scores (logits): Discharge: d=0.1986; 95% CI -0.3046 to 0.7018; 3 weeks: d=-0.1862; 95% CI -0.6978 to 0.3253; 3 months: d=-0.2444; 95% CI -0.7567 to 0.2679; 1 year: d=-0.3843; 95% CI -0.9037 to 0.1351.  Instrumental Activity Measure (IAM) to assess dependence in everyday activity: Overall, both groups improved significantly from discharge to one-year follow-up, no significant differences between the 2 groups. At discharge – home (n=30) - mean -1.8 (SD 1.66) vs. clinic (n=29) - mean -3.2 (SD 1.10). At 3 weeks – home (n=30) - mean 0.29 (SD 1.35) vs. clinic (n=29) - mean 0.08 (SD 0.99). At 3 months – home - (n=30) - mean 0.54 (SD 1.47) vs. clinic (n=29) - mean 0.59 (SD 1.20). At 1 year – home (n=29) - mean 0.70 (SD	rating

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Effect sizes of IAM (logits) Discharge: d=0.0991; 95% CI -0.4116 to 0.6098; 3 weeks: d=0.1769; 95% CI -0.3345 to 0.6883; 3 months: d=-0.0372; 95% CI -0.5476 to 0.4733; 1 year: d=-0.2063; 95% CI -0.7224 to 0.3097.	
		Thirty-metre walking test: Overall, both groups improved significantly from discharge to one-year follow-up, no significant differences between the 2 groups.  Discharge 25 0.70 0.33 26 0.84 0.46 3 months 24 0.90 0.32 28 0.93 0.43 1 year 26 0.94 0.33 27 0.98 0.39	
		At discharge – home (n=25) - mean 0.70 (SD 0.33) vs. clinic (n=26) - mean 0.84 (SD 0.46). At 3 months – home (n=24) - mean 0.90 (SD 0.32) vs. clinic - (n=28) - mean 0.93 (SD 0.43). At 1 year - home (n=26) - mean 0.94 (SD 0.33) vs. clinic (n=27) - mean 0.98 (SD 0.39).	
		Effect sizes of Thirty-metre walking test: Discharge: d=-0.3486; 95% CI -0.9017 to 0.2046; 3 months: d=-0.0783; 95% CI -0.6237 to 0.4672; 1 year: d=-0.1105; 95% CI -0.6495 to 0.4284.	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
		Total cost: Both groups received 27 hours of intervention in the 3 weeks.	
		Home: 1830 Euros Clinic: 4410 Euros (home group costs 42% of the clinic group.)	

## 3. Björkdahl A, Nilsson AL, Sunnerhagen KS (2007) Can rehabilitation in the home setting reduce the burden of care for the next-of-kin of stroke victims? Journal of Rehabilitation Medicine 39: 27-32

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To	Participants: Service users and	Statistical data - family or caregiver related	Overall
evaluate if an	their families, partners and carers	outcomes -	assessment of
intervention with	- family carers, next-of-kin of	Caregiver Burden Scale: Overall score of the 2	internal validity:
information about	stroke patients rehabilitating at	groups: No significant differences between the	+
stroke and its	home.	2 groups. Maximum sum score of the	
consequences, as		Caregiver Burden Scale of 66, and reflects a	Overall
well as practical	Sample characteristics:	definite burden on all questions. The median	assessment of
advice and training	Age - mean age of stroke	sum score of the sample was 27 (0-52) at 3	external validity:
in the home setting	patients 53 years; no info on	weeks, 21 (0-50) at 3 months and 19 (0-45) at	+
reduces or affects	carers. (NB. no. of husbands as	the 1-year follow-up.	
the burden of care	carer responders to		Overall validity
for next-of-kin.	questionnaires: home group 6;	Day clinic group: Significant change in	rating:
	day clinic group 3. no. of wives	Caregiver Burden Scale scores between 3	+
Methodology:	as carer responders to	months and 1 year, suggesting a tendency to a	
Randomised	questionnaires: home group 12;	lower burden on the 'general strain' index for	
controlled trial.	day clinic group 12. no. of	the next-of-kin in the home group compared	
	grown-up children responders	with the next-of-kin in the day clinic group at 3	
Country: Sweden.	to questionnaires: home group	weeks.	
	0; day clinic group 2.)		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
Source of funding: Government - The Swedish Research Council.	<ul> <li>Sex - Not reported for either patients or carers.</li> <li>Ethnicity - Not reported for either patients or carers.</li> <li>Religion/belief - Not reported for either patients or carers.</li> <li>Disability - Not reported for carers.</li> <li>Long term health condition - Not reported for carers of stroke patients. The sample of patients had a median score on the National Institute of Health Stroke Scale (NIHSS) of 5 (maximum score 36, the lower score the less deficit) and a median sum score of 76 (maximum score 91, which means total independence) on the Functional Independence Measure -motor scale at discharge from the rehabilitation ward. The groups did not differ in any aspect.)</li> <li>Sexual orientation - Not reported for either patients or carers.</li> </ul>	Home group: The burden for the home group stays about the same on the 2 follow-up assessments at 3 months and 1 year.  To the question 'Do you sometimes feel as if you would like to run away from the entire situation you find yourself in?': At 3 weeks - acknowledged by 30% of the next-of-kin in the home group vs. 60% in the day clinic group. At 1 year - acknowledged by 50% in the home group vs. 40% in the day clinic group.  Correlations findings: At 3 weeks - The burden of caregivers in the home group correlated significantly, with FIM motor scale (p=0.003), Functional Independence Measure - social/cognitive scale (p=0.001), Assessment of Motor and Process Skills - process skill (p=0.010) and the European Brain Injury Questionnaire (p=0.000) completed by the next-of-kin. No such correlation in the day clinic group other than the European Brain Injury Questionnaire completed by the next-of-kin.  At one-year follow-up: No significant correlations were found for the next-of-kin in the home group. Significant correlations in the day clinic group between the burden of caregivers and the patient's life satisfaction	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Socioeconomic position - Not reported for either patients or carers.</li> </ul>	(p=0.000), Functional Independence Measure - social/cognitive scale (p=0.000), while no significant correlations were found for the next-of-kin in the home group. There were	
	<ul> <li>Sample size:</li> <li>Comparison numbers - Day clinic group: 17 carers.</li> <li>Intervention numbers - Home group: 18 carers.</li> <li>Sample size - 36 family carers of 59 stroke patients.</li> </ul>	significant correlations between the burden of care and European Brain Injury Questionnaire by the next-of-kin for both groups (p=0.000).	
	Intervention:  Intervention category - Rehabilitation in the home setting.  Describe intervention - The intervention began directly after discharge from the rehabilitation ward and lasted for 3 weeks. In the home group, family or friends and helpers were involved and information was given to them and the patient about the stroke, its consequences and how to deal with them. An occupational therapist and a physiotherapist offered individually tailored		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	training, based on the patient's		
	needs and desires, focusing on		
	activities in their natural		
	context; a top-down approach		
	to facilitate adaptation. The		
	content varied from personal		
	care to shopping and trying out		
	leisure activities. As skills and		
	strategies were directly		
	implemented into real life it was		
	easy for the family members to		
	follow the progress and be		
	aware of the ability of the		
	patient.		
	<ul> <li>Delivered by - An occupational</li> </ul>		
	therapist and a physiotherapist		
	offered individually tailored		
	training.		
	<ul> <li>Delivered to - Carers of stroke</li> </ul>		
	patients after discharge.		
	<ul> <li>Duration, frequency, intensity,</li> </ul>		
	etc Duration of intervention 3		
	weeks, no information on		
	intensity or frequency.		
	<ul> <li>Key components and</li> </ul>		
	objectives of intervention - See		
	'Intervention details'.		
	<ul> <li>Content/session titles – N/A.</li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Location/place of delivery –		Tating
	Home.		
	rionic.		
	Comparison intervention: Day		
	clinic group. A multi-professional		
	team offered training at the day		
	clinic to which the person		
	commuted 3 times a week. There		
	was a possibility for the next-of-		
	kin to participate occasionally, not		
	always feasible due to working		
	hours, etc. for the next-of-kin.		
	Over all accessibility for the		
	family was not as easy as for the		
	home group, and fewer		
	opportunities to ask questions		
	and get direct answers in		
	conjunction with the training. The		
	focus of the intervention in the		
	day clinic group was more a		
	bottom-up approach that focused		
	on the training of deficits or		
	components of function		
	(impairment). It became more		
	difficult for the patient as well as		
	for the next-of-kin to understand		
	how things at the clinic could be		
	transferred into real life.		
	Outcomes measured:		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	Family or caregiver related		
	outcomes -		
	Caregiver burden was assessed		
	with the Caregiver Burden Scale,		
	a questionnaire with 22 questions		
	(answered in written by the carer)		
	concerning burden from the		
	aspects of the caregiver's health,		
	feeling of psychological well-		
	being, relations, social network,		
	physical workload and		
	environmental aspects that might		
	be important. The 'general strain'		
	index of the Caregiver Burden		
	Scale was used.		
	To investigate which aspects		
	might influence burden, the		
	Caregiver Burden Scale was		
	used as a measure of burden and		
	was correlated with the following		
	instruments: the Functional		
	Independence Measure (divided		
	into Motor score and		
	Social/cognitive score),		
	Assessment of Motor and		
	Process Skills, European Brain		
	Injury Questionnaire - patient and		
	close relatives version, the		
	questionnaire of Life satisfaction		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	by Fugl-Meyer, National Institute		
	of Health Stroke Scale and		
	Barrow Neurological Institute		
	Screening of higher cerebral		
	functions. The National Institute		
	of Health Stroke Scale and BNIS		
	measured body functions, such		
	as physical and cognitive		
	function. The Functional		
	Independence Measure and		
	Assessment of Motor and		
	Process Skills evaluated activity		
	limitations. The European Brain		
	Injury Questionnaire is a		
	questionnaire concerning		
	perceived social, cognitive and		
	emotional problems of the stroke		
	victim, which was given both to		
	the patients and to the next-of-		
	kin. The aspect of life satisfaction		
	was only available from the		
	patient.		
	Follow-up: Three weeks, 3		
	months and 1 year post-		
	intervention.		
	Costs? No.		

## 4. Fjaertoft H, Indredavik B, Magnussen J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular diseases 19: 376-83

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
Study aim: To	Participants: Service users and	Statistical data - service outcomes -	Overall
compare the use of	their families, partners and carers	Mean length of inpatient stay: Acute care in	assessment of
health services and	- stroke patients after discharge.	stroke unit: No significant difference between	internal validity:
the costs of these in		the 2 groups; extended stroke unit service -	+
the extended stroke	Sample characteristics:	mean 12.6 days (range 1-48), total 2,008 days	
unit service group	Age - From previous study	vs. ordinary stroke unit service - mean 12.5	Overall
with the ordinary	(Indredavik 2000) - mean age -	days (range 1-64), total 2,004 days, p=0.771.	assessment of
stroke unit service	Extended stroke unit service 74		external validity:
group during the	years; Ordinary stroke unit	Inpatient rehabilitation: A significant reduction	+
first year following a	service 73.8 years.	in inpatient rehabilitation in the extended stroke	
stroke.	Sex - From previous study	unit service group; extended stroke unit service	Overall validity
	(Indredavik 2000) Sex (male)	- mean 11.1days (range 0–182) total 1778	rating:
Methodology:	extended stroke unit service:	days vs. ordinary stroke unit service - mean	+
Randomised	54% Ordinary stroke unit	23.4 (range 0–163) total 3,732 days, p<0.001	
controlled trial.	service: 44%.	(significant).	
	Ethnicity - not reported.		
Country: Norway.	Religion/belief - not reported.	Hospital readmission: No significant difference	
	Disability - not reported.	between the 2 groups; extended stroke unit	
Source of funding:	Long term health condition -	service mean 5.8 days (range 0–120) total 927	
Government -	Transient ischemic attack -	days vs. ordinary stroke unit service - mean 7.3	
Norwegian	Extended stroke unit service:	days (range 0–62), total 1,167 days, p=0.269	
Foundation for	13%, Ordinary stroke unit	(non-significant).	
Health and	service: 14%. Stroke -		
Rehabilitation.	Extended stroke unit service:	Nursing home/'assisted living': No significant	
	12%, Ordinary stroke unit	difference between the 2 groups; extended	
	service: 16%. Hypertension -	stroke unit service mean 37.2 days, (range 0–	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	344), total 5,952 days vs. ordinary stroke unit	

Extended stroke unit service: 33%, Ordinary stroke unit service: 35%. Myocardial infarction - Extended stroke unit service: 19%, Ordinary stroke unit service: 16%. Atrial fibrillation - Extended stroke unit service: 17%, Ordinary stroke unit service: 15%. Diabetes - Extended stroke unit service: 15%, Ordinary stroke	service mean 41.9 days (range 0–356), total 6698 days, p=0.602 (non-significant).  Total inpatient bed days: A significant reduction in inpatient stay in the extended stroke unit service group; extended stroke unit service mean 66.7 days (range 1–364), total 10,665 days vs. ordinary stroke unit service mean 85.0 days (range 1–364), total 13,601 days, p=0.012 (significant).	
infarction - Extended stroke unit service: 19%, Ordinary stroke unit service: 16%. Atrial fibrillation - Extended stroke unit service: 17%, Ordinary stroke unit service: 15%.  Diabetes - Extended stroke unit	reduction in inpatient stay in the extended stroke unit service group; extended stroke unit service mean 66.7 days (range 1–364), total 10,665 days vs. ordinary stroke unit service mean 85.0 days (range 1–364), total 13,601	
,	days, p=0.012 (significant).	
unit service: 12%.  • Sexual orientation - not reported.  • Socioeconomic position - Living alone (from Indredavik 2000) - Extended stroke unit service: 41%, Ordinary stroke unit service: 43%.	Home nursing care: No significant difference between the 2 groups, a trend towards reduced requirement for home nursing service in the extended stroke unit service group; extended stroke unit service - mean 78.5 days (range 0–1536), total 12,560 days vs. ordinary stroke unit service - mean 101.4 days (range 0–1066), total 16,233 days, p=0.085 (non-significant).	
Sample size:  • Comparison numbers - Ordinary stroke unit service n=160	Day clinic: Significant increase in use of day care in the extended stroke unit service group; extended stroke unit service - mean 11.4 days	
<ul> <li>Intervention numbers - Extended stroke unit service n=160.</li> <li>Sample size – Total N=320.</li> </ul>	(range 0–63), total 1831 days vs. ordinary stroke unit service - mean 8.9 days (range 0–55), total 1,438 days, p=0.027 (significant).	
	<ul> <li>Socioeconomic position - Living alone (from Indredavik 2000) - Extended stroke unit service: 41%, Ordinary stroke unit service: 43%.</li> <li>Sample size:         <ul> <li>Comparison numbers - Ordinary stroke unit service n=160.</li> <li>Intervention numbers - Extended stroke unit service n=160.</li> </ul> </li> </ul>	<ul> <li>Socioeconomic position - Living alone (from Indredavik 2000) - Extended stroke unit service: 41%, Ordinary stroke unit service: 43%.</li> <li>Comparison numbers - Ordinary stroke unit service n=160.</li> <li>Intervention numbers - Extended stroke unit service - mean 101.4 days (range 0–1066), total 16,233 days , p=0.085 (nonsignificant).</li> <li>Day clinic: Significant increase in use of day care in the extended stroke unit service group; extended stroke unit service - mean 11.4 days (range 0–63), total 1831 days vs. ordinary stroke unit service - mean 8.9 days (range 0–55), total 1,438 days, p=0.027 (significant).</li> </ul>

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Intervention:	service - mean 3.5 days (range 0–96), total	9
	Intervention category -	556 days vs. ordinary stroke unit service -	
	Extended stroke unit service.	mean 4.0 days (range 0–99), total 645 days,	
	Describe intervention -	p=0.720 (non-significant).	
	Extended stroke unit service	, ,	
	offered a comprehensive	General practitioner: No significant difference	
	follow-up stroke service	between the 2 groups; extended stroke unit	
	organized by a coordinating	service - mean 7.5 days (range 0–58), total	
	mobile team that followed the	1199 days vs. ordinary stroke unit service -	
	patient for the first month after	mean 6.4 days (range 0-35), total 1027 days,	
	discharge from hospital. They	p=0.184 (non-significant).	
	established a programme and		
	support system that allowed the	Physiotherapist: No significant difference	
	patient to live at home as soon	between the 2 groups; extended stroke unit	
	as possible and to continue	service - mean 4.5 days (range 0–58), total	
	rehabilitation at home or in a	721 days vs. ordinary stroke unit service -	
	day clinic. The mobile team	mean 4.8 days (range 0-57), total 768 days,	
	consisted of a physiotherapist,	p=0.745 (non-significant).	
	an occupational therapist, a		
	nurse and the part-time service	Occupational and speech therapists: No	
	of a physician. One of the	significant difference between the 2 groups;	
	therapists acted as a case	extended stroke unit service - mean 1.5 days	
	manager for the patient.	(range 0–56), total 241 days vs. ordinary	
	Delivered by - A	stroke unit service - mean 1.2 days (range 0-	
	physiotherapist, an	34), total 117 days, p=0.260 (non-significant).	
	occupational therapist, a nurse		
	and the part-time service of a	Mean costs/patient during the first 52	
	physician.	weeks after stroke (in Euros) -	
	<ul> <li>Delivered to - Stroke patients</li> </ul>	Acute care in stroke unit: Extended stroke unit	
	after discharge.	service - mean 5,485 (range 437–20,979) vs.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Duration, frequency, intensity, etc not reported.</li> <li>Key components and objectives of intervention - To assess if the extended stroke unit service reduced health service use and costs.</li> <li>Content/session titles – N/A.</li> <li>Location/place of delivery – Home.</li> <li>Comparison intervention: Ordinary stroke unit service</li> </ul>	ordinary stroke unit service - mean 5474 (range 437–32,343), p=0.504 (non-significant).  Inpatient rehabilitation: Extended stroke unit service - mean 2,053 (range 0–35,001) vs. ordinary stroke unit service - mean 4178 (range 0–31,540), p=0.000 (significant).  Home based rehabilitation: Extended stroke unit service - mean 4065 (range 0–46,829) vs. ordinary stroke unit service - mean 4339 (range 0–36,235), p=0.532 (non-significant).  Nursing home/'assisted living': Extended	rating
	organized by the primary health care system with further inpatient rehabilitation or a follow-up programme organized after discharge from hospital.	stroke unit service - mean 4233 (range 0–39,560) vs. ordinary stroke unit service - mean 4645 (range 0–39,548), p=0.560 (nonsignificant).	
	Outcomes measured: Service outcomes –  • Health service use and costs.	Hospital readmission: Extended stroke unit service - mean 2532 (range 0–52,448) vs. ordinary stroke unit service - mean 3188 (range 0–27,098), p=0.229 (non-significant).	
	Follow-up: 1 year.  Costs? Cost information.	Mobile team: Extended stroke unit service only: mean 569.	
		All health service costs: Extended stroke unit service - mean 18,937 (range 481–92,498) vs.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		ordinary stroke unit service - mean 21,824 (range 569–92,792), p=0.127 (non-significant).	

## 5. Inglis SC, Pearson S, Treen S et al. (2006) Extending the horizon in chronic heart failure: Effects of multidisciplinary, home-based intervention relative to usual care. Circulation 114: 2466-73

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
Study aim: To	Participants: Service users and	Statistical data - service user related	Overall
examine the long-	their families, partners and carers	outcomes –	assessment of
term (minimum of	- patients with chronic congestive	All-cause mortality: Significantly fewer	internal validity: +
7.5 to 10 years)	heart failure.	participants in the home based intervention	
impact of a nurse-		group died compared with usual care; home	Overall
led, multidisciplinary	Sample characteristics:	based intervention n=114 (77%) vs. usual care	assessment of
home based	<ul> <li>Age - mean age 75 years.</li> </ul>	n=132 (89%), adjusted relative risk = 0.74;	external validity: +
intervention versus	• Sex - 56% males.	95% Confidence Interval 0.53 to 0.80; p<0.001.	
usual post-	• Ethnicity - 42-44% non- English		Overall validity
discharge care in an	speaking.	Median survival: Significantly higher survival	rating: +
old and fragile	<ul> <li>Religion/belief - not reported.</li> </ul>	rate in home based intervention group; home	
cohort of 297	Disability - not reported.	based intervention 40 months vs. usual care:	
congestive heart	Long term health condition -	22 months, p<0.001.	
failure patients	Previous admission for heart		
discharged from	failure ranged from 55-63 %.	Prolonged event-free survival: Significant	
short-term hospital	Comorbidity: Past myocardial	increase in home based intervention group;	
care.	infarction- 50-55%. Chronic	home based intervention median of 7 event	
	airways disease- 32-40%.	free months vs. usual care median of 4 event	
Methodology:	Chronic hypertension- 57-58%.	free months, p<0.01.	
Randomised	Non-insulin-dependent/insulin-		
controlled trial.	dependent diabetes- 26-31%.	Days of hospital-free survival: More days in	
	-	home based intervention group; home based	
		intervention 1,448 (SD±1,187) vs. usual care:	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
Research aims  Country: Not UK. Australia.  Source of funding: Government - National Heart Foundation, and National Health and Medical Research Council of Australia.	<ul> <li>comparison, outcomes)         Mean Charlson Index score-2.8-2.9.         Sexual orientation - not reported.         Socioeconomic position - Living alone 36-41%, no other information.     </li> <li>Sample size:         <ul> <li>Comparison numbers - Usual care n=148.</li> <li>Intervention numbers - Home-based intervention n=149.</li> <li>Sample size - Total n=297.</li> </ul> </li> </ul>	1,010 (SD+/-999), p<0.001, adjusted for being prescribed a Beta blocker at baseline, relative risk = 0.76, 95% CI 0.61 to 0.96, p=0.010.  Number of unplanned readmissions: More in home based intervention group: home based intervention 560; usual care: 550. However, when adjustments are made for duration of follow-up and HBI-related survival time, HBI group's rate of readmission was significantly lower. It took 7 years for the 2 groups to match.  Rate of readmission per patient per year: Significantly lower in home based intervention group. Home based intervention: 2.04 (SD +/-3.23) vs. usual care: 3.66 (SD±7.62), p=0.039.	=
	<ul> <li>Intervention:</li> <li>Intervention category - Home-based intervention as a congestive heart failure management programme.</li> <li>Describe intervention - Usual care and home based</li> </ul>	Days of recurrent hospital stay per patient per year: Significantly lower in home based intervention group: home based intervention 14.8 (SD±23) vs. usual care 28.4 (SD±53.40, p<0.045.	
	intervention. Home-based intervention comprised a structured home visit within 7 to 14 days of discharge, by a nurse and pharmacist, or by a qualified cardiac nurse. During the home visit, patients	Average length of stay for readmission: Lower in home based intervention group; home based intervention 8.2(SD±5.5) vs. usual care: 8.8 (SD±6.5), non-significant.  Elective admissions (predominantly surgical procedures): More in home based intervention	

Research aims	PICO (population, intervention,	Findings	Overall validity
Research aims	underwent a physical examination and a review of their adherence to and knowledge of their condition and prescribed treatments as well as an assessment of their social support system. Factors likely to increase the immediate	group; home based intervention 159 vs. usual care 92, non-significant. Home based intervention was associated with 120 more life-years per 100 participants treated compared with usual care (405 vs. 285 years) at a cost of \$1729 per additional life-year gained when we accounted for healthcare costs including the home based intervention.	rating
	and longer-term probability of hospital readmission or death were identified, such as undiagnosed early clinical deterioration and an impaired ability to recognize signs of an impending crisis, poor self-care behaviours and/or were taking potentially harmful medication. On the basis of this comprehensive home	Healthcare costs: During almost the entire remaining life span of this cohort, the costbenefit of home based intervention was estimated to be AU\$1,729 per additional life-year gained.	
	assessment, patients and their families received a combination of remedial counselling, introduction of strategies designed to improve treatment adherence, introduction of a simple exercise regimen, and incremental monitoring by family/caregivers. Those with signs of clinical deterioration were immediately reviewed by		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	their primary care physician or		
	cardiologist, and remedial		
	action was taken. Those with		
	problems in managing their		
	medications were referred for		
	long-term support by their		
	community pharmacist.		
	Irrespective of the outcome, a		
	comprehensive report was sent		
	to the patient's primary care		
	physician and cardiologist		
	detailing both the assessment		
	and any actions taken or		
	recommended. All patients had		
	a telephone follow-up over 6		
	months to ensure that patients		
	were receiving appropriate		
	levels of support, and the		
	patient's physicians and/or		
	community services were		
	contacted to address any		
	problems. 25% of patients		
	initiated telephone calls for		
	advice and/or to arrange an		
	urgent review. Both short-term		
	(intensive) and long-term		
	(predominantly routine and		
	surveillance) management		
	strategies were applied as part		
	of the home based intervention.		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	It is assumed that there was 'No restrictions were placed on the extent or the intensity of follow-up' (p2,467) which was what the usual care group received.  • Delivered by - Nurse-led multidisciplinary team including community pharmacists, family physicians, community services (no details what kind of services reported).  • Delivered to - Patients with congestive heart failure after hospital discharge.  • Duration, frequency, intensity, etc See 'Describe intervention'.  • Key components and objectives of intervention - See 'Describe intervention'.		rating
	<ul> <li>Content/session titles – N/A.</li> <li>Location/place of delivery - Patient's home.</li> </ul>		
	Comparison intervention: Usual Patient Management (usual care) - usual levels of post-discharge planning. No restrictions were		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	placed on the extent or the intensity of follow-up. This included an appointment with their primary care physician and the cardiology outpatient clinic within 14 days of discharge. All patients underwent regular outpatient-based review by a cardiologist at the hospital and attended their same primary care clinic.		
	Outcomes measured: Service user related outcomes –  • All-cause mortality.  • Event free survival.		
	<ul> <li>Service outcomes –</li> <li>Frequency of hospital admission.</li> <li>Healthcare utilisation costs and subsequent cost per life-year saved.</li> <li>Length of hospital stay.</li> <li>Type of hospital admission (elective/unplanned).</li> </ul>		
	<b>Follow-up:</b> Long term follow-up at ten years (minimum 7.5 years).		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Data for the same cohort of patient when followed-up at 3-6 years were assessed in another paper (Stewart 2002).		
	Costs? Cost information.  Healthcare utilization costs and subsequent cost per life-year saved.		

6. Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9: 18

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To compare a range of outcomes at 3, 6 and 12 months between stroke patients managed on the stroke unit, on general wards with stroke team support or at home by specialist domiciliary care team.  Methodology:	Participants: Service users and their families, partners and carers - patients with disabling stroke.  Sample characteristics:  Age - Median age – stroke unit 75 years; stroke team 77.3 years; home care 77.7 years. Sex - females (%) stroke unit: 46.6, stroke team: 50.6, home care: 45.6.  Ethnicity - not reported.  Religion/belief - not reported.  Disability – Number of patients with premorbid independence:	Statistical data - service user related outcomes –  Mortality or institutionalised at 3 months (%): Participants managed in home care were significantly more likely to die or be institutionalised compared with the stroke unit group; stroke unit 10% vs. home care 20%, relative risk = 0.50 (95% Confidence Interval 0.29 to 0.87), p=0.01. There was no significant difference in mortality or institutionalisation rate between the home care and the stroke team group; stroke team 20% vs. home care 20%, relative risk = 1.00 (95% CI 0.96 to 1.04), p=0.99.	Overall assessment of internal validity: ++  Overall assessment of external validity: ++  Overall validity rating: ++
Randomised	mai promorbia macpondonos.		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
controlled trial.	Continence: stroke unit: 146	Mortality or institutionalised at 6 months (%):	
Prospective, single-	stroke team: 147 home care:	Participants managed in home care were more	
blind, randomised	148, Dressing: stroke unit: 146	significantly likely to die or be institutionalised	
controlled trial.	stroke team: 143 home care:	compared with the stroke unit group; stroke	
	142, Mobility: stroke unit: 145	unit 13% vs. home care 24%, relative risk =	
Country: UK –	stroke team: 146 home care:	0.42 (95% CI 0.24 to 0.75), p=0.003. There	
South east England	146.	was no significant difference in mortality or	
<ul><li>Bromley.</li></ul>	<ul> <li>Long term health condition -</li> </ul>	institutionalisation rate between the home care	
	Risk factor profile (%) Previous	and the stroke team group; stroke team 25%	
Source of funding:	stroke/TIA: stroke unit: 26;	vs. home care 24%, relative risk = 1.05, (95%	
Government	stroke team: 29; home care:	CI 0.71 to 1.56), p=0.81.	
- Health Technology	30. Hypertension: stroke unit:		
Assessment	45; stroke team: 48; home	Mortality or institutionalised at 12 months (%):	
Programme.	care: 48. Diabetes mellitus:	Participants managed in home care were	
	stroke unit: 11; stroke team: 16;	significantly more likely to die or be	
	home care: 15. Atrial fibrillation:	institutionalised compared with the stroke unit	
	stroke unit: 24; stroke team: 27;	group; stroke unit 14% vs. home care 23%,	
	home care: 16. Smoking:	relative risk = 0.59 (95% CI 0.37 to 0.95),	
	stroke unit: 19; stroke team: 14;	p=0.03. No significant difference in mortality or	
	home care: 15. Ischaemic heart	institutionalisation rate between the home care	
	disease: stroke unit: 22; stroke	and stroke team group; stroke team 30% vs.	
	team: 25; home care: 21.	home care 23%, relative risk = 1.28 (95% CI	
	Carotid bruit: stroke unit: 3;	0.87 to 1.87), p=0.20.	
	stroke team: 5; home care: 3.		
	Stroke characteristics: Median	After adjusting for age, baseline BI and	
	Orgogozo score (IQR) (extent	dysphasia at all time-points, the odds of dying	
	and severity of neurological	or being institutionalised at 1 year were 3.2	
	deficit): stroke unit: 75 (46–90)	greater for stroke team participants and 1.8	
	stroke team: 80 (60–90) home	greater for participants receiving specialist	
	care: 85 (58–90). OPS (motor,	home care compared with stroke unit care.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	balance, proprioception and	Cox's regression survival analysis; stroke unit	rauny
	cognition) (1.6–6.8), median	vs. home care - Hazards ratio = 1.7 (95% CI	
	(IQR): stroke unit: 3.2 (2.4–4.4)	1.0 to 3.0), p=0.04 (significant).	
	stroke team:3.2 (2.4–4.4) home	1.0 to 3.0), p=0.04 (significant).	
	care: 2.8 (2.0–4.0) BI (Barthel	Mortality rates at 3 months: There was a	
	Index, consisting of feeding,	significantly higher mortality rate in the home	
	dressing, toilet use and mobility	care group than the stroke unit group; stroke	
	assessments) (0–20), median	unit 4% vs. home care 10%, relative risk = 0.41	
	(IQR): stroke unit: 8 (5–12)	(95% CI 0.17 to 0.98, p=0.05). There was no	
	stroke team: 9 (5–12) home	significant difference in mortality rate between	
	care:10 (4–14).	the stroke team and the home care groups;	
	<ul> <li>Sexual orientation - not</li> </ul>	stroke team 12% vs. home care 10%, relative	
		,	
	reported.	risk = 1.24 (95% CI 0.64 to 2.38, p=0.52).	
	Socioeconomic position - lives	Mortality rates at 6 months: There was no	
	alone (%) stroke unit: 33.7	Mortality rates at 6 months: There was no significant difference in mortality rate between	
	stroke team: 36.6 home care:	1 9	
	33.5.	the stroke unit and the home care groups; stroke unit 7% vs. home care 13%, relative risk	
	Operator all and	= 0.50 (95% 0.25 to 1.02, p=0.06). There was	
	Sample size:	·	
	Comparison numbers - 152	no significant difference in mortality rate between the stroke team and the home care	
	stroke unit care (n=152), stroke		
	team care (n=152).	groups; stroke team 17% vs. home care 13%,	
	Intervention numbers -	relative risk = 1.27 (95% CI 0.74 to 2.19,	
	domiciliary care (n=153).	p=0.39).	
	<ul> <li>Sample size – Total n=457.</li> </ul>	Mortality rates at 1 years There was as	
		Mortality rates at 1 year: There was no	
	Intervention:	significant difference in mortality rate between	
	<ul> <li>Intervention category - Stroke</li> </ul>	the stroke unit and the home care groups;	
	care and management at home	stroke unit 9% vs. home care 15%, relative risk	
		= 0.59 (95% CI 0.31 to 1.11, p=0.10). There	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating	
	after discharge.	was no significant difference in mortality rate		
	Describe intervention - Home	between the stroke team and the home care		
	(domiciliary) care (home care):	groups; stroke team 23% vs. home care 15%,		
	Patients in the home care	relative risk = 1.56 (95% CI 0.96 to 2.53,		
	group were managed in their	p=0.07).		
	own home by a specialist team			
	consisting of a doctor	Barthel Index scores at 3 months: There was		
	(specialist registrar), a nurse (G	no significant difference between the 3 groups;		
	grade) and therapists (senior I	stroke unit 82% vs. home care 73%, relative		
	grades), with support from	risk = 1.11 (95% CI 0.99 to 1.25), p=0.09 (non-		
	district nursing and social	significant); stroke team 70% vs. home care		
	services for nursing and	73%, relative risk = 0.96 (95% CI 0.83 to 1.11),		
	personal care needs. Patients	p=0.58 (non-significant).		
	were under the joint care of the			
	stroke physician and GP, who	Dependence (modified Rankin Scale, survival		
	retained the clinical	without severe disability) at 1 year: Significantly		
	responsibility for patients	less participants survived without severe		
	managed in the community,	disability in the home care group compared		
	supported by the stroke team.	with the stroke unit group; stroke unit 85% vs.		
	The stroke team consisted of	home care 71%, relative risk = 1.21 (95% CI		
	the stroke nurse (coordinator),	1.07 to 1.37, p=0.002). There were no		
	doctor, physiotherapist and	significant differences between the stroke team		
	occupational therapist, and will	and the home care groups; stroke team 66%		
	be supported by the district	vs. home care 71%, relative risk = 0.94 (95%		
	nurses and social services care	CI 0.81 to 1.09, p=0.42).		
	managers. They liaised closely			
	with the GP and the stroke	Changes in Barthel Index scores at 6 months		
	consultant to maintain	and 1 year for survivors (stroke unit n=138;		
	continuity of care, provided	stroke team n=115; home care n=123) -		
	timely information on progress			

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	and were responsive to general	baseline comparisons similar for age, gender	
	practice concerns and	and premorbid functional abilities:	
	comments. Investigations,	Survivors in the stroke unit showed a	
	including CT scanning, were	significantly greater change than those in the	
	performed on an outpatient	home care group at 6 months (stroke unit 9 vs.	
	basis. Therapy was provided by	home care 7, p<0.02) and at 1 year (stroke unit	
	members of the specialist	10 vs. home care 7, p<0.002).	
	stroke team. Each patient had		
	an individualised integrated	Changes in FAI scores for survivors (stroke	
	care pathway outlining activities	unit n=138; stroke team n=115; home care	
	and the objectives of treatment,	n=123) - baseline comparisons similar for age,	
	which was reviewed at weekly	gender and premorbid functional abilities:	
	multidisciplinary meetings. This	Differences from pre-stroke and post stroke	
	support was provided for a	function were greatest in the stroke unit group	
	maximum of 3 months.	and least in those in the home care group	
	Patients' progress were	(p<0.005 at 6 months; p<0.01 at 1 year).	
	monitored on a regular basis in		
	multidisciplinary meetings. The	Hospital Anxiety and Depression Scale scores	
	team reviewed patients on the	<ul> <li>Anxiety: There were no significant</li> </ul>	
	basis of comprehensive	differences between the 3 groups at 3 months	
	assessments, goals and	(stroke unit 3 vs. stroke team 4 vs. home care	
	progress. Problems in	3), or at 1 year (stroke unit 2 vs. stroke team 2	
	rehabilitation of individual	vs. home care 2).	
	patients were discussed at		
	these meetings. Patient/carer	Hospital Anxiety and Depression Scale scores	
	involvement was encouraged	Depression: There were no significant	
	as appropriate. Specialist	differences between the 3 groups at 3 months	
	support was provided from the	(stroke unit 3 vs. stroke team 3 vs. home care	
	hospital to support the 'shared	3), or at 1 year (stroke unit 2.5 vs. stroke team	
	care' with GPs.	3 vs. home care 2).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Delivered by - Stroke team (see intervention details).</li> <li>Delivered to - Stroke patients</li> <li>Duration, frequency, intensity, etc Support by stroke team at home for 3 months. No report of frequency and intensity.</li> <li>Key components and objectives of intervention - See 'describe intervention'.</li> <li>Content/session titles - Home care for stroke patients after discharge.</li> <li>Location/place of delivery – home.</li> <li>Comparison interventions: Stroke Unit (stroke unit): patients in this group received care on the stroke unit (acute and rehabilitation) was provided by a stroke physician supported by a multidisciplinary team with specialist experience in stroke management. There were clear guidelines for acute care, prevention of complications, rehabilitation and secondary prevention, and a culture of joint</li> </ul>	EuroQuol analogue scores: Significant higher rating in the stroke unit and the home care groups compared with the stroke team group at 3 months (stroke unit 75 vs. stroke team 60 vs. home care 73, home care vs. stroke team, p<0.005). There was no significant difference between the 3 groups at 1 year (stroke unit 80 vs. stroke team 75 vs. home care 75).  Statistical data - satisfaction with services - Patient satisfaction at 3 months: Patients in the home care group were more satisfied with the care provided by the domiciliary stroke team compared with the stroke unit or the stroke team. This was significant for 'being able to talk about problems with professionals' (Chi-sq 25.5, p<0.0001), 'information on the nature and cause of the stroke' (Chi-sq 8.6, p<0.014)' 'organisation of care at home' (Chi-sq 11.6, p<0.003), 'support from community services' (Chi-sq 13.2, p<0.001), 'the amount of contact with the specialist team' (Chi-sq 99.4, p=0.009).  Carer's satisfaction: Carers rated care provided at home to be more satisfactory than that provided on the stroke unit or stroke team. This was significant for ' attention to personal needs	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	assessments, goal setting,	of the patient' (Chi-sq = 13.1, p=0.001),	
	coordinated treatment and	'recognition of problems associated with caring	
	discharge planning. A	for stroke participants' (Chi-sq 22.1, p<0.0001),	
	coordinated multidisciplinary	'amount of therapy provided (Chi-sq 13.8,	
	approach was adopted towards	p=0.001), information on benefits and services	
	rehabilitation, with emphasis on	(Chi-sq 10.6, p=0.005) 'the level of contact with	
	early mobilisation. All patients	the specialist team' (Chi-sq 23.8, p<0.0001).	
	had an individualised		
	rehabilitation plan with clearly	Professional acceptability of domiciliary care	
	defined goals based on joint	(GPs, district nurses and social services care	
	assessments. Patient	managers): The sample was too small to allow	
	participation was encouraged,	meaningful statistical analysis.	
	with focus on motivation and		
	providing an enriched	Statistical data - service outcomes -	
	environment. A plan of	Length of hospital stay (mean number of days):	
	management, individualised to	Stroke unit 32 (29.6 SD) vs. stroke team 29.5	
	each patient's needs, was	(40.1 SD) vs. home care 48.9 (26.6 SD) for 51	
	formulated and communicated to	participants requiring hospital admission from	
	the various professionals involved	home.	
	in the patient's care, the patient	Physiotherapy (% of participants treated):	
	and the family. All patients were	Similar between the 3 groups; stroke unit 99%	
	screened and managed for stroke	vs. stroke team 97% vs. home care 99%.	
	risk factors and secondary		
	prevention. There was close	Occupational therapy (% of participants	
	liaison between various	treated): Similar between the 3 groups; stroke	
	disciplines, with problems being	unit 100% vs. stroke team 87% vs. home care	
	addressed as they arose.	99%.	
	Discharges were planned in		
	advance, and spouses and	Speech therapy (% of participants treated):	
	relatives were encouraged to	Lower use in the home care group than the	

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	participate in the rehabilitation	stroke unit group; stroke unit 71% vs. stroke	
	process. Stroke team (stroke	team 47% vs. home care 49%.	
	team): Patients in the stroke team	Patients on the stroke unit received	
	care were managed on general	significantly more therapy compared with those	
	wards and remained under the	managed by the stroke team or at home. There	
	care of admitting physicians. All	were no significant differences in the duration	
	patients were seen by a specialist	1	
	team, which consisted of a doctor	home care group.	
	(specialist registrar grade), a		
	nurse (grade G), a		
	physiotherapist (senior I) and an		
	occupational therapist (senior I)		
	with expertise in stroke		
	management. Patients were		
	assessed and evaluated for		
	medical, nursing and therapy		
	needs, based on a plan for		
	investigations and acute		
	management guided by		
	standardised guidelines Although		
	generic staff on the ward		
	provided the day-to-day		
	treatment, the team advised		
	reviewed progress and treatment		
	goals of individual patients with		
	the ward team and helped in		
	discharge planning and setting up		
	of post-discharge services. The		
	team also provided counselling,		
1	education and support to the		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	family, identified expectations and		
	advised about realistic outcomes		
	in the context of previous		
	morbidity and present deficits.		
	Outcomes measured:		
	Service user related outcomes -		
	Death or institutionalisation at 1		
	year.		
	Dependence (measured using		
	modified Rankin Scale - death		
	is rated as 6), and the Barthel		
	Index (scores of 15–20		
	classified as favourable).		
	Disability (measured using		
	Barthel Index and Frenchay		
	Activities Index).		
	<ul> <li>Extent and severity of</li> </ul>		
	neurological deficit (measured		
	using the Orgogozo scale).		
	Mood (measured using		
	Hospital Anxiety and		
	Depression Scale).		
	Quality of life (measured using		
	EuroQol).		
	Family or caregiver related		
	outcomes –		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	<ul> <li>EuroQol for quality of life of patients' carers.</li> </ul>		
	Satisfaction with services –		
	<ul> <li>Satisfaction with care and professional acceptability.</li> </ul>		
	Family or caregiver related outcomes –		
	Quality of life (EuroQol).		
	Satisfaction with services –  • Satisfaction with care and professional acceptability.		
	Service outcomes -  • Length of hospital stay.		
	Follow-up: At 3, 6 and 12 months.		
	Costs? Cost information. Please see economic evidence tables.		
	Participants: Service users and their families, partners and carers - patients with disabling stroke. Sample characteristics:		

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
<ul> <li>Age - Median age - stroke unit 75 years; stroke team support 77.3 years; home care 77.7 years.</li> <li>Sex - females - stroke unit 46.6, stroke team support 50.6, home care 45.6%.</li> <li>Ethnicity - not reported.</li> <li>Religion/belief - not reported.</li> <li>Disability – Number of patients with premorbid independence in continence (stroke unit n=146; stroke team support n=147; home care n=148), dressing (stroke unit n=146; stroke team support n=143; home care n=142), mobility (stroke unit n=145; stroke team support n=146).</li> <li>Long term health condition – Risk factor profile - Previous stroke/transient ischaemic attack - stroke unit 26%; stroke team 29%; home care 30%. Hypertension - stroke unit: 45%; stroke team 48%; home care 48%. Diabetes mellitus -</li> </ul>		rating
	<ul> <li>Age - Median age - stroke unit 75 years; stroke team support 77.3 years; home care 77.7 years.</li> <li>Sex - females - stroke unit 46.6, stroke team support 50.6, home care 45.6%.</li> <li>Ethnicity - not reported.</li> <li>Religion/belief - not reported.</li> <li>Disability – Number of patients with premorbid independence in continence (stroke unit n=146; stroke team support n=147; home care n=148), dressing (stroke unit n=146; stroke team support n=143; home care n=142), mobility (stroke unit n=145; stroke team support n=146; home care: n=146).</li> <li>Long term health condition – Risk factor profile - Previous stroke/transient ischaemic attack - stroke unit 26%; stroke team 29%; home care 30%. Hypertension - stroke unit: 45%; stroke team 48%; home</li> </ul>	comparison, outcomes)  • Age - Median age - stroke unit 75 years; stroke team support 77.3 years; home care 77.7 years.  • Sex - females - stroke unit 46.6, stroke team support 50.6, home care 45.6%.  • Ethnicity - not reported.  • Religion/belief - not reported.  • Disability — Number of patients with premorbid independence in continence (stroke unit n=146; stroke team support n=147; home care n=148), dressing (stroke unit n=146; stroke team support n=143; home care n=142), mobility (stroke unit n=145; stroke team support n=146; home care: n=146).  • Long term health condition — Risk factor profile - Previous stroke/transient ischaemic attack - stroke unit 26%; stroke team 29%; home care 30%. Hypertension - stroke unit: 45%; stroke team 48%; home care 48%. Diabetes mellitus -

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	16%; home care 15%. Atrial		
	fibrillation - stroke unit 24%;		
	stroke team 27%; home care		
	16%. Smoking - stroke unit:		
	19%; stroke team 14%; home		
	care 15%. Ischaemic heart		
	disease - stroke unit: 22%;		
	stroke team 25%; home care		
	21%. Carotid bruit - stroke unit		
	3%; stroke team 5%; home		
	care 3%. Median Orgogozo		
	score - stroke unit 75 (46–90		
	IQR); stroke team 80 (60–90		
	IQR); home care 85 (58–90		
	IQR). Median OPS score (1.6–		
	6.8) - stroke unit 3.2 (2.4–4.4		
	IQR); stroke team 3.2 (2.4–4.4		
	IQR); home care 2.8 (2.0–4.0		
	IQR). Median Barthel Index		
	score - stroke unit 8 (5–12		
	IQR); stroke team 9 (5–12		
	IQR); home care 10 (4–14		
	IQR).		
	<ul> <li>Sexual orientation - Not</li> </ul>		
	reported.		
	Socioeconomic position - Lives		
	alone - stroke unit 33.7%;		
	stroke team 36.6% home care		
	33.5%.		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	Sample size:		
	Comparison numbers -		
	domiciliary care (n=153).		
	<ul> <li>Intervention numbers - 152</li> </ul>		
	stroke unit care (n=152), stroke		
	team care (n=152).		
	Sample size – Total N=457.		
	Intervention:		
	<ul> <li>Intervention category - Stroke</li> </ul>		
	care managed on the stroke		
	unit vs. on general wards with		
	stroke team support vs. at		
	home by specialist domiciliary		
	team.		
	Describe intervention - Two		
	interventions: 1. Stroke team		
	(stroke team): Patients in the		
	stroke team care were		
	managed on general wards and		
	remained under the care of		
	admitting physicians. All		
	patients were seen by a		
	specialist team, which		
	consisted of a doctor (specialist		
	registrar grade), a nurse (grade		
	G), a physiotherapist (senior I)		
	and an occupational therapist		
	(senior I) with expertise in		
	stroke management. Patients		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	were assessed and evaluated		
	for medical, nursing and		
	therapy needs, based on a plan		
	for investigations and acute		
	management guided by		
	standardised guidelines		
	Although generic staff on the		
	ward provided the day-to-day		
	treatment, the team advised		
	reviewed progress and		
	treatment goals of individual		
	patients with the ward team		
	and helped in discharge		
	planning and setting up of post-		
	discharge services. The team		
	also provided counselling,		
	education and support to the		
	family, identified expectations		
	and advised about realistic		
	outcomes in the context of		
	previous morbidity and present		
	deficits. 2. Stroke Unit (stroke		
	unit): patients in this group		
	received care on the stroke unit		
	(acute and rehabilitation) was		
	provided by a stroke physician		
	supported by a multidisciplinary		
	team with specialist experience		
	in stroke management. There		
	were clear guidelines for acute		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	care, prevention of		
	complications, rehabilitation		
	and secondary prevention, and		
	a culture of joint assessments,		
	goal setting, coordinated		
	treatment and discharge		
	planning. A coordinated		
	multidisciplinary approach was		
	adopted towards rehabilitation,		
	with emphasis on early		
	mobilisation. All patients had an		
	individualised rehabilitation		
	plan with clearly defined goals		
	based on joint assessments.		
	Patient participation was		
	encouraged, with focus on		
	motivation and providing an		
	enriched environment. A plan		
	of management, individualised		
	to each patient's needs, was		
	formulated and communicated		
	to the various professionals		
	involved in the patient's care,		
	the patient and the family. All		
	patients were screened and		
	managed for stroke risk factors		
	and secondary prevention.		
	There was close liaison		
	between various disciplines,		
	with problems being addressed		

Research aims	PICO (population, intervention,	Findings	Overall validity
	comparison, outcomes)		rating
	as they arose. Discharges were		
	planned in advance, and		
	spouses and relatives were		
	encouraged to participate in the		
	rehabilitation process.		
	<ul> <li>Delivered by - Stroke team</li> </ul>		
	(stroke team) in hospital:		
	delivered by a specialist team,		
	which consisted of a doctor		
	(specialist registrar grade), a		
	nurse (grade G), a		
	physiotherapist (senior I) and		
	an occupational therapist		
	(senior I) with expertise in		
	stroke management. Stroke		
	unit (stroke unit) in hospital:		
	(acute and rehabilitation) care		
	provided by a stroke physician		
	supported by a multidisciplinary		
	team with specialist experience		
	in stroke management.		
	<ul> <li>Delivered to - Stroke patients.</li> </ul>		
	<ul> <li>Duration, frequency, intensity,</li> </ul>		
	etc No report of duration,		
	frequency and intensity of		
	intervention. Outcomes were		
	assessed at 3, 6 and 12		
	months.		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Key components and objectives of intervention - See 'describe intervention'.</li> <li>Content/session titles – N/A.</li> <li>Location/place of delivery - Stroke team and stroke unit in hospital (bed based).</li> </ul>		

## Review question 1 – Critical appraisal tables – Effectiveness

## 1. Crotty M, Giles LC, Halbert J et al. (2008) Home versus day rehabilitation: A randomised controlled trial. Age and Ageing 37: 628-33

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: To ' assess the	Was the exposure to the	Does the study's research	Overall assessment of
effect of home versus day	intervention and comparison	question match the review	internal validity:
rehabilitation on patient outcomes' (p628).	<b>as intended?</b> Not reported. The authors do not provide detail in	<b>question?</b> Yes. The study aims to ' assess the effect of home	+
	relation to exposure.	versus day rehabilitation on	Overall assessment of
Description of theoretical		patient outcomes' (p628).	external validity:
approach? No. The authors	Was contamination		++
do not provide a theory of	acceptably low? Not reported.	Has the study dealt	
change of logic model, it is		appropriately with any ethical	Overall validity rating:
simply noted that both	Did either group receive	concerns? Yes. Informed	+
hospital and home based	additional interventions or	consent was provided by	
rehabilitation programmes	have services provided in a	participants (or their proxy if	
have been shown to be	different manner? Partly.	cognitive difficulties were an	
effective.	Participants in the day hospital	issue) and the study was	
	based programme received		

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
How was selection bias	more services with participants	approved by a number of ethics	
minimised? Randomised	randomised to this group	committees.	
computer generated block	receiving an average of 67.8		
randomisation, stratified by	sessions (SD=8.6) compared to	Were service users involved in	
presenting condition.	an average of 23.5 sessions	the design of the study? No. No	
	(SD=14.7) in the home based	indication that service users were	
Was the allocation method	rehabilitation programme	involved in the design of the	
concealed? Yes.	(significance not reported).	study or interpretation of findings.	
	Participants randomised to the		
Were participants blinded?	day hospital based group also	Is there a clear focus on the	
Blinding not possible. Due to	spent longer in the programme	guideline topic? Yes. The study	
the nature of the intervention	than those in the home based	focuses on hospital based day	
it would not have been	programme (median of 78 days,	rehabilitation and home based	
possible to blind participants.	95% Confidence Interval 71.6 to	rehabilitation both of which are	
	83 vs. 28 days, 95% CI 26 to 30	described as multidisciplinary	
Were providers blinded?	days) which the authors report	programmes generally lasting for	
Blinding not possible. Due to	as significant (p<0.001).	4 to 6 weeks.	
the nature of the intervention	Participants in both groups also		
it would not have been	appear to have spent time in	Is the study population the	
possible to blind providers.	rehabilitation prior to	same as at least one of the	
	randomisation although it is not	groups covered by the	
Were investigators,	clear whether this differed	<b>guideline?</b> Yes. The participants	
outcome assessors,	significantly by group.	of the study are individuals	
researchers, etc., blinded?		referred for ambulatory	
Part blind. Discharge	Were outcomes relevant? Yes.	rehabilitation at the end of a	
assessments were conducted	The study aimed to evaluate the	hospital stay. The mean age of	
by the clinical team who were	effects of the intervention and	the group was 71.7 years	
not blinded to group	control on outcomes such as	however there were 5 participants	
assignment, however follow-	functional competence in	who were younger than 30 and 4	
up assessments and	activities of daily living and	who were older than 90.	

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
statistical analysis were both	quality of life, as well as carer		
conducted by researchers	strain and carer quality of life	Is the study setting the same	
blinded to group assignment.	and these were measured	as at least one of the settings	
	directly.	covered by the guideline? Yes.	
Did participants represent		The interventions were delivered	
the target group? Yes. An	Were outcome measures	in a day hospital and participants	
acceptable number of eligible	reliable? Yes. All measures	homes. Follow-up assessments	
individuals agreed to	have established reliability and	took place in participant's homes.	
participate (229 were	validity however data in relation		
randomised out of 267 who	to this are not presented. Both	Does the study relate to at	
were eligible). The mean age	observational and self-report	least one of the activities	
of participants was 71.7 years	measures are used although the	covered by the guideline? Yes.	
although a number of	primary outcome is measure is	Both the intervention and control	
participants below the age of	observational.	are short-term, multidisciplinary	
30 and over the age of 90		rehabilitation programmes.	
were included in the sample.	Were all outcome		
One individual was excluded	measurements complete?	(For effectiveness questions)	
on the basis that they had	Yes. All outcome data was	Are the study outcomes	
insufficient memory.	measured and reported as	relevant to the guideline? Yes.	
	planned.	The primary outcome was	
Were all participants		change in functional competence	
accounted for at study	Were all important outcomes	in activities of daily living. Other	
conclusion? Yes. The	assessed? Partly. Although the	outcomes included depression,	
number of participants lost to	outcomes assessed are	quality of life, hospital	
follow-up was acceptable	comprehensive, between group	readmissions, carer quality of life	
(less than 20%) and	differences for mortality and	and carer stress.	
explanations are reported by	admission to residential care are		
the authors. Rates are	not analysed/reported.	(For views questions) Are the	
comparable by group.		views and experiences	
		reported relevant to the	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Were there similar follow-up times in exposure and comparison groups? Yes. Both groups were followed up for an equal length of time.  Was follow-up time meaningful? No. The total follow-up period was 6 months which is only long enough to detect short-term effects and the majority of measures were only assessed at 3 months.  Were the analytical methods appropriate? Yes.  Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes. The authors report that the 2 groups were similar at baseline with respect to demographic characteristics and functional ability and quality of life related outcome measures however significance testing is not reported.	guideline? Not applicable (not views question). No views and experiences data provided.  Was the study conducted in the UK? No. The study was conducted in Australia.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
, and the second	Was intention to treat (ITT)		
	analysis conducted? Yes.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Yes. The authors		
	provide a power calculation		
	based on data in relation to the		
	primary outcome measure		
	(Assessment of Motor and		
	Process Skills). This showed		
	that to detect a clinically		
	significant change of 0.5 on this		
	measure (0.8 power,		
	significance level of 0.05), 60		
	participants were required in		
	each group. 229 participants		
	were randomised in total. The		
	authors report that they		
	increased the sample size to		
	allow for stratified randomisation		
	and 25% attrition.		
	Were the estimates of effect		
	size given or calculable? No.		
	Effect sizes are not provided.		
	Was the precision of		
	intervention effects given or		

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
	calculable? Were they		
	meaningful? Partly. p values		
	and confidence intervals are		
	reported for some outcomes but		
	this is not consistent.		
	Do conclusions match		
	findings? Partly. The authors		
	conclude that home is a better		
	site for rehabilitation. This		
	appears to be on the basis of		
	risk of readmission and time to		
	first readmission however it		
	should be noted that day		
	hospital had significantly better		
	Functional Independence		
	Measure scores at 3 months		
	and significantly greater change		
	scores on this measure. The		
	authors suggest that this		
	difference was due to unblinded		
	assessments. The authors also		
	state that both groups made		
	significant improvements in		
	functional outcomes but this		
	only appears to be the case for		
	scores on the Functional		
	Independence Measure.		

2. Jackson JC, Ely EW, Morey MC et al. (2012) Cognitive and physical rehabilitation of intensive care unit survivors: Results of the RETURN randomized controlled pilot investigation. Critical Care Medicine 40(4): 1088-97

		External validity	Overall validity rating
Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	Door the atualish was similar	Overall appearance of af
Study aim: To test the	Was the exposure to the	Does the study's research	Overall assessment of
following hypothesis - in a	intervention and comparison	question match the review	internal validity:
cohort of ICU survivors, a	as intended? Partly. Eligibility	question? Yes.	+
'bundled' rehabilitation	criteria were changed during		
approach combining cognitive,	the trial to allow for the	Has the study dealt	Overall assessment of
physical, and functional	inclusion of participants who	appropriately with any	external validity:
rehabilitation could be	were discharged to a nursing	ethical concerns? Yes.	++
developed and effectively	home or rehabilitation centre.	Researchers at Vanderbilt	
delivered in the home using		University, Duke University,	Overall validity rating:
novel tele-video technology	Was contamination	and the Nashville (Tennessee	+
delivered via social workers	acceptably low? Yes.	Valley) and Durham VA	
and would result in greater		Medical Centers supervised	
improvement in cognition and	Did either group receive	the trial and institutional	
functional outcomes in	additional interventions or	review boards (IRBs)	
intervention than control	have services provided in a	approved the protocol. Having	
participants.	different manner?	said that, there is no	
	Partly. The authors do not	discussion of ethical issues	
Description of theoretical	know details about the control	associated with withholding	
approach? Yes. A critical	groups' involvement in	the intervention from the	
evaluation of existing research	outpatient rehabilitation	control participants.	
led the researchers to	because they were unable to		
hypothesize that a	gather that information from	Were service users involved	
rehabilitation approach	half of all participants.	in the design of the study?	
combining cognitive, physical,	Furthermore, usual care may	No.	
and functional training could	have included physical		
have enhanced effects related	therapy, occupational therapy	Is there a clear focus on the	
to the beneficial physiological	and nursing care delivered to	guideline topic? Yes.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
effects of exercise on	in-patient, out-patient or home		
cognition (and potentially on	health settings.	Is the study population the	
the responsiveness to		same as at least one of the	
cognitive training) as well as	Were outcomes relevant?	groups covered by the	
the effects of functional	Yes.	guideline? Yes.	
training facilitating translation of newly acquired skills into	Were outcome measures	Is the study setting the	
daily life.	reliable? Yes.	same as at least one of the	
daily inc.	renable: 103.	settings covered by the	
How was selection bias	Were all outcome	guideline? Partly. Yes	
minimised? Randomised.	measurements complete?	although it should be noted	
Randomisation was done	No. Although it is not terribly	that the study was conducted	
using a 2:1 randomization	clear, it appears that up to 6	in the US where the different	
scheme (intervention vs.	intervention participants	health care system may have	
control) to maximize	dropped out between baseline	a bearing on external validity	
knowledge gained from the number of participants in the	and follow up. We're assured that the characteristics of	and applicability.	
study's intervention group.	these people were similar to	Does the study relate to at	
Permuted block randomization	those of the people who	least one of the activities	
was employed, with block	completed the study.	covered by the guideline?	
sizes of 3 and 6.		Yes.	
	Were all important outcomes		
Was the allocation method	assessed? Yes.	(For effectiveness	
concealed? Yes.		questions) Are the study	
Randomization was concealed	Were there similar follow-up	outcomes relevant to the	
via tri-folded randomization sheets placed in sealed	times in exposure and comparison groups? Yes. 3	guideline? Yes.	
opaque envelopes. Staff	months.	Was the study conducted in	
enrolling study participants	monuis.	the UK? No.	
were thus blinded as to which			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
group the next eligible patient	Was follow-up time		
would be randomised.	meaningful? Partly. An		
	additional, longer term follow		
Were participants blinded?	up would have improved the		
Not reported.	study e.g. 6 or 12 months.		
Were providers blinded? Not	Were the analytical methods		
blind.	appropriate? Yes. Descriptive		
	analyses regarding		
Were investigators, outcome	socioeconomic characteristics,		
assessors, researchers, etc.,	baseline health conditions, and		
blinded? Not blind.	severity of illness were done		
	comparing intervention and		
Did participants represent	control groups using Mann-		
the target group? Partly. The	Whitney U-tests for continuous		
study applied extensive	variables and Pearson chi-		
exclusion criteria including:	square tests for categorical		
accidents or diseases with	variables. Linear regression		
resulting moderate to severe	was employed to examine		
cognitive deficits or ADL	differences in follow-up		
dependency - active	assessment cores on primary		
substance abuse or psychotic	and secondary outcome		
disorder - prisoners - patients	measures between treatment		
living beyond a 125 mile	groups while adjusting for		
radius - the presence of	baseline treatment scores.		
normal cognition and normal	Adjusted treatment effects are		
physical function at the time of	the point estimates and 95%		
discharge - lack of telephone	confidence intervals for the		
service with analogue	treatment coefficient in the		
telephone line - discharge	ANCOVA models. They		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
planned to rehab centre	describe the difference in the		
(although this was changed	three-month measurement for		
mid study to allow them to	the intervention group as		
join).	compared to the control group,		
	while adjusting for baseline		
Were all participants	measurement. Logistic		
accounted for at study	regression was also employed		
conclusion? Yes. Three out	to analyse data from our		
of the 21 randomized patients	dichotomous Katz ADL		
dropped out - all from the	outcome.		
intervention arm. Reasons: the			
study was inconvenient,	Were exposure and		
personal reason unrelated to	comparison groups similar		
the study and multiple hospital	at baseline? If not, were		
readmissions.	these adjusted? Partly		
	With respect to key baseline		
	demographic and clinical		
	characteristics, participants		
	were generally similar, though		
	certain differences were		
	observed. Severity of illness,		
	as measured via the Acute		
	Physiology and Chronic Health		
	Evaluation Score – II		
	(APACHE II) and Sequential		
	Organ Failure (SOFA) scores		
	were slightly higher (though		
	not statistically significantly so)		
	in control versus intervention		
	patients, and control patients		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
una sample	suffered from a larger number of medical comorbidities (as measured by overall scores on the Duke Comorbidity Index). Control patients also experienced longer ICU hospitalizations and greater duration of mechanical ventilation, which though not statistically significantly different may have been clinically significant. Scores on relevant outcome measures at a baseline (pre-intervention) assessment were not statistically significantly different between groups.		
	Was intention to treat (ITT) analysis conducted? No. Results are presented only for the participants who completed the study - they exclude those who dropped out.  Was the study sufficiently powered to detect an intervention effect (if one exists)? No. The authors say		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	-
	that due to the preliminary		
	nature of this investigation and		
	its primary goals, which		
	included hypothesis		
	generation, evaluation of		
	feasibility, and assessing proof		
	of principle, a formal power		
	analysis and was not used to		
	determine the study's sample		
	size, and most of the reported		
	outcomes are underpowered.		
	Were the estimates of effect		
	size given or calculable? No.		
	Was the precision of		
	intervention effects given or		
	calculable? Were they		
	meaningful? Partly. p values		
	are reported and adjusted		
	treatment effects are also		
	given.		
	Do conclusions match		
	findings? Yes.		

3. Mahomed NN, Davis AM, Hawker G et al. (2008) Inpatient compared with home-based rehabilitation following primary unilateral total hip or knee replacement: A randomized controlled trial. American Journal of Bone and Joint Surgery 90A(8): 1673-80

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The aim of the	Was the exposure to the	Does the study's research	Overall assessment of
study was to evaluate the	intervention and comparison	question match the review	internal validity:
effectiveness and cost of	as intended? Yes. Both	question? Yes. The study's	+
home based rehabilitation,	interventions went as planned.	research question is in line	
compared with inpatient	There were no problems with	with the review question.	Overall assessment of
rehabilitation following primary	uptake or changes made		external validity:
total hip or knee joint	during the course of the study.	Has the study dealt	++
replacement.		appropriately with any	
	Was contamination	ethical concerns? Yes. The	Overall validity rating:
Description of theoretical	acceptably low? No. Twenty	study was approved by the	+
approach? No. There is no	participants requested a	Human Subject Review	
description of the theory	crossover from their assigned	Committee.	
behind the evaluated	treatment group of home		
intervention.	rehabilitation to inpatient	Were service users involved	
	rehabilitation.	in the design of the study?	
How was selection bias		No. Service users were	
minimised? Randomised.	Did either group receive	involved as participants and	
Participants were randomised	additional interventions or	not in the design of the study	
to either home based or	have services provided in a	or interpretation of results.	
inpatient rehabilitation.	different manner? No.		
	Neither of the groups received	Is there a clear focus on the	
Was the allocation method	additional interventions.	guideline topic? Yes. The	
concealed? Not reported.	1 12	study clearly relates to the	
	Were outcomes relevant?	overall topic of the guideline.	
Were participants blinded?	Yes. Reported outcomes		
Not blind. Participants were			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
informed of their treatment	clearly relate to the measures	Is the study population the	
allocation to either home	used.	same as at least one of the	
based or inpatient		groups covered by the	
rehabilitation. This was to	Were outcome measures	<b>guideline?</b> Yes. Adults using	
allow sufficient time to prepare	reliable?	intermediate care services	
their home settings (if	Yes. Validated questionnaires	formed the study population.	
allocated to home based	were used, and these were		
rehabilitation).	both subjective and objective,	Is the study setting the	
	however data in relation to this	same as at least one of the	
Were providers blinded? Not	are not provided.	settings covered by the	
reported.		guideline? Yes. An acute	
	Were all outcome	hospital and participants'	
Were investigators,	measurements complete?	homes formed the study	
outcome assessors,	Yes. All planned data was	settings.	
researchers, etc., blinded?	gathered.		
Not reported.		Does the study relate to at	
	Were all important outcomes	least one of the activities	
Did participants represent	assessed? Yes.	covered by the guideline?	
the target group? Yes.		Yes. The effectiveness and	
Participants clearly represent	Were there similar follow-up	cost effectiveness of bed-	
the target group for this	times in exposure and	based vs. home based	
intervention.	comparison groups? Yes.	intermediate care is covered	
	Both groups were followed up	in the study.	
Were all participants	3 and 12 months after the		
accounted for at study	intervention.	(For effectiveness	
conclusion? Yes. None of the		questions) Are the study	
participants were lost to	Was follow-up time	outcomes relevant to the	
follow-up.	meaningful? Yes. Follow-up	guideline? Yes. The main	
	was sufficient to assess long-	outcome was the efficacy of	
	term benefits or harms and no	inpatient, compared with	

	ternal validity -	External validity	Overall validity rating
and sample per	rformance and analysis		
par this  We app var diff the diff sat evarante	rticipants were lost during stime.  Pere the analytical methods propriate? Yes. Analysis of riance was used to evaluate ferences between groups in a 2 treatment arms and ferences between groups in tisfaction scores were aluated with use of Wilcoxon nk-sum tests.  Pere exposure and imparison groups similar baseline? If not, were ese adjusted? Yes. There ere no significant differences tween groups in important infounders at baseline.  Passintention to treat (ITT) palysis conducted? Yes. imary analysis was on an ention-to-treat basis. This is to ensure that any tential variables could be justed for in the final alysis.	home based, rehabilitation 3 months after surgery. Secondary outcomes included measurement of health status and patient satisfaction.  Was the study conducted in the UK? No. US study.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
-	Was the study sufficiently powered to detect an intervention effect (if one exists)? Yes. A power calculation is presented.		
	Were the estimates of effect size given or calculable? Yes. Effect size is presented (0.5).		
	Was the precision of intervention effects given or calculable? Were they meaningful? Not reported.		

4. Parker SG, Oliver P, Pennington M et al. (2009) Rehabilitation of older patients: Day hospital compared with rehabilitation at home. A randomised controlled trial. Health Technology Assessment 13(39): DOI 10.3310/hta13390

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The study aimed	Was the exposure to the	Does the study's research	Overall assessment of
to test the hypothesis that '	intervention and	question match the review	internal validity:
older people and their informal	comparison as intended?	question? Yes. The study	+
carers are not disadvantaged	Not reported. The authors do	aimed to test the hypothesis	
by home-based rehabilitation	not provide any details on	that ' older people and their	The failure to carry out 12
relative to day hospital	delivery of either the	informal carers are not	month follow-up assessments
rehabilitation' (piii).	intervention or comparison.	disadvantaged by home-based	for some participants, high
		rehabilitation relative to day	rate of attrition and lack of
Description of theoretical	Was contamination	hospital rehabilitation' (piii).	sufficient power mean that it
approach? No. The authors	acceptably low? Not		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
do not provide a clear	reported. Information on	Has the study dealt	is not possible to award a
description of their theoretical	contamination is not provided.	appropriately with any	higher score.
approach or a logic model.		ethical concerns? Yes. The	
The hypothesis of the study is	Did either group receive	protocol was approved by a	Overall assessment of
that home based	additional interventions or	research ethics committee and	external validity:
multidisciplinary rehabilitation	have services provided in a	informed consent was	++
is not inferior to day hospital	different manner? Not	provided by participants (with	
based multidisciplinary	reported. There is no	assistance from an advocate	Overall validity rating:
rehabilitation but there is no	indication that either group	or carer if necessary).	+
exploration of why this might	received additional		
be the case. The authors	interventions.	Were service users involved	
simply note that home based		in the design of the study?	
rehabilitation was a policy	Were outcomes relevant?	Yes. Patient advisory groups	
priority. It should also be noted	Yes. Although the outcome	took part in discussions	
that this intervention was not	measures seem appropriate	regarding the protocol.	
designed specifically for this	the discussion in relation to	_	
trial, instead, it appears that	the types of outcomes which	Is there a clear focus on the	
participants were randomised	the service may impact and	guideline topic? Yes. The	
at 1 of 4 centres where home	the measures which would be	study evaluates short-term	
based multidisciplinary	relevant to these is minimal.	multidisciplinary home based	
rehabilitation services were	The hypothesis of the study	rehabilitation.	
already in existence.	was that older people and their		
	carers would not be	Is the study population the	
How was selection bias	'disadvantaged' by the	same as at least one of the	
minimised? Randomised.	intervention which does not	groups covered by the	
Permuted block randomisation	really provide much focus.	guideline? Yes. All	
using a web-based		participants were over the age	
randomisation service.	Were outcome measures	of 18, however the majority	
Randomisation was stratified	reliable? Yes. All outcome	were aged 65 or older.	
by ' centre, AMT score and	measures appear to have		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
gender and by the presence of	established reliability and	Is the study setting the	
a carer' (p558).	validity however data in	same as at least one of the	
	relation to this are not	settings covered by the	
Was the allocation method	provided.	guideline? Yes. The	
concealed? Not reported.		interventions were delivered in	
Methods of allocation and	Were all outcome	the participants own homes	
concealment are not reported.	measurements complete?	and day hospitals. All outcome	
	No. Due to problems with	assessments were conducted	
Were participants blinded?	recruitment, 12 month follow-	in the homes of participants.	
Blinding not possible. Due to	up assessments did not take		
the nature of the intervention it	place for all participants. The	Does the study relate to at	
would not have been possible	number for whom this was the	least one of the activities	
to blind participants to group	case is not clearly reported.	covered by the guideline?	
assignment.		Yes. The experimental	
	Were all important	condition was a home based	
Were providers blinded?	outcomes assessed? Partly.	multidisciplinary rehabilitation	
Blinding not possible. Due to	Although the range of service	service which is relevant to	
the nature of the intervention it	user related outcomes seem	home based intermediate	
would not have been possible	comprehensive the study did	care.	
to blind participants to group	not measure mortality and it is		
assignment.	disappointing that the only	(For effectiveness	
	carer related outcome was	questions) Are the study	
Were investigators, outcome	psychiatric morbidity. Given	outcomes relevant to the	
assessors, researchers, etc.,	that the authors emphasise	<b>guideline?</b> Yes. The primary	
blinded? Part blind. The	the importance of service user	outcome was activities of daily	
authors report that it was not	preference in their supporting	living. Secondary outcomes	
possible to ensure that	materials it is also	included anxiety and	
outcome assessors remained	disappointing that the study	depression, and health of	
blinded; however they note	did not include a qualitative	carers.	
that the research team were	component.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	(Familiana and Alama) Ama	
blinded until the first analyses	NAVa na 4la ana ainailan fallan an	(For views questions) Are	
had been conducted and	Were there similar follow-up	the views and experiences	
discussed by the team.	times in exposure and	reported relevant to the	
<b>D.</b>	comparison groups? Yes.	guideline? Not applicable (not	
Did participants represent		views question). This study did	
the target group? No. Only	Was follow-up time	not include any views and	
89 eligible participants were	meaningful? Partly. Final	experiences data.	
randomised out of a total of	follow-up assessments were		
435. Two hundred and thirty	conducted at 12 months	Was the study conducted in	
five individuals declined to	(although recruitment	the UK? Yes. The study was	
participate and 111 did not	problems meant that these	conducted across 4 sites in	
take part for 'other' reasons.	were not always carried out)	England.	
Only minimal data in relation	which may not have been		
to demographics of the sample	sufficient to detect longer-term		
are provided, for example in	effects.		
relation to ethnicity or			
socioeconomic status,	Were the analytical methods		
however the majority of	appropriate? Yes. Analysis of		
participants were over the age	covariance (adjusting for		
of 65. There is a lack of clarity	baseline scores), logistic		
in relation to inclusion and	regression, Mann-Whitney U		
exclusion criteria. The authors	test, and binary logistic		
note that these were set at the	regression. The authors also		
local level on the basis that	report that a post hoc analysis		
participants with a clinical	of non-inferiority in relation to		
need which could only be met	clinically significant differences		
by a service currently provided	was conducted which they		
in only 1 setting were	note is problematic without		
excluded. However, they also	predefined non-inferiority		
report that potentially eligible	limits.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
people were excluded because they had not been referred for multidisciplinary rehabilitation and because of ' site specific service configuration' (p558). It should also be noted that recruitment to the trial was ceased at an earlier point than intended due to the high numbers of people who declined to participate, the volume assessed as ineligible and changes in service	Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes. The authors report that the 2 groups were similar at baseline in relation to demographic characteristics however they do not report any significance testing. Analysis of continuous data used baseline scores as the covariate.		
were all participants accounted for at study conclusion? No. At 3 months follow-up only 72 out of 89 participants provided outcome data, by the 6 months follow-up this had fallen to 65 and by the final 12 month assessment, data was only available for 43 participants out of a total of 89 randomised. Explanations for loss to follow-up are included.	Was intention to treat (ITT) analysis conducted? Partly. Intention to treat analysis was only conducted for 5 of the outcomes assessed at the 6 months follow-up.  Was the study sufficiently powered to detect an intervention effect (if one exists)? No. The authors calculated that to detect a 2 point difference on the Nottingham Extended		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample  It appears that there were also 23 carers in each group although it is not clear if any of these were lost to follow-up.	performance and analysis at a significance level of 5% a sample size of 460 was required. Only 89 participants were randomised.		
	Were the estimates of effect size given or calculable? Partly. Odds ratios are provided for some outcome measures but this is not consistent.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes. 95% confidence intervals and <i>p</i> values are provided as appropriate.		
	Do conclusions match findings? Yes.		

5. Thorsen AM, Widen Holmqvist L, Von Koch L (2006) Early Supported Discharge and continued rehabilitation at home after stroke: 5-year follow-up of resource use. Journal of Stroke and Cerebrovascular Diseases 15(4): 139-43

more of the first				
Internal validity - approach	Internal validity -	External validity	Overall validity rating	
and sample	performance and analysis			
Study aim: The aim of the	Was the exposure to the	Does the study's research	Overall assessment of	
study was to assess the effect	intervention and comparison	question match the review	internal validity:	
of Early Supported Discharge	as intended? Not reported.	question? Yes. The study's	-	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	, ,
on use of health care and		research question is clearly in	
social service resources 5	Was contamination	line with the review question.	Overall assessment of
years after stroke. NB. This is	acceptably low? Not		external validity:
1 of 2 follow-up studies, the	reported.	Has the study dealt	++
first of which explores		appropriately with any	
changes in perceived health	Did either group receive	ethical concerns? Yes. The	Overall validity rating:
status over the 5 years after	additional interventions or	study was approved by the	+
stroke onset (Ytterberg et al.	have services provided in a	University Hospital ethics	
2010), thus providing an overall picture.	different manner? Not reported.	committee.	
		Were service users involved	
Description of theoretical	Were outcomes relevant?	in the design of the study?	
approach? No. A theoretical	Yes. Reported outcomes	No. Service users were	
approach is not described.	clearly relate to the measures	involved as participants, but	
	used.	not in the design of the study	
How was selection bias		or interpretation of results.	
minimised? Randomised.	Were outcome measures	·	
Participants were randomised	reliable?	Is there a clear focus on the	
to either Early Supported	Yes. The authors used a	guideline topic? Yes. The	
Discharge or conventional	variety of measures to gather	study relates to home based	
rehabilitation.	data, including: - a	intermediate care.	
	computerised register of		
Was the allocation method	Stockholm County Council -	Is the study population the	
concealed? Not reported.	telephone conversations and	same as at least one of the	
Details on the randomisation	consultation visits - interviews	groups covered by the	
procedure are presented in	with participants and/or their	guideline? Yes. The study	
the original RCT (von Koch et	spouses.	population consisted of adults	
al. 2000).		(mean age 72 years) using	
	Were all outcome	intermediate care (Early	
	measurements complete?	Supported Discharge with	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Were participants blinded?	Yes. All planned data was	continued rehabilitation at	
Not reported.	gathered.	home).	
Were providers blinded? Not	Were all important outcomes	Is the study setting the	
reported.	assessed? Yes. Meaningful effects, in favour of Early	same as at least one of the	
Were investigators,	Supported Discharge on	settings covered by the guideline? Yes. The	
outcome assessors,	resource use, are reported.	intervention took place in	
researchers, etc., blinded?	resource use, are reported.	participants' homes.	
Blind. The assessor was blind	Were there similar follow-up		
to group assignment and had	times in exposure and	Does the study relate to at	
not been involved in the	comparison groups? Yes.	least one of the activities	
randomisation procedure.	Participants in both the	covered by the guideline?	
	intervention and comparison	Yes. The study looks at the	
Did participants represent	groups were followed-up 5	effect of Early Supported	
the target group? Yes.	years after stroke.	Discharge services on use of	
Participants met selected		health care and social service	
inclusion criteria that were	Was follow-up time	resources.	
representative of the target	meaningful?		
group (people with stroke).	Partly. 29 participants were	(For effectiveness	
	lost during 5 year follow-up.	questions) Are the study	
Were all participants	This was potentially too long to	outcomes relevant to the	
accounted for at study	assess this particular group.	guideline? Yes. The main	
conclusion? No. Over 20%		outcome measured was the	
participants were lost to	Were the analytical methods	effect of Early Supported	
follow-up (n=29). Of these, 20	appropriate? Partly. The	Discharge services on use of	
had died and 9 were 'lost to	authors gathered various types	health care and social service	
follow-up' (p140).	of data, including interview	resources.	
	data, but do not go into any		
	detail about how these were		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
	analysed. For example, they only used Chi-squared and t tests, but do not say whether interview responses were coded to be reported quantitatively.	Was the study conducted in the UK? No. Swedish study.	
	Were exposure and comparison groups similar at baseline? If not, were these adjusted? Not reported.  Was intention to treat (ITT) analysis conducted? Not		
	reported.  Was the study sufficiently powered to detect an intervention effect (if one exists)? Not reported.		
	Were the estimates of effect size given or calculable? Not reported.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes. Confidence		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	intervals and p values are reported.		
	Do conclusions match findings? Yes. Conclusions are in line with findings; that Early Supported Discharge is favourable with regards to resource use.		

6. Ytterberg C, Thorsen AM, Liljedahl M et al. (2010) Changes in perceived health between one and five years after stroke: A randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the Neurological Sciences 294: 86-8

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: To explore perceived health status in people with stroke who	Was the exposure to the intervention and comparison as intended? Not reported.	Does the study's research question match the review question? Yes. The study's	Overall assessment of internal validity:
received Early Supported Discharge, with those who received conventional	Was contamination acceptably low? Not reported.	research question is in line with the review question.	Conclusions are in line with study findings, which suggest
rehabilitation, over 5 years after stroke onset.  NB. This is 1 of 2 follow-up	Did either group receive additional interventions or have services provided in a	Has the study dealt appropriately with any ethical concerns? Yes. Informed consent was	that the long term outcome with regard to perceived health status is more favourable after Early
studies, the second of which explores the effect of Early Supported Discharge services on use of health care and	different manner? Not reported.	obtained prior to participation in this follow-up study.	Supported Discharge than after conventional rehabilitation.

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
social service resources 5	Were outcomes relevant?	Were service users involved	Overall assessment of
years after stroke onset	Yes. Data on perceived health	in the design of the study?	external validity:
(Thorsen et al. 2006), thus	was collected using the	No. Service users were not	++
providing an overall picture.	Sickness Impact Profile (SIP),	involved in the design or	
	which measured perceived	methodology of the study.	Overall validity rating:
Description of theoretical	health-related limitations in 12		+
approach? Yes. The authors	categories of activity.	Is there a clear focus on the	
present a clear and	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	guideline topic? Yes. There	
comprehensive theory that is	Were outcome measures reliable?	is a clear focus on	
based on existing research for why Early Supported		intermediate care.	
Discharge is expected to	Partly. The Sickness Impact Profile has been proved to be	Is the study population the	
make a difference to	reliable and valid for the	same as at least one of the	
participants in the intervention	Swedish population, however,	groups covered by the	
arm.	may not be representative of	guideline? Yes. The study	
	the wider population. The	population includes adults	
How was selection bias	authors also note that use of a	with experience of home	
minimised? Randomised.	disease-specific instrument	based intermediate care	
Participants were randomised	would have offered a more	services.	
to a home rehabilitation group	detailed understanding of the		
or a conventional rehabilitation	perceived health status among	Is the study setting the	
group. This was done in the	patients after stroke.	same as at least one of the	
original study.		settings covered by the	
	Were all outcome	guideline? Yes. The study	
Was the allocation method	measurements complete?	setting is Early Supported	
concealed? Not reported.	Yes. All intended outcomes	Discharge with continued	
	were measured and reported.	rehabilitation in service users'	
Were participants blinded?		homes.	
Not reported.	Were all important outcomes		
	assessed? Yes. The authors		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Were providers blinded? Not	report the meaningful effects of	Does the study relate to at	
reported.	the intervention on patients	least one of the activities	
	with stroke versus	covered by the guideline?	
Were investigators,	conventional rehabilitation. No	Yes. The intervention was	
outcome assessors,	explicit harms were reported.	home based intermediate	
researchers, etc., blinded?	Managhana at attackation	care.	
Not reported.	Were there similar follow-up	/F \$5 1"	
Did neuticinente neurocent	times in exposure and	(For effectiveness	
Did participants represent	comparison groups? Yes.	questions) Are the study	
the target group? Yes. All	Both groups were followed-up	outcomes relevant to the	
eligible participants (n=83) were included and randomised	at 3 months, 6 months, 1 and 5	guideline? Yes. The study outcomes are user-related	
to either the intervention or	years.	(perceived health following	
comparison condition.	Was follow-up time	Early Supported Discharge).	
companson condition.	meaningful?	Larry Supported Discharge).	
Were all participants	Partly. Approximately 40% of	Was the study conducted in	
accounted for at study	participants were lost to	the UK? No. Swedish study.	
conclusion? No.	lengthy follow-up (five years).		
Approximately 40% of			
participants (n=33) were lost	Were the analytical methods		
to follow-up. Reasons for this	appropriate? Yes. The Mann		
were: death, non-residents or	Whitney U-test was used for		
declined.	statistical analysis of		
	differences between groups at		
	1 and 5 years, and the		
	Wilcoxon sign test for		
	differences within groups		
	between 1 and 5 years.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	Were exposure and		
	comparison groups similar		
	at baseline? If not, were		
	these adjusted? Partly. The		
	groups were comparable at		
	baseline with regard to		
	sociodemographic		
	characteristics, stroke-		
	associated conditions before		
	onset and functioning, with the		
	exception of more people in		
	the home rehabilitation group		
	with a medical history of		
	diabetes and transient		
	ischemic attack. There were,		
	however, more women in the		
	home rehabilitation group		
	(n=13) than the conventional rehabilitation group (n=8).		
	Teriabilitation group (11–8).		
	Was intention to treat (ITT)		
	analysis conducted? Not		
	reported.		
	reported.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Not reported.		
	, ,		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Were the estimates of effect size given or calculable? Not reported.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes. p values are provided.		
	Do conclusions match findings? Yes.		

## Review question 1 – Critical appraisal tables – the views and experiences of people using services, their families and carers

1. Ariss S (2014) National audit for intermediate care: Patient reported experiences, 2014. Sheffield: University of Sheffield

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Objectives of the study	Basic data adequately	Does the study's research	Overall assessment of
clearly stated? Partly. The	described? Partly. More data	question match the review	internal validity:
objective is simply to answer	on the numbers/ proportions	question? Yes. The survey,	-
the 1 survey question.	making certain responses	which was part of the NAIC	
• •	could have been provided.	2014, asked the question 'Do	Overall assessment of
Research design clearly	·	you feel that there is	external validity:
specified and appropriate?	Results presented clearly,	something that could have	++
Partly. It is not clear exactly	objectively and in enough	made your experience of the	
how the survey was conducted	detail for readers to make	service better?' Yes or No,	Overall validity rating:
		and then a space to provide	-

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
but details of the methods of	personal judgements?	further information. The	
analysis are provided.	Partly.	question was asked to people	
		using bed based and home	
Clear description of context?	Results internally	based intermediate care and	
Partly. The context of the	consistent? Partly. On the	reablement.	
survey is clear but we do not	whole, yes although numbers		
have details about the context	weren't routinely provided	Has the study dealt	
of the survey respondents	against responses.	appropriately with any	
(except that they have used		ethical concerns?	
home based intermediate	Data suitable for analysis?	No. There is no discussion of	
care).	Yes.	handling ethical issues or	
		obtaining ethical approval for	
References made to original	Clear description of data	the survey.	
work if existing tool used?	collection methods and		
N/A.	analysis? Partly. Clear	Were service users involved	
	description of data analysis	in the study? No.	
Reliability and validity of new	but not data collection.		
tool reported? Unclear. No		Is there a clear focus on the	
information about the validity	Methods appropriate for the	guideline topic? Yes.	
and reliability of the single	data? Yes.		
survey question, why it was		Is the study population the	
chosen or worded the way it	Statistics correctly	same as at least one of the	
was.	performed and interpreted?	groups covered by the	
	Partly. In terms of statistics,	guideline? Yes.	
Survey population and	only frequencies were		
sample frame clearly	produced and even then, not	Is the study setting the	
described? No. We only know	for all the themes, which	same as at least one of the	
that the sampling frame is	means we don't know how	settings covered by the	
people using home based	many respondents cited each	guideline? Yes.	
intermediate care in England.	issue - this could have been		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Representativeness of sample is described? No. We have no idea how representative the sample is.	provided in the ranked table. Further statistical analyses could have been usefully produced, e.g. cross tabulations or, if the data had	Does the study relate to at least one of the activities covered by the guideline? Yes.	
Subject of study represents full spectrum of population of interest? Unclear. The author does not provide any	been collected, responses could have been linked with service users' characteristics.  Response rate calculation	(For views questions) Are the views and experiences reported relevant to the guideline? Yes.	
information that would help us judge whether the study represents the full spectrum of the population of interest.	provided? No. Because we do not know how many people received the survey question.	Does the study have a UK perspective? Yes. The National Audit of Intermediate Care (NAIC), now it its third	
Study large enough to achieve its objectives, sample size estimates performed? No. There's no	Methods for handling missing data described? No.  Difference between non-	year, provides a unique, 'bird's eye' view of intermediate care commissioning and provision in England.	
evidence that sample size estimates have been made.	respondents described? No.	iii Erigianu.	
All subjects accounted for?  No. The paper does not provide a figure for the total number of people who received the survey.	Results discussed in relation to existing knowledge on subject and study objectives? No.		
Measures for contacting non- responders? There's no	Limitations of the study stated? No.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
evidence that non responders were followed up.	Results can be generalised? Partly. Within England, probably although it's hard to		
All appropriate outcomes considered? N/A. No outcomes were measured, the survey simply comprised of 1	tell because the author does not provide any information about the respondents.		
open ended question.	Appropriate attempts made to establish 'reliability' and 'validity' of analysis? No.		
	Conclusions justified? Unclear. No conclusions are provided in this paper.		

2. Cobley CS, Fisher RJ, Chouliara N et al. (2013) A qualitative study exploring patients' and carers' experiences of Early Supported Discharge services after stroke. Clinical Rehabilitation 27(8): 750-7

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Is a qualitative approach	Is the context clearly	Does the study's research	Overall assessment of
appropriate? Appropriate.	described? Unclear. We only know participants' ages and	question match the review question? Yes. A study of	internal validity:
Is the study clear in what it	the fact they have a stroke	patient and carer views of	
seeks to do? Clear.	diagnosis.	Early Supported Discharge for	Overall assessment of
		stroke.	external validity:
How defensible/rigorous is	Was the sampling carried		++
the research	out in an appropriate way?	Has the study dealt	
design/methodology?	Somewhat appropriate. It was	appropriately with any	With the caveat about Early
Defensible. Sampling, data	self-selecting. Patients and	ethical concerns? Yes.	Supported Discharge being
	their carers were given an	Researchers stressed that	outside the NAIC definition.

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	,
collection and analysis were	information sheet and those	participation was voluntary and	
clearly described and rational.	who wished to participate	all information would be	Overall validity rating:
	were invited to contact the	treated in confidence. The	+
How well was the data	researcher directly.	study was approved by the	
collection carried out?		Nottingham Research Ethics	
Somewhat appropriately.	Were the methods reliable?	Committee 1, and written	
Although it is not clear whether	Somewhat reliable. Data	informed consent was	
people were interviewed with	collection is only via	obtained from all patients and	
their carers present or whether	interviews. No observation or	identified carers.	
they were interviewed	opportunity for triangulation.	Were service users involved	
separately.	'Effectiveness' of Early Supported Discharge is		
	based on qualitative	in the study? No.	
	comparisons of Early	Is there a clear focus on the	
	Supported Discharge vs non	guideline topic? Yes.	
	Early Supported Discharge so	Although according to the	
	no basis for assumptions	NAIC definition, single	
	about effectiveness.	condition Early Supported	
		Discharge should be outside of	
	Are the data 'rich'? Mixed.	scope. The reviewers agreed	
	It's not always clear whether	to include this paper because	
	the response is from an Early	the GC were not happy to	
	Supported Discharge patient	exclude Early Supported	
	or from someone who has	Discharge interventions	
	been discharged without the	outright. The evidence from	
	Early Supported Discharge	this paper will be presented at	
	service. The themes applied	the GC can discuss whether	
	to the data are useful and	they think it is appropriate as a	
	seem appropriate. However	basis for recommendations.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
, , ,	there isn't an awful lot of data presented.	Is the study population the same as at least one of the groups covered by the	
	Is the analysis reliable? Somewhat reliable. A second	guideline? Yes.	
	researcher reviewed the interview transcripts and checked the relevance of each theme. Differences in research perspective were discussed and agreement was reached. Cases	Is the study setting the same as at least one of the settings covered by the guideline? Yes. Community services provided in peoples own homes.	
	disconfirming the core themes were examined and reported. However, participants were not given the opportunity to feedback on interview transcripts.	Does the study relate to at least one of the activities covered by the guideline? Yes. With the caveat that this is Early Supported Discharge (outside the NAIC definition).	
	Are the findings convincing? Somewhat convincing. The findings are fairly clearly presented although it is not always easy	(For views questions) Are the views and experiences reported relevant to the guideline? Yes.	
	to tell whether data from Early Supported Discharge patients or non-Early Supported Discharge patients are being reported. Findings seem internally coherent albeit that	Does the study have a UK perspective? Yes. The study was conducted in Nottinghamshire, UK.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	there are some contrasting views. Extracts from the original data are included and well referenced. Reporting is coherent and fairly clear.		
	Are the conclusions adequate? Adequate. There are clear links between the data, interpretation and conclusions. The conclusions are plausible and coherent. Implications of the research are clearly defined and also summarized in a 'clinical messages' summary at the end. There is adequate discussion of the study limitations.		

3. McLeod E, Bywaters P, Tanner D et al. (2008) For the sake of their health: Older service users' requirements for social care to facilitate access to social networks following hospital discharge. British Journal of Social Work 38: 73-90

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Is a qualitative approach	Is the context clearly	Does the study's research	Overall assessment of
appropriate? Somewhat	described? Clear. The	question match the review	internal validity:
appropriate. The data were	context (the 5 hospital	question? Partly. The paper	+
gathered via postal survey and	aftercare social rehabilitation	explores the forms of social	
telephone interview (mainly	projects) was described	care that older service users	Overall assessment of
postal survey). It is likely that	although there but there is no	require after hospital	external validity:

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
this was due to resource	description of how context	discharge, to facilitate access	++
limitations but face to face	bias was minimised.	to or re-engagement in social	
interviews would have been a		networks. It does this by	Overall validity rating:
more reliable way of gathering	Was the sampling carried	drawing on a qualitative study	+
data about people's	out in an appropriate way?	of pilot voluntary sector	
experiences of rehabilitation	Appropriate. The risk of	hospital aftercare social	
post discharge.	sampling bias (where for	rehabilitation projects.	
	example, only people happy		
Is the study clear in what it	with the service might be	Has the study dealt	
seeks to do? Clear. To	sampled) was minimised	appropriately with any	
understand people's	because the sample was	ethical concerns? Yes. All	
experiences and views relating	randomly selected - albeit by	participants gave informed,	
to the post hospital social	project coordinators. It wasn't	written consent. There is no	
rehabilitation services.	purposefully stratified and the	mention of gaining ethical	
	target number was chosen to	approval for the study.	
How defensible/rigorous is	ensure participants from all 5		
the research	projects participated.	Were service users	
design/methodology?		involved in the study? Yes.	
Somewhat defensible. The	Were the methods reliable?	To reflect older service users'	
design is somewhat appropriate	Somewhat reliable. The	interests and perspectives, a	
to the research question,	methods do investigate what	representative from an Older	
although the use of face to face	they claim to and more than 1	Service Users' Health and	
interviews would have improved	method of data collection was	Social Care Forum	
the reliability and arguably the	used, which is to the study's	contributed to all aspects of	
richness of the findings. There	credit. However, the	the research design and	
are clear accounts of the	opportunity was missed to	process.	
rationale/justification for the	triangulate the collected data.		
sampling although it is a	For example, the analysis of	Is there a clear focus on the	
limitation that project co-	user case records could have	guideline topic? Yes. The	
ordinators carried out the	been matched with the	focus is on delivering social	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
random sampling - there is no	interview/ questionnaire data,	rehabilitation in the context of	
reference to whether this	which in turn could have been	a hospital discharge service.	
process was blinded or could	triangulated with the interview		
have been selective. The fact	data from the 5 project	Is the study population the	
that interviews with project	coordinators.	same as at least one of the	
coordinators were conducted is		groups covered by the	
positive and allowed for	Are the data 'rich'? Rich.	guideline? Yes. Although	
triangulation. There is no	The detail of the data was	older rather than younger	
description of the analysis of	demonstrated and responses	adults.	
survey data.	were compared and		
	contrasted across the 5	Is the study setting the	
How well was the data	projects. Findings were	same as at least one of the	
collection carried out?	backed with quotes, which	settings covered by the	
Somewhat appropriately.	were connected with the	<b>guideline?</b> Yes. Delivered in	
Appropriate data were collected	contexts (e.g. the projects).	people's own homes.	
to address the research			
question but stronger data	Is the analysis reliable?	Does the study relate to at	
would have been provided if the	Unreliable. We are told that all	least one of the activities	
service records could have	data were analysed	covered by the guideline?	
matched with the interviewees/	thematically in relation to	Yes. Post hospital	
questionnaire respondents.	specific research objectives	rehabilitation with a limited	
Data collection is described	although this thematic	duration, delivered in people's	
quite clearly although the	analysis is not described.	own homes.	
description of the sampling of	There is also no evidence that		
service records refers to	more than 1 researcher	(For views questions) Are	
'vagaries in selection' to explain	themed and code	the views and experiences	
why fewer records were	transcripts/data. There is no	reported relevant to the	
analysed that had been the aim.	suggestion that participants'	guideline? Yes.	
There is no description of	feedback on the	_ , , , ,	
record keeping in relation to	transcripts/data. Finally, the	Does the study have a UK	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
data collection.	authors do not present discrepant results and although this could mean there were no such results, it could also suggest they were ignored in the analysis.	perspective? Yes. '5 UK localities'.	
	Are the findings convincing? Convincing? Convincing. Extracts from the original data are included, with appropriately referencing. The reporting, organised in themes is clear and coherent and it is also contextualised with existing literature.		
	Are the conclusions adequate? Adequate. The findings are clearly relevant to the aims of the study and there are good links between data, interpretation and conclusions. The conclusions are plausible and coherent and are linked to existing research. They enhance understanding of the ways in which social rehabilitation can be effectively provided via a		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	hospital aftercare service. The		
	only drawback is that study		
	limitations are not discussed		
	in any detail except to say that		
	study is 'small scale'.		

4. Mitchell F, Dobson C, McAlpine A et al. (2011) Intermediate care: Lessons from a demonstrator project in Fife. Journal of Integrated Care 19(1): 26-36

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Is a qualitative approach	Is the context clearly	Does the study's research	Overall assessment of
appropriate? Appropriate.	described? Unclear. There's	question match the review	internal validity:
	no information about the	question? Yes. The	-
Is the study clear in what it	characteristics of the	intermediate care	
seeks to do? Mixed. There is	participants and we don't	demonstrator project (which	Overall assessment of
some reference to existing	know who conducted the	increased the availability of	external validity:
literature. Although the purpose	interviews e.g. whether a	access to the existing	++
of the overall demonstrator	provider of the service or an	intermediate care services in	
project is fairly clear, it is not	independent researcher.	1 locality in Fife) involved face	Overall validity rating:
immediately obvious how the		to face interviews with	-
service user interviews fit in and	Was the sampling carried	patients about their	
how they contribute.	out in an appropriate way?	experience of intermediate	
_	Somewhat appropriate. A	care.	
How defensible/rigorous is	random sample of 12 of the 34		
the research	intermediate care participants	Has the study dealt	
design/methodology?	were invited to participate	appropriately with any	
Somewhat defensible. There's	however we have no idea	ethical concerns? No. Not	
no clear account of the rational	about the sampling frame for	reported.	
for sampling and no account of	the staff survey and do not		
	know the response rate.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
the analysis of the interview		Were service users	
data.	Were the methods reliable?	involved in the study? No.	
	Somewhat reliable. The		
How well was the data	service user data were not	Is there a clear focus on the	
collection carried out?	collected in any way except	guideline topic? Yes.	
Inappropriately. Face to face	via interviews - no observation		
interviews are appropriate for	and the outcomes data	Is the study population the	
understanding people's	(numbers remaining at home,	same as at least one of the	
experiences of the intermediate	numbers returning home)	groups covered by the	
care service. However data	were not linked with the	<b>guideline?</b> Yes. People using	
collection methods are not	interview data for example.	intermediate care.	
clearly described except to say	However, the authors do		
that interviews were conducted	describe their findings	Is the study setting the	
in people's own homes. There's	alongside other studies. Staff	same as at least one of the	
also no description of any	views were gathered via	settings covered by the	
systematic recording of the	questionnaires although there	guideline? Yes.	
interviews. We're told that 18	is mention of 6 interviews		
staff completed a survey but we	taking place - but it is not clear	Does the study relate to at	
do not know the size of the	how these relate to the 18	least one of the activities	
sampling frame or the number	survey respondents.	covered by the guideline?	
of people who were invited to		Yes.	
respond to the survey. We	Are the data 'rich'? Poor.		
therefore do not know what the	There's no information about	(For views questions) Are	
response rate was or whether	the context of the data and we	the views and experiences	
the respondents are	have no idea about the	reported relevant to the	
representative.	diversity of perspective	guideline? Yes.	
	represented by the		
	participants. Results are	Does the study have a UK	
	presented with very little	perspective? Yes.	
	detail.	Conducted in Scotland.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Is the analysis reliable? Unreliable. There is no information to suggest that more than one researcher themed and coded transcripts/data. Also no information to suggest that participant's feedback on the transcripts/data. There's no evidence of discrepant results. The results are presented more or less as a consensus.		
	Are the findings convincing? Somewhat convincing. The findings seem convincing but are only illustrated with the use of 1 quote.		
	Are the conclusions adequate? Inadequate. The conclusions are not in-depth and certain statements are made which are not backed by the data provided e.g. 'The results provide strong evidence that the service enabled patients to return to		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
•	their previous level of ability in activities of daily living' (p30).		

5. Townsend J, Godfrey M, Moore J (2006) Careful thoughts: Recognising and supporting older carers in intermediate care. Research Policy and Planning 24(1): 39-52

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Is a qualitative approach	Is the context clearly	Does the study's research	Overall assessment of
appropriate? Appropriate. A	described? Clear. The	question match the review	internal validity:
qualitative approach was	characteristics of the	question? Yes. The study's	+
appropriate for exploring the	participants and settings are	research question clearly	
aims of the study.	clearly defined. The authors considered the influence of	relates to the review question.	Overall assessment of external validity:
Is the study clear in what it	the setting where the study	Has the study dealt	++
seeks to do? Clear. The aims	took place.	appropriately with any	
of the study are clearly outlined		ethical concerns? Yes. The	Overall validity rating:
and referred to in the literature.	Was the sampling carried	study had ethics committee	+
	out in an appropriate way?	permission.	
How defensible/rigorous is	Somewhat appropriate. The		
the research	sample focused mainly on	Were service users	
design/methodology?	traditional dyadic	involved in the study? Yes.	
Defensible. The rationales for	relationships, and carers who	Service users were involved	
the research design, data	were immediately 'visible' (i.e.	as participants and not in the	
collection and data analysis	the perspectives of others	design or interpretation of	
techniques are provided.	providing informal support such as friends and	results.	
How well was the data	neighbours were not	Is there a clear focus on the	
collection carried out?	explored). Service users were	guideline topic? Yes. The	
Appropriately. The data	also predominantly women.	study clearly relates to	
collection methods are clearly	-	intermediate care.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
described and seem	Were the methods reliable?		
appropriate to address the	Somewhat reliable. The data	Is the study population the	
research question.	was not collected by more	same as at least one of the	
	than 1 method, but the	groups covered by the	
	authors do discuss their	guideline? Yes. The study	
	findings alongside other	population consists of people	
	studies.	using intermediate care	
	Are the data (rich?? Dich	services and their carers.	
	Are the data 'rich'? Rich. The contexts of the data are	Is the study setting the	
	clearly described, the diversity	same as at least one of the	
	of perspective and content	settings covered by the	
	was explored, and detail of	guideline? Yes. The study	
	the data was demonstrated -	was conducted following	
	supported by data extracts.	participants' discharge from	
		intermediate care.	
	Is the analysis reliable?		
	Somewhat reliable. The	Does the study relate to at	
	authors note that, during data	least one of the activities	
	analysis, there was	covered by the guideline?	
	'discussion within the team',	Yes. Study interviews	
	however, no other reliability	explored user and carer views	
	checks are reported.	on intermediate care service	
	Are the findings	experiences and outcomes.	
	convincing? Convincing.	(For views questions) Are	
	Extracts from the original data	the views and experiences	
	are included and the data is	reported relevant to the	
	appropriately referenced. The	guideline? Yes. Views and	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	reporting is clear and coherent.	experiences reported are relevant to the guideline topic.	
	Are the conclusions adequate? Adequate. The conclusions are plausible and coherent, and implications of the research are clearly outlined. There is adequate discussion of the limitations of the study.	Does the study have a UK perspective? Yes. UK study.	

## Review question 1 – Critical appraisal – Health, social care and other practitioners' views and experiences

1. Chouliara N, Fisher RJ; Kerr M et al. (2014) Implementing evidence-based stroke Early Supported Discharge services: A qualitative study of challenges, facilitators and impact. Clinical Rehabilitation 28: 370-7

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Is a qualitative approach	Is the context clearly	Does the study's research	Overall assessment of
appropriate? Appropriate. The	described?	question match the review	internal validity:
study aims to determine the	Unclear. Only minimal detail in	question? Partly. The study	+
views of healthcare	relation to the characteristics	reports the results of	
professionals and	of participants and the context	interviews with health	The lack of detail in relation
commissioners.	in which the data were	professionals and	to contexts and participants,
	collected are provided.	commissioners working with a	and the fact that data was
Is the study clear in what it		stroke Early Supported	only collected by 1 method
seeks to do? Clear. The study	Was the sampling carried	Discharge service; and aims	means that it is not possible
has a clear objective and this is	out in an appropriate way?	to describe their views on the	

discussed in relation to the relevant literature.

# How defensible/rigorous is the research design/methodology?

Defensible. The authors provide a rationale for the use of a qualitative approach and the design is appropriate (semistructured interviews), however there is not a great deal of discussion in relation to choice of sampling method or data collection and analysis techniques.

How well was the data collection carried out? Appropriately.

Somewhat appropriate. Detail in relation to sampling is minimal however this appears to be appropriate (purposive sampling of 'key' stakeholders at each site).

Were the methods reliable? Somewhat reliable. Data collected by interviews only – not triangulated.

Are the data 'rich'? Mixed. Although there are a good amount of verbatim quotes, discussion of different perspectives, and comparisons made between the 2 sites/teams only minimal detail is provided in relation to the context of the data.

Is the analysis reliable?
Reliable. Data were analysed by 2 researchers to identify common themes and discrepancies. Participant verification is not reported.

Are the findings convincing? Convincing. The findings are coherent and

impact of the service and the factors which '... facilitate or impede the implementation of the service' (p370). The study was included by the NCCSC as the service as described in the paper seemed to clearly align with the definition of intermediate care used by the review team despite the exclusion of these services from the National Audit of Intermediate Care.

Has the study dealt appropriately with any ethical concerns? Partly. Participants gave informed consent; however approval for the study is not reported.

Were service users involved in the study? No. No indication that service users were involved in the design of the study or interpretation of findings.

Is there a clear focus on the guideline topic? Partly. The study focuses on 2 stroke Early Supported Discharge

to award a higher quality rating.

Overall assessment of external validity:

+

Overall validity rating:

+

clearly presented and are supported with a good number of verbatim quotes which are appropriately referenced.

Are the conclusions adequate? Somewhat adequate. The conclusions are generally adequate however the findings mostly focus on the perceived impact of the service rather than identifying barriers and facilitators to implementation which was also an objective of the study. The authors do not really discuss limitations associated with the study although they note that the research was conducted at an early stage in the development of both teams. There is some discussion of the findings/conclusion in relation to other research.

services which appear to be equivalent to the NCCSC working definition of intermediate care.

Is the study population the same as at least one of the groups covered by the guideline? Partly. The study reports on interviews with health professionals and commissioners who work with stroke Early Supported Discharge services.

Is the study setting the same as at least one of the settings covered by the guideline? Partly. Setting not reported.

Does the study relate to at least one of the activities covered by the guideline? Partly. The study focuses on 2 stroke Early Supported Discharge services, both of which appear to include short-term multi-disciplinary rehabilitation in the service users own home which aligns with the NCCSC's working

definition of home based intermediate care.
(For views questions) Are the views and experiences reported relevant to the guideline? Partly. The study reports the views of professionals in relation to 2 stroke Early Supported Discharge services.
Does the study have a UK perspective? Yes. The study was conducted in England.

2. Glasby J, Martin G, Regen E (2008) Older people and the relationship between hospital services and intermediate care: Results from a national evaluation. Journal of Interprofessional Care 22: 639-49

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Is a qualitative approach	Is the context clearly	Does the study's research	Overall assessment of
<b>appropriate?</b> Appropriate. The	described? Unclear. Very	question match the review	internal validity:
study aims to determine the	little detail in relation to the	question? Partly. The study	+
views of key professionals on	characteristics of participants	is part of a national evaluation	
the benefits of intermediate care	and context are provided. The	of intermediate care and aims	The lack of detail on context
and the challenges of	authors note that data is	to ' explore the views of	and participants; and the
implementing intermediate care	presented by site rather than	intermediate care leads on	sampling of 'key' managers
services.	professional background of	the benefits and challenges of	and practitioners means that
	the respondent in order to	implementing intermediate	it is not possible to award a
Is the study clear in what it	ensure anonymity however it	care policy' (p642). The	higher score.
seeks to do? Clear. The	is therefore difficult to make	specific focus of the paper is	
objective of the study is clear	useful distinctions such as	to explore the links between	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
and there is a good discussion	whether managers and	intermediate care and acute	Overall assessment of
of relevant literature.	practitioners differed in their	care.	external validity:
	viewpoints and it could be		++
How defensible/rigorous is	argued that this type of	Has the study dealt	
the research	information would not	appropriately with any	Overall validity rating:
design/methodology?	compromise anonymity.	ethical concerns? Partly.	+
Somewhat defensible. Whilst		The authors do not report	
the study design (interviews and	Was the sampling carried	approval for the study;	
focus groups) is appropriate the	out in an appropriate way?	however written consent was	
authors do not present their	Not sure. Although there is a	obtained before interviews	
rationale for this approach.	good amount of detail in	took place.	
Although the authors do discuss	relation to the selection of the	·	
their approaches to data	case study sites at which	Were service users	
collection and analysis only	participants in this study were	involved in the study? No.	
minimal detail is provided in	based, it is not clear how 'key'	No indication that service	
relation to the sampling strategy	managers or practitioners at	users were involved in the	
and it is not clear on what basis	these sites were selected.	design of the study or the	
'key' managers and		interpretation of findings.	
practitioners were selected.	Were the methods reliable?	and protested or manager	
	Somewhat reliable. Data was	Is there a clear focus on the	
How well was the data	collected via interviews and	guideline topic? Yes. The	
collection carried out?	focus groups however the	study focuses on intermediate	
Appropriately. The data	authors do not contextualise	care.	
collection and management	their findings in relation to	53.51	
methods are clearly described	other research.	Is the study population the	
and are appropriate to address		same as at least one of the	
the research question.	Are the data 'rich'? Mixed.	groups covered by the	
and resourcer question.	Although there are a good	guideline? Yes. The study	
	amount of verbatim quotes	reports the views of key	
	there is only minimal detail	professionals involved in the	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	provided in relation to the context of the data and there is little exploration of diversity of perspective or comparisons between sites.  Is the analysis reliable?  Somewhat reliable. Although key themes identified in the analysis were discussed at	delivery, management and planning of intermediate care services across 5 sites.  Is the study setting the same as at least one of the settings covered by the guideline? Partly. Although settings are not reported by	
	research team meetings the authors do not report that double coding, discussion of discrepancies, or participant verification took place.	the study it seems likely that the settings in which the services operate will correspond to those outlined in the scope.	
	Are the findings convincing? Somewhat convincing. The findings are clearly presented and there are an appropriate number of	Does the study relate to at least one of the activities covered by the guideline? Yes. Service organisation.	
	verbatim quotes however the findings are not very detailed. The lack of information in relation to context means that it is particularly difficult to draw any meaningful conclusions from the study.	(For views questions) Are the views and experiences reported relevant to the guideline? Yes. The study reports the views of key professional stakeholders working in intermediate care.	
	Are the conclusions adequate? Adequate.	Does the study have a UK perspective? Yes.	

#### Review question 1 – Critical appraisal – additional effectiveness data

1. Aimonino N, Tibaldi V, Barale S et al. (2007) Depressive symptoms and quality of life in elderly patients with exacerbation of chronic obstructive pulmonary disease or cardiac heart failure: Preliminary data of a randomized controlled trial. Archives of Gerontology and Geriatrics, 44 (Suppl. 1): 7-12

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To evaluate	Was the exposure to the	Does the study's research	Overall assessment of
mortality, functional, cognitive,	intervention and comparison	question match the review	internal validity:
affective status in elderly	as intended? Not reported.	question? Partly. Focused	-
patients (<75 years of age)		on home hospital service vs.	
with chronic obstructive	Was contamination	a general medical ward	Overall assessment of
pulmonary disease or acute	acceptably low? Not reported.	service after emergency	external validity:
congestive heart failure when		admission.	+
treated at home or in a general	Did either group receive		
ward after admission to	additional interventions or	Has the study dealt	Overall validity rating:
emergency department.	have services provided in a	appropriately with any	+
	different manner? Not	ethical concerns? No.	
Description of theoretical	reported.		
approach? No.		Were service users	
	Were outcomes relevant?	involved in the design of	
How was selection bias minimised? Randomised.	Yes.	the study? No.	
	Were outcome measures	Is there a clear focus on the	
Was the allocation method	reliable? Yes. Activities of	guideline topic? Partly.	
concealed? Not reported.	Daily Living, Instrumental	Focus on diagnostic and	
	Activities of Daily Living, Mini	therapeutic treatments by	
Were participants blinded?	Mental state examination,	health care professionals in	
Not reported.	Geriatric Depression Scale,	patient's home. Not explicitly	
	Mini Nutritional Assessment,	intermediate care.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Were providers blinded? Not	Acute Physiology and Chronic		
reported.	Health Evaluation, Cumulative	Is the study population the	
Mana investigatore sutcome	Illness Rating Scale,	same as at least one of the	
Were investigators, outcome	Nottingham Health Profile -	groups covered by the	
assessors, researchers, etc., blinded? Not reported.	quality of life, and Co- morbidity. Lengths of	guideline? Yes.	
billided? Not reported.	treatment, mortality, hospital	Is the study setting the	
Did participants represent	readmission.	same as at least one of the	
the target group? Yes.	readmission.	settings covered by the	
and tanget group in the	Were all outcome	guideline? Yes. Geriatric	
Were all participants	measurements complete?	home service.	
accounted for at study	Partly. Only mortality, hospital		
conclusion? Not reported.	readmission, lengths of	Does the study relate to at	
	treatment, GDS and NHP	least one of the activities	
	measured and reported.	covered by the guideline?	
		Yes. Hospital treatment at	
	Were all important outcomes assessed? Yes. Activities of	home.	
	Daily Living, Instrumental	(For effectiveness	
	Activities of Daily Living,	questions) Are the study	
	Geriatric Depression Scale,	outcomes relevant to the	
	and Nottingham Health Profile	guideline? Partly.	
	measured and reported.		
	·	Was the study conducted	
	Were there similar follow-up	in the UK? No. Italy.	
	times in exposure and		
	comparison groups? Yes.		
	Six months follow-up.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	was follow-up time meaningful? Not reported.		
	Were the analytical methods appropriate? Yes. Descriptive pre-post comparison.		
	Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes. No significant differences at baseline.		
	Was intention to treat (ITT) analysis conducted? Not reported.		
	Was the study sufficiently powered to detect an intervention effect (if one exists)? Not reported.		
	Were the estimates of effect size given or calculable? Not reported.		
	Was the precision of intervention effects given or		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	calculable? Were they		
	meaningful? Not reported.		
	Do conclusions match		
	findings? Yes.		

2. Bjorkdahl A, Nilsson AL, Grimby G et al. (2006) Does a short period of rehabilitation in the home setting facilitate functioning after stroke? A randomized controlled trial. Clinical Rehabilitation 20: 1038-49

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To evaluate if 3	Was the exposure to the	Does the study's research	Overall assessment of
weeks of rehabilitation in the	intervention and comparison	question match the review	internal validity:
home setting of younger	as intended? Not reported.	question? Partly. Not	++
patients with stroke would		specifically 'intermediate	
improve activity than ordinary	Was contamination	care', but addresses home	Overall assessment of
outpatient rehabilitation at the	acceptably low? Not reported.	rehabilitation after hospital	external validity:
clinic and facilitate the		discharge.	+
rehabilitation process.	Did either group receive		
·	additional interventions or	Has the study dealt	Overall validity rating:
Description of theoretical	have services provided in a	appropriately with any	+
approach? No.	different manner? Not	ethical concerns? Yes.	
	reported.	Informed consent from	
How was selection bias		participants; study approved	
minimised? Randomised.	Were outcomes relevant?	by The Ethics Committee at	
Methods Not reported.	Yes.	Goteborg University.	
'		,	
Was the allocation method	Were outcome measures	Were service users	
concealed? Yes. Sealed	reliable? Yes.	involved in the design of	
envelopes.		the study? No	
r			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Were participants blinded?	Were all outcome	Is there a clear focus on the	
Not reported.	measurements complete?	guideline topic? Yes. Not	
	Yes.	specifically 'intermediate	
Were providers blinded? Not		care', but addresses home	
reported.	Were all important outcomes assessed? Yes.	rehabilitation after hospital discharge.	
Were investigators, outcome			
assessors, researchers, etc.,	Were there similar follow-up	Is the study population the	
blinded? Blind. Blinded	times in exposure and	same as at least one of the	
assessors made all	comparison groups? Yes. At	groups covered by the	
evaluations at discharge and	3 weeks, 3 months and 1 year	guideline? Yes.	
after the intervention at 3	after discharge (post-		
weeks as well as at additional	intervention).	Is the study setting the	
follow-ups at 3 months and 1		same as at least one of the	
year after discharge.	Was follow-up time	settings covered by the	
	meaningful?	guideline? Yes. Home	
Did participants represent	Yes.	setting.	
the target group? Yes. Stroke			
patients.	Were the analytical methods	Does the study relate to at	
	appropriate? Yes. Also	least one of the activities	
Were all participants	included power calculation.	covered by the guideline?	
accounted for at study		Yes. Home based	
conclusion? Yes. Two	Were exposure and	rehabilitation.	
dropped out after	comparison groups similar		
randomisation.	at baseline? If not, were	(For effectiveness	
	these adjusted? Yes. The 2	questions) Are the study	
	groups did not differ	outcomes relevant to the	
	significantly at discharge	guideline? Yes. Functional	
	concerning age, gender,	activities.	
	lateralization, proportion of		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	haemorrhages and infarcts, or	Was the study conducted	
	in the results from any of the instruments used.	in the UK? No. Sweden.	
	Was intention to treat (ITT) analysis conducted? Yes.		
	Was the study sufficiently powered to detect an intervention effect (if one exists)? Yes. Power analysis undertaken.		
	Were the estimates of effect size given or calculable? Yes. Mean and SDs.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes.		
	Do conclusions match findings? Yes.		

### 3. Björkdahl A, Nilsson AL, Sunnerhagen KS (2007) Can rehabilitation in the home setting reduce the burden of care for the next-of-kin of stroke victims? Journal of Rehabilitation Medicine 39: 27-32

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To evaluate if an intervention with information about stroke and its consequences, as well as	Was the exposure to the intervention and comparison as intended?  Partly. Accessibility for the	Does the study's research question match the review question? Yes.	Overall assessment of internal validity:
practical advice and training in the home setting reduces or affects the burden of care for next-of-kin.	family at the clinic was not as easy as for the home group, and fewer opportunities were given to ask questions and get	Has the study dealt appropriately with any ethical concerns? Yes. The Ethics Committee at	Overall assessment of external validity:
Description of theoretical approach? No	direct answers in conjunction with the training.	Göteborg University approved the study.	Overall validity rating:
How was selection bias minimised? Randomised.	Was contamination acceptably low? Not reported.	Were service users involved in the design of the study? No.	
Was the allocation method concealed? Not reported.  Were participants blinded?	Did either group receive additional interventions or have services provided in a different manner? Not reported.	Is there a clear focus on the guideline topic? Yes. Carer's burden.	
Not reported.	Were outcomes relevant?	Is the study population the same as at least one of the	
Were providers blinded? Not reported.	Yes.	groups covered by the guideline? Yes. Family	
Were investigators, outcome assessors, researchers, etc.,	Were outcome measures reliable? Yes. Caregiver burden scale.	Is the study setting the	
blinded? Blind. Assessors	burderi scale.	same as at least one of the settings covered by the	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
were blind when evaluating	Were all outcome	guideline? Yes. Home vs.	
outcomes.	measurements complete?	clinic.	
	Yes.		
Did participants represent		Does the study relate to at	
the target group? Yes. Family	Were all important outcomes	least one of the activities	
carers of stroke patients.	assessed? Yes.	covered by the guideline?	
		Yes. Rehabilitation in the	
Were all participants	Were there similar follow-up	home setting.	
accounted for at study	times in exposure and	(F	
conclusion? No. Response	comparison groups? Yes. At	(For effectiveness	
rate 80%.	3 weeks, 6 months and 1 year.	questions) Are the study	
	Was follow up time	outcomes relevant to the	
	Was follow-up time meaningful? Yes.	guideline? Yes.	
	meaningiur res.	Was the study conducted	
	Were the analytical methods	in the UK? No. Sweden.	
	appropriate? Yes.	in the ort: No. oweden.	
	Were exposure and		
	comparison groups similar		
	at baseline? If not, were		
	these adjusted? Not reported.		
	Was intention to treat (ITT)		
	analysis conducted? No.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Not reported.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Were the estimates of effect size given or calculable? Not reported.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Partly.		
	Do conclusions match findings? Yes.		

4. Fjaertoft H, Indredavik B, Magnussen J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular diseases 19: 376-83

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: To compare the use of health services and the costs of these in the extended stroke unit service group with	Was the exposure to the intervention and comparison as intended?  Not reported.	Does the study's research question match the review question? Yes. Early supported discharge.	Overall assessment of internal validity:
the ordinary stroke unit service group during the first year following a stroke.	Was contamination acceptably low? Not reported.	Has the study dealt appropriately with any ethical concerns? Yes. The	Overall assessment of external validity:
Description of theoretical approach? No.	Did either group receive additional interventions or have services provided in a	Regional Committee on Medical Research Ethics evaluated the study protocol and approved the trial.	Overall validity rating: +

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
How was selection bias	different manner? Not	Patient consent obtained	
minimised? Randomised.	reported.	(Indredavik 2000).	
Permuted blocks with random			
number tables.	Were outcomes relevant?	Were service users	
	Yes.	involved in the design of	
Was the allocation method		the study? No.	
concealed? Yes. Permuted	Were outcome measures	_	
blocks with random number	reliable?	Is there a clear focus on the	
tables provided in sealed	Yes.	guideline topic? Yes. Early	
opaque envelopes.		supported discharge.	
	Were all outcome		
Were participants blinded?	measurements complete?	Is the study population the	
Not reported.	Yes.	same as at least one of the	
		groups covered by the	
Were providers blinded? Not	Were all important outcomes	guideline? Yes.	
reported.	assessed? Yes.		
,		Is the study setting the	
Were investigators, outcome	Were there similar follow-up	same as at least one of the	
assessors, researchers, etc.,	times in exposure and	settings covered by the	
blinded? Not reported.	comparison groups? Yes.	guideline? Yes. Home.	
-			
Did participants represent	Was follow-up time	Does the study relate to at	
the target group? Yes.	meaningful? Yes.	least one of the activities	
	_	covered by the guideline?	
Were all participants	Were the analytical methods	Yes. Early supported	
accounted for at study	appropriate? Yes.	discharge, home based	
conclusion? Yes.		rehabilitation.	
	Were exposure and		
	comparison groups similar	(For effectiveness	
	at baseline? If not, were	questions) Are the study	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	these adjusted? Yes. There	outcomes relevant to the	
	were no significant differences	guideline? Yes.	
	between the groups.		
		Was the study conducted	
	Was intention to treat (ITT) analysis conducted? Yes.	in the UK? No. Norway.	
	Was the study sufficiently powered to detect an intervention effect (if one exists)? Not reported. Follow-up of a previous study by Indredavik 2000.		
	Were the estimates of effect size given or calculable? Not reported.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Not reported.		
	Do conclusions match findings? Yes.		

5. Inglis SC, Pearson S, Treen S et al. (2006) Extending the horizon in chronic heart failure: Effects of multidisciplinary, home-based intervention relative to usual care. Circulation 114: 2466-73

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To examine the	Was the exposure to the	Does the study's research	Overall assessment of
long-term (minimum of 7.5 to	intervention and comparison	question match the review	internal validity:
10 years) impact of a nurse-	as intended? Yes.	question? Partly. Not	+
led, multidisciplinary home		specifically 'intermediate	
based intervention versus	Was contamination	care', but focused on home	Overall assessment of
usual post-discharge care in	acceptably low? Not reported.	based management of	external validity:
an old and fragile cohort of 297		congestive heart failure after	+
congestive heart failure	Did either group receive	hospital discharge.	
patients discharged from short-	additional interventions or		Overall validity rating:
term hospital care.	have services provided in a	Has the study dealt	+
	different manner? Partly. In	appropriately with any	
Description of theoretical	the previous study (follow-up at	ethical concerns? Yes.	
approach? Yes. Application of	3 years, Stewart 2002), 7	Patients signed a consent	
a broad range of adult learning	patients received repeat home	form (information from	
theories relating to life-long	visits if they survived a	Stewart 2002).	
learning, and the principles of	readmission within 6 months.		
individual and community		Were service users	
empowerment to facilitate self-	Were outcomes relevant?	involved in the design of	
determination and self-care.	Yes.	the study? No.	
How was selection bias	Were outcome measures	Is there a clear focus on the	
minimised? Randomised.	reliable?	guideline topic? Partly. Did	
Used a blinded computerised	Yes.	not specify 'intermediate care'	
protocol (info from Stewart		but addressed a home based	
2002).	Were all outcome	intervention for chronic	
	measurements complete?	disease management of	
Was the allocation method	Yes.	congestive heart failure after	
concealed? Not reported.		hospital discharge. Duration	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Were participants blinded? Not reported.	Were all important outcomes assessed? Yes.	of intervention not reported but patients followed up over 6 months.	
Were providers blinded? Not reported.  Were investigators, outcome	Were there similar follow-up times in exposure and comparison groups? Yes.  Was follow-up time	Is the study population the same as at least one of the groups covered by the guideline? Yes.	
assessors, researchers, etc., blinded? Blind. Outcomes examined in a blinded manner.	meaningful? Yes. Long-term impact measured at ten years after intervention.	Is the study setting the same as at least one of the settings covered by the	
Did participants represent the target group? Yes.	Were the analytical methods appropriate? Yes.	guideline? Yes. Home-based intervention.	
Were all participants accounted for at study conclusion? Yes.	Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes. At baseline, home based intervention patients were more likely to have a prior acute myocardial infarction, left bundle-branch block, and higher blood urea concentration.	Does the study relate to at least one of the activities covered by the guideline? Yes. Nurse-led, multidisciplinary, home-based intervention.  (For effectiveness questions) Are the study outcomes relevant to the guideline? Yes.	
	Was intention to treat (ITT) analysis conducted? Yes.	Was the study conducted in the UK? No. Australia.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
•	Was the study sufficiently powered to detect an intervention effect (if one exists)? Not reported.		
	Were the estimates of effect size given or calculable? Yes.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes.		
	Do conclusions match findings? Yes.		

6. Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9: 18

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To compare a	Was the exposure to the	Does the study's research	Overall assessment of
range of outcomes at 3, 6 and	intervention and comparison	question match the review	internal validity:
12 months between stroke	as intended? Yes.	question? Yes. Stroke care	++
patients managed on the		and management at home	
stroke unit, on general wards	Was contamination	after discharge.	Overall assessment of
with stroke team support or at	acceptably low? Not reported.	_	external validity:
home by specialist domiciliary		Has the study dealt	++
care team.	Did either group receive	appropriately with any	
	additional interventions or	ethical concerns? Yes. The	Overall validity rating:

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Description of theoretical	have services provided in a	project was approved by the	++
approach? Partly.	different manner? Not	local ethics committee.	
	reported.		
How was selection bias		Were service users	
minimised? Randomised.	Were outcomes relevant?	involved in the design of	
Randomisation was	Yes.	the study? No	
unstratified using the block			
randomisation technique, in 16	Were outcome measures	Is there a clear focus on the	
blocks of 30.	reliable?	guideline topic? Yes.	
	Yes.		
Was the allocation method		Is the study population the	
concealed? Yes.	Were all outcome	same as at least one of the	
Randomisation was conducted	measurements complete?	groups covered by the	
in an office remote from patient	Yes.	guideline? Yes.	
treatment areas, so that it			
would not be possible for those	Were all important outcomes	Is the study setting the	
enrolling patients to guess	assessed?	same as at least one of the	
allocation for the vast majority	Yes.	settings covered by the	
of subjects.	_	guideline? Yes. Domiciliary.	
	Were there similar follow-up		
Were participants blinded?	times in exposure and	Does the study relate to at	
Blinding not possible.	comparison groups? Yes. At	least one of the activities	
	3, 6 and 12 months.	covered by the guideline?	
Were providers blinded? Not		Yes. Stroke care and	
reported.	Was follow-up time	management at home after	
	meaningful?	discharge.	
Were investigators, outcome	Yes.		
assessors, researchers, etc.,		(For effectiveness	
blinded? Blind. Independent		questions) Are the study	
observers were used for			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
assessment and using	Were the analytical methods	outcomes relevant to the	
outcome measures.	appropriate? Yes.	guideline? Yes.	
	Descriptive.		
Did participants represent		Was the study conducted	
the target group? Yes.	Were exposure and	in the UK? Yes.	
	comparison groups similar		
Were all participants	at baseline? If not, were		
accounted for at study	these adjusted? Yes.		
conclusion? No. Nine drop-	Baseline characteristics well		
outs in home care group; 3 in	matched across the 3 groups		
stroke team group.	in stroke type and severity,		
	level of impairment and initial		
	disability.		
	Was intention to treat (ITT)		
	analysis conducted? Yes.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Yes. Power		
	calculation conducted as part		
	of design.		
	Were the estimates of effect		
	size given or calculable?		
	Yes.		
	Was the precision of		
	intervention effects given or		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	calculable? Were they		
	meaningful? Yes.		
	Do conclusions match		
	findings? Yes.		

Research question 2. Bed based intermediate care:

- a) What is the effectiveness and cost effectiveness of bed based intermediate care?
- b) What are the views and experiences of people using services, their families and carers in relation to bed based intermediate care?
- c) What are the views and experiences of health, social care and other practitioners about bed based intermediate care?

#### Research question 2 – Findings tables – Effectiveness

1. Crotty M, Whitehead CH, Wundke R et al. (2005) Transitional care facility for elderly people in hospital awaiting a long term care bed: Randomised controlled trial. British Medical Journal (Clinical Research Edition) 331: 1110-3

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: To ' assess the	Participants: Service users	Statistical data – service	Overall assessment of
effectiveness of moving	and their families, partners and	user related outcomes -	internal validity:
patients who are waiting in	carers – Elderly patients	Care needs (measured using	+
hospital for a long term care	admitted to acute care at 1 of 3	the Residential Care Scale):	
bed to an off-site transitional	hospitals who were already	Participants in the	Due to the very short follow-up
care facility' (p1).	awaiting placements in long-	intervention group had a	period of 4 months and the
	term care and had been	higher (worse) mean score	fact that a number of
Methodology: randomised	assessed as 'unsuitable for	on measures of care need,	participants were not
controlled trial. Two arm	other rehabilitation or	however this difference was	transferred to the intervention
randomised controlled trial	community discharge support	not significant; control 55.6	facility as intended it is not
using a Zelen randomised	programmes' (p1). The authors	(23.6 SD) vs. intervention	possible to award a higher
consent design.	note that nearly 30% had been	58.7 (22.0 SD), mean	quality rating to this study.
	admitted to hospital as a result	difference=-2.1 (95%	
Country: Not UK. Australia –	of ' musculoskeletal	Confidence Interval –8.3 to	Overall assessment of
South Adelaide.	problems such as falls,	4.1, p=0.506).	external validity:
	fractures, and soft tissue		++

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Source of funding: Government - South Australian Department of Human Services and Commonwealth Department of Health and Aged Care (National Demonstration Hospital Program Phase 4).	injuries' (p3), no further details on reasons for admission are reported.  Patients were eligible ' if it was decided they were to go to long term care, an assessment had been performed, they were medically stable and ready for hospital discharge, and no long term care bed was available' (p1). Individuals with dementia or behavioural problems were eligible unless their care was though to require additional staff.  Patients appear to have been ineligible (although this is not clearly stated) if – discharge to another facility/location had already been arranged, if a long-term care placement had already been secured, if they were under the age of 65, and if the individual had no next of kin.	Functional level (measured using the modified Barthel index): Participants in the intervention group had a lower (worse) mean score on measures of physical function, however this difference was not significant; control 56.7 (27.2 SD) vs. intervention 55.2 (25.1 SD), mean difference = 1.5 (95% CI –5.6 to 8.6, p=0.678).  Mortality: The proportion of participants who had died was higher in the intervention group than in the control group, however this difference was not significant; control n=28, 27% vs. intervention n=59, 28%, statistical data not provided, reported as non-significant by authors.  Quality of life (measured using the Assessment of Quality of Life scale): Participants in the	Overall assessment of validity: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Participants were referred by 1 of 3 referring hospitals, 1 of which provided services to veterans (no further details provided).  Sample characteristics: Age – Participants under the age of 65 appear to have been excluded. Control group – mean age 83 years (7.2 SD); intervention group – mean age 82.8 years (8.3 SD). Sex – Control group – male n=53 (51%); intervention group – male n=102 (48%). Ethnicity – Not reported. Religion/belief - Not reported. Disability - Not reported. Long term health condition - Not reported. Socioeconomic position - Not reported. Socioeconomic position - Not reported.  Sample size: Comparison numbers – Randomised n=108; received care as allocated n=105 (three	intervention group had a higher (worse) mean score on measures of quality of life, however this difference was not significant; control 22.9 (4.9 SD) vs. intervention 24.0 (4.4 SD), mean difference = -1.1 (95% CI -2.3 to 0.2, p=0.099).  Statistical data – service outcomes - Days in hospital from admission to discharge (one control participant not discharged from hospital in 4 month follow-up period): Participants in the intervention group spent significantly less time in hospital than those in the control group; control 43.5 days (95% CI 41.0 to 51.0) vs. intervention 32.5 days (95% CI 29.0 to 36.0), median difference in length of stay = 11 days (95% CI 6 to 16, p<0.001).	
	participants withdrew after	, [- 3.33 .].	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	randomisation); assessed at	Days in hospital from	
	four-month follow up n=77	randomisation to discharge	
	(n=28 participants had died).	(one control participant not	
	Intervention numbers –	discharged from hospital in 4	
	Randomised n=212; received	month follow-up period):	
	care as allocated n=134 (n=29	Participants in the	
	participants were transferred to	intervention group spent	
	a long-term care placement or	significantly less time in	
	died before transfer to	hospital post-randomisation	
	intervention facility, n=44	than those in the control	
	declined transfer to	group; control 16 days (13 to	
	intervention facility, n=5 were	20) vs. intervention 6 days	
	refused admission to	(95% CI 5 to seven), median	
	intervention facility due to	difference in post-	
	concerns regarding behaviour);	randomisation length of stay	
	assessed at four-month follow	= 10 days (95% CI 6 to 11,	
	up n=153 (n=59 participants had died).	p<0.001).	
	Sample size – Randomised	Time from hospital admission	
	N=320; received care as	to admission to permanent	
	allocated n=239; assessed at	care (n=224): Of those	
	four-month follow up n=230.	participants who were	
		admitted to permanent care	
	Intervention:	(n=224), those in the	
	Intervention category - Bed	intervention group took	
	based intermediate care.	significantly longer to be	
	Describe intervention - The	admitted than those in the	
	intervention is described by the	control group; control 51.5	
	authors as a ' transitional	days (95% CI 44.0 to 63.0)	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	care facility where all patients	vs. intervention 72.5 days	
	received a single assessment	(95% CI 62.0 to 81.9),	
	from a specialist elder care	median difference=-21 days	
	team and appropriate ongoing therapy' (p1). The care	(95% CI -27 to -6, p=0.003).	
	provided is described as	Hospital use after	
	multidisciplinary and aligned	randomization (combining	
	with a medical rehabilitation	initial length of stay post-	
	model.	randomisation and	
	Delivered by - Care at the	readmissions during the 4	
	facility involves input from	month follow-up period) -	
	geriatricians, general	Participants in the	
	practitioners, pharmacists,	intervention group spent	
	physiotherapists, rehabilitation	significantly less time in	
	medicine physicians, social	hospital during the total study	
	workers, and 1 full-time	period than those in the	
	transitional care nurse coordinator, as well as '	control group; control 18 days (95% CI 15 to 21) vs.	
	accommodation, catering,	intervention 7.5 days (95% CI	
	cleaning, nursing (5.0 full time	7.0 to 9.0), median	
	equivalents in 24 hours), and	difference=10.5 days (95% CI	
	carer staff (10.0 full time	6.0 to 11.0, p<0.001).	
	equivalents in 24 hours)'	,	
	(p2).	Proportion of participants	
	'Allied health' staff are reported	readmitted to hospital over	
	to be equivalent to 4.4 full time	four-month follow-up period -	
	members of staff; no further	The proportion of participants	
	details in relation to staffing	readmitted to hospital was	
	levels are provided. A private	higher in the intervention	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	long-term care provider and the 3 referring hospitals jointly staffed the facility.  Delivered to - Elderly patients waiting for long-term care placement and assessed as being 'unsuitable for other rehabilitation or community discharge support programmes' (p1).  Duration, frequency, intensity, etc Details in relation to the care provided are minimal. The median length of stay in the facility was 46 days (range 35.5 to 53.6 days), however 4 patients were still at the facility at the four-month follow-up. The authors also report a maturation effect, with patients recruited during the second half of the study staying significantly longer in the facility, with a median stay of 28 days (21.3 to 46.7 days), in comparison to a median stay of 58 days (40.4 to 80.3 days) for patients recruited during the	group than in the control group but this difference was not significant; control 25% vs. intervention 28%, statistical data not provided, reported as non-significant by authors.  Participant status at follow-up (statistical testing of between group differences not reported for all statuses):  Permanent care - The proportion of participants living in permanent care was higher in the control group than in the intervention group (significance of between group differences not reported; control n=62, 59% vs. intervention n=104, 49%). Home - The proportion of participants who were living in their own home was lower in the intervention group than in the control group however this difference was not significant (NB. Statistical data not provided, reported	
	first half of the study (p=0.001).		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Key components and objectives of intervention - The authors report that care provided at the facility was based on a model of medical rehabilitation which incorporated goal setting (including both the patient and their family), multidisciplinary assessment, and weekly case conferences). Patients were assessed by the whole team on admission, specialist medical staff took part in case conferences and reviewed admissions, and on-call medical care was available on a 24-hour basis. The transitional care nurse coordinator liaised with families and managed the transfer of case notes between the acute hospital and the transitional facility.  Location/place of delivery - An offsite transitional 36 bed facility within 5-25km of 3 referring hospitals in South Adelaide, Australia.	as non-significant by authors). Died - Mortality was lower in the intervention group than in the control group, however this difference was not significant (NB. Statistical data not provided, reported as non-significant by authors). Transitional care facility - Twenty three participants in the intervention group were still staying in the transitional care facility (also reported in narrative as n=24, 11%). Hospital - The proportion of participants staying in hospital was the same in both groups (significance of between group differences not reported; control n=5, 5% vs. intervention n=10, 5%). Respite - The proportion of participants staying in respite care was the same in both groups (significance of between group differences	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Comparison intervention: Participants in the control	not reported; control n=1, 1% vs. intervention n=2, 1%).	
	group received care as usual which was provided in the	Narrative findings - service user related outcomes -	
	hospital. The authors note that these participants did not ' routinely receive specialist	Care needs (measured using the Residential Care Scale): Participants in the	
	assessment from the geriatric or rehabilitation teams' (p2). No further details provided.	intervention group had a higher (worse) mean score on measures of care need,	
	Outcomes measured: Service user outcomes –	however this difference was not significant.	
	Care needs were measured using the Residential Care	Functional level (measured using the modified Barthel	
	Scale (0-104, lower scores correspond to lower levels of dependence).	index): Participants in the intervention group had a lower mean score on	
	Functional level was measured using the modified Barthel index. (0-100, lower scores	measures of physical function, however this difference was not significant.	
	correspond to lower levels of physical function).	Mortality: The proportion of	
	Mortality (Source of data not reported).	participants who had died was higher in the intervention	
	Quality of life was measured using the Assessment of Quality of Life scale (0-45,	group than in the control group, however this difference was not significant	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
lower scores correspond to	(NB. Statistical data not	
better quality of life).	provided, reported as non-significant by authors).	
Service level outcomes –		
Hospital usage (days in	Quality of life (measured	
hospital from admission to	using the Assessment of	
discharge). Source of data not	Quality of Life scale):	
reported.	Participants in the	
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	not significant.	
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	intervention, comparison, outcomes)  lower scores correspond to better quality of life).  Service level outcomes — Hospital usage (days in hospital from admission to discharge). Source of data not	intervention, comparison, outcomes)  lower scores correspond to better quality of life).  Service level outcomes – Hospital usage (days in hospital from admission to discharge). Source of data not reported. Hospital usage (days in hospital from randomisation to discharge). Source of data not reported. Hospital usage after randomisation (total length of stay – combining initial length of stay post-randomisation and readmissions during fourmonth follow-up period). Source of data not reported. Rate of returning home/participants living at home. Source of data not reported. Proportion of participants readmitted to hospital over follow-up period. Source of data not reported. Time from hospital admission  (NB. Statistical data not provided, reported as non-significant by authors).  Quality of life (measured using the Assessment of Quality of Life scale): Participants in the intervention group had a higher (worse) mean score on measures of quality of life, however this difference was not significant.  Narrative findings - service outcomes – Days in hospital from admission to discharge (one control participant not discharged from hospital in 4 month follow-up period): Participants in the intervention group had a higher (worse) mean score on measures of quality of life, however this difference was not significant.  Narrative findings - service outcomes – Days in hospital from admission to discharge (one control participants in the intervention group spent significant.

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	care. Source of data not reported.  Follow-up: Both groups were followed-up for 4 months post-randomisation.	(one control participant not discharged from hospital in 4 month follow-up period): Participants in the intervention group spent significantly less time in hospital post-randomisation than those in the control group.  Time from hospital admission to admission to permanent care (n=224): Of those participants who were admitted to permanent care (n=224), those in the intervention group took significantly longer to be admitted than those in the control group. Hospital use after randomization (combining initial length of stay post-randomisation and readmissions during the 4 month follow-up period): Participants in the intervention group spent	
		significantly less time in	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		hospital during the total study period than those in the control group.	
		Proportion of participants readmitted to hospital over four-month follow-up period: The proportion of participants readmitted to hospital was higher in the intervention group than in the control group but this difference was not significant (NB. Statistical data not provided, reported as non-significant by authors).	
		Participant status at follow-up (statistical testing of between group differences not reported for all statuses): Permanent care - The proportion of participants living in permanent care was higher in the control group than in the intervention group (significance of between group differences not reported).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Home - The proportion of	
		participants who were living	
		in their own home was lower	
		in the intervention group than	
		in the control group however	
		this difference was not	
		significant (NB. Statistical	
		data not provided, reported	
		as non-significant by	
		authors).	
		Died - Mortality was lower in	
		the intervention group than in	
		the control group, however	
		this difference was not	
		significant (NB. Statistical	
		data not provided, reported	
		as non-significant by	
		authors).	
		Transitional care facility -	
		Twenty three participants in	
		the intervention group were	
		still staying in the transitional	
		care facility.	
		Hospital - The proportion of	
		participants staying in	
		hospital was the same in both	
		groups (significance of	
		between group differences	
		not reported).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Respite - The proportion of participants staying in respite care was the same in both groups (significance of between group differences not reported).	

2. Garåsen H, Windspoll R, Johnsen R (2007) Intermediate care at a community hospital as an alternative to prolonged general hospital care for elderly patients: A randomised controlled trial. BioMed Central Public Health 7: 68

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: The aim of the	Participants: Service users	Statistical data – service	Overall assessment of
study was to compare the	and their families, partners and	outcomes -	internal validity:
efficacy of intermediate care at	carers - Participants were	Readmissions - Of the 72	+
a community hospital with	service users.	patients in the Intervention	
standard prolonged care at a		group, 14 (19.4%) were	Overall assessment of
general hospital.	Sample characteristics:	readmitted for the same	external validity:
	Age - Mean age of	disease within 60 days, while	++
Methodology: Randomised	intervention group	25 out of 70 (37.5%) from the	
controlled trial.	(randomised) = 80.6 Mean	control group receiving	Overall validity rating:
	age of intervention group	general hospital treatment	+
Country: Norway.	(received intervention) =	were readmitted. Of the	
	80.9 Mean age of	Intervention group	
Source of funding:	comparison group = 81.3.	readmissions, 9 (64.3%) took	
Government - Central	Sex - Intervention group	place before they had been	
Norway Regional Health	(randomised) = 20 males /	discharged home, while from	
Authority.	52 females Intervention	the general hospital group 19	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	group (received intervention) = 14 males / 50 females Comparison group = 27 males / 43 females. • Ethnicity – Not reported. • Religion/belief – Not reported. • Disability – Not reported. • Long term health condition - The most common primary diagnosis was cardiological diseases: Intervention group (randomised) = 22 Intervention group (received intervention) = 21 Comparison group = 20. Other reported conditions included infections, fractures/contusions, pulmonary diseases, neurological diseases, cancers, psychiatric diseases and other diseases. • Sexual orientation – Not reported.	(76.0%) were readmitted after discharge and 6 (24%) during rehabilitation care. Odds Ration (OR) for readmissions for the same disease in the intervention group versus the general hospital group was 2.77 (95% CI 1.18–6.49). There was statistically a significant difference between the two groups (p=0.03 while p adjusted for age, gender, ADL and diagnosis was 0.02).  Use of nursing home or home care - There were no significant differences in need for nursing homes and home care after 6 months, with 38 (52.8%) from the intervention and 44 (62.9%) from the comparison group still needing long-term home nurse care. The OR for the need of home care was 1.21 (95% CI 0.59–2.52) in the intervention group versus the general hospital group.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Socioeconomic position – Not reported.</li> </ul>	Numerically and proportionately there were more in the intervention	
	<ul> <li>Sample size:</li> <li>Comparison numbers - n=70.</li> <li>Intervention numbers - randomised n=72; received intervention n=64.</li> <li>Sample size - Total N=142.</li> </ul>	group who were independent of home care (18 participants, 25%) than in the general hospital group (7 participants, 10%). The OR was 0.31 (95% CI 0.11–0.88) in favour of the intervention group.	
	<ul> <li>Intervention:</li> <li>Intervention category - Bed based intermediate care.</li> <li>Describe intervention - The intervention was based on individualised intermediate care, focussing on improving physical functioning so that participants would be able to manage independently on returning home.</li> <li>Delivered by - The intervention was delivered by the multi-disciplinary team.</li> <li>Delivered to - The intervention was delivered to service users who had been</li> </ul>	Narrative findings - service outcomes - Participants who received intermediate care had better outcomes than those receiving standard care, with significantly fewer readmissions. Although statistically insignificant, results favour intermediate care with regards to decreased mortality and need for community care at 6 month follow-up.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	admitted to hospital due to acute illness/exacerbation of chronic disease and were subsequently randomised to the intermediate care condition.  • Duration, frequency, intensity, etc This is not reported, however, the authors do note that the intervention was individualised to each participant.  • Key components and objectives of intervention - The main objective of the intervention was to improve physical functioning so that participants would be able to manage independently on returning home.  • Content/session titles - N/A.  • Location/place of delivery - The intervention took place		
	at a community hospital.  Comparison intervention: The comparison intervention was standard prolonged care		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	at a general hospital, where normal routines were followed.  No further information is provided.		
	Outcomes measured: Service user related outcomes Mortality.		
	Service outcomes  • Number of days in institution, readmissions were assessed through patients' journals and health records, as well as administrative systems.		
	Follow-up: Participants were followed up for 6 months (approximately 26 weeks after baseline.		
	Costs? No.		

## 3. Garåsen H, Windspoll R, Johnsen R (2008) Long-term patients' outcomes after intermediate care at a community hospital for elderly patients: 12-month follow-up of a randomized controlled trial. Scandinavian Journal of Public Health 36: 197-204

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The aim of the study was to compare the efficacy of intermediate care at a community hospital with standard prolonged care at a general hospital.  Methodology: Randomised controlled trial.  Country: Norway.	Participants: Service users and their families, partners and carers - Participants were service users.  Sample characteristics:  • Age - Mean age of intervention group (randomised) = 80.6 Mean age of intervention group (received intervention) =	Statistical data – service outcomes – Number of admissions: There was no significant difference in number of admissions for both groups (intervention = 46 vs. comparison = 51). Average hospital stay was the same in both groups (12.6 days; mean difference 9.2-16.1 [95% Confidence	Overall assessment of internal validity: + Overall assessment of external validity: ++ Overall validity rating: +
Source of funding: Government - Central Norway Regional Health Authority.	80.9 Mean age of comparison group = 81.3.  Sex - Intervention group (randomised) = 20 males / 52 females Intervention group (received intervention) = 14 males / 50 females Comparison group = 27 males / 43 females.  Ethnicity – Not reported.  Religion/belief – Not reported.  Disability – Not reported.	Interval] for the intervention group and 7.4-17.8 [95% Confidence Interval] for the comparison group).  Use of nursing home or home care: There were no significant differences in need for nursing homes and home care after 12 months, with both 32 (54.2%) from the intervention and 32 (66.7%) from the comparison group still needing long-term home nurse care.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Long term health condition -         The most common primary         diagnosis was cardiological         diseases: Intervention group         (randomised) = 22         Intervention group (received         intervention) = 21         Comparison group = 20.         Other reported conditions         included infections,         fractures/contusions,         pulmonary diseases,         neurological diseases,         cancers, psychiatric         diseases and other         diseases.</li> <li>Sexual orientation – Not         reported.</li> <li>Socioeconomic position –         Not reported.</li> </ul>	Slightly more participants in the intervention group (n=10; 28.8%) were independent of home care, in comparison to the general hospital group (n=7; 18.8%).  Mortality: The difference in number of deaths between groups was statistically significant.  Participants in the intervention group were observed for a longer period of time than those in the comparison group (335.7 [95% Confidence Interval 312.0-359.4] v 292.8 [95% confidence interval 264.1-	
	Sample size:	321.5]) days (p=0.01).	
	<ul> <li>Comparison numbers - n=70. Intervention numbers – randomised n=72, received intervention n=64.</li> <li>Sample size – Total n=142.</li> </ul>	Narrative findings – service outcomes - Participants who received intermediate care had better outcomes than those receiving standard care, with	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Intervention:  Intervention category - Bedbased intermediate care.  Describe intervention - The intervention was based on individualised intermediate care, focussing on improving physical functioning so that participants would be able to manage independently on returning home.  Delivered by - The intervention was delivered by the multi-disciplinary team.  Delivered to - The intervention was delivered to service users who had been admitted to hospital due to acute illness/exacerbation of chronic disease and were subsequently randomised to the intermediate care condition.  Duration, frequency, intensity, etc This is not reported.	fewer needing community services, and significantly fewer being dead after 12 months.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Key components and objectives of intervention -         The main objective of the intervention was to improve physical functioning so that participants would be able to manage independently on returning home.</li> <li>Content/session titles – N/A.</li> <li>Location/place of delivery -         The intervention took place at a community hospital.</li> </ul>		
	Comparison intervention: The comparison intervention was standard prolonged care at a general hospital, where normal routines were followed. No further information is provided.		
	Outcomes measured: Service user related outcomes Mortality.		
	Service outcomes –  • Number of days in institution, readmissions were assessed		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	through patients' journals and health records, as well as administrative systems.		
	<b>Follow-up:</b> 6 and 12 months after baseline.		
	Costs? No.		

4. Herfjord JK, Heggestad T, Ersland H et al. (2014) Intermediate care in nursing home after hospital admission: a randomized controlled trial with one year follow-up. BMC Research Notes 7: 889

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To evaluate the efficacy and safety of early	Participants: Service users and their families, partners and	Statistical data – service user related outcomes -	Overall assessment of internal validity:
transfer to an intermediate care unit in a nursing home.	carers - Individuals over the age of 70 admitted to a medical or orthopaedic ward	Days alive (mean number): All patients – Not reported. Medical patients – Not	+ Although the study appears
Methodology: Randomised controlled trial. Participants randomised to either an intermediate care unit in a nursing home or usual care in the hospital.	from their home. Staff at the 2 hospitals from which participants were recruited were ' requested to consider every patient 70 year [sic] or older admitted from home' (p5). Individuals were eligible if	reported. Orthopaedic patients – The mean number of days alive was significantly lower for orthopaedic patients in the intervention group than for orthopaedic patients in the	to have been well carried out the decision to change the outcomes measured for the second phase of the study, the fact that a small number of participants allocated to the intervention had to remain
Country: Norway - Bergen.	they were respiratory and circulatory stable, and viewed	control group (control 346.9 vs. intervention 311.9, 35	in acute care, and the post hoc decision to conduct
Source of funding:	as being able to return to their	days lower; p=0.025).	subgroup analysis means

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
<ul> <li>Government - Western Norway Regional Health Authority.</li> <li>Other - Kavli Research Centre for Geriatrics and Dementia.</li> </ul>	home within 3 weeks. Exclusion criteria were – need for intensive care or surgery, and severe dementia or delirium. The authors note that patients with mild or moderate dementia were eligible.  Sample characteristics:  • Age - Mean (range) –  • Control - All patients = 84.6 (71-98); medical patients = 85.2 (72-98); orthopaedic patients = 83.9 (71-95).  • Intervention - All patients = 83.6 (70-96); medical patients = 83.9 (70-96); orthopaedic patients = 84.0 (70-95).  • Sex – Proportion of females –  • Control - All patients = 73.7%; medical patients = 61.1%; orthopaedic patients = 82.4%.  • Intervention - All patients = 73.2%; medical	Days alive and living at home (mean number): All patients – The mean number of days alive and living at home was lower in the intervention group than the control group, however this difference was not significant; control 256.5 days (125.1 SD) vs. intervention 253.7 days (120.4 SD), relative effect size ÷ 1.1%, absolute effect size ÷ 2.8 days, p=0.80.  Medical patients – The mean number of days alive and living at home was lower for medical patients in the intervention group than those in the control group, however this difference was not significant; control 250.4 days (134.1 SD) vs. intervention 249.2 days (123.6 SD), relative effect size ÷ 0.5%, absolute effect size ÷ 1.2 days, p=0.165. Orthopaedic patients – The mean number of days alive	that it is not possible to award a higher quality rating to this study.  Overall assessment of external validity: ++  Overall assessment of validity: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>61.5%; orthopaedic patients = 85.0%.</li> <li>Ethnicity – Not reported.</li> <li>Religion/belief - Not reported.</li> <li>Disability - Not reported.</li> <li>Long term health condition - Not reported.</li> <li>Socioeconomic position - Not reported.</li> </ul>	and living at home was lower for orthopaedic patients in the intervention group than those in the control group, however this difference was not significant; control 256.5 days (121.0 SD) vs. intervention 233.2 days (128.2), relative effect size ÷ 9.1%, absolute effect size ÷ 23.3 days, p=0.09.	
	<ul> <li>Sample size:</li> <li>Comparison numbers – n=200 randomised; n=186 received control intervention (14 participants withdrew consent after randomisation).</li> <li>Intervention numbers – n=200 randomised; n=190 received intervention (10 participants withdrew consent after randomisation; 8 did not receive the intervention due to medical concerns and remained in acute care).</li> </ul>	One year mortality: All patients – Mortality was higher in the intervention group than in the control group, however this difference was not significant (control 17.2% vs. intervention 22.1%, relative effect size + 28.5%; absolute effect size + 4.9%, p=0.29). The relative risk of mortality was also higher for this group; relative risk 1.29 (95% CI 0.85 to 1.94). Medical patients – Mortality was higher in the intervention group than in the control	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
<ul> <li>Sample size – N=400; n=368 received intended interventions.</li> <li>Intervention:         <ul> <li>Intervention category - Bed based intermediate care.</li> <li>Describe intervention - The authors describe intermediate care as a 'stepdown' facility.</li> <li>Delivered by - The units were staffed by a multidisciplinary team including a health care worker, physician, physiotherapist, and nurse. The physician was either a consultant specialist in geriatrics/internal medicine or a junior doctor working under the supervision of the consultant specialist; however this post only appears to have been staffed on weekdays. The number of full-time nursing positions increased from 3 to</li> </ul> </li> </ul>	group, however this difference was not significant (control 25.0% vs. intervention 25.6%, relative effect size + 2.4%, absolute effect size + 0.6%, p=0.99. The relative risk of mortality was also higher for this group; relative risk 1.03 (95% CI 0.59-1.78). Orthopaedic patients – Mortality was significantly higher in the intervention group than in the control group (control 10.3 % vs. intervention 25.0%, relative effect size + 142.7%, absolute effect size 14.7%, p=0.049). The relative risk of mortality was also higher for this group; relative risk 2.43 (95% CI 1.05 to 5.55).  Statistical data – service outcomes - Days in hospital after discharge from control/intervention (mean number):	
	<ul> <li>intervention, comparison, outcomes)</li> <li>Sample size – N=400; n=368 received intended interventions.</li> <li>Intervention:         <ul> <li>Intervention category - Bed based intermediate care.</li> <li>Describe intervention - The authors describe intermediate care as a 'stepdown' facility.</li> <li>Delivered by - The units were staffed by a multidisciplinary team including a health care worker, physician, physiotherapist, and nurse. The physician was either a consultant specialist in geriatrics/internal medicine or a junior doctor working under the supervision of the consultant specialist; however this post only appears to have been staffed on weekdays. The number of full-time nursing</li> </ul> </li> </ul>	intervention, comparison, outcomes)  • Sample size – N=400; n=368 received intended interventions.  Intervention: • Intervention category - Bed based intermediate care. • Describe intervention - The authors describe intermediate care as a 'stepdown' facility. • Delivered by - The units were staffed by a multidisciplinary team including a health care worker, physician, physiotherapist, and nurse. The physician was either a consultant specialist in geriatrics/internal medicine or a junior doctor working under the supervision of the consultant specialist; however this post only appears to have been staffed on weekdays. The number of full-time nursing positions increased from 3 to

intervention, comparison, outcomes)	Findings	Overall validity rating
converted into an intermediate care unit.  Delivered to - Individuals over the age of 70 admitted to a medical or orthopaedic ward from their home.  Duration, frequency, intensity, etc Maximum stay was specified as 3 weeks. The average length of stay at the facility was 17.3 days (range 1-34). Further details on intensity of care/therapies is not clear, however the patient was assessed by a physician and physiotherapist on the first working day after their admission, and physician led ward rounds and multidisciplinary team meetings took place at least twice a week.  Key components and objectives of intervention - A key aspect of the service which the researchers hoped to investigate was earlier	All patients - The mean number of days in hospital was lower for participants in the intervention group than those in the control group, however this difference was not significant (control 10.5 days, 15.2 SD vs. intervention 10.4 days, 15.8 SD; relative effect size ÷ 0.01%; absolute effect size ÷ 0.1 days; p=0.748). Medical patients – The mean number of days in hospital was lower for medical patients in the intervention group than those in the control group, however this difference was not significant; control 12.9 days (17.2 SD) vs. intervention 10.6 days (14.9 SD); relative effect size ÷ 18.1%; absolute effect size ÷ 2.3 days; p=0.530. Orthopaedic patients – The mean number of days in hospital was greater for orthopaedic patients in the intervention group than those	
	converted into an intermediate care unit.  Delivered to - Individuals over the age of 70 admitted to a medical or orthopaedic ward from their home.  Duration, frequency, intensity, etc Maximum stay was specified as 3 weeks. The average length of stay at the facility was 17.3 days (range 1-34). Further details on intensity of care/therapies is not clear, however the patient was assessed by a physician and physiotherapist on the first working day after their admission, and physician led ward rounds and multidisciplinary team meetings took place at least twice a week.  Key components and objectives of intervention - A key aspect of the service which the researchers hoped	converted into an intermediate care unit.  Delivered to - Individuals over the age of 70 admitted to a medical or orthopaedic ward from their home.  Duration, frequency, intensity, etc Maximum stay was specified as 3 weeks. The average length of stay at the facility was 17.3 days (range 1-34). Further details on intensity of care/therapies is not clear, however the patient was assessed by a physician and physiotherapist on the first working day after their admission, and physician led ward rounds and multidisciplinary team meetings took place at least twice a week.  Key components and objectives of intervention - A key aspect of the service which the researchers hoped to investigate was earlier  All patients - The mean number of days in hospital was lower for participants in the intervention group than those in the control group, however this difference was not significant (control 10.4 days, 15.8 SD; relative effect size ÷ 0.01%; absolute effect size ÷ 0.1 days; p=0.748). Medical patients – The mean number of days in hospital was lower for participants in the intervention group than those in the control group, however this difference was not significant (control 10.5 days, 15.8 SD; relative effect size ÷ 0.01%; absolute effect size ÷ 0.1 days; p=0.748). Medical patients – The mean number of days in the intervention group than those in the control group, however this difference was not significant (control 10.5 days, 15.8 SD; relative effect size ÷ 0.1 days; p=0.748). Medical patients – The mean number of days in the intervention group than those in the control group, however this difference was not significant (control 10.5 days, 15.8 SD; relative effect size ÷ 0.1 days; p=0.748). Medical patients – The mean number of days in hospital was lower for patients – The mean number of days in the intervention group than those in the intervention group than those in the intervention of significant (control 10.5 days, 15.8 SD; relative effect size ÷ 0.1 days; p=0.748). Medical patients – The mean number of days in t

Research aims	PICO (population, intervention, comparison,	Findings	Overall validity rating
	outcomes)		
	that patients in earlier	in the control group, however	
	studies were usually	this difference was not	
	transferred after a number of	significant control 8.2 days	
	days in hospital). Transfer	(12.7 SD) vs. intervention	
	took place within 1 working	12.0 days (19.0 SD); relative	
	day of randomisation (mean	effect size + 46.6%; absolute	
	0.7 days, range 0-three).	effect size + 3.8 days;	
	Patients were also assessed	p=0.536.	
	using a 'comprehensive		
	geriatric assessment' (Ellis	Days in nursing home (mean	
	and Langhorne, 2005).	number):	
	Patients were encouraged to	All patients – The mean	
	mobilise and get out of their	number of days in a nursing	
	bed as soon as possible; to	home was significantly lower	
	exercise (individual	for participants in the	
	physiotherapy, group	intervention group than those	
	exercise classes and	in the control group; control	
	mobility aids were provided).	55.0 days (91.7 SD) vs.	
	Nutrition and the	intervention 40.6 days (71.4	
	environment at meal times	SD); relative effect size ÷	
	were considered, information	26.1%; absolute effect size ÷	
	about the patients home	14.4 days; p=0.046.	
	environment and presence	Medical patients - The mean	
	of a carer was gathered and	number of days in a nursing	
	staff made referrals to	home was lower for medical	
	occupational or speech	patients in the intervention	
	therapy where necessary	group than those in the	
	and helped patients to apply	control group, however this	
	for further home health care	difference was not significant;	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	services or residential care if needed. Multidisciplinary team meetings considered arrangements for care after discharge from the unit.  • Location/place of delivery - Fifteen bed intermediate care unit in a nursing home. Although the unit could not provide intensive care it did have facilities to analyse some blood tests on site as well as equipment for bladder scans, ECGs, intravenous treatment, oxygen supply, pulse oximetry, and a nebuliser for inhalation.	control 44.1 days (86.5 SD) vs. intervention 37.8 days (62.9 SD) relative effect size ÷ 14.3%; absolute effect size ÷ 6.3 days; p=0.876. Orthopaedic patients - The mean number of days in a nursing home was lower for orthopaedic patients in the intervention group than those in the control group, however this difference was not significant; control 74.7 days (106.0 SD) vs. intervention 49.5 days (0.192 SD); relative effect size ÷ 33.7%; absolute effect size ÷ 25.2 days; p=0.192.	
	Comparison intervention: Hospital based care as usual according to condition. The authors note that what this entailed could vary between the 2 hospital sites at which participants randomised to the control group received their care, and even between different departments within	Days without home health care (mean number): All patients – The mean number of days without home health care services was significantly longer for participants in the intervention group than those in the control group; control 97.7 days vs. intervention	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	the same hospital. They suggest that key differences between care as usual in the hospital and that provided in the intermediate care unit were – facilities for diagnostic tests, monitoring equipment (e.g. telemetry), and the availability of a physician at weekends. It is noted that multidisciplinary assessments and consultation by a geriatrician were unlikely to be carried out as standard. The mean length of stay in the comparison intervention 7.0	70.2 days; 27.5 days longer; p=0.027.  Medical patients - The mean number of days without home health care services was significantly longer for medical patients in the intervention group than those in the control group; control 97.2 days vs. intervention 53.5 days; 52.0 days longer (97.2 vs. 53.5); p=0.01.  Orthopaedic patients: Subgroup analysis not reported.	
	days (range 0–36).  Outcomes measured: NB All outcomes data were extracted from patient records held with hospitals or community health care services. The following data were extracted by the researchers -  Service user related outcomes  • Days alive and living at home.  • Mean number of days alive.	Independence from home health care: All patients – The proportion of participants in the intervention group who were 'independent' of home health care services was significantly higher than that in the control group; (control 19.9% vs. intervention 31.6%, relative effect size +58.8%, absolute effect size +11.7%, p=0.007). The relative risk of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>One year mortality.</li> <li>Service outcomes —</li> <li>Days in a nursing home.</li> <li>Days in hospital.</li> <li>'Independence' from home health care, and mean number of days without home health care.</li> <li>No home health care. The authors defined home health care services as publicly funded supportive care provided in the home. Supportive care is described as ' help provided by licensed healthcare professionals, non-medical caregivers or care assistants for medical needs, help in activities of daily living and help for practical needs like cleaning the home and preparing meals' (p4).</li> <li>Patient classification details (medical or orthopaedic) were extracted from hospital</li> </ul>	being 'independent' from home health care services was also higher for this group; relative risk 1.59 (95% CI 1.11 to 2.27). Medical patients – The proportion of medical patients who were 'independent' of home health care services in the intervention group was significantly higher than that in the control group (control 18.1% vs. intervention 35.9%, relative effect size +98.6%, absolute effect size +98.6%, absolute effect size +17.8%, p=0.011). The relative risk of being 'independent' from home health care services was also higher for this group; relative risk 1.99 (95% CI 1.12 to 3.53). Orthopaedic patients – The proportion of orthopaedic patients who were 'independent' of home health care services in the intervention group was higher than that in the control group, however this difference was	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	discharge notes, which the authors report use ICD-10 definitions as the basis for classification.  Follow-up: 1 year post-randomisation.	not significant (control 19.1% vs. intervention 30.0%, relative effect size +57.1%, absolute effect size +10.9%, p=0.219). The relative risk of being 'independent' from home health care services was also higher for this group; relative risk 1.57 (95% CI 0.84 to 2.93).	
		Narrative findings - service user related outcomes NB. Although the authors calculate 'relative effect sizes' these are not included in this summary.	
		At 1 year post-randomisation, mortality was higher in the intervention group than in the control group, however this difference was not significant (control 17.2% vs. intervention 22.1%; absolute effect size + 4.9%; p=0.29). Post hoc subgroup analysis showed that mortality was also higher for medical	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		patients in the intervention	
		group, however this was also	
		non-significant (control 25.0%	
		vs. intervention 25.6%;	
		absolute effect size + 0.6%;	
		p=0.99). However, mortality	
		was significantly higher for	
		orthopaedic patients in the	
		intervention group (control	
		10.3 % vs. intervention	
		25.0%; absolute effect size	
		14.7%; p=0.049). Similarly,	
		there was a non-significant	
		increased relative risk of	
		mortality for participants in	
		the intervention group	
		(relative risk ratio = 1.29, 95%	
		CI 0.85 to 1.94), and for	
		medical patients in the	
		intervention group (relative	
		risk ratio = 1.03, 95% CI 0.59	
		to 1.78). However, relative	
		risk for orthopaedic patients	
		in the intervention group was	
		significantly increased	
		(relative risk ratio = 2.43, 95%	
		CI 1.05 to 5.55). The mean	
		number of days alive was	
		significantly lower for	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		orthopaedic patients in the intervention group than for orthopaedic patients in the control group (control 346.9 vs. intervention 311.9; 35 days lower; p=0.025). Data in relation to mean number of days alive for all patients or for medical patients are not reported.	
		Narrative findings - service outcomes — The mean number of days alive and living at home over the 1 year follow-up period was lower in the intervention group than the control group, however this difference was not significant (control 256.5 days [125.1 SD] vs. intervention 253.7 days [120.4 SD]; absolute effect size ÷ 2.8 days; p=0.80). This was also the case for medical patients in the intervention group (control 250.4 days [134.1 SD] vs. intervention 249.2 days [123.6 SD];	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		absolute effect size ÷ 1.2 days; p=0.165); and for orthopaedic patients in the intervention group (control 256.5 days [121.0 SD] vs. intervention 233.2 days [128.2 SD]; absolute effect size ÷ 23.3 days; p=0.09).	
		The mean number of days in hospital (after discharge from the intervention/control treatment) was lower for participants in the intervention group than those in the control group, however this difference was not significant (control 10.5 days [15.2 SD] vs. intervention 10.4 days [15.8 SD]; absolute	
		effect size ÷ 0.1 days; p=0.748). This was also the case for medical patients in the intervention group (control 12.9 days [17.2 SD] vs. intervention 10.6 days [14.9 SD]; absolute effect size ÷ 2.3 days; p=0.530). For orthopaedic patients in the	

intervention group, the mean number of days in hospital was higher than that in the control group, however this	
difference was also non-significant (control 8.2 days [12.7 SD] vs. intervention 12.0 days [19.0 SD]; absolute effect size + 3.8 days; p=0.536).	
The mean number of days in a nursing home was significantly lower for participants in the intervention group than those in the control group (control 55.0 days [91.7 SD] vs. intervention 40.6 days [71.4 SD]; absolute effect size ÷ 14.4 days; p=0.046). The mean number of days in a nursing home was also lower for medical patients in the intervention group (control 44.1 days [86.5 SD] vs. intervention 37.8 days [62.9	
	effect size + 3.8 days; p=0.536).  The mean number of days in a nursing home was significantly lower for participants in the intervention group than those in the control group (control 55.0 days [91.7 SD] vs. intervention 40.6 days [71.4 SD]; absolute effect size ÷ 14.4 days; p=0.046). The mean number of days in a nursing home was also lower for medical patients in the intervention group (control 44.1 days [86.5 SD] vs.

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	•	orthopaedic patients in the intervention group (control 74.7 days [106.0 SD] vs. intervention 49.5 days [0.192 SD]; absolute effect size ÷ 25.2 days; p=0.192), however these differences were nonsignificant.  The mean number of days without home health care services was significantly greater for participants in the intervention group than those in the control group (control 70.2 days vs. intervention 97.7 days; 27.5 days longer; p=0.027). This was also the case for medical patients in the intervention group (control 53.5 days vs. intervention 97.2 days; 52.0 days longer; p=0.01). Data in	
		relation to mean number of days without home health care services for orthopaedic patients are not reported.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	· • • • • • • • • • • • • • • • • • • •	The proportion of participants in the intervention group who were 'independent' of home health care services was significantly higher than that in the control group (control 19.9% vs. intervention 31.6%; absolute effect size +11.7%; p=0.007). This was also the case for medical patients in the intervention group (control 18.1% vs. intervention 35.9%; absolute effect size +17.8%; p=0.011). The proportion of orthopaedic patients who were 'independent' of home health care services in the intervention group was also higher than that in the control group, however this difference was not significant (control 19.1% vs.	
		intervention 30.0%; absolute effect size +10.9%, p=0.219).	
		Similarly, there was a significantly increased relative risk of independence	
		from home health care	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		services for participants in the intervention group (relative risk = 1.59, 95% CI 1.11 to 2.27); and for medical patients in the intervention group (relative risk = 1.99, 95% CI 1.12 to 3.53). For orthopaedic patients in the intervention group there was a non-significant increased relative risk (relative risk = 1.57, 95% CI 0.84 to 2.93).	

## 5. Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9: 18

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To compare a range of outcomes at 3, 6 and 12 months between stroke patients managed on the stroke unit (SU), on general wards with stroke team (ST) support or at home by specialist domiciliary care team (HC).	Participants: Service users and their families, partners and carers - patients with disabling stroke.  Sample characteristics:  • Age - Median age - stroke unit 75 years; stroke team support 77.3 years; home care 77.7 years.	Statistical data – service user related outcomes - Mortality or institutionalised at 3 months: Participants managed in the stroke unit were significantly less likely to die or be institutionalised compared with home care group (stroke unit 10% vs. home care 20%, relative risk = 0.50, [95% Confidence	Overall assessment of internal validity: ++  Overall assessment of external validity: ++  Overall validity rating: ++

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Methodology: Prospective, single-blind, randomised controlled trial.  Country: UK – south east England – Bromley.  Source of funding: Government - Health Technology Assessment Programme.	<ul> <li>Sex - females - stroke unit 46.6, stroke team support 50.6, home care 45.6%.</li> <li>Ethnicity - not reported.</li> <li>Religion/belief - not reported.</li> <li>Disability - Number of patients with premorbid independence in continence (stroke unit n=146; stroke team support n=147; home care n=148), dressing (stroke unit n=146; stroke team support n=143; home care n=142), mobility (stroke unit n=145; stroke team support n=146; home care: n=146).</li> <li>Long term health condition - Risk factor profile - Previous stroke/transient ischaemic attack - stroke unit 26%; stroke team 29%; home care 30%. Hypertension - stroke unit: 45%; stroke team 48%; home care 48%. Diabetes mellitus - stroke unit: 11%; stroke team 16%; home care 15%. Atrial fibrillation -</li> </ul>	Interval 0.29 to 0.87], p=0.01). There was no significant difference in mortality or institutionalisation rate between the stroke team and home care groups (stroke team 20% vs. home care 20%, relative risk = 1.00, [95% CI 0.96 to 1.04], p=0.99).  Mortality or institutionalised at 6 months: Participants managed in the stroke unit were significantly less likely to die or be institutionalised compared with the home care group (stroke unit 13% vs. home care 24%, relative risk = 0.42 [95% CI 0.24 to 0.75], p=0.003). There was no significant difference in mortality or institutionalisation rate between the stroke team and the home care group (stroke team 25% vs. home care 24%, relative risk = 1.05 [95% CI 0.71 to 1.56], p=0.81.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	stroke unit 24%; stroke team 27%; home care 16%. Smoking - stroke unit: 19%; stroke team 14%; home care 15%. Ischaemic heart disease - stroke unit: 22%; stroke team 25%; home care 21%. Carotid bruit - stroke unit 3%; stroke team 5%; home care 3%. Median Orgogozo score - stroke unit 75 (46–90 IQR); stroke team 80 (60–90 IQR); home care 85 (58–90 IQR). Median OPS score (1.6–6.8) - stroke unit 3.2 (2.4–4.4 IQR); stroke team 3.2 (2.4–4.4 IQR); home care 2.8 (2.0–4.0 IQR). Median Barthel Index score - stroke unit 8 (5–12 IQR); stroke team 9 (5–12 IQR); stroke team 9 (5–12 IQR); home care 10 (4–14 IQR).  • Sexual orientation - Not reported.  • Socioeconomic position - Lives alone - stroke unit 33.7%; stroke team 36.6%	Mortality or institutionalised at 12 months: Patients managed in the stroke unit were significantly less likely to die or be institutionalised compared with the home care group (stroke unit 14% vs. 24%, relative risk = 0.59 [95% CI 0.37 to 0.95], p=0.03. There was no significant difference in mortality or institutionalisation rate between the stroke team and the home care group (stroke team 30% vs. home care 23%, relative risk = 1.28 [95% CI 0.87 to 1.87], p=0.20. After adjusting for age, baseline Barthel Index scores and dysphasia at all timepoints, the odds of dying or being institutionalised at 1 year were 3.2 greater for stroke team patients and 1.8 greater for patients receiving specialist home care when compared with stroke unit	
	home care 33.5%.	care. (Cox's regression	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Sample size:</li> <li>Comparison numbers - domiciliary care (n=153).</li> <li>Intervention numbers - 152 stroke unit care (n=152), stroke team care (n=152).</li> <li>Sample size – Total N=457.</li> <li>Intervention:</li> <li>Intervention category - Stroke care managed on the stroke unit vs on general wards with stroke team support vs at home by specialist domiciliary team. Describe intervention - Two interventions: 1. Stroke team (ST): Patients in the stroke team care were managed on general wards and remained under the care of admitting physicians. All patients were seen by a specialist team, which consisted of a doctor (specialist registrar grade), a nurse (grade G), a physiotherapist (senior I) and an occupational therapist</li> </ul>	survival analysis – stroke team 43 events vs. stroke unit 18 events; odds ratio = 3.2 [95% CI 1.6 to 6.4], p=0.001; hazards ratio = 2.4 [95% CI 1.4 to 4.2], p=0.002, stroke unit 18 events vs. home care 30 events; odds ratio = 1.8 [95% CI 1.0 to 3.8], p=0.03), Hazards ratio (HR) 1.7 (95% CI 1.0 to 3.0), p=0.04 (significant).  Mortality rate at 3 months: There was a significantly lower mortality rate in the stroke unit group than the home care group (stroke unit 4% vs home care 10%, relative risk = 0.41 [95% CI 0.17 to 0.98], p=0.05. There was no significant difference in mortality rates between the stroke team and the home care group (stroke team 12% vs. home care 10%, relative risk = 1.24 [95% 0.64 to 2.38], p=0.52).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	(senior I) with expertise in	Mortality rate at 6 months:	
	stroke management.	There was no significant	
	Patients were assessed and	difference in mortality rate	
	evaluated for medical,	between the stroke unit and	
	nursing and therapy needs,	the home care group (stroke	
	based on a plan for	unit 7% vs. home care 13%,	
	investigations and acute	relative risk = 0.50 [95% 0.25	
	management guided by	to 1.02] p=0.06). There was	
	standardised guidelines	no significant difference in	
	Although generic staff on the	mortality rates between the	
	ward provided the day-to-	stroke team and the home	
	day treatment, the team	care group (stroke team 17%	
	advised reviewed progress	vs. home care 13%, relative	
	and treatment goals of	risk = 1.27 [95% CI 0.74 to	
	individual patients with the	2.19] p=0.39).	
	ward team and helped in		
	discharge planning and	Mortality rate at 1 year: There	
	setting up of post-discharge	was no significant difference	
	services. The team also	in mortality rate between the	
	provided counselling,	stroke unit and the home care	
	education and support to the	group (stroke unit 9% vs.	
	family, identified	home care 15%, relative risk	
	expectations and advised	= 0.59 [95% CI 0.31 to 1.11]	
	about realistic outcomes in	p=0.10). There was no	
	the context of previous	significant difference in	
	morbidity and present	mortality rate between the	
	deficits. 2. Stroke Unit (SU):	stroke team and the home	
	patients in this group	care group (stroke team 23%	
	received care on the stroke	vs. home care 15%, relative	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	unit (acute and rehabilitation) was provided by a stroke physician supported by a	risk = 1.56 [95% CI 0.96 to 2.53] p=0.07).	
	multidisciplinary team with specialist experience in stroke management. There	Barthel Index scores at 3 months: There was no significant difference between	
	were clear guidelines for acute care, prevention of	the 3 groups (stroke unit 82% vs. home care 73%, relative	
	complications, rehabilitation and secondary prevention, and a culture of joint	risk = 1.11 [95% CI 0.99 to 1.25] p=0.09; stroke team 70% vs. home care 73%,	
	assessments, goal setting, coordinated treatment and discharge planning. A	relative risk = 0.96 [95% CI 0.83 to 1.11] p=0.58.	
	coordinated multidisciplinary approach was adopted	Dependence (modified Rankin Scale, survival	
	towards rehabilitation, with emphasis on early mobilisation. All patients had	without severe disability) at 1 year: Significantly more participants survived without	
	an individualised rehabilitation plan with clearly defined goals based	severe disability in the stroke unit group compared with the home care group (stroke unit	
	on joint assessments. Patient participation was	85% vs. home care 71%, relative risk = 1.21 [95% CI	
	encouraged, with focus on motivation and providing an enriched environment. A	1.07 to 1.37], p=0.002). There was no significant differences between the stroke team and	
	plan of management, individualised to each	the home care group (stroke team 66% vs. home care	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	patient's needs, was formulated and communicated to the various	71%, relative risk = 0.94 [95% CI 0.81 to 1.09] p=0.42).	
	professionals involved in the patient's care, the patient and the family. All patients were screened and managed for stroke risk factors and secondary prevention. There was close liaison between various disciplines, with problems being addressed as they arose. Discharges were planned in advance, and spouses and relatives were encouraged to participate in	Changes in Barthel Index scores at 6 months and 1 year for survivors (stroke unit n=138; stroke team n=115; home care n=123) - baseline comparisons similar for age, gender and premorbid functional abilities: Survivors in the stroke unit group showed a significantly greater change than those in the home care group at 6 months (stroke unit 9 vs home care 7, p<0.02) and at 1 year (stroke	
	the rehabilitation process.  • Delivered by - Stroke team (ST) in hospital: delivered by a specialist team, which consisted of a doctor (specialist registrar grade), a nurse (grade G), a physiotherapist (senior I) and an occupational therapist (senior I) with expertise in stroke management. Stroke unit (SU) in hospital: (acute	unit 10 vs. home care 7, p<0.002).  Changes in FAI scores for survivors (stroke unit n=138; stroke team n=115; home care n=123) - baseline comparisons similar for age, gender and premorbid functional abilities: Differences between prestroke	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	and rehabilitation) care provided by a stroke physician supported by a multidisciplinary team with specialist experience in stroke management.  • Delivered to - Stroke patients.  • Duration, frequency, intensity, etc No report of duration, frequency and intensity of intervention.  Outcomes were assessed at 3, 6 and 12 months.  • Key components and objectives of intervention - See 'describe intervention'.  • Content/session titles – N/A.  • Location/place of delivery - Stroke team and stroke unit in hospital (bed-based).  Comparison intervention:  Home (domiciliary) care - Patients in the home care group were managed in their	function were greatest in the stroke unit group and least in the home care group (p<0.005 at 6 months; p<0.01 at 1 year).  Hospital Anxiety and Depression Scale scores – Anxiety: There were no significant differences between the 3 groups at 3 months (stroke unit 3 vs. stroke team 4 vs. home care 3, non-significant) or at 1 year (stroke unit 2 vs. stroke team 2 vs. home care 2, non-significant).  Hospital Anxiety and Depression Scale scores – Depression: There were no significant differences between the 3 groups at 3 months (stroke unit 3 vs. stroke team 3 vs. home care 3, non-significant), or at 1 year (stroke unit 2.5 vs.	
	own home by a specialist team consisting of a doctor	stroke team 3 vs. home care 2, non-significant).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	(specialist registrar), a nurse (G grade) and therapists (senior I grades), with support from district nursing and social services for nursing and personal care needs. Patients were under the joint care of the stroke physician and GP, who retained the clinical responsibility for patients managed in the community, supported by the stroke team. The stroke team consisted of the stroke nurse (coordinator),	EuroQol analogue scores: Significant higher rating in the stroke unit and home care groups compared with the stroke team group at 3 months (stroke unit 75 vs. stroke team 60 vs. home care 73; home care vs. stroke team, p<0.005. There was no significant difference between the 3 groups at 1 year (stroke unit 80 vs. stroke team 75 vs. home care 75, nonsignificant).	
	doctor, physiotherapist and occupational therapist, and will be supported by the district nurses and social services care managers. They liaised closely with the GP and the stroke consultant to maintain continuity of care, provided timely information on progress and were responsive to general practice concerns and comments. Investigations, including CT scanning, were performed on an outpatient basis. Therapy was provided	Statistical data – satisfaction with services Patient satisfaction at 3 months: Patients in the home care group were more satisfied with the care provided by the domiciliary stroke team compared with the stroke unit or stroke team. This was significant for 'being able to talk about problems with professionals' (Chi-sq 25.5, p<0.0001), 'information on the nature and cause of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	by members of the specialist stroke team. Each patient had an individualised integrated care pathway outlining activities and the objectives of treatment, which was reviewed at weekly multidisciplinary meetings. This support was provided for a maximum of 3 months. Patients' progress were monitored on a regular basis in multidisciplinary meetings. The team reviewed patients on the basis of comprehensive assessments, goals and progress. Problems in rehabilitation of individual patients were discussed at these meetings. Patient/carer involvement was encouraged as appropriate. Specialist support was provided from the hospital to support the 'shared care' with general practitioners.  Outcomes measured:  Service user related outcomes	the stroke' (Chi-sq 8.6, p<0.014)' 'organisation of care at home' (Chi-sq 11.6, p<0.003), 'support from community services' (Chi-sq 13.2, p<0.001), 'the amount of contact with the specialist team' (Chi-sq 99.4, p=0.009).  Carer satisfaction: Carers rated care provided at home (home care group) to be more satisfactory than that provided on the stroke unit or stroke team. This was significant for 'attention to personal needs of the patient' (Chi-sq = 13.1, p=0.001), 'recognition of problems associated with caring for stroke patients' (Chi-sq 22.1, p<0.0001), 'amount of therapy provided (Chi-sq 13.8, p=0.001), information on benefits and services (Chi-sq 10.6, p=0.005) 'the level of contact with the specialist team' (Chi-sq 23.8,	
	-	p<0.0001).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Death or institutionalisation at 1 year.</li> <li>Dependence (measured using modified Rankin Scale - death is rated as 6), and the Barthel Index (scores of 15–20 classified as favourable).</li> <li>Disability (measured using Barthel Index and Frenchay Activities Index).</li> <li>Extent and severity of neurological deficit (measured using the Orgogozo scale).</li> <li>Mood (measured using Hospital Anxiety and Depression Scale).</li> <li>Quality of life (measured using EuroQol).</li> <li>Family or caregiver related outcomes –</li> <li>Quality of life (EuroQol).</li> </ul>	Professional acceptability of domiciliary care (general practitioners, district nurses and social services care managers): Sample too small to allow meaningful statistical analysis.  Statistical data – service related outcomes Lengths of hospital stay (mean number of days): stroke unit 32 (29.6 SD) vs. stroke team 29.5 (40.1 SD) vs home care 48.9 (26.6 SD) for 51 patients requiring hospital admission rom home.  Physiotherapy (% of patients treated): Similar between the 3 groups – stroke unit 99% vs. stroke team 97% vs. home care 99%.	
	Satisfaction with services –  • Satisfaction with care and professional acceptability.	Occupational therapy (% of patients treated): Similar between the 3 groups - stroke	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Service outcomes - • Length of hospital stay.  Follow-up: At 3, 6 and 12 months.  Costs? Cost information. See economic evidence tables.	unit 100% vs. stroke team 87% vs. home care 99%.  Speech therapy (% of patients treated): Higher use in the stroke unit group than the home care group – stroke unit 71% vs. stroke team 47% vs. home care 49%. Patients on the stroke unit received significantly more therapy compared with those managed by the stroke team or at home. There were no significant differences in the duration of therapy between the stroke team and the home care group.	

6. Stenvall M, Olofsson B, Nyberg L et al. (2007) Improved performance in activities of daily living and mobility after a multidisciplinary postoperative rehabilitation in older people with femoral neck fracture: A randomized controlled trial with 1-year follow-up. Journal of Rehabilitation Medicine 39: 232-8

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The aim of the study was to investigate the	Participants: Service users	Statistical data – service user related outcomes -	Overall assessment of internal validity:
short and long-term effects of a multidisciplinary postoperative	carers - Participants were service users.	Living independently: Intervention group	+

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
rehabilitation programme in patients with femoral neck fracture.  Methodology: Randomised controlled trial. Stratified according to the operation methods used based on the degree of hip dislocation.  Country: Sweden.  Source of funding: Other - Swedish Research Council.	<ul> <li>Sample characteristics:</li> <li>Age - Mean age of intervention group = 82.3 Mean age of comparison group = 82.</li> <li>Sex - Intervention group = 74 females Comparison group = 74 females.</li> <li>Ethnicity – Not reported.</li> <li>Religion/belief – Not reported.</li> <li>Disability - Sensory impairments are reported: Impaired hearing Intervention group = 42 Comparison group = 34 Impaired vision Intervention group = 37 Comparison group = 27. No significant difference between the 2 groups.</li> <li>Long term health condition - Health and medical problems are reported; the most common being cardiovascular disease, depression, stroke, and</li> </ul>	significantly more likely than control group to live independently – at discharge (odds ratio = 0.93 [95% Confidence Interval 0.32 to 2.73]); at 4 months (odds ratio = 0.68 [95% CI 0.20 to 2.27]); and at 12 months (odds ratio = 0.91 [95% CI 0.32 to 2.56] at 12 months.  Independent walking without walking aid indoors: Intervention group significantly more likely than control group to walk without walking aid (adjusted for dementia and depression) at discharge (odds ratio = 2.22 [95% CI 0.99 to 4.95]); at 4 months (odds ratio = 3.01 [95% CI 1.18 to 7.61]); and at 12 months.  Independent P-ADL: Intervention group significantly more likely than control group to regain P-ADL (adjusted for dementia and	Overall assessment of external validity: + Overall validity rating: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	dementia. Other reported conditions include cancer, previous hip fracture and diabetes. No significant difference between the 2 groups. Significantly more 'diagnosed depression' (intervention 33, control 45, p=0.031) and 'antidepressants' use (intervention 29, con 45, p=0.009) in the control group.  • Sexual orientation – Not reported.	depression) at discharge (odds ratio 1.81 [95%Cl 0.74–4.37]); at 4 months (odds ratio = 2.51 [95% Cl 1.00–6.30]); and at 12 months (odds ratio = 3.49 [95% Cl 1.31 to 9.23]).  Mortality: No significant differences between the 2 groups at 4 months. Intervention 16 deaths vs control 18 deaths (p=0.591) at 12 months.	
	<ul> <li>Socioeconomic position –</li> <li>Not reported.</li> </ul>	Return to same ADL performance level (using the Katz index) as before	
	<ul> <li>Sample size:</li> <li>Comparison numbers - n=97.</li> <li>Intervention numbers - n=102.</li> <li>Sample size - Total N=199.</li> <li>Intervention:</li> <li>Intervention category - Bedbased intermediate care (a</li> </ul>	fracture: There were no significant differences between the 2 groups at 4 months (intervention 56/92 [61%] vs control 39/82 [48%], p=0.078). (Table VI) The intervention group were significantly more likely than the control group to return to the same ADL before fracture at 12 months (intervention	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	multidisciplinary postoperative rehabilitation programme.)	49/84 [58%] vs control 27/76 [36%], p=0.004)	
	<ul> <li>Describe intervention - The intervention involved comprehensive geriatric assessment and rehabilitation. Early mobilisation with daily training was provided to participants during their hospital stay.</li> <li>Delivered by - The intervention was delivered by the multidisciplinary team (nurses, physiotherapists, occupational therapists, dietitians, geriatricians).</li> <li>Delivered to - The intervention was delivered to participants allocated to a multidisciplinary postoperative rehabilitation programme in a geriatric ward.</li> <li>Duration, frequency, intensity, etc. – Not reported.</li> </ul>	Statistical data – service outcomes - Length of hospital stay: The intervention group were significantly more likely than the control group to have a shorter inpatient stay; intervention 30 days (SD 18.1) vs. control 40 days (SD 40.6), p=0.028.  Readmissions up to 30 days after discharge: No significant differences between the 2 groups - intervention 4 readmissions vs. control 5 readmissions, p=0.734.  Readmissions throughout whole study period: No significant differences between the 2 groups - intervention 38 readmissions vs control 30 readmissions, p=0.484.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Key components and objectives of intervention - The overall objective of the intervention was to improve performance in activities of daily living and mobility.</li> <li>Content/session titles - Includes: Individual care planning, prevention and treatment of complications, nutrition, rehabilitation which also involves early mobilisation with daily training was provided during the hospital stay., home visit by occupational therapist and occupational therapist and occupational therapist who co-operated with colleagues working in community service after discharge from hospital. The PT or OT followed up all patients with a telephone call 2 weeks after discharge and a home visit 4 months postoperatively. A physician met the patients 4 months postoperatively to detect and prevent complications.</li> </ul>	Narrative findings - Despite a shorter in-hospital stay after surgery, significantly more participants in the intervention group had regained independence in personal activities of daily living performance at 4 and 12 months. Those in the intervention group had also gained the ability to walk independently without walking aids by 4 and 12 months.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Location/place of delivery - The intervention was delivered at a geriatric unit.</li> </ul>		
	Comparison intervention: The comparison intervention was delivered at a specialist orthopaedic unit, following conventional post-operative routines. (No dietitian, no corresponding teamwork, individualised care planning not routinely used).		
	Outcomes measured:		
	<ul> <li>Service user related outcomes</li> <li>Living independently.</li> <li>Walking ability (registered according to the Swedish version - 21 of Clinical Outcome Variables.</li> <li>Functional status of activities of daily living (Staircase of Activities of Daily Living and Katz Activities of Daily Living index).</li> </ul>		

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison, outcomes)		
	<ul> <li>Cognitive status (Mini Mental State Examination)</li> <li>Depression (Geriatric Depression Scale).</li> <li>Vision.</li> <li>Hearing.</li> <li>Service outcomes</li> <li>In-hospital days after discharge.</li> <li>Readmissions.</li> <li>Follow-up: Four and 12</li> </ul>		
	months.		
	Costs? No.		

7. Young J, Green J, Forster A et al. (2007) Postacute care for older people in community hospitals: A multicenter randomized, controlled trial. Journal of the American Geriatrics Society 55: 1995-2002

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The study aims to	Participants: Service users	NB. Statistical analysis of	Overall assessment of
' compare the effects of	and their families, partners and	between group differences is	internal validity:
community hospital care on	carers – Elderly patients with	only reported for change	-
independence for older people	an acute illness who had been	scores in certain outcomes	
needing rehabilitation with that	' emergently admitted to	over a small number of time	Due to the high number of
of general hospital care'	elderly care departments (four	horizons.	eligible patients who did not

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
hypothesise that elderly patients transferred to community hospital care would achieve greater independence than those treated in elderly care departments.  Methodology: Randomised controlled trial.	general hospital sites) or a combined elderly and medical unit (one general hospital site)' (p1996). Inclusion criteria were - residence within catchment area of a participating community hospital; and deemed to be medically stable with a need for postacute	Statistical data - service user related outcomes - Anxiety (measured using the Hospital Anxiety and Depression Scale) Between group differences in change scores between baseline and 1 week post discharge from	participate; high rates of attrition; a relatively high number of control group participants who were transferred to a study community hospital rather than receiving care as usual, or after receiving care as usual were then transferred to non-participating
Country: United Kingdom – Midlands and north of England.  Source of funding:  Government - Department of	rehabilitation care before expected discharge home (in opinion of senior attending physician).  Exclusion criteria were -	control/intervention hospital: Participants in the intervention group had significantly smaller change scores on a measure of anxiety than those in the	community hospitals, intermediate care facilities or rehabilitation facilities; and blinding concerns it is not possible to award a higher quality rating to this study.
Health.  • Charity - Medical Research Council. The paper also includes data from an earlier study that was funded by The	patients with signs of medical instability (e.g. at rest breathlessness, chest pain within past 48 hours, need for intravenous medication, or	intervention group (median difference = 1, 0 to 2 95% Confidence Interval, Mann–Whitney U-test p=0.03).  NB No further analyses	Overall assessment of external validity:
Health Foundation.	pyrexia); drowsy or unconscious patients; patients in need of stroke rehabilitation or specialist care or treatment from another department (e.g. surgery or coronary care); and patients in need of a new	reported.  Summary scores at 1 week post-discharge: There was a difference in favour of the control group; intervention n=208, median score 5 (1-8)	Overall assessment of validity:

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	nursing home or residential home placement.  Sample characteristics:  • Age – Intervention – median age 86 years (81–90 IQR). Control – median age 86 years (82–90 IQR).  • Sex – Intervention – female n=197 (70.4%), male n=83 (29.6%). Control - female n=141 (67.1%), male n=69 (32.9%).  • Ethnicity – Not reported.  • Religion/belief - Not reported.  • Disability - Not reported.  • Long term health condition – Not reported.  • Socioeconomic position – Intervention – living alone n=185 (66.1%); does not live alone n=81 (28.9%); lives in care n=14 (5.0%). Control-living alone n=154 (73.3%); does not live alone n= 48 (22.9%); lives in care n= 8	IQR) vs. control n=150, median score 4 (2-8 IQR). Summary scores at 3 months post-randomisation: There were no differences in scores; intervention n=183, median score 4 (2-7 IQR) vs. control n=128, median score 4 (2-7 IQR). Summary scores at 6 months post-randomisation: There were no differences in scores; intervention n=170, median score 4 (1-7 IQR) vs. control n=117, median score 4 (2-7 IQR).  Depression (measured using the Hospital Anxiety and Depression Scale) - Summary scores at 1 week post-discharge: There were no differences in scores; intervention n=208, median score 6 (3-9 IQR) vs. control n=197, median score 6 (4-10 IQR). Summary scores at 3 months	
	n=185 (66.1%); does not live alone n=81 (28.9%); lives in care n=14 (5.0%). Control - living alone n=154 (73.3%); does not live alone n= 48	post-discharge: There were no differences in scores; intervention n=208, median score 6 (3-9 IQR) vs. control n=197, median score 6 (4-10 IQR).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Sample size:         <ul> <li>Comparison numbers:                 Randomised n=210;                 received intervention –                 number unclear; completed                 1 week post-discharge                 assessment n=164;                 completed 3 months post-randomisation assessment                 n=149; completed 6 months                 post-randomisation                 assessment n=138.</li> </ul> </li> <li>Intervention numbers:                  Randomised n=280;                 received intervention n=233;                  completed 1 week post-discharge assessment                  n=230; completed 3 months                  post-randomisation                  assessment n=216;                  completed 6 months post-randomisation assessment                  n=195.</li> <li>Sample size: Randomised                  n=490; received intervention                  n=XX; completed 1 week                  post-discharge assessment                  n=394; completed 3 months</li> </ul>	were no differences in scores; intervention n=183, median score 7 (4-10 IQR) vs. control n=128, median score 7 (5-9 IQR). Summary scores at 6 months post-randomisation: There was a difference in favour of the intervention group; intervention n=170, median score 6 (4-9 IQR) vs. control n=117, median score 7 (4-9 IQR). NB No analyses reported.  Functional activity restriction (measured using the Barthel Index) - Summary scores at 1 week post-discharge: There were no differences in scores; intervention n=229, median score 16 (13-18 IQR) vs. control n=164, median score 16 (13-18 IQR). Summary scores at 3 months post-randomisation: There were no differences in scores; intervention n=216,	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	post-randomisation assessment n=365; completed 6 months post- randomisation assessment n=333.	median score 16 (12-18 IQR) vs. control n=149, median score 16 (13-19 IQR). Summary scores at 6 months post-randomisation: There were no differences in scores; intervention n=195,	
	<ul> <li>Intervention category - Bed based intermediate care.</li> <li>Describe intervention - The authors describe the intervention as ' multidisciplinary team care for older people in community hospitals' (p1995). However these interventions were delivered at 7 community hospitals and appear to be preexisting services.</li> <li>Delivered by - Few details are provided, however the authors note that the approach to care allowed involvement from social service professionals and therapists. Medical</li> </ul>	median score 16 (13-18 IQR) vs. control n=138, median score 16 (12-19 IQR). NB No analyses reported.  Independence (measured using the Nottingham Extended Activities of Daily Living Scale) - Between group differences at 6 months: Participants in the intervention group had significantly larger change scores (time horizon not clearly reported) on a measure of independence than participants in the control group (mean difference = 3.27, 0.26 to 6.28 95% CI, p=0.03). After	
	leadership at the community hospitals was provided by	removal of data from an outlier patient, this difference	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	consultant geriatricians and general practitioners.  Delivered to - Elderly patients with an acute illness who had been ' emergently admitted to elderly care departments (four general hospital sites) or a combined elderly and medical unit (one general hospital site)' (p1996).  Duration, frequency, intensity, etc No details on the intensity or frequency of treatments received by community hospital patients are provided in the paper. The authors report that the average length of stay in the participating community hospitals was between 18 and 30 days however the range for each hospital is not reported in this paper and it seems likely that some participants may have stayed for longer than 30 days and there is no	remained significant (mean difference = 2.98, 0.06–5.91 95% CI, p=0.046). Mann—Whitney U-tests (after assigning the worst score on this measure to patients who had died) also showed that this difference was significant (p=0.03). NB No further analyses reported.  Summary scores at 1 week post discharge from control/intervention hospital: There was a difference in favour of the intervention group; intervention n=230, median score 16 (8-25 IQR) vs. control n=163, median score 14 (7-26 IQR). Summary scores at 3 months post-randomisation: There was a difference in favour of the intervention group; intervention n=216, median score 19 (7-32 IQR) vs. control n=148, median score 17 (7-31 IQR).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	indication that upper limits on length of stay were set.  Key components and objectives of intervention - The authors' report that the care provided in community hospitals took a 'multidisciplinary rehabilitation approach' and incorporated multidisciplinary assessment and treatment and individualized care plans (p1996-7).  Location/place of delivery - The intervention was provided across 7 community hospitals in the midlands and the north of England. These ranged in size from a 16-bed unit to a 100-bed unit (although only 42 beds were available to the trial at this setting). 1 of these units also provided palliative care, whilst 2 are reported to also have self-contained apartments on site (although it is not clear	Summary scores at 6 months post-randomisation: There were no differences in scores; intervention n=195, median score 20 (9-32 IQR) vs. control n=138, median score 20 (6-32 IQR).  Perceived health state - energy (measured using the Nottingham Health Profile) - Summary scores at 1 week post-discharge: There were no differences in scores; intervention n=214, median score 61 (24-100 IQR). Control n=156, median score 61 (24-100 IQR). Summary scores at 3 months post-randomisation: There were no differences in scores; intervention n=191, median score 61 (24-100 IQR). Control n=133, median score 61 (24-100 IQR). Summary scores at 6 months post-randomisation: There were no differences in There were no difference	
	whether participants at these	scores; intervention n=178,	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	sites had access to these). Three of the community hospitals are described as rural whilst 4 are described as urban.	median score 61 (24-100 IQR). Control n=122, median score 61 (24-100 IQR). NB No analyses reported.  Perceived health state - pain	
	Comparison intervention: Participants randomised to the control group received usual care, which the authors' state usually ' consisted primarily of an extended general hospital stay with multidisciplinary care but could include transfer to other postacute services according to existing local operational policies' (p1997). It should be noted that a number of participants in the control group were therefore transferred to an 'intermediate care placement' (n=2); a non-participating community hospital (n=11); and a rehabilitation unit (n=3). The average length of stay in the participating general hospitals was between 7 and 12 days	(measured using the Nottingham Health Profile) - Summary scores at 1 week post-discharge: There was a difference in favour of the intervention group; intervention n=213, median score 11 (0-42 IQR). Control n=156, median score 13 (0-45 IQR). Summary scores at 3 months post-randomisation: There were no differences in scores; intervention n=191, median score 11 (0-33 IQR). Control n=133, median score 11 (0-41 IQR). Summary scores at 6 months post-randomisation: There was a difference in favour of the control group; intervention n=178, median score 11 (0-	

however as with the intervention it seems likely that participants may have 42 IQR). Control median score 9 (NB No analyses)	0-35 IQR).
remained in hospital for longer, particularly given the authors description of usual care as involving an extended stay.  Outcomes measured: Service user related outcomes  • Anxiety was measured using the Hospital Anxiety and Depression Scale (0-21, higher scores correspond to higher levels of anxiety).  • Depression was measured using the Hospital Anxiety and Depression Scale (0-21, higher scores correspond to higher levels of depression).  • Functional activity restriction was measured using the Barthel Index (0-20, lower scores correspond to increased levels of restriction).  • Independence was measured using the Nottingham Extended	red using the th Profile) s at 1 week There was a pur of the p; 12, median QR). Control core 18 (0- s at 3 months on: There in favour of p; intervention core 17 (0- n=133, (0-43 IQR). S at 6 months on: There in favour of group; 78, median

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Activities of Daily Living Scale (0-66, lower scores correspond to lower levels of independence).	n=122, median score 16 (0-38 IQR). NB No analyses reported.	
	<ul> <li>Perceived health state was measured using the Nottingham Health Profile (0-100, higher scores correspond to lower perceived health).</li> <li>Mortality (source of data not reported).</li> </ul>	Perceived health state - sleep (measured using the Nottingham Health Profile) - Summary scores at 1 week post-discharge: There were no differences in scores; intervention n=213, median score 22 (0-62 IQR). Control	
	<ul> <li>Place of residence (source of data not reported).</li> </ul>	n=156, median score 22 (0- 50 IQR). Summary scores at 3 months	
	<ul><li>Satisfaction with services –</li><li>Service satisfaction (scale unclear).</li></ul>	post-randomisation: There were no differences in scores; intervention n=191, median score 22 (0-62 IQR).	
	Follow-up: Participants were assessed 1 week after control/intervention hospital discharge, 3 months post-randomisation, 6 months post-randomisation however statistical analysis of between group differences is only reported for certain outcomes	Control n=133, median score 22 (0-50 IQR). Summary scores at 6 months post-randomisation: There was a difference in favour of the control group; intervention n=178, median score 22 (0-62 IQR). Control n=122, median score 19 (0-45 IQR). NB No analyses reported.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	at a small number of time points.	Perceived health state - isolation (measured using the Nottingham Health Profile) - Summary scores at 1 week post-discharge: There was a difference in favour of the intervention; intervention n=212, median score 20 (0-35 IQR). Control n=156, median score 21 (0-23 IQR). Summary scores at 3 months post-randomisation: There were no differences in scores; intervention n=191, median score 22 (0-42 IQR). Control n=133, median score 22 (0-39 IQR). Summary scores at 6 months post-randomisation: There was a difference in favour of the intervention; intervention n=178, median score 0 (0-23 IQR). Control n=122, median score 22 (0-41 IQR). NB No analyses reported.	
		Mortality	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		The proportion of participants in the intervention group who had died before the 6 month follow-up assessment was lower than that in the control group, however this difference was not significant (intervention 26.1% [n=73] vs. control 30.5% [n=64]; difference = - 4.4%, 95% CI 12.5 to 3.7%; p=0.33). NB No further analyses reported.	
		Place of residence - The proportion of participants living at home prior to hospital admission who were then admitted to a care home or had died before discharge from the control/intervention hospital was lower in the intervention group than in the control group, however this difference was not significant (intervention 24.9% [n=66] vs. control 32.8% [n=66]; difference = - 7.9%; 95% CI - 16.2 to 0.3; p=0.08).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		The proportion of participants living at home prior to hospital admission who were still living at home was higher in the intervention group than in the control group, however this difference was not significant (intervention n=143/254, 56.3% vs. n=101/194, 52.1%, difference = 4.2%; -5.1 to 13.5% 95% CI, p=0.426). NB No further analyses reported.	
		Statistical data - satisfaction with services - Satisfaction with services (scale unclear) - Participants in the intervention group were significantly more likely to agree with the statement 'I am happy with the amount of recovery I have made' (odds ratio = 2.12; 95% CI 1.30 to 3.46; p=0.004).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		NB No further analyses reported.	
		Narrative findings - service user related outcomes One week after discharge from the control/intervention, participants in the intervention group had significantly smaller change scores (baseline to 1 week post-discharge) on a measure of anxiety (Hospital Anxiety and Depression Scale) than those in the control group. Follow-up scores at 1 week post-discharge showed a difference in favour of the control group. There were no differences in median follow-up scores on this measure at 3 months post-randomisation or at 6 months post-randomisation.	
		There were no differences in follow-up scores on a measure of depression	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		(Hospital Anxiety and Depression Scale) 1 week post-discharge, or at 3 months post-randomisation. At 6 months post-randomisation there was a difference between follow-up scores in favour of the intervention.	
		There were no differences in follow-up scores on a measure of functional activity restriction (Barthel Index) at 1 week post-discharge; at 3 months post-randomisation; or at 6 months post-randomisation.	
		At 6 months follow-up, participants in the intervention group had significantly larger change scores (time horizon not reported) on a measure of independence (Nottingham Extended Activities of Daily Living Scale) than those in the control group. After	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		removal of data from an outlier patient, this difference remained significant. Mann—Whitney U-tests (after assigning the worst score on this measure to patients who had died) also showed that this difference was significant. There were differences in follow-up scores on this measure in favour of the intervention at 1 week post-discharge; at 3 months post-randomisation. At 6 months post-randomisation there were no differences in follow-up scores.  There were no differences in follow-up scores on a measure of perceived energy levels (Nottingham Health Profile - energy) at 1 week post-discharge; at 3 months post-randomisation; or at 6 months post-randomisation.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		At 1 week post-discharge there was a difference between follow-up scores on a measure of perceptions of pain (Nottingham Health Profile – pain) in favour of the intervention. At 3 months post-randomisation there were no differences in follow-up scores. At 6 months post-randomisation there was a difference in follow-up scores in favour of the control.  At 1 week post-discharge there was a difference in follow-up scores on a measure of perceived emotional level (Nottingham Health Profile – emotion) in favour of the intervention. There was also a difference in favour of the intervention at 6 months post-randomisation; however at 3 months post-randomisation the difference was in favour of the control.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		There were no differences in follow-up scores on a measure of perceived sleep levels (Nottingham Health Profile – sleep) at 1 week post-discharge; or at 3 months post-randomisation. At 6 months post-randomisation there was a difference in scores in favour of the control.	
		At 1 week post-discharge there was a difference in follow-up scores on a measure of perceived isolation (Nottingham Health Profile – isolation) in favour of the intervention. At 3 months post-randomisation there were no differences in scores. At 6 months post-randomisation there was a difference in scores in favour of the intervention.	
		The proportion of participants in the intervention group who had died before the 6 month	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		follow-up assessment was lower than that in the control group, however this difference was not significant.  The proportion of participants living at home prior to hospital admission who were then admitted to a care home or had died before discharge from the control/intervention hospital was lower in the intervention group than in the control group, however this difference was not significant. The proportion of participants living at home prior to hospital admission who were still living at home was higher in the intervention group, however this difference was not	
		significant.  Narrative findings - Satisfaction with services Participants in the intervention group were significantly more likely to	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		agree with the statement 'I am happy with the amount of recovery I have made'.	

## Review question 2 – Findings tables – the views and experiences of people using services, their families and carers

1. Ariss S (2014) National audit for intermediate care: Patient reported experiences, 2014. Sheffield: University of Sheffield

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: To obtain views and	Participants: Service users	Statements about ways that	Overall assessment of
experiences from people using	and their families, partners and	the service might be	internal validity:
intermediate care by asking the	carers - People using	improved were coded into 8	-
following survey question: 'Do	intermediate care (including	distinct themes, which	
you feel that there is something	bed based intermediate care).	emerged from the data. They	Overall assessment of
that could have made your	,	are listed here in descending	external validity:
experience of the service	<b>Sample size:</b> 908 (345 of	order, starting with those	++
better?'	which were people using bed	cited most frequently. NB The	
	based intermediate care).	document does not include	Overall validity rating:
Methodology: Survey.	·	page numbers to reference	-
	Intervention:	any quotes reported below.	
Country: UK – England.	Describe intervention - Bed		
	based intermediate care. No	Personal communication and	
Source of funding:	further details provided.	attention	
Government.	<ul> <li>Delivered by – Not reported.</li> </ul>	Comments received in	
	Duration, frequency,	relation to this theme	
	intensity, etc Not reported.	included reports of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Key components and objectives of intervention -         Not reported.</li> <li>Location/place of delivery -         Not reported.</li> </ul>	dissatisfaction with the provision of information regarding services or the care which service users were likely to receive (often reported as inconsistent) as well as the amount of information provided at discharge:	
		"I was led to believe that just 3/4days at rehabilitation centre would be enough but clearly this was incorrect so I did not make sufficient arrangements for my stay for example clothes, financial matter [sic] etc."	
		"It would be useful to have a discharge packet giving the available support organization outside of the hospital."	
		Other respondents felt that staff had been disrespectful to them or had spoken in an inappropriate manner. Some	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		respondents felt that they had not been listened to, whilst others reported that their needs had not been properly understood. Respondents also suggested that communication with the families of service users needed to be improved and that staff should be more responsive to service users.	
		Facilities Comments included in this theme related to entertainment and food as well as the layout of units, and the toilet and washing facilities available. Service users were particularly concerned about the lack of activities and alternative spaces (including access to a garden or the local area) and privacy levels (for example when using a commode). Other respondents commented on the location of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		"Putting rehab clients together on the same floor, instead of mixing them with dementia/nursing home permanent clients."	
		The author notes that hydration and nutrition were not always adequately addressed and some respondents reported little consideration of dietary needs:	
		"My wife is Coeliac and diabetic they had no idea on how or what food she required. Bread and various other foods were supplied by myself."	
		Joined-up and appropriate services It should be noted that many of the quotes included to support this theme do not appear to relate to bed-based intermediate care, and	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		instead seem more likely to be descriptions of home care/rehabilitation provided in the home. However, the author reports that comments relating to this theme tended to focus on discharge arrangements and the extent to which services communicated with each other and the impact this had on co-ordinated care.	
		"My daughter was informed that she would be involved in a meeting prior to me coming home, to discuss my needs. This didn't happen, on my release there was no "hand over" or staff around to speak to my family. More communication between family and staff would benefit your service."	
		"Carers were set up to help prepare meals but no information was given to get look at how I was going to get	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		food in my house and with no physio/ help this was a problem."	
		"Over whelming sense that medical/ after care and Reablement exist in separate bubbles. Insufficient medical input after discharge from # operative procedure. Poor execution."	
		Other issues brought up by respondents included waiting times and accurate information regarding these, and continuity of care.	
		The author reports that a small number of comments were received about provision of information on other services and the knowledge of staff regarding these.	
		Staffing Many participants are reported to have commented	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		on staff shortages and the need for staff to have specific skills or for certain professions to be involved in care:	
		"Staff are all kind, gentle, helpful and full of fun. I think they have too much to do. Could do with more staff."	
		"Lack of therapy at weekends."	
		"Compassionate nursing was not there, nurses were doing job without any care."	
		The author also highlights that agency workers and night shift staff were sometimes mentioned specifically:	
		"Some of the agency nurses not to standard of the permanent nurses who were excellent."	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Personal care The majority of comments received in relation to this theme are reported to have focused on bathing, help using the toilet, and mobility.	
		"More frequent bath /shower (One a week not enough!!)" "I did not get a shower although I requested for one." "Would have liked to have been offered a shower more frequently."	
		"Sitting in a chair unfree to move is not good for morale." "Given more time to exercise." "They should have made me walk more then they did."	
		"Felt I could have walked more, but appreciate I did walk down for meals."	
		"Yes too much sitting/lying around."	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Some respondents also highlighted assistance at meal times as an area that could be improved:	
		"More help given at breakfast times, where people were struggling with their hands."	
		"More assistance and care with eating is required. Just cutting up food is not sufficient- help and encouragement is necessary during the whole meal. My husband has very little use in his hands and consequently manages with great difficulty to eat only a small part of every meal."	
		"On a good number of days dad's food was still in front of him, result losing 3 stones."	
		Therapy and assessment The author highlights that a significant number of comments were made	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		specifically in relation to perceived insufficiencies in the amount of physiotherapy provided. Other respondents commented on the need for more exercise or the assistance they felt they needed to be able to walk. The author suggests that this is indicative of inappropriate skill mixes at some facilities.  "I would have liked to do more work on the stairs."  "More extensive physio, probably may have helped me when I was discharged home. In total had 5 treatments of physio following a total hip replacement!!"  "More physio visits because that was the main reason for his stay and only had 2 sessions in 2 weeks."	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		"More time with the physiotherapist and teaching of exercises."	

## 2. Benten J and Spalding N (2008) Intermediate care: What are service users' experiences of rehabilitation? Quality in Ageing and Older Adults 9: 4-14

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: The researchers	Participants: Service users	NB. The authors report that 6	Overall assessment of
aimed to 'explore service	and their families, partners and	themes emerged from their	internal validity:
users' experiences of a 22-	carers – Service users being	research conducted with	+
bedded intermediate care	discharged from an	service users, however this	
service' (p4). Out of 6 themes	intermediate care unit in the	paper only reports on 1 of	Overall assessment of
that emerged from this	east of England within the	these themes and the	external validity:
research, this paper presents	study's data collection period	corresponding research	++
findings in relation to 1 and the	(four-months).	question – ' did the	
specific question – ' did the		intermediate care unit provide	Overall validity rating:
intermediate care unit provide	Participants were eligible if	rehabilitation that met the	+
rehabilitation that met the needs	they were aged 65 or more,	needs of service users?' (p5).	
of service users?' (p5).	had stayed at the unit for a		
	minimum of 2 weeks, intended	'Users' understanding' (p7)	
Methodology: Qualitative –	to return to their home, and	The authors report that none	
semi-structured interviews.	had been referred to the facility	of the participants had	
	for rehabilitation. Participants	received any information	
Country: United Kingdom - The	were excluded if they were	regarding intermediate care	
study reports patient	medically unstable or ' not	when they were admitted to	
experiences of an intermediate		hospital, and that all	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
care facility in the east of England.	psychologically orientated at most times' (p6).	participants had also been unaware of the unit before their transfer there was	
Source of funding: Not reported.	The authors do not state what (if any) eligibility criteria were specified for the facility itself. Participants had been admitted to acute hospital for a variety of reasons including aneurysm, diabetes related infection, elective surgery, fractures, and myocardial infarctions, etc.  Sample characteristics:  • Age – Although inclusion criteria for the study specified that participants should be aged 65 or above, the ages of participants ranged between 64 and 83 years of age.  • Sex – The majority of participants were female (n=6).  • Ethnicity – The authors report that the sample did not include any Black or " ethnic communities" (p12).	Five participants are reported to have felt that the information they had subsequently received in relation to the unit and why it was deemed appropriate for them was minimal:  "They said: 'We can let you go to the community ward' and I said 'What is that?' and 'Where is that?' and because I had a feeling at first that it was where the very very old people were and perhaps there were some there that weren't all there up top, I thought I don't want to go to a ward like that. Well, they didn't say too much about it, they simply said they had got this community ward, 'It's very pleasant.' (Participant 1, p7).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Religion/belief - Not reported.</li> <li>Disability - Not reported.</li> <li>Long term health condition - Not reported.</li> <li>Socioeconomic position - Not reported.</li> <li>Sample size: n=8.</li> <li>Intervention:         <ul> <li>Intervention category - Bed based intermediate care.</li> </ul> </li> </ul>	"They said: 'You are going to the community centre.' But I had no idea what it was" (Participant 6, p7). Three participants are reported to have felt involved in the decision-making process (one of whom had received an information leaflet explaining the unit).	
	<ul> <li>Describe intervention –         Intermediate care provided in an impatient unit to participants discharged from an acute hospital ward before returning to their own home.     </li> <li>Delivered by – Discharge coordinator (1.0 whole-time equivalent); healthcare assistants (12 whole-time equivalent); qualified nurses (6.3 whole-time equivalent); occupational therapist (0.6 whole-time equivalent);</li> </ul>	participants were asked why they thought they had been transferred to the facility; many participants cited their immobility. Other suggestions included access to specialist nurses, or as an interim measure whilst property adaptations or home care packages were arranged. The authors note that a number of participants suggested the need to free up acute care beds as the main reason for their transfer to the facility (in contrast to	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	pharmacy technician (1.0 whole-time equivalent); physiotherapy technician (1.0 whole-time equivalent); ward clerk (0.8 whole-time equivalent). The authors note that the healthcare assistants and nurses did not receive additional training when recruited. A staff grade doctor who visited the unit on a daily basis provided medical cover and additional services were available when requested (i.e. dietician, social worker, speech and language therapist).  • Delivered to – Unclear. The authors do not report whether the facility had any eligibility criteria except to note that the service accepted referrals for participants over the age of 18.  • Duration, frequency, intensity, etc. – Length of	an active choice to participate in a rehabilitation programme) and some participants are reported to have referred to themselves as 'bed-blockers').  'Assessment and goal setting' (p8) The majority of participants are reported to have been unaware of any formal assessment of their personal, physical or social needs at admission to the facility and could not recall being involved in setting and prioritising rehabilitation goals. Similarly, participants were unable to explain how staff there had attempted to address their rehabilitation needs and whether their care included an individual treatment plan:  "My difficulties were not discussed, not that I	
	stay for the 8 participants		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Research aims	intervention, comparison,	remember" (Participant 7, p8).  "Well I can't remember them being discussed with me a lot at all really, they simply started looking after me" (Participant 1, p5).  One participant reported that they had tried to understand their progress by looking at notes kept by their bedside, however these had proven to be unhelpful:  "Being a nosey parker I kept looking in the notes, but I couldn't understand them, they were all squiggles. I only knew how I was getting on by how I feel myself. I couldn't understand what was written	Overall validity rating
	for planning treatments and arranging discharge.  Content/session titles – N/A.  Location/place of delivery – A 22-bed intermediate care facility in the east of	down" (Participant 4, p8).  'Interventions' (p8) The authors note that the culture that participants described at the unit was one	

intervention, comparison, outcomes)		
England, which had been opened in 2000. The authors' note that the facility is only in use on a temporary basis until construction of a new 32-bed unit is completed.	of 'do it yourself' rather than one of active rehabilitation, with little purposeful activity being undertaken by service users:  "We walked around if we felt like it" (Participant 1, p8).  Participants who received physiotherapy are reported to have felt that more should have been provided to them; and a patient who had had a lower limb amputated described his time at the facility ' purely in terms of waiting for adaptations to be completed at home. He felt he could have followed up his physiotherapy with healthcare assistants on the ward but never liked to ask them' (Authors p8).	
	The authors also note that when participants were asked to recall activities they had	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		undertaken, the responses included: "The physio came with a sheet of paper with a number of exercises to do. I did those until I got bored with them. After that I started to walk about by myself" (Participant 5, p8).	
		Provision of occupational therapy was also reported to be mostly limited to home assessment and the provision of equipment, with 2 participants reporting a session in the kitchen in which they made a cup of tea. The authors emphasise that this was the only 'everyday task' recalled by participants, and suggest that there was little connection made between needs likely to arise in the participants own home and those activities undertaken at the facility.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Participants are also reported to have viewed the nurses as 'very busy' in the nursing role, a characteristic that the authors' note was unlikely to enable independence.	
		The authors report that service users described daily life at the facility as mainly inactive and with no clear focus of rehabilitation on the participants needs once they had returned home:	
		"I've just been content to sit really" (Participant 8, p8).	
		Similarly, the authors report that the emphasis on active and healthy living was absent from participants' experiences in the facility.	
		They report that the son of 1 participant (a non-insulin-dependent diabetic) sometimes cooked fried breakfast for him, which the authors suggest is indicative	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		of a poor understanding of dietary needs.	
		The authors also report that some patients had experienced disempowering attitudes at the unit: "I have a problem; I am incontinent and have been for years. As I took pads in with me, this was not picked up; I was put down as continent. On the community unit when my pads ran out, 1 nurse would only give me 1 pad at a time, others would give me a day's supply. I am supposed to have 5 a day and a night pad. It felt very demeaning to have to almost beg for one"	
		(Participant 2, p8).  'Transfer home' (p9) There were mixed views in relation to discharge from the facility and the authors contrast responses in which transfers were well-planned and involved participants'	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		families, to those in which confusion had arisen:	
		"I was given quite a bit of notice I had the home assessment and then they (daughters) went on holiday. When they came back it was when I came home and one of them came and stayed with me for a couple of days" (Participant 5, p9).	
		"The week before they said I could come home on the Tuesday or Friday and I felt it was more likely to be the Friday. But on the Monday of that week, they said you can go home on the Wednesday" (Participant 2, p9).	
		The authors emphasise that all participants were satisfied with their stay at the unit and reported that they found the staff there to be friendly and kind; however they caution that this positive feedback	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		should be considered in the context of a general lack of understanding in relation to the unit's purpose and its role in their rehabilitation.	
		The authors report (with little explanation) that participants were asked to reflect on their needs after discharge to their own home; if they had felt confident before discharge; and if (after returning to their own home) there was anything they felt should have been addressed during their stay at the facility:	
		"The only difficulty is because I was getting my meals brought to me in the hospital and here I have to stand and make my own meals" (Participant 2, p9).	
		"When I first came home, I only sat and went up the stairs at night. I used to shake at the bottom before I	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		went and shake at the top when I got there. But I don't do that any more. I can get up and down without shaking, so my legs are getting stronger I am getting more into the kitchen" (Participant 8, p9).	
		"Yes, I was definitely ready to come home. I had had the visit one afternoon with the occupational therapist, over the loo and the door and everything It's been alright. It's been better than I thought it would be" (Participant 7, p10).	

## Review question 2 – Findings tables – Health, social care and other practitioners' views and experiences

## 1. Millar AN, Hughes CM, Ryan C (2015) "It's very complicated": A qualitative study of medicines management in intermediate care facilities in Northern Ireland. Biomed Central Health Services Research 15: 216

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The study aimed to	Participants:	Three overarching themes	Overall assessment of
explore healthcare workers' and	_	were identified:	internal validity:

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
patients' views and attitudes towards medicines management services in intermediate care facilities in Northern Ireland.  Methodology: Qualitative study. The study used qualitative methodology. Semistructured interviews were conducted and analysed using a comparative approach.  Country: UK. Northern Ireland.  Source of funding: Government - Department for Employment and Learning, Northern Ireland.	<ul> <li>Service users and their families, partners and carers - Participants included service users.</li> <li>Professionals/practitioners - Participants included healthcare workers from various intermediate care settings.</li> <li>Sample characteristics:         <ul> <li>Age – Not reported.</li> <li>Sex - Nine service users were male and 9 were female. This is not reported for healthcare workers.</li> <li>Ethnicity – Not reported.</li> <li>Religion/belief – Not reported.</li> <li>Long term health condition – Not reported.</li> <li>Sexual orientation – Not reported.</li> </ul> </li> <li>Sexual orientation – Not reported.</li> <li>Socioeconomic position – Not reported.</li> <li>Socioeconomic position – Not reported.</li> </ul>	1. Concept and reality - Healthcare workers noted the discrepancies between the concept and reality of intermediate care. For example, most identified the service as 'rehabilitation' as they viewed the terminology of intermediate care to be poorly understood in the wider health service: "It's a new word I don't like the term 'intermediate care', I would sit more comfortable with it being a medical rehabilitation ward for older people" (p4).  Those working in nursing and residential homes felt that although the concept was good, "from the ground it is not running properly" (p5). This was in contrast to patients, who frequently expressed positive attitudes towards the intermediate care setting: "I think it's this place that has helped me a lot	Overall assessment of external validity: ++ Overall validity rating: +

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Sample size: A total of 43 participants (25 healthcare workers and 18 patients) were recruited to the study.	you just feel like very at home already" (p5).  2. Setting and supply The settings in which intermediate care was delivered were found to be varied, dictating both medical care provision and the prescribing of medicines. For example, many healthcare workers found that 'off-site' supplies posed logistical challenges, delaying the administration of drugs and overall process. Patients, on the other hand, had no knowledge of who was responsible for prescribing their medicines and were not concerned about their supply: "They just give them to me, I don't know where they come from" (p5).  3. Responsibility and review Responsibility for prescribing and reviewing patients' medicines in intermediate	
	intervention, comparison, outcomes)  Sample size: A total of 43 participants (25 healthcare workers and 18 patients) were	intervention, comparison, outcomes)  Sample size: A total of 43 participants (25 healthcare workers and 18 patients) were recruited to the study.  2. Setting and supply The settings in which intermediate care was delivered were found to be varied, dictating both medical care provision and the prescribing of medicines. For example, many healthcare workers found that 'off-site' supplies posed logistical challenges, delaying the administration of drugs and overall process. Patients, on the other hand, had no knowledge of who was responsible for prescribing their medicines and were not concerned about their supply: "They just give them to me, I don't know where they come from" (p5).  3. Responsibility and review Responsibility for prescribing and reviewing patients'

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		depending on the setting. Self-administration of medicines was not promoted by healthcare workers due to concerns of patient safety: "it's easier for us to just take control, take charge, we know they're safely stored, we know they've got them" (p6).	
		Similarly, medication counselling was not routinely provided, as healthcare workers felt that this was not their responsibility and many patients believed this to be unnecessary: "I'm one of those people who just takes the doctor's word for it and assume that he knows best and don't really query it" (p6).	

2. Regen E, Martin G, Glasby J et al. (2008) Challenges, benefits and weaknesses of intermediate care: Results from five UK case study sites. Health & Social Care in the Community 16: 629–37

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: The research was	Participants:	'Developing intermediate care	Overall assessment of
designed to ' explore the	Professionals/practitioners –	- challenges' (p632)	internal validity:
views of practitioners and	Practitioners and managers	Participants are reported to	+
managers on the	working in intermediate care in	have identified problems	
implementation of intermediate	1 of 5 primary care trusts in	recruiting and retaining both	Overall assessment of
care for elderly people across	England.	qualified and non-qualified	external validity:
England, including their		staff as the most significant	++
perceptions of the challenges	Interviews were conducted	barriers to the implementation	
involved in its implementation,	with individuals involved in the	of intermediate care, with	Overall validity rating:
and their assessment of the	strategic development of	inadequate funding and	+
main benefits and weaknesses	intermediate care and	difficulty attracting staff to	
of provision' (p629).	intermediate care service	posts being cited as the main	
	managers (medical staff,	reasons for these. The risk of	
Methodology: Qualitative:	senior managers, lead	professional isolation within	
Focus groups and semi-	professionals and managers of	small teams based in the	
structured interviews.	individual services); and focus	community, and a low	
	groups were conducted with	awareness of intermediate	
Country: UK – England.	practitioners directly involved	care were thought to be key	
	in care provision (allied health	issues for professional staff;	
Source of funding:	professionals, care assistants,	whilst participants felt that	
<ul> <li>Government – Department of</li> </ul>	nurses, social workers, etc.).	support staff would be	
Health.	,	deterred by low wages and	
<ul> <li>Charity – Medical Research</li> </ul>	Sample characteristics:	unsociable and long hours.	
Council.	Age – Not reported.		
	• Sex – Not reported.	"One of the biggest things	
	• Ethnicity – Not reported.	that has been the problem is	
		the fact that there has been a	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Religion/belief - Not reported.</li> <li>Disability - Not reported.</li> <li>Long term health condition - Not reported.</li> <li>Socioeconomic position - Not reported.</li> </ul>	lack of a capacity and by that I mean we have not got the staff levels to offer the service we would want to. It is very difficult to get hold of rehab assistants through one thing and another, be it low money or bad shifts, people	
	Sample size: Interviews n=61 participants; focus groups n=21 participants. Total sample size n=82.	don't necessarily want to do that" (Participant 1, site E, p633).	
	Intervention: Intervention category – The trusts for which participants worked all provided a range of services that the authors describe as intermediate care. These included sheltered housing, rapid response teams and domiciliary rehabilitation, however only data in relation to bed based intermediate care have been extracted here.	Participants are reported to have identified funding shortages (and non-recurrent short-term funding in particular) as a challenge to the implementation of intermediate care. Medium to long-term service development was reported to be difficult to plan for when short-term contracts were the norm and future funding was uncertain.	
	The authors report that the sites were ' operating in a context whereby a single social	Participants at all sites are reported to have identified low levels of joint working	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	services department (county- or city-wide) was attempting to work alongside several locality- based PCTs (sites B, C, D, E). The exception was site A where the city-wide PCT was coterminous with social services' (p631).  Four of the sites are also reported to have attempted to improve the links between intermediate care and the wider service network by implementing ' a single point of access for referrals to intermediate care. Site A had developed an alternative approach. Here, there was no single point of access. Instead, intermediate care operated as a "managed network" which sought to bring the range of services into a single operating system via closer links between services, agreed pathways of care and clearer access points' (p631).	between health and social care as a significant challenge in the implementation of intermediate care. The authors report that competing strategic attempts to take 'ownership' of intermediate care were particularly apparent at sites C, D and E:  "It still feels to me like there's quite a bit of potential infighting between social services and [the] PCT about who owns it, who's taking the initiative. Maybe that's at certain levels but it shouldn't be like that, it's an integrated service, you can't talk about owning it, it can't be like that" (Participant 5, site E, p633).  The authors note that even those areas in which the move towards joint working had been more successful.	
	1 (1 /	the tendency for	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Describe intervention – Not reported.</li> <li>Delivered by – Not reported.</li> <li>Delivered to – Not reported.</li> <li>Duration, frequency, intensity, etc Not reported.</li> <li>Key components and objectives of intervention - Not reported.</li> </ul>	organisations to attempt to retain control of budgets had hindered implementation:  "There has been very good collaborative work between agencies for a number of years but one of the stopping points, if you like, or the barriers to taking that work forward, is different financial budgets, for example. Everybody is all for joint working and collaboration until you start asking people to give over money and that is a constant tension and I think perhaps has stood in the way of really making good progress and having a more flexible model" (Participant 15, site A, p633.).  Frontline challenges to joint working are reported to have included incompatible information technology systems and varied employment policies.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Non-medical interviewees at 3 sites are reported to have identified a perceived lack of involvement from medical practitioners as a barrier to the implementation and use of intermediate care services. Participants suggested that medical practitioners felt that there was insufficient evidence regarding the effectiveness of intermediate care or thought it potentially discriminated against older people:	
		"The more senior members of the medical profession could remember days when older people had been warehoused, so to speak, in environments outside hospital because they were not considered worthy of hospital admission and they didn't want to go back to those days where people were being basically cared for and	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		denied proper assessment and treatment" (Participant 1, site B, p633).	
		In contrast, a number of interviewees suggested that acute sector clinicians had seen themselves as excluded from the implementation of intermediate care. The authors report that the lack of involvement from general practitioners could be explained by low incentives and high workloads.	
		Some consultant geriatricians reported concerns that intermediate care had been introduced before the evidence base had been established:  "If I need to convince my colleagues, then I think I would need robust evidence. Nowadays, everything is evidence based and unless we develop some evidence and say this is what is	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		happening, it's going to be very difficult to convince the sceptical" (Participant 2, site B, p633).	
		Consultants are also reported to have felt that the emphasis on reducing hospital use by the elderly potentially made intermediate care a discriminatory service.	
		The authors report that the potential for intermediate care to enable allied health practitioners and nurses to move into leadership roles had in some cases been interpreted as a sign that medical involvement was not needed at all. However, consultants are reported to have seen this as something	
		that could lead to higher costs because the length of stay for service users with unmet medical needs would be higher. The authors also report that consultants felt	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		that medical input into intermediate care services made these 'safer', helped to streamline the transition between the acute and intermediate sectors, and reassured other practitioners regarding the care provided there:	
		"It smoothes the working between the acute hospital and the intermediate care unit, and it also means that I can, if you like, re-assure colleagues that it's a proper unit, there's proper medical support as well as the multidisciplinary care and my working across the 2 units hopefully re-assures people that communication is good, the pathways of referral are recognised and so on" (Participant 1, site B, p634).	
		Benefits of intermediate care Participants across all sites are reported to have	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		identified the potential benefits it offered to service users as its main strength (both in terms of experiences and outcomes). Participants suggested that intermediate care was flexible, holistic, patient centred and responsive, attributes which were often contrasted to those of care provided in hospital:	
		"They get like a one-to-one service. If they're in a hospital base, you get your healthcare assistants with however, many other patients there are in a ward. They get individual attention whether it's from us, whether it's from their own district nurse in their own home and they thrive on it" (Participant 24, site A, p634).	
		Participants emphasised the home-like environment of intermediate care, which was seen as a means of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		increasing independence and confidence, in contrast to care in the hospital which was felt to lead to greater dependency.	
		Participants are also reported to have identified multidisciplinary teamwork as a potential strength of intermediate care that could benefit both practitioners and service users. Participants emphasised the positive impact that support from colleagues and access to a wide range of professional expertise could have. Practitioners are also reported to have welcomed the increased role flexibility provided by intermediate care:  "We're multidisciplinary but we're also very interdisciplinary. But having said that we know our boundaries so as a nurse going out to see a patient, I	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		would carry out my nursing tasks but I wouldn't just go out there and do my nursing tasks, which would happen on a ward. There wouldn't be such an overlap [on a ward] as there is within the team so if they're having to carry out an exercise programme then it would be expected of me as a nurse to go through that exercise programme with them on behalf of the physio" (Participant 5, site A, p634). Practitioners also discussed the job satisfaction they had gained through their involvement in intermediate care, which the authors suggest appeared to be fundamentally linked to the service emphasis on restoring or maintaining independence.	
		Weaknesses of intermediate care Participants at all sites were reported to comment on the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		failure of intermediate care to fulfill its potential as a means of alleviating pressures on the health and social care system.  Participants highlighted the limited number of beds and placements, operational hours and staffing levels as key issues in relation to this. Although participants noted the impact which funding had on these issues, the authors also report that the inability to recruit and retain staff had an impact.	
		Participants at all sites are also reported to have identified poor awareness about intermediate care and difficulties in accessing these services as a challenge to under use of these services. Some participants also suggested that the eligibility criteria for intermediate care services were too narrow or that these services 'cherry-	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		picked' service users, which resulted in an overreliance on more traditional care:	
		"So the experience on the ground, when I talk to people in the hospital and say 'This looks like intermediate care to me, did you phone last night? You know, we've been telling you about it', he said, 'Oh that was no good, I phoned and they weren't interested', or 'They said they didn't have any space.' 'I'm losing faith in intermediate care', 'I can't see the point': I get comments like that all the time" (Participant 5, site e, p635).	
		A small number of participants suggested that more needed to be done to build stakeholder confidence in intermediate care and to address concerns regarding perceived risk:	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	outcomes)	"The big cultural thing we found in particular about the intermediate care beds is hospital staff being prepared to take the risk and discharge somebody to something new that is relatively untested and unknown So it is starting to overcome those barriers. Part of it is actually once somebody has put a patient through intermediate care then they have got the confidence to do it again" (Participant 16, site D, p635).  Another issue raised by participants across all sites was the tendency for intermediate care services to be used inappropriately, with many expressing concern that this was being driven by the need to free up acute care beds rather than providing the care appropriate to enable the	
		individual to recover at their own pace.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Intermediate care services that were poorly integrated with similar services was also highlighted by some participants which the authors report led to difficulties in accessing services, problems in the care pathway and opposition to flexible working. Participants are reported to have viewed this failure to coordinate or integrate as symptomatic of the ad-hoc manner in which many services had been developed. The authors also report that participant's knowledge in relation to other intermediate care services and their eligibility criteria were inconsistent.	
		When discussing the range of services on offer some participants are reported to have suggested that elderly people with mental health problems were at a	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		disadvantage due to a lack of input from mental health services into intermediate care. Other participants are reported to have identified more proactive services such as admission avoidance schemes as a more appropriate priority than bed-based services.	

3. Thomson D and Love H (2013) Exploring the negative social evaluation of patients by specialist physiotherapists working in residential intermediate care. Physiotherapy 99: 71-7

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The researchers aimed to ' gain an understanding of the negative social evaluation of patients by specialist physiotherapists, and	Participants: Professionals/practitioners - Senior level physiotherapists specialising in intermediate care working in the greater	The authors report that participants discussed categories 'residing' with the service user (alcohol dependency, inability to	Overall assessment of internal validity: + Overall assessment of
to explore possible coping strategies in order to engage patients in appropriately	London area.  Sample characteristics:	accept their condition or adapt, and family involvement which obstructed the process	external validity:
designed rehabilitation programmes' (p71). The authors go on to explain that 'negative social evaluation' is a more acceptable term than 'difficult' in	<ul> <li>Age – 29-36 years of age at time of participation.</li> <li>Sex – Focus group participants – female n=4, male n=1. Interview</li> </ul>	of rehabilitation) and those which 'resided' within the context of intermediate care specifically ('labelling', the 6 week model, and transfer into	Overall validity rating: + Although this appears to be a generally well-conducted study the lack of information

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
relation to service users who represent an 'interpersonal' challenge to practitioners. These practitioners were working at a residential intermediate care facility.  Methodology: Qualitative. Focus groups and semistructured interviews.  Country: United Kingdom – Greater London area.	<ul> <li>participants – female n=4, male n=0.</li> <li>Ethnicity – Not reported.</li> <li>Religion/belief - Not reported.</li> <li>Disability - Not reported.</li> <li>Long term health condition - Not reported.</li> <li>Socioeconomic position – Not reported.</li> <li>Sample size: Focus group participants n=5. Interview</li> </ul>	the service). The authors conclude that these categories contribute to the likelihood that a service user will receive a 'negative social evaluation' (the perception that the service user is 'difficult' or 'challenging'. Participants also reported 'coping strategies' to address these issues (goal setting, reflective practice and workforce planning).	regarding whether data was double coded and sometimes somewhat unclear links between the data and the conclusions it is not possible to award a higher quality rating to this study.
Source of funding: Not reported.	participants n=4. Total sample N=9.  Intervention: Intervention category – Bed based intermediate care. Describe intervention – Detail in relation to the care provided by the facilities at which participants worked is not provided. However the authors note residential intermediate care is increasingly considered to ' represent the adoption	Alcohol dependency The authors report that participants expressed frustration in relation to service users who drank alcohol excessively; particularly in relation to the effect which this had on treatment efficacy:  "There are 50 patients that need intermediate care but if you look at it closely, 10 of those are debatable and 10 of those are alcoholics, so the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	and integration of biopsychosocial values within health care, including a person-centred care approach' (p71).  • Delivered by – All participants had qualified between 1999 and 2004 and the majority had received their basic training in the United Kingdom (one participant had trained in Malta and one in India. There was a range of qualification levels (BSc, PGcert, MSc) and participants Agenda for Change bands ranged between 6 and 8a. The number of years which participants had specialised in intermediate care for ranged between 3 and six.  • Delivered to – Detailed characteristics of the service users which participants worked with is not reported, however 3 focus group	30 should be the ones getting seen by the NHS" (Focus group – Physiotherapist 1, p73).  The authors go on to note that participants made assumptions about service users with alcohol dependency issues in relation to their social environment and living arrangements and their ability to perform activities of daily living:  "Alcoholism is a thing I personally find quite challenging at times. It means generally that they are relatively unkempt, their gait pattern is usually quite poor (and) trying to get them to use any kind of aid is just not a good idea. And you can't educate them; only tell them to stop drinking" (Interview – Physiotherapist D, p73).	
	participants are reported to		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	have a predominant caseload of older people's rehabilitation and 2 are reported to have a predominant caseload of neurological rehabilitation. All interview participants had a predominant caseload of older people's rehabilitation.  • Duration, frequency, intensity, etc. – Not reported for any of the facilities, however the authors note that the residential intermediate care model is a 6 week therapeutic intervention.  • Key components and objectives of intervention – Not reported for any of the facilities, however the authors note in their preliminary discussion that residential intermediate care services have the goals of ' facilitating early hospital discharge, avoiding unnecessary hospital admission and delaying	Participants reported that service users who continued to consume alcohol whilst staying in intermediate care had been asked to leave and the authors suggest that the issue of alcohol dependency appears to ' provide a conflict for the physiotherapist looking to provide personcentred rehabilitation' (Authors, p73).  Participants are also reported to have felt that intermediate care teams did not possess the specialist skills required to help service users overcome their reliance on alcohol.  'Patients with unrealistic demands due to a failure to accept their situation' (p74) Participants are reported to have highlighted service user anger regarding their diagnosis as a critical issue:	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	transfer into long-term care' (p71).  Content/session titles – N/A.  Location/place of delivery – Participants worked at a range of intermediate care facilities in the greater London area however no further details are provided.	"And then it actually hits home that they can't actually do the things they thought they'd be able to do and they get quite angry that you're not doing what you should be doing for them or you're not experienced enough. So clearly (they think) you're holding them back and you're not, obviously" (Interview – Physiotherapist D, p74).  The authors also note that participants reported that management of service user expectations regarding recovery impacted on the provision of clinical interventions.	
		'A patient with an unhelpful family' (p74) Participants are reported to have regularly commented on the importance of interactions with the families of service users and suggested that family dynamics and the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		expectations of the family were important:	
		"The patient's family doesn't kind of help either sometimes. If they think we can get them home and walking, then we need to do it now. Or we're being too harsh 'Oh, just leave him in bed, he's tired, he had a stroke he needs to rest.' (They) Don't really understand what we are trying to do" (Interview – Physiotherapist D, p74).	
		'Being labelled/external and internal assumptions (p74) The researchers report that physiotherapists made assumptions about service users and the challenges that they may represent based on labels used by practitioners making referrals to intermediate care: "You do start to prejudge people and as soon as	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		someone says you've got a complex patient coming to you, immediately it sets off alarm bells and that sets up the way that the whole process starts for them" (Focus group – Physiotherapist 5, p74).	
		Labels which were reported to alert participants to potentially challenging or difficult service users included: "Chronic pain. When I see that on a referral I often think that the potential of challenges being present is quite high" (Interview – Physiotherapist A, p74).	
		Whether they've had mental health problems in the past You (also) think about things like head injuries for example and the unpredictability of that" (Interview – Physiotherapist C, p74).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		The authors suggest that these assumptions go unchallenged ' and thus the evaluation is perpetuated and shared, potentially affecting the therapeutic relationship' (Authors p74).	
		'The 6-week model of intermediate care' (p74) The authors report that participants view their work as challenging when their goal of enabling service users to adapt to a sudden loss of function (both emotionally and physically) must be achieved within 6 weeks:	
		"We get told to have someone rehabbed by a certain period or we have to manage our beds and the problem is we have to document a way of saying this patient is not compliant There's always a ticking	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		clock" (Focus group – Physiotherapist 2, p74).	
		'The process of transition into the service' (p74) Participants are reported to	
		have expressed frustration regarding the processes by which service users are	
		referred and transferred into residential intermediate care	
		"Some people just want to go home and don't understand why they've been moved between wards in the hospital and now they've come to us completely disorientated and no one's told them why they can't go home they've just been sent to us" (Interview – Physiotherapist D, p74).	
		The authors highlight the role that the requirement for intermediate care services to meet local needs can play in creating inconsistent eligibility	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		criteria and delivery models which ultimately result in an unsettled transition period for service users.	
		Some participants identified adequate communication of the rationale for transfer as key:  "If [the patients] are aware of what the service involves to begin with, that's always quite a good start" (Focus group – Physiotherapist 5, p74).	
		Coping strategies The authors then go on to discuss the 'coping strategies' that participants felt were useful in cases where a service user had a 'negative social evaluation'. These were collaborative goal setting, reflective practice and workforce planning.	
		Workforce planning	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Participants are reported to have described a range of responsibilities within their teams and all are reported to have suggested that support was needed for practitioners working with service users with a 'negative social evaluation':	
		"In our little team, we all have our own named patients and if we see that somebody is having a bad time, then (we) obviously talk with them and try and support them" (Interview – Physiotherapist D, p75).	
		The authors suggest that participants had begun to develop emotional intelligence skills; the encouragement of which the authors suggest should be a priority for managers: "I try to be calm and if I feel I'm having a bad day (with patients), I'd speak to one of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	outcomes)	my other colleagues to see whether they would see them. Because if you present a really negative picture, you're only going to transfer that onto the patient aren't you? And that's not beneficial" (Focus group – Physiotherapist 4, p75).  Collaborative goal setting and patient engagement The authors report that participants regularly used collaborative goal setting to minimise the need to give a service user a 'negative social evaluation': "You sit down and (say) what are your goals, what have you got to do when you get home, what's your family (life) like, have you got grandkids, what do you do for them?"	
		(Focus group – Physiotherapist 3, p75).  Participants are reported to have viewed this	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		collaboration as ' a mechanism through which they can appraise their practice in light of the patient-centred ideology to which they subscribe. Increasingly, the physiotherapists wanted to negotiate the therapeutic intervention with the clients rather than enter into conflict' (Authors, p75).	
		Reflective practice Reflective practice was also reported to be a coping strategy used by participants:	
		"I think it has quite an emotional impact on people so it's important to discuss with MDT members and other agencies the best management for these clients and also reflecting on past cases" (Interview – Physiotherapist A, p75).	

## **Review question 2 – Critical appraisal tables – Effectiveness**

1. Crotty M, Whitehead CH, Wundke R et al. (2005) Transitional care facility for elderly people in hospital awaiting a long term care bed: Randomised controlled trial. British Medical Journal (Clinical Research Edition) 331: 1110-3

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To ' assess the	Was the exposure to the	Does the study's research	Overall assessment of
effectiveness of moving patients	intervention and comparison	question match the review	internal validity:
who are waiting in hospital for a	as intended? No. Only 63%	question? Yes. The study	+
long term care bed to an off-site	(n=134) of those allocated to	aimed to ' assess the	
transitional care facility' (p1).	the intervention were	effectiveness of moving	Due to the very short follow-
	transferred to the facility and	patients who are waiting in	up period of 4 months and
Description of theoretical	transfer did not take place for	hospital for a long term care	the fact that a number of
approach? No. The authors do	78 individuals. The main	bed to an off-site transitional	participants were not
not provide a theory of change	reason for this was death or	care facility' (p1).	transferred to the intervention
or logic model. It is simply	transfer to a long-term		facility as intended it is not
implied that care for frail	placement (n=29), and 5	Has the study dealt	possible to award a higher
individuals who are medically	participants were refused	appropriately with any	quality rating to this study.
stable but have high care needs	admission to the facility due to	ethical concerns? Yes. The	
can be provided in alternative	concerns regarding severe	study was approved by a	Overall assessment of
facilities to a hospital.	disruptive behaviour and need	number of ethics committees	external validity:
	for additional staffing. A further	and participants provided	++
How was selection bias	34% (n=15) declined to	written consent (proxy	
minimised? Randomised.	transfer at the second consent	consent was given by the	Overall assessment of
Computer generated in blocks	stage.	families of participants with	validity:
of 12 stratified by referring		dementia). Participants	+
hospital with a 2:1 allocation	Was contamination	randomised to the	
ratio (intervention: control).	acceptably low? Not reported.	intervention group were	
		asked to consent for a	
Was the allocation method	Did either group receive	second time after	
concealed? Yes. Allocation	additional interventions or	randomisation and before	
	have services provided in a	transfer to the facility.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
was concealed using sealed	different manner? Not		
opaque envelopes).	reported. There is no indication	Were service users	
	that either group received	involved in the design of	
Were participants blinded?	additional interventions or that	the study? No. No indication	
Blinding not possible. Due to the	services were provided in a	that service users were	
nature of the intervention it	different manner.	involved in the design of the	
would not have been possible to		study or interpretation of	
blind participants. In addition,	Were outcomes relevant?	findings.	
the Zelen randomised consent	Yes.	le there e clear fears on the	
process revealed group	Wara autaama maaauraa	Is there a clear focus on the	
assignment to participants in the intervention group.	Were outcome measures reliable? Yes. All outcome	<b>guideline topic?</b> Yes. The study aims to evaluate the	
intervention group.	measures appear to have	effectiveness of a transitional	
Were providers blinded?	established reliability and	care facility providing	
Blinding not possible. Due to the	validity however data to	multidisciplinary rehabilitation	
nature of the intervention it	support this are not presented.	from a specialist elder care	
would not have been possible to	cappert and are not presented.	team.	
blind participants.	Were all outcome		
	measurements complete?	Is the study population the	
Were investigators, outcome	Yes. All data were measured	same as at least one of the	
assessors, researchers, etc.,	and reported as planned,	groups covered by the	
blinded? Blind. Baseline	however 3 participants	guideline? Yes. All	
assessments were conducted	withdrew after randomisation	participants were over the	
before randomisation and	and no data were available for	age of 18, however it should	
follow-up assessments were	these individuals.	be noted that only	
conducted by a research nurse		participants for whom long-	
blinded to group allocation.	Were all important outcomes	term care was deemed to be	
Did and the said	assessed? Yes.	appropriate were eligible and	
Did participants represent the		the mean age of participants	
target group? Yes. An		was 83 years.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	-
acceptable number of eligible	Were there similar follow-up		
individuals agreed to participate,	times in exposure and	Is the study setting the	
however it should be noted that	comparison groups? Yes.	same as at least one of the	
patients were only eligible if	Both groups were followed up	settings covered by the	
there was no long-term care bed	for the same length of time, at	guideline? Yes. The	
available, discharge elsewhere	4 months.	intervention was provided in a	
had not already been		transitional care facility, the	
arranged/the patient was	Was follow-up time	control group received care in	
assessed as 'unsuitable for	meaningful? Partly. Follow-up	the hospital as usual and	
other rehabilitation or	assessments were conducted	follow-up assessments were	
community discharge support	at four-months which would	conducted in participant's	
programmes (p1) and if no	only have been long enough to	homes.	
next of kin were available. It	detect short-term effects of the		
also appears that patients under	intervention.	Does the study relate to at	
the age of 65 were also		least one of the activities	
ineligible (although this is not	Were the analytical methods	covered by the guideline?	
stated clearly). Individuals with	appropriate? Yes. t tests,	Yes. The intervention	
dementia or behavioural	Mann-Whitney U tests and χ <sup>2</sup>	consisted of transfer to a	
problems were eligible unless it		transitional care facility	
was though that additional staff	Were exposure and	providing multidisciplinary	
would be needed to provide	comparison groups similar	rehabilitation from a specialist	
care for them.	at baseline? If not, were	elder care team.	
	these adjusted? Yes. The		
Were all participants	authors state that the	(For effectiveness	
accounted for at study	intervention and control groups	questions) Are the study	
conclusion? No. There was a	were similar at baseline in	outcomes relevant to the	
high rate of attrition with 90	relation to demographic	guideline? Yes. Outcomes	
participants (28%) lost to follow-	characteristics, functional	included quality of life,	
up. The reasons for this are	ability and quality of life;	functional ability,	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
reported by the authors (all were due to death or withdrawal).	however significance testing is not reported.	readmissions to hospital, and care needs.	
	Was intention to treat (ITT) analysis conducted? Yes. The authors state that data were analysed according to random allocation.	(For views questions) Are the views and experiences reported relevant to the guideline? N/A. No views and experiences data presented.	
	Was the study sufficiently powered to detect an intervention effect (if one	Was the study conducted in the UK? No. The study	
	exists)? Yes. The authors report that power calculations showed that 243 participants were needed to detect treatment effects at a significance level of 0.05 (90% power). n=320 participants were randomised.	was conducted in Australia.	
	Were the estimates of effect size given or calculable? Partly.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Partly. p values and confidence intervals are		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
and campio	provided in relation to some outcome measures but this is not consistent.		
	Do conclusions match findings? Yes.		

2. Garåsen H, Windspoll R, Johnsen R (2007) Intermediate care at a community hospital as an alternative to prolonged general hospital care for elderly patients: A randomised controlled trial. BioMed Central Public Health 7: 68

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The aim of the	Was the exposure to the	Does the study's research	Overall assessment of
study was to compare the	intervention and comparison	question match the review	internal validity:
efficacy of intermediate care at	as intended?	question? Yes. The study's	+
a community hospital with	Not reported. It does appear	research question is in line	
standard prolonged care at a	that the	with the review question.	Overall assessment of
general hospital.	intervention/comparison went		external validity:
	as planned.	Has the study dealt	++
Description of theoretical		appropriately with any	
approach? No. The authors do	Was contamination	ethical concerns? Yes. The	Overall validity rating:
not outline a theoretical	acceptably low? Yes. The	study was approved by the	+
approach.	comparison group did not	Regional Committee for	
	receive the intervention and	Medical Research Ethics for	
How was selection bias	vice versa.	Central Norway.	
minimised? Randomised.			
Participants were randomised	Did either group receive	Were service users	
using random number tables in	additional interventions or	involved in the design of	
blocks to ensure balanced	have services provided in a	the study? No. Service users	
groups.	different manner? Not	were involved as participants	
		only and not in the design of	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
Was the allocation method	reported.	the study or interpretation of	
concealed? Not reported.		results.	
	Were outcomes relevant?		
Were participants blinded?	Yes. The study's outcome	Is there a clear focus on the	
Blinding not possible.	measures clearly relate to the	guideline topic? Yes. The	
	outcomes which the authors	study clearly relates to	
Were providers blinded? Not	wanted to impact.	intermediate care.	
reported.			
	Were outcome measures	Is the study population the	
Were investigators, outcome	reliable?	same as at least one of the	
assessors, researchers, etc.,	Yes. All outcome measures	groups covered by the	
blinded? Not reported.	were objective. Data on	guideline? Yes. The study	
	readmissions was collected via	population consists of older	
Did participants represent the	patients' medical records and	adults using intermediate	
target group? Yes. Participants	monitored through patient	care services.	
were recruited as intended and	administrative systems,		
representative of the target	independent of treatment	Is the study setting the	
group for this intervention.	groups. Physical functioning	same as at least one of the	
	was measured by specially	settings covered by the	
Were all participants	trained nurses using a national	guideline? Yes. The study	
accounted for at study	system, Gerix.	setting was intermediate care	
conclusion? Yes. There were		at a community hospital.	
no dropouts, except for deaths,	Were all outcome		
although mortality was	measurements complete?	Does the study relate to at	
measured as 1 of the study's	Yes. All intended outcomes	least one of the activities	
outcomes. 8 of the participants	were measured and reported.	covered by the guideline?	
randomised for intervention	-	Yes. The study relates to the	
were never transferred due to	Were all important outcomes	efficacy of bed based	
deterioration of their medical	assessed? Partly. Although	intermediate care.	
conditions after inclusion.	important outcomes were		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	assessed, participants' quality of life and satisfaction with the intervention may also have been useful to measure.  Were there similar follow-up times in exposure and comparison groups? Yes. Although not explicitly stated, participants were followed-up 6 months following discharge	(For effectiveness questions) Are the study outcomes relevant to the guideline? Yes. Outcomes included number of readmissions, need of community home care and need of long-term nursing home.  Was the study conducted in the UK? No. The study	
	from intermediate care or care at the general hospital.  Was follow-up time	was conducted in Norway.	
	meaningful? Partly. It may have been useful to follow-up participants 1 year following discharge from intermediate care or care at the general hospital in order to obtain the long term effects of the intervention.		
	Were the analytical methods appropriate? Yes. Differences in readmissions and need of home care services between groups were tested by chi square tests, and differences		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis in mean number of days in institution were tested by paired t-test and by Wilcoxon signed rank test, adjusting for gender, age, activities of daily living score and diagnosis.  Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes. Participants randomised to intermediate care or to general hospital care were comparable with respect to number of days of care before randomisation, mean and median age, diagnosis, gender, physical functioning and matrimonial status.  Was intention to treat (ITT) analysis conducted? Yes. All participants, including the 8 that did not fully complete the intervention, were analysed in the groups to which they were originally allocated.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Was the study sufficiently powered to detect an intervention effect (if one exists)? Yes. A power calculation is presented. The final sample was sufficient to detect a difference.		
	Were the estimates of effect size given or calculable? No. Effect sizes are not provided.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes. Confidence intervals and <i>p</i> values are reported.		
	Do conclusions match findings? Yes. Conclusions are in line		
	with findings, favouring intermediate care at a community hospital to standard prolonged care at a general		
	hospital, with regards to better patient outcomes.		

3. Garåsen H, Windspoll R, Johnsen R (2008) Long-term patients' outcomes after intermediate care at a community hospital for elderly patients: 12-month follow-up of a randomized controlled trial. Scandinavian Journal of Public Health 36: 197-204

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The aim of the	Was the exposure to the	Does the study's research	Overall assessment of
study was to compare the	intervention and comparison	question match the review	internal validity:
efficacy of intermediate care at	as intended?	question? Yes. The study's	+
a community hospital with	Not reported. It does appear	research question clearly	
standard prolonged care at a general hospital.	that the intervention/comparison went	matches the review question.	Overall assessment of external validity:
	as planned.	Has the study dealt	++
Description of theoretical	·	appropriately with any	
approach? No. There is no	Was contamination	ethical concerns? Yes. The	Overall validity rating:
description of the theory behind	acceptably low? Yes. The	study was approved by the	+
the evaluated intervention.	comparison group did not	Regional Committee for	
	receive the intervention and	Medical Research Ethics for	
How was selection bias	vice versa.	Central Norway.	
minimised? Randomised.			
Participants were randomised	Did either group receive	Were service users	
using random number tables in	additional interventions or	involved in the design of	
blocks to ensure balanced	have services provided in a	the study? No. Service users	
groups.	different manner? Not	were involved as participants	
	reported.	only and not in the design of	
Was the allocation method		the study or interpretation of	
concealed? Not reported.	Were outcomes relevant?	results.	
	Yes. The study's outcome		
Were participants blinded?	measures clearly relate to the	Is there a clear focus on the	
Blinding not possible.	outcomes which the authors	guideline topic? Yes. The	
	wanted to impact.	study clearly relates to intermediate care.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Were providers blinded? Not	Were outcome measures	Is the study population the	
reported.	reliable? Yes. Data were	same as at least one of the	
	collected from participants'	groups covered by the	
Were investigators, outcome	journals and health records.	guideline? Yes. The study	
assessors, researchers, etc.,	Number of days in institution,	population consists of older	
blinded? Not reported.	readmissions and deaths were	adults using intermediate	
	also monitored through patient	care services.	
Did participants represent the	administrative systems,		
target group? Yes. Participants	independent of treatment	Is the study setting the	
were recruited as intended and	groups, to ensure that figures	same as at least one of the	
representative of the target	were correct.	settings covered by the	
group for this intervention.		guideline? Yes. The study	
	Were all outcome	setting was intermediate care	
Were all participants	measurements complete?	at a community hospital.	
accounted for at study	Yes. All intended outcomes		
conclusion? Yes. During the	were measured and reported.	Does the study relate to at	
follow-up time, about a quarter		least one of the activities	
(24.6%) of the included patients	Were all important outcomes	covered by the guideline?	
died. NB. Eight of the	assessed? Partly. Although	Yes. The study relates to the	
participants randomised for	important outcomes were	efficacy of bed based	
intervention were never	assessed, participants' quality	intermediate care.	
transferred due to deterioration	of life and satisfaction with the		
of their medical conditions after	intervention may also have	(For effectiveness	
inclusion.	been useful to measure.	questions) Are the study	
		outcomes relevant to the	
	Were there similar follow-up	guideline? Yes. The study's	
	times in exposure and	outcomes clearly relate to the	
	comparison groups? Yes. All	overall topic of the guideline.	
	data were collected were		
	collected at discharge from		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	community or general hospitals, and at 6 and 12 months from the time of inclusion.	Was the study conducted in the UK? No. The study was conducted in Norway.	
	Was follow-up time meaningful? Yes. Twelve months appeared sufficient to assess the benefits of the intervention and there were no dropouts during this time, except for deaths (n=35).		
	Were the analytical methods appropriate? Yes. Differences in readmissions and need of home care services between groups were tested by chi square tests, and differences in mean number of days in institution were tested by paired <i>t</i> -test and by Wilcoxon signed rank test, adjusting for gender, age, activities of daily living score and diagnosis.		
	Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
and sample	Participants randomised to intermediate care or to general hospital care were comparable with respect to number of days of care before randomisation, mean and median age, diagnosis, gender, physical functioning (activities of daily living) and matrimonial status.  Was intention to treat (ITT) analysis conducted? Yes. All participants, including the 8 that did not fully complete the		
	intervention, were analysed in the groups to which they were originally allocated.  Was the study sufficiently powered to detect an intervention effect (if one exists)? Yes. A power calculation is presented. The final sample was sufficient to detect a difference.  Were the estimates of effect size given or calculable? Not reported. Effect sizes are not provided.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes. Confidence intervals and p values are reported.		
	Do conclusions match findings? Yes. Conclusions are in line with findings, favouring intermediate care at a community hospital to standard prolonged care at a general hospital, with regards to better patient outcomes.		

4. Herfjord JK, Heggestad T, Ersland H et al. (2014) Intermediate care in nursing home after hospital admission: a randomized controlled trial with one year follow-up. BMC Research Notes 7: 889

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: To evaluate the efficacy and safety of early transfer to an intermediate care unit in a nursing home. NB. It should be noted that this paper reports on the second phase of a randomised controlled trial (for	Was the exposure to the intervention and comparison as intended? Yes. The authors state that the intervention was not modified during the course of the study' (p4).	Does the study's research question match the review question? Yes. The paper reports the findings of the second phase of a trial designed to evaluate the efficacy and safety of early	Overall assessment of internal validity: +  Although the study appears to have been well carried out the decision to change the
which outcomes were changed).		transfer to an intermediate care unit in a nursing home.	outcomes measured for the second phase of the study,

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
Description of theoretical approach? No. The authors do not provide a theory of change or a logic model; they simply note that earlier studies have shown that elderly patients can be treated successfully in 'stepdown' facilities after a stay in hospital and that if it could be established that it was safe for	Was contamination acceptably low? Partly. Contamination levels were low however it should be noted that 8 participants randomised to the intervention group had to remain in acute care (care as usual) due to medical concerns.	Has the study dealt appropriately with any ethical concerns? Yes. Participants gave informed consent and a regional ethics committee gave approval for both the first and second phases.	the fact that a small number of participants allocated to the intervention had to remain in acute care, and the post hoc decision to conduct subgroup analysis means that it is not possible to award a higher quality rating to this study.
this transfer to take place at an earlier point the ' service could be extended to a larger group of patients and have a greater impact in saving health care costs' (p3).	Did either group receive additional interventions or have services provided in a different manner? No. There is no indication that either group received additional services.	Were service users involved in the design of the study? No. No indication that service users were involved in the design of the study or interpretation of findings.	Overall assessment of external validity: ++  Overall assessment of validity:
How was selection bias minimised? Randomised. Computer generated block randomisation.  Was the allocation method concealed? Yes.	Were outcomes relevant? Yes.  Were outcome measures reliable? Yes. All outcome data were extracted from medical records held at	Is there a clear focus on the guideline topic? Yes. The study evaluates an intermediate care unit in a nursing home.	+
Were participants blinded? Blinding not possible. Due to the nature of the intervention it would not have been possible to blind participants.	hospitals or with community health care services.  Were all outcome measurements complete?	Is the study population the same as at least one of the groups covered by the guideline? Yes. All participants were over the	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	Partly. All outcome data were	age of 18, however the	
Were providers blinded?	measured and reported as	youngest of these was 70.	
Blinding not possible. Due to the	planned however the study		
nature of the intervention it	only reports on outcomes	Is the study setting the	
would not have been possible to	assessed as part of the second	same as at least one of the	
blind providers.	phase of the study. In addition,	settings covered by the	
	a number of subgroup	guideline? Yes. The	
Were investigators, outcome	analyses do not appear to	intervention was delivered in	
assessors, researchers, etc.,	have been reported.	an inpatient intermediate care	
blinded? Blind.		unit established in a nursing	
	Were all important outcomes	home.	
Did participants represent the	assessed? Partly. The paper		
target group? Partly. The	only reports on outcome data	Does the study relate to at	
number of individuals assessed	collected in the second phase	least one of the activities	
for eligibility was not recorded.	of the study which were	covered by the guideline?	
Staff at the 2 hospitals from	number of days living at home	Yes. The study evaluates an	
which participants were	or in a nursing home, the	inpatient intermediate care	
recruited were ' requested to	number of days in hospital,	intervention.	
consider every patient 70 year	mortality at 1 year, and use of		
[sic] or older admitted from	home health care. Service user	(For effectiveness	
home' (p5). Individuals were	level outcomes such as	questions) Are the study	
eligible if they were respiratory	functional ability and quality of	outcomes relevant to the	
and circulatory stable, and	life were collected during the	guideline? Yes. Outcome	
viewed as being able to return	first phase of the trial but due	measures included number of	
to their home within 3 weeks.	to low response rates and	days living at home or in a	
Exclusion criteria were – need	other information which was	nursing home, the number of	
for intensive care or surgery,	'indeterminate', the '	days in hospital, mortality at	
and severe dementia or	investigators were on the	one year, and use of home	
delirium. The authors note that	whole unable to draw any	health care.	
patients with mild or moderate	decisive conclusions' (p2). The		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
dementia were eligible. Details in relation to ethnicity, socioeconomic status, etc. are not reported.	findings of the first phase are only available in a Norwegian language article.	(For views questions) Are the views and experiences reported relevant to the guideline? N/A. No views	
Were all participants	Were there similar follow-up times in exposure and	and experiences data presented.	
accounted for at study	comparison groups? Yes.	presented.	
conclusion? Yes. There were no participants who were lost to follow-up.	Both groups were followed up for the same amount of time.	Was the study conducted in the UK? No. The study was conducted in Norway.	
	Was follow-up time meaningful? Partly. Participants were followed up for 1 year (post randomisation) in total which would allow short and intermediate term effects to be detected.		
	Were the analytical methods appropriate? Yes. Methods included Mann-Whitney U-test, chi-square, Kaplan-Meier, etc. Observations made during the trial suggested that outcomes differed according to patient classification (medical or orthopaedic) and a post-hoc subgroup analysis was conducted to investigate this. Patient classification details		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	were extracted from hospital discharge notes, which the authors report use ICD-10 definitions as the basis for classification.		
	Were exposure and comparison groups similar at baseline? If not, were these adjusted? Not reported. The authors do not report significance testing of baseline characteristics except in relation to use of home health care services, which did not differ significantly by group (p=0.47).		
	Was intention to treat (ITT) analysis conducted? Yes.		
	Was the study sufficiently powered to detect an intervention effect (if one exists)? Yes. Power calculations for the first phase of the study showed that to detect an improvement of 10% or more in functional ability with 80% power at a		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	significance level of 0.05		
	(allowing for a drop-out rate of		
	30%) 400 participants were		
	required. Four hundred		
	participants were randomised		
	and 376 were included in		
	analyses.		
	Were the estimates of effect		
	size given or calculable?		
	Yes.		
	Was the precision of		
	intervention effects given or		
	calculable? Were they		
	meaningful? Yes. p values		
	and confidence intervals are		
	provided.		
	Do conclusions match		
	findings? Yes.		

## 5. Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9: 18

industrial technicity is the second of the s			
Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To compare a range	Was the exposure to the	Does the study's research	Overall assessment of
of outcomes at 3, 6 and 12	intervention and comparison	question match the review	internal validity:
months between stroke patients	as intended?	question? Yes. Management	++
managed on the stroke unit, on	Yes.	of stroke patients in a stroke	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
general wards with stroke team		unit, on general wards with	Overall assessment of
support or at home by specialist	Was contamination	stroke team support or at	external validity:
domiciliary care team.	acceptably low? Not reported.	home by specialist domiciliary	++
		care team.	
Description of theoretical	Did either group receive		Overall validity rating:
approach? Partly.	additional interventions or	Has the study dealt	++
	have services provided in a	appropriately with any	
How was selection bias	different manner?	ethical concerns? Yes. The	
minimised? Randomised.	Not reported.	project was approved by the	
Randomisation was unstratified	·	local ethics committee.	
using the block randomisation	Were outcomes relevant?		
technique, in 16 blocks of 30.	Yes.	Were service users	
•		involved in the design of	
Was the allocation method	Were outcome measures	the study? No.	
concealed? Yes.	reliable?		
Randomisation was conducted	Yes.	Is there a clear focus on the	
in an office remote from patient		guideline topic? Yes.	
treatment areas, so that it would	Were all outcome		
not be possible for those	measurements complete?	Is the study population the	
enrolling patients to guess	Yes.	same as at least one of the	
allocation for the vast majority of		groups covered by the	
subjects.	Were all important outcomes	guideline? Yes.	
	assessed? Yes.		
Were participants blinded?		Is the study setting the	
Blinding not possible.	Were there similar follow-up	same as at least one of the	
	times in exposure and	settings covered by the	
Were providers blinded? Not	comparison groups? Yes. At	guideline? Yes.	
reported.	3, 6 and 12 months.		
·	·	Does the study relate to at	
		least one of the activities	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
Were investigators, outcome	Was follow-up time	covered by the guideline?	
assessors, researchers, etc.,	meaningful?	Yes. Bed based vs. home	
blinded? Blind. Independent	Yes.	based care.	
observers were used for			
assessment and using outcome	Were the analytical methods	(For effectiveness	
measures.	appropriate? Yes.	questions) Are the study	
	Descriptive.	outcomes relevant to the	
Did participants represent the		guideline? Yes.	
target group? Yes.	Were exposure and		
	comparison groups similar	Was the study conducted	
Were all participants	at baseline? If not, were	in the UK? Yes. The study	
accounted for at study	these adjusted?	was conducted in Bromley,	
conclusion? Yes. Nine drop-	Yes. Baseline characteristics	south east England.	
outs in home group; 3 in stroke	well matched across the 3		
team group.	groups in stroke type and		
	severity, level of impairment		
	and initial disability.		
	Was intention to tract (ITT)		
	Was intention to treat (ITT) analysis conducted? Yes.		
	alialysis colludcted? Tes.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Yes. Power		
	calculation conducted as part		
	of design.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Were the estimates of effect size given or calculable? Yes.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes.		
	Do conclusions match findings? Yes.		

6. Stenvall M, Olofsson B, Nyberg L et al. (2007) Improved performance in activities of daily living and mobility after a multidisciplinary postoperative rehabilitation in older people with femoral neck fracture: A randomized controlled trial with 1-year follow-up. Journal of Rehabilitation Medicine 39: 232-8

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: The aim of the	Was the exposure to the	Does the study's research	Overall assessment of
study was to investigate the	intervention and comparison	question match the review	internal validity:
short and long-term effects of a	as intended?	question?	+
multidisciplinary postoperative	Not reported. It does appear	Yes. The study's research	
rehabilitation programme in	that the	question clearly matches the	Overall assessment of
patients with femoral neck	intervention/comparison went	review question: to	external validity:
fracture.	as planned.	investigate the short- and	+
		long-term effects of a	
Description of theoretical	Was contamination	multidisciplinary	Overall validity rating:
approach? No. There is no	acceptably low? Not reported.	postoperative rehabilitation	+
description of the theory behind		programme among patients	
the evaluated intervention.	Did either group receive	with femoral neck fracture	
	additional interventions or	regarding living conditions,	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
How was selection bias	have services provided in a	walking ability and activities	
minimised? Randomised.	different manner? Not	of daily living performance. A	
Method of randomisation not	reported.	secondary aim was to	
reported, but it was stratified		investigate outpatient	
according to the operation	Were outcomes relevant?	rehabilitation consumption	
methods used based on the	Yes. The study's outcome	and inpatient days after	
degree of hip dislocation.	measures clearly relate to the	discharge and mortality.	
	outcomes which the authors		
Was the allocation method	wanted to impact.	Has the study dealt	
concealed? Yes. Allocation lots		appropriately with any	
were numbered sequentially,	Were outcome measures	ethical concerns? Yes. The	
placed in opaque sealed	reliable?	study was approved by the	
envelopes. Envelopes not	Yes. Outcomes were	ethics committee of the	
opened till immediately before	measured using a variety of	Faculty of Medicine at Umeå	
surgery to ensure all receive	validated questionnaires.	University. Patients asked in	
similar pre-op treatment. The	These were observed rather	writing and orally if they were	
selection procedures were	than self-reported.	willing to participate in study,	
carried out by people not		and were told they could	
involved in the study.	Were all outcome	withdraw participation at any	
	measurements complete?	time during the study.	
Were participants blinded?	Yes. All intended outcomes		
Blinding not possible.	were measured and reported.	Were service users	
		involved in the design of	
Were providers blinded?	Were all important outcomes	the study? No. Service users	
Blinding not possible.	assessed? Partly. Although	were involved as participants	
	important outcomes were	only and not in the design of	
Were investigators, outcome	assessed, quality of life and	the study or interpretation of	
assessors, researchers, etc.,	satisfaction with the	results.	
blinded? Not blind. The	intervention may also have		
outcomes analyst was blind - a			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
geriatrician, who was unaware	been useful for the authors to	Is there a clear focus on the	
of the study group allocation,	consider.	guideline topic? Yes. The	
analysed all assessments and		study relates to the overall	
documentations after the study	Were there similar follow-up	topic of the guideline.	
was finished.	times in exposure and		
	comparison groups? Yes.	Is the study population the	
Did participants represent the	Both groups had similar follow-	same as at least one of the	
target group? Yes. Participants	up times at 4 and 12 months.	groups covered by the	
were recruited as intended and	Was Calle and Care	guideline? Yes. The study	
representative of the target	Was follow-up time	population consists of older	
group for this intervention i.e.	meaningful?	adults using intermediate	
patients involved in a	Yes. Follow-up time appeared	care services.	
multidisciplinary postoperative rehabilitation programme.	long enough to assess the impact of the intervention and	Is the study setting the	
renabilitation programme.	attrition rate was acceptably	same as at least one of the	
Were all participants	low.	settings covered by the	
accounted for at study	low.	guideline? Yes. The study	
conclusion? Yes. The attrition	Were the analytical methods	setting was a geriatric unit	
rate was approximately 20%.	appropriate? Yes. The	intervention ward.	
Reasons given for all dropout	analytical methods were	miorvaniam wara.	
included death or withdrawal	appropriate for this type of	Does the study relate to at	
from study, however, all	data, using Student's <i>t</i> -test,	least one of the activities	
participants (n=199) were	Pearson's $\chi$ 2 test and the	covered by the guideline?	
included in the primary analysis	Mann-Whitney U test to	Yes. It examines 'effects of a	
but 82% (84/102) of the	analyse group differences, and	multidisciplinary	
intervention group and 78%	odds ratios and confidence	postoperative rehabilitation	
(76/97) of the control group	intervals analysed by logistic	programme among patients	
were analysed at 12 months	regression.	with femoral neck fracture' in	
follow-up.		a geriatric ward.	

Internal validity - performance and analysis	External validity	Overall validity rating
Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes. Both groups were similar at baseline except for 'diagnosed depression' and 'on antidepressants' (significantly higher in control group). These differences were adjusted for in the analysis.  Was intention to treat (ITT) analysis conducted? No.  Was the study sufficiently powered to detect an intervention effect (if one exists)? Not reported.  Were the estimates of effect size given or calculable? Yes. Odds ratios are reported.  Was the precision of intervention effects given or calculable? Were they meaningful? Yes. Confidence intervals are reported.	(For effectiveness questions) Are the study outcomes relevant to the guideline? Yes. The study's outcomes relate to the overall topic of the guideline.  Was the study conducted in the UK? No. The study was conducted in Sweden.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	Do conclusions match		
	findings?		
	Yes. The authors overall		
	conclusions match the findings		
	presented.		

7. Young J, Green J, Forster A et al. (2007) Postacute care for older people in community hospitals: A multicenter randomized, controlled trial. Journal of the American Geriatrics Society 55: 1995-2002

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The study aims to	Was the exposure to the	Does the study's research	Overall assessment of
' compare the effects of	intervention and comparison	question match the review	internal validity:
community hospital care on	as intended? Not reported.	question? Yes. The study	-
independence for older people	The authors do not provide	aims to ' compare the	
needing rehabilitation with that	detail in relation to exposure.	effects of community hospital	Due to the high number of
of general hospital care'		care on independence for	eligible patients who did not
(p1995). The authors	Was contamination	older people needing	participate; high rates of
hypothesise that elderly patients	acceptably low? No. The	rehabilitation with that of	attrition; a relatively high
transferred to community	authors do not clearly report	general hospital care'	number of control group
hospital care would achieve	levels of contamination. It	(p1995). The authors note	participants who were
greater independence than	appears that 39 participants	that community hospitals	transferred to a study
those treated in elderly care	randomised to the intervention	represent " 1 type of	community hospital rather
departments.	group did not receive care as	intermediate care service	than receiving care as usual,
	intended (due to a lack of	model" (p1999). They	or after receiving care as
Description of theoretical	available beds in community	hypothesise that elderly	usual were then transferred
approach? No. The authors do	hospitals or the closure of local	patients transferred to	to non-participating
not provide a theory of change	community hospitals); however	community hospital care	community hospitals,
or logic model.	the authors do not clearly state	would achieve greater	intermediate care facilities or
	what care these participants	independence than those	rehabilitation facilities; and
	received instead. Similarly,		blinding concerns it is not

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
How was selection bias	although the control	treated in elderly care	possible to award a higher
minimised? Randomised.	intervention 'primarily'	departments.	quality rating to this study.
Randomisation was stratified on	consisted of ' an extended		
the basis of referral centre,	general hospital stay with	Has the study dealt	Overall assessment of
cognitive impairment, and	multidisciplinary care'	appropriately with any	external validity:
functional ability. Ratios for	patients could be transferred to	ethical concerns? Yes. The	++
randomisation were pre-	other postacute services	trial was approved by	
specified on the basis local bed	according to existing local	regional and multicentre	Overall assessment of
availability.	operational policies' (p1997). It	ethics committees, and	validity:
	appears that 30 participants	written consent was provided	+
Was the allocation method	randomised to the control	by participants (or their proxy	
concealed? Yes.	group were actually transferred	if capacity was a concern).	
	to a community hospital and		
Were participants blinded?	that of the 180 who did at first	Were service users	
Blinding not possible. Due to the	remain in general hospital; 11	involved in the design of	
nature of the intervention it	were later transferred to a non-	the study? No. No indication	
would not have been possible to	participating community	that service users were	
blind participants.	hospital; 3 to a rehabilitation	involved in the design of the	
	unit; 2 to an intermediate care	study or interpretation of	
Were providers blinded?	placement whilst waiting for	findings.	
Blinding not possible. Due to the	home care 'places' (not clear if		
nature of the intervention it	this actually refers to a care	Is there a clear focus on the	
would not have been possible to	home placement), and 1 was	guideline topic? Yes. The	
blind providers.	admitted to a psychiatric unit.	study evaluates community	
		hospital care which the	
Were investigators, outcome	Did either group receive	authors categorise as a	
assessors, researchers, etc.,	additional interventions or	specific type of intermediate	
blinded? Part blind. It appears	have services provided in a	care service model.	
that at the final follow-up	different manner? Not		
assessment a number of	reported. There is no indication		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
participants revealed group	that either group received care	Is the study population the	
assignment to outcome	in addition to the	same as at least one of the	
assessors who were then able	intervention/control or had	groups covered by the	
to guess the group assignment	services provided in a different	guideline? Yes. All	
for other participants, however	manner.	participants were over the	
the authors determined that an		age of 18 however the	
acceptable level of blinding was	Were outcomes relevant?	majority were elderly.	
still achieved: 'At the 6-month	Yes. The researchers were		
assessment, 63 patients or	primarily interested in the	Is the study setting the	
caregivers unintentionally	effects of the intervention on	same as at least one of the	
unblinded outcome assessors to	older people's independence	settings covered by the	
treatment allocation, who	and outcome measures were	guideline? Yes. The	
correctly guessed the allocation	appropriate to this.	interventions were delivered	
of 143 (56.1%) of the remaining		in community and general	
255 patients at the 6-month	Were outcome measures	hospitals.	
assessment (missing data for 15	reliable? Yes. All outcome		
patients), resulting in a kappa	measures appear to have	Does the study relate to at	
statistic of <0.20 (poor	established reliability and	least one of the activities	
agreement), indicating that	validity however data to	covered by the guideline?	
reasonable masking of	support this are not presented.	Yes. The study evaluates	
treatment allocation was	It should also be noted that the	multidisciplinary care	
achieved' (p1998). It is also	scale used to measure	provided in a community	
unclear if researchers who	satisfaction with services	hospital which is considered	
collected data from patient	appears to be specific to stroke	by the authors to be one of a	
records were blinded to group	care.	number of intermediate care	
assignment.	Mana all autonomo	service models.	
Did noution outs nounce of the	Were all outcome	(Fanaffaati saaaa	
Did participants represent the	measurements complete?	(For effectiveness	
target group? Partly. Out of	Yes. All data were measured	questions) Are the study	
773 patients deemed to be	and collected as planned	outcomes relevant to the	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
eligible, 144 did not consent to	however data appear to be	guideline? Yes. Outcomes	
participation, and staff at referral	missing for a number of	included activities of daily	
sites refused to allow a further	participants at various follow-	living, health status, anxiety	
136 patients to be randomised.	up points in relation to a range	and depression.	
Staff rationale for this is not	of different measures and it is		
reported. Individuals were	not clear how the authors dealt	(For views questions) Are	
eligible if they had been	with this missing data. In	the views and experiences	
admitted to an elderly care or	addition it should be noted that	reported relevant to the	
combined elderly care and	statistical analysis of between	guideline? N/A. Not views	
medical unit after an	group differences are only	question. However, data	
emergency. Individuals had to	reported for certain outcomes	relating to a quantitative	
be deemed to be medically	at a small number of time	measure of service	
stable and in need of postacute	points and it is not clear from	satisfaction is reported.	
rehabilitation (in advance of	the narrative whether any of		
expected home discharge) by a	these showed significant	Was the study conducted	
physician. Patients were also	between group differences.	in the UK? Yes. The study	
excluded if they were drowsy or		was conducted across a	
unconscious; were in need of	Were all important outcomes	number of sites in the	
specialist stroke rehabilitation,	assessed? Partly. It is	midlands and the north of	
treatment in other departments,	disappointing that	England.	
or surgery; or were in need of a	readmissions to acute care		
new residential or nursing home	were not measured.		
placement. An address in the	_		
catchment area of 1 of the	Were there similar follow-up		
participating hospitals was also	times in exposure and		
required. Details in relation to	comparison groups? Yes.		
ethnicity, socio-economic status,	Both groups were followed up		
etc. are not reported but the	for the same length of time.		
authors report that the majority			
of participants were females			

Internal validity -	External validity	Overall validity rating
performance and analysis		
Was follow-up time		
meaningful? Partly. The final		
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be detected.		
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outcomes.		
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	performance and analysis Was follow-up time	was follow-up time meaningful? Partly. The final follow-up assessment took place at 6 months which would not allow longer-term effects to be detected.  Were the analytical methods appropriate? Yes. Included analysis of covariance, Mann- Whitney U-Test and χ². All analyses were pre-specified however statistical analysis of between group differences is only reported for a very small number of secondary outcomes.  Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes. The authors state that characteristics of the 2 groups were similar at baseline however significance testing is not reported and it should be noted that very little

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	demographic characteristics		
	are reported.		
	Was intention to treat (ITT)		
	analysis conducted? Partly.		
	The authors' report that		
	intention to treat analysis was		
	conducted for the primary		
	outcome measure however		
	they do not state whether all		
	other analyses were conducted		
	on this basis.		
	Mos the study sufficiently		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one exists)? Yes. The authors		
	report that power calculations		
	using a standard deviation of		
	5.3 for within patient changes		
	and a clinically meaningful		
	difference of 2 points on the		
	primary outcome measure		
	(Nottingham Extended		
	Activities of Daily Living scale)		
	showed that a sample size of		
	250-400 was required to detect		
	differences at 85% power at a		
	5% and 1% significance		
	respectively. The authors		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	aimed to recruit 500 patients to allow for attrition and a total of 490 were randomised.		
	Were the estimates of effect size given or calculable? Partly.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Partly. Confidence intervals and <i>p</i> values are provided however this is not consistent.		
	Do conclusions match findings? Yes.		

## Review question 2 – Critical appraisal – the views and experiences of people using services, their families and carers

1. Ariss S (2014) National audit for intermediate care: Patient reported experiences, 2014. Sheffield: University of Sheffield

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
<b>Study aim:</b> To obtain views and experiences from people using intermediate care by asking the following survey question: 'Do	Basic data adequately described? Partly. More data on the numbers/ proportions	Does the study's research question match the review question? Yes. The survey, which was part of the NAIC	Overall assessment of internal validity: -

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
you feel that there is something	making certain responses	2014, asked the question 'Do	Overall assessment of
that could have made your	could have been provided.	you feel that there is	external validity:
experience of the service		something that could have	++
better?'	Results presented clearly,	made your experience of the	
	objectively and in enough	service better?' Yes or no,	Overall validity rating:
Objectives of the study	detail for readers to make	and then a space to provide	-
clearly stated? Partly. The	personal judgements? Partly.	further information. The	
objective is simply to answer the		question was asked to people	
one survey question.	Results internally	using bed based, and home	
	consistent?	based intermediate care and	
Research design clearly	Partly. On the whole, yes	reablement.	
specified and appropriate?	although numbers weren't		
Partly. It is not clear exactly how	routinely provided against	Has the study dealt	
the survey was conducted but	responses.	appropriately with any	
details of the methods of		ethical concerns?	
analysis are provided.	Data suitable for analysis?	No. There is no discussion of	
	Yes.	ethical issues or ethical	
Clear description of context?		approval for the survey.	
Partly. The context of the survey	Clear description of data		
is clear but we do not have	collection methods and	Were service users	
details about the context of the	analysis? Partly. Clear	involved in the study? No.	
survey respondents (except that	description of data analysis but		
they have used bed based	not data collection.	Is there a clear focus on the	
intermediate care).		guideline topic? Yes.	
	Methods appropriate for the		
References made to original	data? Yes.	Is the study population the	
work if existing tool used?		same as at least one of the	
N/A.	Statistics correctly	groups covered by the	
	performed and interpreted?	guideline? Yes.	
	Partly. In terms of statistics,		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Reliability and validity of new tool reported? Unclear. No information about the validity and reliability of the single survey question, why it was	only frequencies were produced and even then, not for all the themes, which means we don't know how many respondents cited each	Is the study setting the same as at least one of the settings covered by the guideline? Yes.	
chosen or worded the way it was.  Survey population and sample frame clearly	issue - this could have been provided in the ranked table. Further statistical analyses could have been usefully produced, e.g. cross	Does the study relate to at least one of the activities covered by the guideline? Yes.	
described? No. We only know that the sampling frame is people using bed based intermediate care in England.	tabulations or, if the data had been collected, responses could have been linked with service users' characteristics.	(For views questions) Are the views and experiences reported relevant to the guideline? Yes.	
Representativeness of sample is described? No. We have no idea how representative the sample is.	Response rate calculation provided? No.  Methods for handling missing data described? No.	Does the study have a UK perspective? Yes. The National Audit of Intermediate Care, focuses on intermediate care	
Subject of study represents full spectrum of population of interest? Unclear. The author does not provide any information that would help us judge whether the study represents the full spectrum of the population of interest.	Difference between non-respondents and respondents described? No.  Results discussed in relation to existing knowledge on subject and study objectives? No.	commissioning and provision in England.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study large enough to achieve its objectives, sample size estimates performed?	Limitations of the study stated? No.		
No. No evidence that sample size estimates have been made.	Results can be generalised? Unclear. No information provided regarding		
All subjects accounted for?  No. The paper does not provide	respondents.		
a figure for the total number of people who received the survey.	Appropriate attempts made to establish 'reliability' and 'validity' of analysis? No.		
Measures for contacting non- responders? No. No evidence that non responders were followed up.	Conclusions justified? Unclear. No conclusions are provided in this paper.		
All appropriate outcomes considered? N/A. No outcomes were measured, the survey simply comprised of 1 open ended question.			

#### 2. Benten J and Spalding N (2008) Intermediate care: What are service users' experiences of rehabilitation? Quality in Ageing and Older Adults 9:4-14.

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: The researchers	Is the context clearly	Does the study's research	Overall assessment of
aimed to 'explore service	described? Clear. The	question match the review	internal validity:
users' experiences of a 22-	authors provide a good level of	question? Yes. The	+
bedded intermediate care	detail in relation to participant	researchers aimed to	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
service' (p4). Out of 6 themes	characteristics and the setting	'explore service users'	Overall assessment of
that emerged from this	in which data collection took	experiences of a 22-bedded	external validity:
research, this paper presents	place and they clearly	intermediate care service'	++
findings with the in relation to	considered the issue of context	(p4). Out of 6 themes that	
one and the specific question –	bias.	emerged from this research,	Overall validity rating:
' did the intermediate care unit		this paper presents findings	+
provide rehabilitation that met	Was the sampling carried	relating to 1 of these themes	
the needs of service users?'	out in an appropriate way?	and specifically focuses on	
(p5).	Somewhat appropriate. The	the research question – '	
	authors report the use of	did the intermediate care unit	
Is a qualitative approach	purposive sampling which is	provide rehabilitation that met	
appropriate? Appropriate. The	appropriate however they also	the needs of service users?'	
researchers aimed to explore	note that this was conducted	(p5).	
service user experience.	using quite specific eligibility		
	criteria (rather than anyone	Has the study dealt	
Is the study clear in what it	with experience of the facility).	appropriately with any	
seeks to do? Clear. The	For example, only participants	ethical concerns? Yes. A	
research objectives are clearly	over the age of 65 and those	regional NHS research ethics	
expressed and there is a good	who had stayed at the facility	committee approved the	
discussion of the policy context	for a minimum of 2 weeks were	study and participants	
for intermediate care. Although	eligible, etc.; meaning that	provided informed consent.	
the authors do not really make	younger service users and		
reference to existing literature	those with very short stays	Were service users	
on the subject of intermediate	could not have been	involved in the study? No.	
care they do note the	interviewed. In addition it	Service users involved as	
importance of research with	should be noted that the	participants only. No	
service users and emphasise	authors do not discuss the	indication of involvement in	
the role that this can play in	process by which they came to	design of study or	
improving health care services.	select the facility at which	interpretation of findings.	
	participants were recruited or		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
How defensible/rigorous is	whether this facility itself had	Is there a clear focus on the	
the research	any eligibility criteria.	guideline topic? Yes. The	
design/methodology?		study reports service user	
Somewhat defensible. The	Were the methods reliable?	experiences of an	
authors provide a relatively clear	Somewhat reliable. Data were	intermediate care unit.	
rationale for their chosen data	only collected via semi-	However it should be noted	
collection and analysis	structured interview however a	that this paper only reports	
techniques. Although they also	reasonably adequate	findings in relation to 1 theme	
provide a clear report of their	discussion of the findings in	that emerged from the	
participant sampling strategy	relation to other research is	research – service users'	
(purposive) they do not discuss	included.	experience of rehabilitation in	
how they selected the facility at		the intermediate care facility.	
which participants were	Are the data 'rich'? Mixed.		
recruited.	The contexts of the data are	Is the study population the	
	described (the interview	same as at least one of the	
How well was the data	schedule is included as an	groups covered by the	
collection carried out?	appendix) and the depth and	guideline? Yes. All	
Somewhat appropriately. Data	detail of the data are	participants were over the	
collection methods are clearly	demonstrated however	age of 18 however it should	
described and appropriate to the	responses were not really	be noted that the youngest	
research question, however no	compared and contrasted.	was 64 years of age.	
details are provided in relation			
data management or record-	Is the analysis reliable?	Does the study relate to at	
keeping.	Reliable. The researchers	least one of the activities	
	reviewed each other's coding	covered by the guideline?	
	and a practitioner with	Yes.	
	research experience was also		
	involved in this process to	(For views questions) Are	
	ensure that data was	the views and experiences	
	interpreted appropriately;	reported relevant to the	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	however the authors do not	guideline? Yes. The study	
	report how discrepancies or	reports service user views of	
	disagreements were dealt with.	an intermediate care facility.	
	Participants also appear to		
	have been able to provide	Was the study conducted	
	feedback on transcripts of	in the UK? Yes.	
	interviews although this does		
	not appear to be the case for		
	the coding or reporting stage.		
	A sea the second section 0		
	Are the findings convincing?		
	Convincing. The findings are		
	clear and coherent and an		
	appropriate number of adequately referenced quotes		
	are included.		
	are included.		
	Are the conclusions		
	adequate? Adequate. The		
	conclusions are generally		
	plausible and coherent with		
	relatively clear links to the		
	data.		

## Review question 2 – Critical appraisal – Health, social care and other practitioners' views and experiences

1. Millar AN, Hughes CM, Ryan C (2015) 'It's very complicated': A qualitative study of medicines management in intermediate care facilities in Northern Ireland. Biomed Central Health Services Research 15: 216

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
<b>Study aim:</b> The study aimed to	Is the context clearly	Does the study's research	Overall assessment of
explore healthcare workers' and	described? Unclear. The	question match the review	internal validity:
patients' views and attitudes	authors do not specify where	question? Yes. The study's	+
towards medicines management	interviews were conducted.	research question clearly	
services in intermediate care		matches the review question.	Overall assessment of
facilities in Northern Ireland.	Was the sampling carried		external validity:
	out in an appropriate way?	Has the study dealt	++
Is a qualitative approach	Somewhat appropriate.	appropriately with any	
appropriate? Appropriate. A	Participation in the study was	ethical concerns? Yes. The	Overall validity rating:
qualitative approach is	voluntary, therefore, it is	study was approved by the	+
appropriate to address the	possible that the views and	Office for Research Ethics	
research questions proposed.	experiences expressed	Committees Northern Ireland.	
	reflected those with an interest		
Is the study clear in what it	in medicines management.	Were service users	
seeks to do? Clear. The aims		involved in the study? No.	
and objectives of the study are	Were the methods reliable?	Service users were involved	
clearly outlined, and reference	Somewhat reliable. The data	as participants only, and not	
to the relevant literature is made	was not collected by more than	in the design of the study or	
throughout.	1 method, but the authors did	interpretation of results.	
	triangulate the data and		
How defensible/rigorous is	discuss their findings alongside	Is there a clear focus on the	
the research	other studies.	guideline topic? Yes. The	
design/methodology?		study clearly relates to the	
Defensible. The authors provide		overall topic of the guideline.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
a clear rationale for the	Are the data 'rich'? Rich. The		
sampling, data collection and	contexts of the data are clearly	Is the study population the	
data analysis techniques used.	described, and include the	same as at least one of the	
	perspectives of both health	groups covered by the	
How well was the data	care workers and patients.	guideline? Yes. The study	
collection carried out?	Responses are also	population clearly relates to	
Appropriately. The data	compared/contrasted across	the guideline scope.	
collection methods are clearly	settings.		
described and seem appropriate		Is the study setting the	
to address the research	Is the analysis reliable?	same as at least one of the	
question.	Reliable. More than 1	settings covered by the	
	researcher themed and coded	guideline? Yes. The study	
	the data, and consensus on	setting clearly relates to the	
	emergent themes was reached by discussion among all 3	guideline scope.	
	researchers. It is clear how the	(For views questions) Are	
	themes and concepts were	the views and experiences	
	derived from the data, and the	reported relevant to the	
	researchers use quotes to	guideline? Yes. The views	
	illustrate how they developed	and experiences reported in	
	the analysis.	the study are clearly relevant	
		to the guideline topic.	
	Are the findings convincing?	<del>  -</del>	
	Convincing. The findings are	Does the study have a UK	
	clearly presented and internally	perspective? Yes. The study	
	coherent in that they address	was conducted in Northern	
	the study question. Extracts	Ireland.	
	from the original data are		
	included and the data is		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
una cumpio	appropriately referenced. The reporting is clear and coherent.		
	Are the conclusions adequate? Adequate. There are clear links between the data, interpretation and conclusions, which are plausible and coherent. Alternative explanations have also been explored. Implications of the research are clearly defined and there is adequate discussion of the limitations of the study.		

2. Regen E, Martin G, Glasby J et al. (2008) Challenges, benefits and weaknesses of intermediate care: Results from five UK case study sites. Health & Social Care in the Community 16: 629–37

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: The research was designed to ' explore the views of practitioners and managers on the implementation of intermediate care for elderly people across England, including their perceptions of the challenges involved in its implementation,	Is the context clearly described? Not sure. The authors provide a good level of detail in relation to the sites at which participants worked, however very little detail is provided in relation to the demographic characteristics and professional background	Does the study's research question match the review question? Partly. The research was designed to ' explore the views of practitioners and managers on the implementation of intermediate care for elderly people across England,	Overall assessment of internal validity: + Overall assessment of external validity: ++ Overall validity rating:

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
and their assessment of the	of participants. An appropriate	including their perceptions of	+
main benefits and weaknesses	level of detail is provided in	the challenges involved in its	
of provision' (p629).	relation to the settings in which	implementation, and their	
	data collection took place,	assessment of the main	
Is a qualitative approach	however the authors do not	benefits and weaknesses of	
appropriate? Yes. The	specifically discuss the issue of	provision' (p629).	
researchers aimed to explore	context bias. It should also be		
the views of practitioners and	noted that it is sometimes	Has the study dealt	
managers regarding the	difficult to determine whether	appropriately with any	
implementation and benefits	participants are referring to	ethical concerns? Partly. An	
and weaknesses of intermediate	bed based intermediate care	ethics committee approved	
care.	specifically.	the research however no	
		details are provided in	
Is the study clear in what it	Was the sampling carried	relation to consent	
seeks to do? Clear. The	out in an appropriate way?	processes.	
research objectives are clearly	Somewhat appropriate. The		
expressed and there is a good	authors report that they relied	Were service users	
discussion regarding the policy	on contacts at each site to	involved in the study? No.	
context of intermediate care and	identify potential interviewees	No indication that service	
the wider literature on this	and that although they	users were involved in design	
service.	emphasised that they sought	of the study or interpretation	
	to incorporate a range of	of findings.	
How defensible/rigorous is	perspectives, the majority of		
the research	participants were directly	Is there a clear focus on the	
design/methodology?	involved in the provision of	guideline topic? Yes. The	
Somewhat defensible. The	care or management of	study focuses on	
authors provide a relatively clear	services.	intermediate care delivered	
rationale for their chosen		across 5 sites in the United	
sampling, data collection and	Were the methods reliable?	Kingdom.	
data analysis techniques;			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
however this is not very detailed.	Reliable. Data were triangulated.	Is the study population the same as at least one of the groups covered by the	
How well was the data collection carried out? Appropriately. The data collection methods are	Are the data 'rich'? Mixed. The authors do not provide a great deal of detail in relation to the contexts of the data.	guideline? Yes. Practitioners and managers working in intermediate care services.	
appropriate to the research question, and a good level of detail is provided in relation to this, however there are no details relating to data	Although there is a good sense of the detail and depth of data, there is no comparative element.	Does the study relate to at least one of the activities covered by the guideline? Yes.	
management or record-keeping.	Is the analysis reliable? Somewhat reliable. Data do not appear to have been analysed or coded by more than 1 researcher however the research team met regularly to discuss themes and concepts that were emerging and discrepant results appear to have been used to modify themes where necessary. The authors also report that participants and funders were given opportunities to feedback on the results but it is not clear how this was carried out.	(For views questions) Are the views and experiences reported relevant to the guideline? Yes. The study reports the views of practitioners and managers regarding intermediate care.  Was the study conducted in the UK? Yes. The study was conducted across 5 sites in England.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
•	Are the findings convincing? Convincing. The findings are clearly and coherently presented and an appropriate number of adequately referenced quotes are included.		
	Are the conclusions adequate? Somewhat adequate. Although the conclusions are plausible and coherent, the links between these conclusions and the data are somewhat unclear.		

3. Thomson D and Love H (2013) Exploring the negative social evaluation of patients by specialist physiotherapists working in residential intermediate care. Physiotherapy 99: 71-7

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: The researchers	Is the context clearly	Does the study's research	Overall assessment of
aimed to ' gain an	described? Not sure. The	question match the review	internal validity:
understanding of the negative	authors provide a good level of	question? Partly. The	+
social evaluation of patients by	detail in relation to the	researchers aimed to ' gain	
specialist physiotherapists, and	professional background of	an understanding of the	Overall assessment of
to explore possible coping	participants, however very little	negative social evaluation of	external validity:
strategies in order to engage	detail is provided in relation to	patients by specialist	++
patients in appropriately	demographic characteristics of	physiotherapists, and to	
designed rehabilitation	participants, or to the settings	explore possible coping	Overall validity rating:
programmes' (p71). The authors	in which data collection took	strategies in order to engage	+

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
go on to explain that 'negative social evaluation' is a more acceptable term than 'difficult' in relation to service users who represent an 'interpersonal' challenge to practitioners.  These practitioners were working at a residential intermediate care facility.	place (e.g. number or length of focus groups/interviews), and the issue of context bias is not specifically discussed by the authors.  Was the sampling carried out in an appropriate way?  Somewhat appropriate. The authors report the use of	patients in appropriately designed rehabilitation programmes' (p71). These practitioners were working at a residential intermediate care facility.  Has the study dealt appropriately with any ethical concerns? Partly. An	Although this appears to be a generally well-conducted study the lack of information regarding whether data was double coded and sometimes somewhat unclear links between the data and the conclusions it is not possible to award a higher quality
Is a qualitative approach appropriate? Yes. The researchers aimed to develop an understanding of why physiotherapists may perceive some service users as having a	purposeful and then theoretical sampling, which are appropriate however it is not clear why only senior physiotherapists took part in the research.	ethics committee approved the research however no details are provided in relation to consent processes.	rating to this study.
'negative social evaluation', as		Were service users	
well as the strategies which	Were the methods reliable?	involved in the study? No.	
were used when working with such service users.	Reliable. Data were triangulated.	No indication that service users were involved in design of the study or interpretation	
Is the study clear in what it	Are the data 'rich'? Mixed.	of findings.	
seeks to do? Clear. The	Little detail is provided in relation to the contexts of the	Is there a clear focus on the	
research objectives are clearly expressed and there is a good	data, only a limited sense of	guideline topic? Yes. The	
discussion of the wider	the detail and depth of	study reports the views of	
literature.	participants' views is provided and there is no comparative	physiotherapists working in intermediate care.	
How defensible/rigorous is the research	element.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
design/methodology? Somewhat defensible. The authors provide a relatively clear rationale for their chosen data collection and analysis techniques; however although the sampling processes used appear appropriate, a similar level of justification is not provided.	Is the analysis reliable? Unreliable. The authors do not report whether data were coded by more than 1 researcher and there is no indication that participants were able to provide feedback on transcripts or data.  Are the findings convincing?	Is the study population the same as at least one of the groups covered by the guideline? Yes.  Physiotherapists working in intermediate care.  Does the study relate to at least one of the activities covered by the guideline?	
How well was the data collection carried out? Somewhat appropriately. The data collection methods are appropriate to the research question, however very little detail is reported in relation to this except to note that this was conducted via focus groups and semi-structured interviews, and there are only very minimal details provided in relation to data management and record-keeping.	Convincing. The findings are clearly and coherently presented and an appropriate number of adequately referenced quotes are included.  Are the conclusions adequate? Somewhat adequate. Although the authors' conclusions are generally plausible and coherent and there is a reasonable discussion regarding the implications of the research, the links between these conclusions and the authors' interpretation are not always clear. In addition, the authors do not clearly discuss	Yes.  (For views questions) Are the views and experiences reported relevant to the guideline? Yes. The study reports the views of physiotherapists on providing rehabilitation in intermediate care settings to service users with a 'negative social evaluation' (service users perceived to be 'difficult').  Was the study conducted in the UK? Yes. The study was conducted in the greater London area.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	the limitations of their		
	research.		

Research question 3. Crisis response intermediate care:

- a) What is the effectiveness and cost effectiveness of crisis response intermediate care?
- b) What are the views and experiences of people using services, their families and carers in relation to crisis response intermediate care?
- c) What are the views and experiences of health, social care and other practitioners about crisis response intermediate care?

Research question 3 – Findings tables – the views and experiences of people using services, their families and carers

1. Beech R, Henderson C, Ashby S et al. (2013) Does integrated governance lead to integrated patient care? Findings from the innovation forum. Health and Social Care in the Community 21: 598-605

Research aims	PICO (population, intervention, comparison,	Findings	Overall validity rating
	outcomes)		
Study aim: To explore	Participants:	The authors note that few of	Overall assessment of
'patients' perceptions of the	<ul> <li>Service users and their</li> </ul>	the patients they interviewed	internal validity:
care received across and within	families, partners and carers	had been 'diverted' to other	-
organisational boundaries'	- 'Older' patients who had	services at the point at which	
(p598) in 3 areas where	experienced a stroke, had	an emergency call had been	Due to the lack of details in
attempts to foster inter-	fallen or had a diagnosis of	made. Some practitioners are	relation to key methodological
organisational integration was	Chronic Obstructive	reported to have viewed out-	issues it is not possible to
taking place. Whilst some of the	Pulmonary Disease. Hospital	of-hours rapid response	award a higher quality rating
findings relate to crisis response	or community based staff	teams positively as a result of	to this study.
services, the study was not	recruited patients using the	their ability to respond more	
specifically designed to elicit	modified Appropriateness	quickly than out-of-hours	Overall assessment of
views on this type of service,	Evaluation Protocol criteria	general practitioner services.	external validity:
and data relating to other issues	(a tool used to identify '		+
or services have not been	avoidable acute hospital bed	Rapid response staff reported	
extracted.	use' (p599). Interviews	difficulties in accessing	Overall validity rating:

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	were also conducted with	important health information	-
Country: UK - England.	carers, as well as	out of hours, particularly if the	
	professionals involved in the	patient's community matron	Due to the lack of details in
Methodology: Qualitative study	care of the older person.	or general practitioner was	relation to key methodological
- Semi-structured interviews.	Professionals/practitioners -	unavailable and access	issues and somewhat poor
On the office distant	Hospital nursing staff,	arrangements to centrally	external validity it is not
Source of funding:	members of the allied health	held notes or assessments	possible to award a higher
Government - National Institute	or medical team, or in	were not in place.	quality rating to this study.
for Health Research, Service Delivery and Organisation	community settings, members or intermediate	The authors identify accident	
programme.	care or rehabilitation teams.	and emergency department	
programme.	Interviews in relation to	staff as 'key' to the provision	
	emergent findings also	of 'care closer to home' and	
	appear to have been	they note that admission	
	conducted with senior	avoidance work within the	
	managers however data	hospital itself had not always	
	generated by these are not	been sensitive to the needs	
	reported in the paper.	of the patient: 'Two patients	
		recounted episodes in which	
	Sample characteristics:	they were treated in A&E for	
	Age - Not reported. Although	fractures and discharged	
	it should be noted that the	home, but apparently without	
	study focuses on the impacts	adequate arrangements for	
	of integrated care for 'older'	follow-up care and support'	
	patients.	(p601).	
	Sex - Not reported.		
	Ethnicity - Not reported.	The study also reports that	
	Religion/belief - Not	staff at each of the 3 sites	
	_	who were involved in	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	reported.  Disability - Not reported.  Long term health condition - Four patients had a diagnosis of Chronic Obstructive Pulmonary Disease.  Sexual orientation - Not reported.  Socioeconomic position - Not reported.  Sample size: Eighteen patients participated in interviews (6 patients from each of the 3 sites). Interviews were also conducted with carers, as well as professionals involved in the care of the older person however the number of these types of participants is not reported.  Intervention:  Intervention category - Crisis response.  Describe intervention - The	providing 'care closer to home' felt that ' opportunities were being missed to prevent 'avoidable' acute bed use. A key challenge was to ensure that the existence and function of these services was known to potential referrers' (p601).  One patient is quoted as being satisfied with the care provided by a respiratory rapid response team after being referred by a hospital observation ward: "I just couldn't believe it. It all sort of clicked into place. I thought this is actually going to happen I came home and I just couldn't believe it, the phone rang and [they] said 'We'll be here in half an hour' – and they were" (Mrs I, Site 2, quoted on p602). The authors suggest in their discussion that there was an 'overreliance' on traditional	
	Describe intervention - The	referral mechanisms and	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	study includes information relating to a rapid response service that appears to meet the definition of crisis response as described in the National Audit of Intermediate Care.  • Delivered by - No details in relation to rapid response team members are reported.  • Delivered to - 'Older' patients who had experienced a stroke (n=1), had fallen (n=13) or had a diagnosis of Chronic Obstructive Pulmonary Disease (n=4). There are no details in relation to service eligibility criteria.  • Duration, frequency, intensity, etc Not reported.  • Key components and objectives of intervention - Not reported.  • Content/session titles - N/A.  • Location/place of delivery - The service appears to have been delivered in the	services at times of crisis. This is attributed to a lack of availability of rapid response services as well as a lack of awareness amongst some professionals that these types of 'care closer to home' services are available. Patients are also reported to have suggested poor signposting to alternative forms of crisis care as an issue.	

Research aims	PICO (population, intervention, comparison,	Findings	Overall validity rating
	outcomes)		
	person's own home.		

#### 2. Oh KM, Warnes AM, Bath P (2009) Effectiveness of a rapid response service for frail older people. Nursing Older People 21: 25-31

utcomes) articipants: Service users		
and their families, partners and arers – Rapid Response ervice users.  Ample characteristics: Age - Mean age 81.4 years (SD 7.1). Sex - 92/150 (62%) women Ethnicity - Not reported. Religion/belief - Not reported. Disability - Not reported. Long term health condition - Health conditions of participants: 1. Injuries from falls (n=48); 2. Chest infection, chronic obstructive pulmonary disease or	Change in service use 90 days after discharge The increase in service use after discharge could be interpreted that the multidisciplinary Rapid Response Service team assessment provided quick access to health and social care support to meet the specific needs of some older people with chronic conditions.  Number of patients with increased or unchanged service:  • Home care - increased	Overall assessment of internal validity:  Overall assessment of external validity: ++  Overall validity rating: +
el al A (18 E F n E L F pfair pa	mple characteristics: Age - Mean age 81.4 years SD 7.1). Sex - 92/150 (62%) women Ethnicity - Not reported. Religion/belief - Not eported. Disability - Not reported. Long term health condition - Health conditions of participants: 1. Injuries from alls (n=48); 2. Chest infection, chronic obstructive	days after discharge The increase in service use after discharge could be interpreted that the multidisciplinary Rapid Response Service team assessment provided quick access to health and social care support to meet the specific needs of some older people with chronic conditions.  Number of patients with increased or unchanged service:  Home care - increased

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	in the knee, leg, hip or back (n=11); 5. Infection on leg (n=10); 6. Urinary tract infection (n=10); 7. Cerebrovascular accident or transient ischaemic attack (n=9); 8. Heart failure (n=5), 9. Other problems including diabetes, bowel problem, hypertension and pain in palliative care patients (n=17). 10. 72% (n=108) admitted through GP referrals, while 23% (n=34) were admitted through the hospital emergency department. 11. The mean Barthel Index score was 70.7 (SD=22.4), with scores ranging from 0 = completely dependent to 100 = completely independent. 12. The mean Instrumental Activities of Daily Living score was 7.4 (SD=3.8) with scores ranging from 0 = completely dependent to 16 = completely independent.  • Sexual orientation - Not	<ul> <li>Respite care - increased service - n=15, same or less - n=59.</li> <li>Meals delivered - increased service - n=9, same or less - n=65.</li> <li>Aids and adaptations - increased service - n=14, same or less n=60.</li> <li>Physiotherapy - increased service - n=8, same or less - n=66.</li> <li>Neighbourhood support - increased service - n=5, same or less - n=69.</li> <li>Day care - increased service - n=10, same or less - n=64</li> <li>Home help - increased service - n=15, same or less - n=59</li> <li>Home loans - increased service - n=25, same or less - n=47</li> <li>Alarm system installed - increased service - n=7, same or less - n=67</li> <li>District nursing - increased</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	reported.  • Socioeconomic position -	service - n=7, same or less - n=67	
	26% married; 73% lived alone.	<ul> <li>Health visitor - increased service - n=8, same or less - n=66</li> </ul>	
	Sample size: 150 Rapid Response Service users.	<ul> <li>Chiropodist - increased service - n=6, same or less - n=68</li> </ul>	
	Intervention:	••	
	<ul> <li>Intervention category - Intermediate care - crisis response.</li> </ul>	NB. Total n=150, data missing for 76.	
	Describe intervention - The Rapid Response Service, in	Narrative findings –	
	collaboration with general practitioners provides a 24-	Features of care that satisfied:	
	hour facility for assessment and care delivered in the	Staff attitudes, their sensitivity to patients and	
	patient's own home and, when required, in a local	good staff patient relationships were	
	authority resource centre or nursing home. Rapid	frequently reported "The respect from the rapid	
	Response Service aims to reduce the rate of	response team is first class. They are truly	
	emergency hospital admissions. The criteria for	'guardian angels' and their kindness has no	
	referral would he patients	boundaries" (p28).	
	aged 60 or more years, who would otherwise be admitted	<ul> <li>Being treated in the home or in a home-like</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	to hospital, whose GPs accepted continuing medical responsibility, and who agreed to the care plan instead of normal hospital care. The service was to be provided for a maximum of 7 days at the patient's home, or for 14 days at a resource centre or care home. The plan was to achieve an assessment within 2 hours of a referral and to work closely with the referrer to set an appropriate care plan.  • Delivered by - Nurses, support workers, a physiotherapist, an occupational therapist, a social worker and clerical	environment "It's more personal and much better than hospital care	
	support.  • Delivered to - Old and vulnerable people who may need acute nursing care and social support in patients' own homes.  • Duration, frequency, intensity, etc Provided for a maximum of 7 days at the	Features of care that dissatisfied:  Inconvenient facilities and insufficient equipment and material supplies "I was satisfied with all the treatment received with the exception of insufficient pads for my complaint	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	patient's home, or for 14 days at a resource centre or care home.  Content/session titles - Not reported.  Location/place of delivery - At a resource centre or care home.  Describe comparison intervention – N/A.  Outcomes measured: Satisfaction with services. Service outcomes. Change in service use.  Follow-up: Service use measured 90 days after discharge.	<ul> <li>[incontinence]" (p29).</li> <li>Arrangements for care and recovery, impersonal nature of care, early dinner and bedtimes "Overall the standard of care I received was quite good, but at times I found it difficult to cope with the other nursing home residents with patients suffering from dementia, who were wandering and shouting" (p29).</li> <li>Poor communication between the Rapid Response Service team and other care professionals or informal carers "There appeared to be a lack of communication between the rapid response team and the district nurse about my insulin injection times" (p30).</li> <li>Inappropriate medical care and a lack of support from the general practitioner</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		during and after the Rapid Response Service care episode. "The rapid response team's initial response was excellent and I was placed very quickly in (a private nursing home which provided beds and care for the Rapid Response Service), but I have a serious concern about the medical care there. I deteriorated in the first week" (p30).  Insufficient or limited duration of care, Rapid Response Service team visits insufficient to meet their needs. "My specific illness was treated and monitored, but no attention was paid to my loss of appetite Not enough interest was shown otherwise" (p30).	

# Research question 3 – Findings tables - Health, social care and other practitioners views and experiences

1. Oh KM and Warnes AM (2010) A nurse-led rapid response service for frail older people: An assessment. British Journal of Community Nursing 15: 333-40

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: The study focuses	Participants:	Respondents were instructed	Overall assessment of
on a nurse-led Rapid Response	Professionals/practitioners -	to specify older people's	internal validity:
Service for frail older people.	Multidisciplinary team	health problems for which the	-
The authors aimed to report	members of the Rapid	service could be an	
practitioners 'assessments' of	Response Service and 3	appropriate response, as well	Due to the lack of details in
the service, and participants	groups of practitioners involved	as naming 3 positive	relation to key methodological
included team members as well	with the service - those who	characteristics and 3	issues it is not possible to
as other professionals involved	referred patients to the service	limitations of the service.	award a higher quality rating
with the team. In particular, the	such as accident and		to this study.
authors were interested in	emergency and admission	Health problems to which	
professionals' views regarding	ward staff at Barnsley District	the service was thought to	Overall assessment of
the type of patient for whom the	General Hospital, district	be an appropriate	external validity:
service was most appropriate,	nurses, general practitioners,	response: The authors	++
and their views on the services	and social workers; those	highlight in their narrative that	
'strengths and limitations'	involved in the care of patients	the 3 most frequently	Overall validity rating:
(p334).	accessing the service (e.g.	suggested problems were	-
	social services staff working at	chest infections or chronic	
Country: United Kingdom -	local resource centres or staff	obstructive pulmonary	Due to the lack of details in
Barnsley.	in nursing or residential	disease, falls, and medical or	relation to key methodological
	homes); practitioners involved	physical deterioration. They	issues it is not possible to
Methodology: Survey - Cross-	in follow-up care of patients	note that although around	award a higher quality rating
sectional postal survey.	such as district nurses and	10% of each group	to this study.
	social workers.	suggested 'deterioration',	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Source of funding: Not reported.	<ul> <li>Sample characteristics:</li> <li>Age - Not reported.</li> <li>Sex - Not reported.</li> <li>Ethnicity - Not reported.</li> <li>Religion/belief - Not reported.</li> <li>Disability - Not reported.</li> <li>Long term health condition - Not reported.</li> <li>Sexual orientation - Not reported.</li> <li>Socioeconomic position - Not reported.</li> </ul>	responses were on the whole quite different between groups. They highlight the fact that although 'emergency social problem' was the second most frequently cited problem by general practitioners, and mild confusion or early dementia was the fifth most frequently cited problem by this group, these issues were not suggested at all by members of the Rapid Response team.	
	<ul> <li>Sample size: N=120.</li> <li>Rapid Response Service team members n=15 (n=3 team leaders, n=4 staff nurses, n=4 care assistants, n=1 physiotherapist, n=1 occupational therapist, n=1 social worker, n=1 coordinator.</li> <li>Practitioners involved in referrals or follow-up care n=78 (n=2 district nurses, n=39 general practitioners,</li> </ul>	Health problems to which the service was thought to be an appropriate response by rapid response team members - frequencies (%):  • Chest infection or chronic obstructive pulmonary disease = 11 (28.9).  • Falls = 8 (21.1).  • Reduced mobility or medical deterioration = 4 (10.5).  • Mild cerebral vascular accident or transient	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>n=10 hospital staff in accident and emergency and admission wards at Barnsley District General Hospital, and n=27 social workers).</li> <li>Practitioners involved in general care of patients accessing the service n=27.</li> </ul>	<ul> <li>ischaemic attacks = 5 (13.2).</li> <li>Urinary tract infection = 4 (10.5).</li> <li>Emergency social problems = 0.</li> <li>Gastrointestinal infection = 1 (2.6).</li> <li>Mild confusion or early</li> </ul>	
	<ul> <li>Intervention:</li> <li>Intervention category - Crisis response.</li> <li>Describe intervention - Nurse-led Rapid Response service. The service is described as a 24 hour service providing assessments and care that aimed to reduce the number of emergency admissions to hospital.</li> <li>Delivered by - The service is nurse-led but is delivered in collaboration with a general practitioner. The team</li> </ul>	<ul> <li>dementia = 0. Cellulitis = 3 (7.9).</li> <li>Generally unwell after recent discharge from hospital = 0. Diabetes = 1 (2.6).</li> <li>Cardiac failure = 0. Other problems (included blood pressure monitoring, gout, incontinence, ischaemic heart disease, methicillin resistant staphylococcus aureus, nutrition problems, acute illness nursing supervision, medication review, shingles, terminal</li> </ul>	
	includes nurses, support workers, a physiotherapist and occupational therapist, and a social worker, and is	illness = 1 (2.6). • Total = 38 (100.0). • Sample size = 15.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	supported by clerical staff. The patient's general practitioner accepted continuing medical responsibility.  • Delivered to - The service was designed to respond to the needs of frail older people over the age of 60 who would otherwise be admitted to hospital.  • Duration, frequency, intensity, etc The service was limited to 7 days if provided in the patients home or for 14 days if provided in a local authority resource centre or in a nursing or residential home.  • Key components and objectives of intervention - The authors report that the service aimed to " achieve an assessment within 2 hours of a referral and to work closely with the referrer to set an appropriate care plan" (p334).  • Content/session titles - N/A.	<ul> <li>Number per head = 2.5.</li> <li>Health problems to which the service was thought to be an appropriate response by general practitioners - frequencies (%):</li> <li>Chest infection or chronic obstructive pulmonary disease = 14 (16.9).</li> <li>Falls = 6 (7.2).</li> <li>Reduced mobility or medical deterioration = 9 (10.8).</li> <li>Mild cerebral vascular accident or transient ischaemic attacks = 9 (10.8).</li> <li>Urinary tract infection = 5 (6.0).</li> <li>Emergency social problems = 12 (14.5).</li> <li>Gastrointestinal infection = 5 (6.0).</li> <li>Mild confusion or early dementia = 7 (8.4). Cellulitis = 4 (4.8).</li> <li>Generally unwell after</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Location/place of delivery –     Patient's own home     (including nursing and residential care homes) or in a local authority resource centre if required (no further details provided).	recent discharge from hospital = 4 (4.8).  Diabetes = 2 (2.4).  Cardiac failure = 1 (1.2).  Other problems (included blood pressure monitoring, gout, incontinence, ischaemic heart disease, methicillin resistant staphylococcus aureus, nutrition problems, acute illness nursing supervision, medication review, shingles, terminal illness = 5 (6.0).  Total = (100.0).  Sample size = 66.  Number per head = 1.3.  Health problems to which the service was thought to be an appropriate response by other practitioners (e.g. district nurses, Barnsley District General Hospital staff, staff working in care and nursing homes, staff	
		working in resource	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		centres, and social workers) - frequencies (%):  • Chest infection or chronic obstructive pulmonary disease = 40 (23.4).  • Falls = 36 (21.1).  • Reduced mobility or medical deterioration = 18 (10.5).  • Mild cerebral vascular accident or transient ischaemic attacks = 16 (9.4).  • Urinary tract infection = 13 (7.6).  • Emergency social problems = 10 (5.8).  • Gastrointestinal infection = 13 (7.6).  • Mild confusion or early dementia = 3 (1.8).  • Cellulitis = 3 (1.8).  • Generally unwell after recent discharge from hospital = 2 (1.2).  • Diabetes = 3 (1.8).  • Cardiac failure = 5 (2.9).	
		Other problems (included)	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		blood pressure monitoring, gout, incontinence, ischaemic heart disease, methicillin resistant staphylococcus aureus, nutrition problems, acute illness nursing supervision, medication review, shingles, terminal illness = 9 (5.3).  • Total = 171 (100.0).  • Sample size = 39.  • Number per head = 4.4.	
		Health problems to which the service was thought to be an appropriate response by all practitioners - frequencies (%):  • Chest infection or chronic obstructive pulmonary disease = 65 (22.3).  • Falls = 50 (17.1).  • Reduced mobility or medical deterioration = 31 (10.6).  • Mild cerebral vascular accident or transient	

ischaemic attacks = 30 (10.3).	
<ul> <li>Urinary tract infection = 22 (7.6).</li> <li>Emergency social problems = 22 (7.6).</li> <li>Gastrointestinal infection - frequency (%) = 19 (6.5).</li> <li>Mild confusion or early dementia = 10 (3.4).</li> <li>Cellulitis = 10 (3.4).</li> <li>Generally unwell after recent discharge from hospital = 6 (2.1).</li> <li>Diabetes = 6 (2.1).</li> <li>Cardiac failure = 6 (2.1).</li> <li>Other problems (included blood pressure monitoring, gout, incontinence, ischaemic heart disease, methicillin resistant staphylococcus aureus, nutrition problems, acute illness nursing supervision, medication review, shingles, terminal illness = 15 (4.9).</li> <li>Total = 292 (100.0).</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		• Sample size = 120.	
		• Number per head = 2.4.	
		Positive features of the	
		Rapid Response Service:	
		The authors found that the 3	
		most frequently cited positive	
		features of the Rapid	
		Response Service (by all	
		types of practitioner) were a	
		perceived ability to prevent	
		admission to hospital; as a	
		rapid response to the needs	
		of the patient (e.g. in terms of	
		nursing; occupational	
		therapy, physiotherapy and	
		social care, or provision of	
		prosthetic equipment and	
		'free placement'); and as a	
		means of enabling patients to	
		remain at home. It is noted	
		that 'assessment, care,	
		treatment and appropriate	
		follow-up discharge care by a	
		multidisciplinary team' was	
		suggested regularly by all	
		types of practitioners. In	
		contrast, although	
		involvement of informal	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		caregivers in care, enhanced collaboration between health and social care practitioners, and rapid rehabilitation were benefits that general practitioners and other types of practitioner identified, these attributes were not suggested by members of the Rapid Response team.	
		General practitioners also suggested positive features associated with nursing such as monitoring of conditions, supervision of care, and oversight of medication adherence. The authors report that social workers were 'most likely' to suggest that positive features of the service were that it prevented premature care home entry and relieved the workload of other practitioners, but that these benefits were not cited by any 'other care staff'. Some general practitioners are reported to have	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		suggested that referrals to the team were faster and simpler than admitting patients to hospital. For practitioners who suggested that the service allowed people to remain in their own home, some are reported to have suggested that patients treated by the team were less likely to lose ' confidence in their own ability' (p337) than those treated in hospital and were also able to avoid the types of complication that can arise in hospital (e.g. infections).	
		Positive features of the Rapid Response Service suggested by rapid response team members - frequencies (%):  • 'Prevent a hospital admission' = 8 (19.0).  • 'Quick response to needs for nursing care, occupational therapy, physiotherapy, social care,	

n, comparison,	Overall validity rating
a multidisciplinary team' = 6 (14.3).  • 'Flexible patient arrangements in community through joint working with social services and the private sector' = 5 (11.9).  • '24-hour, seven-day service' = 3 (7.1).  • 'Response to emergency social problem for a patient or their relatives' = 1 (2.4).  • 'Better liaison between health and social services through joint working' = 0 (0.0).  • 'Supervision and	
	<ul> <li>'Assessment, care, treatment and appropriate follow-up discharge care by a multidisciplinary team' = 6 (14.3).</li> <li>'Flexible patient arrangements in community through joint working with social services and the private sector' = 5 (11.9).</li> <li>'24-hour, seven-day service' = 3 (7.1).</li> <li>'Response to emergency social problem for a patient or their relatives' = 1 (2.4).</li> <li>'Better liaison between health and social services through joint working' = 0 (0.0).</li> </ul>

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		<ul> <li>'Rapid rehabilitation' = 0 (0.0).</li> <li>Others (including ' the involvement of informal caregivers in care, the avoidance of premature entry to a care home, taking work from overstretched professionals, administering medication via intravenous injection at home, clear care pathways, and £100 reimbursement for medical responsibility' p336) = 1 (2.4). Total = 42 (100).</li> <li>Sample size = 15.</li> <li>Number per head = 2.8.</li> </ul>	
		Positive features of the Rapid Response Service suggested by general practitioners - frequencies (%):  • 'Prevent a hospital admission' = 14 (15.6).  • 'Quick response to needs	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		for nursing care, occupational therapy, physiotherapy, social care, free placement and equipment' = 19 (21.1).  • 'Enable people to stay in the familiar and supportive surroundings of their own home' = 15 (16.7).  • 'Assessment, care, treatment and appropriate follow-up discharge care by a multidisciplinary team' = 12 (13.3).  • 'Flexible patient arrangements in community through joint working with social services and the private sector' = 13 (14.4).  • '24-hour, seven-day service' = 2 (2.2).  • 'Response to emergency social problem for a patient or their relatives' = 3 (3.3).  • 'Better liaison between health and social services through joint working' = 1	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		<ul> <li>(1.1).</li> <li>'Supervision and monitoring' = 7 (7.8).</li> <li>'Rapid rehabilitation' = 1 (1.1).</li> <li>Others (including ' the involvement of informal caregivers in care, the avoidance of premature entry to a care home, taking work from overstretched professionals, administering medication via intravenous injection at home, clear care pathways, and £100 reimbursement for medical responsibility' p336) = 3 (3.3). Total = 90 (100).</li> <li>Sample size = 39.</li> <li>Number per head = 2.3.</li> </ul>	
		Positive features of the Rapid Response Service suggested by other practitioners (e.g. district nurses, Barnsley District	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		General Hospital staff, staff working in care and nursing homes, staff working in resource centres, and social workers) - frequencies (%):  • 'Prevent a hospital admission' = 32 (20.4).  • 'Quick response to needs for nursing care, occupational therapy, physiotherapy, social care, free placement and equipment' = 26 (16.6).  • 'Enable people to stay in the familiar and supportive surroundings of their own home' = 24 (15.3).  • 'Assessment, care, treatment and appropriate	
		follow-up discharge care by a multidisciplinary team' = 30 (19.1).  • 'Flexible patient arrangements in community through joint working with social services and the private sector' = 14	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		<ul> <li>(8.9).</li> <li>'24-hour, seven-day service' = 9 (5.7).</li> <li>'Response to emergency social problem for a patient or their relatives' = 5 (3.2).</li> <li>'Better liaison between health and social services through joint working' = 8 (5.1).</li> <li>'Supervision and monitoring' = 0 (0.0).</li> <li>'Rapid rehabilitation' = 3 (1.9).</li> <li>Others (including ' the involvement of informal caregivers in care, the avoidance of premature entry to a care home, taking work from overstretched professionals, administering medication via intravenous injection at home, clear care pathways, and £100 reimbursement for medical responsibility' p336) = 6 (3.8).</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		• Total = 157 (100).	
		• Sample size = 66.	
		• Number per head = 2.4.	
		Positive features of the	
		Rapid Response Service	
		suggested by all	
		practitioners - frequencies (%):	
		"Prevent a hospital	
		admission" = 54 (18.7)	
		"Quick response to needs	
		for nursing care,	
		occupational therapy,	
		physiotherapy, social care,	
		free placement and	
		equipment" = 52 (18.0)	
		<ul> <li>"Enable people to stay in</li> </ul>	
		the familiar and supportive	
		surroundings of their own	
		home" = 50 (17.3)	
		<ul> <li>"Assessment, care,</li> </ul>	
		treatment and appropriate	
		follow-up discharge care by	
		a multidisciplinary team" =	
		48 (16.6) "Flexible patient	
		arrangements in	
		community through joint	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		working with social services and the private sector" = 32 (11.1).  • "24-hour, seven-day service" = 14 (4.8).  • "Response to emergency social problem for a patient or their relatives" = 9 (3.1).  • "Better liaison between health and social services through joint working" = 9 (3.1).  • "Supervision and monitoring" = 7 (2.4).  • "Rapid rehabilitation" = 4 (1.4).  • Others (including " the involvement of informal caregivers in care, the avoidance of premature entry to a care home, taking work from overstretched professionals, administering medication via intravenous injection at home, clear care pathways, and £100 reimbursement	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		for medical responsibility." p336) = 10 (3.5).	
		• Total = 289 (100).	
		• Sample size = 120.	
		• Number per head = 2.4.	
		Limitations of the Rapid Response Service: Respondents were also asked to suggest 3 problems associated with the Rapid Response Service and the authors report that there was considerable variation between groups in relation to this.	
		The most frequently suggested limitation (overall) was that the service tended to be provided in nursing and residential care homes, which was reportedly perceived as inappropriate. The authors state that this was a concern for general practitioners and social workers who felt that the service did not have the	
		capacity required to deliver	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		in-home 24-hour care across a wide geographical region. In contrast, this concern was not raised by Rapid Response team members.	
		The second most frequently suggested limitation (overall) was concern that the service was being used as a means of achieving 'free care'. The authors report that this was regularly raised by Rapid Response team members and social workers, but was only suggested by a small number of general practitioners.	
		The third most frequently suggested issue (overall) was a concern that the services eligibility criteria were inappropriate. The authors note that although this was suggested by all types of practitioners, the reasons for suggesting this varied.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Rapid Response team members are reported to have felt that practitioners based in accident and emergency departments 'referred anyone', and that other practitioners used the service as a means of accessing social services, especially where patients with long-term medical conditions, mental health conditions or social care problems were involved. This was perceived as leading to 'pointless' assessments that wasted the time of the team.	
		In contrast, general practitioners are reported to have viewed the eligibility criteria as too narrow which made it " impossible to provide the full range of intermediate care services" (authors p338) The authors also report that whilst general practitioners recognised that the service	

search aims F	Overall validity rating
	S
	ff

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		authors report that before a	
		social worker was recruited to	
		the team, the mandatory	
		assessment conducted by a	
		social worker before a patient	
		can be discharged from the	
		service was often delayed	
		and that this in turn meant	
		that new patients could not	
		be admitted to the service.	
		The fifth most frequently	
		suggested limitation (overall)	
		was the additional work which	
		the service generated for	
		general practitioners.	
		Although, this concern was	
		the fifth most frequent	
		response, this was almost	
		entirely as a result of	
		concerns raised by general	
		practitioners themselves.	
		General practitioners are	
		reported to have suggested	
		that a shortage of hospital	
		beds led accident and	
		emergency based	
		professionals to make	
		referrals to the team without	
		consultation which in turn	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		added to their workload. Whilst extra work without a corresponding increase in remuneration was a concern, some general practitioners emphasised that their main concern was that they did not have the time to do this extra work rather than that they were not being financially compensated for it.	
		The joint sixth most frequently cited concern (overall) in relation to the service was the fact that it was time-limited and of a very short duration. This was identified as an issue by general practitioners and the group of 'other' practitioners, although not by members of the Rapid Response team. Some respondents are reported to have suggested the time-limited care " regardless of the stage of the	
		patient's recovery, was unrealistic and did not meet	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		the needs of older people" (p339).	
		The other concern that was sixth most frequently cited was that the Rapid Response team made 'misleading medical assessments' (p339) (no further details provided), which was raised mainly by general practitioners but also by some social workers and hospital staff. General practitioners are also reported to have felt that it was difficult to conduct diagnostic tests or rapid investigations in non-hospital settings and that this had resulted in incorrect diagnoses or failure to address needs linked to particular conditions.	
		The authors report that some practitioners identified communication as sometimes problematic. Staff working in nursing/residential care	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		homes or local authority resource centres are reported to have felt that they had to admit patients at too short notice and with only minimal patient information. This meant that they did not have the time to assess patients before admission. These respondents are also reported to have suggested that they were not given enough information regarding transport or the post-discharge care which the patient required.	
		The authors also state that some practitioners were concerned that the large number of professionals involved in care 'bothered' patients and their family, with general practitioners and staff in nursing/residential care homes noting that patients had been asked the same questions by a number of different professionals.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Some practitioners are reported to have felt that the Rapid Response Service 'devalued' existing care services, that it's funding reduced the funds available for other services, had led to positions being made redundant, and that the care the service provided was of a poorer quality than community care. Some respondents are reported to have suggested that the service had specifically diverted funds away from the local authority community care team, which was perceived as an effective interface between healthcare services and social services.	
		Other issues which the authors highlight included: - social worker concerns that it was difficult to arrange follow-up care because the Rapid Response Service had raised	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		the expectations of patients and their families, with some patients discharged from the service reported to have become highly dependent on high cost care packages. Social workers are also reported to have suggested that patients did not want to leave the care home they had been placed in or were reluctant to pay for social services care in their own home, and that the Rapid Response team should have given greater consideration to whether the patient's relatives or friends were able to support the patient.	
		Limitations of the Rapid Response Service suggested by rapid response team members - frequencies (%):  • 'Inappropriate patient placement in residential or nursing homes for the Rapid Response Service	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		<ul> <li>care' = 0 (0.0).</li> <li>'Abuse by some relatives and disciplines as a short cut to 'free home care and nursing or residential care home' = 6 (18.8).</li> <li>'Inadequate criteria to distinguish between medical and social needs' = 10 (31.3).</li> <li>'Time taken for the innovative service and multi-disciplinary to settle down' = 11 (34.4).</li> <li>'General practitioners' pressure of work' = 0 (0.0).</li> <li>'The limited duration of care is only a short-term solution' = 0 (0.0).</li> <li>'Missed or wrong medical assessment due to the difficulty of carrying out diagnostic tests' = 0 (0.0).</li> <li>'Poor communication among Rapid Response Service team members and between them and other care professionals' = 1</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		<ul> <li>(3.1).</li> <li>'Rapid Response Service devalues existing care services' = 1 (3.1).</li> <li>'Not a rapid response' = 0 (0.0).</li> <li>'Lack of publicity about the Rapid Response Service' = 1 (3.1).</li> <li>'Lack of collaboration with other care agencies' = 1 (3.1).</li> <li>'Others' (including no arrangement with a general practitioner to retain medical responsibility; a perception that patients and their relatives are overwhelmed by the number of visits and involvement of numerous professionals; poor quality care provided in nursing or residential care homes; an increase in stress for family carers; a paucity of rehabilitation facilities; a lack of resources; and</li> </ul>	

inconsistently available intravenous medication) = 1 (3.1). • Total = 32 (100). • Sample size = 15. • Number per head = 2.1.  Limitations of the Rapid Response Service suggested by general practitioners - frequencies (%): • 'Inappropriate patient placement in residential or nursing homes for the Rapid Response Service care' = 11 (15.5). • 'Abuse by some relatives and disciplines as a short cut to 'free home care and nursing or residential care home' = 2 (2.8). • 'Inadequate criteria to distinguish between	Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
medical and social needs' = 4 (5.6).  • 'Time taken for the innovative service and			intravenous medication) = 1 (3.1).  • Total = 32 (100).  • Sample size = 15.  • Number per head = 2.1.  Limitations of the Rapid Response Service suggested by general practitioners - frequencies (%):  • 'Inappropriate patient placement in residential or nursing homes for the Rapid Response Service care' = 11 (15.5).  • 'Abuse by some relatives and disciplines as a short cut to 'free home care and nursing or residential care home' = 2 (2.8).  • 'Inadequate criteria to distinguish between medical and social needs' = 4 (5.6).  • 'Time taken for the	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	multi-disciplinary to settle down' = 0 (0.0).  • 'General practitioners' pressure of work' = 17 (23.9).  • 'The limited duration of care is only a short-term solution' = 6 (8.5).  • 'Missed or wrong medical assessment due to the difficulty of carrying out diagnostic tests' = 13 (18.3).  • 'Poor communication among Rapid Response Service team members and between them and other care professionals' = 5 (7.0).  • 'Rapid Response Service devalues existing care services' = 6 (8.5).  • 'Not a rapid response' = 2 (2.8).  • 'Lack of publicity about the Rapid Response Service' = 2 (2.8).	
	intervention, comparison,	intervention, comparison, outcomes)  multi-disciplinary to settle down' = 0 (0.0).  'General practitioners' pressure of work' = 17 (23.9).  'The limited duration of care is only a short-term solution' = 6 (8.5).  'Missed or wrong medical assessment due to the difficulty of carrying out diagnostic tests' = 13 (18.3).  'Poor communication among Rapid Response Service team members and between them and other care professionals' = 5 (7.0).  'Rapid Response Service devalues existing care services' = 6 (8.5).  'Not a rapid response' = 2 (2.8).  'Lack of publicity about the Rapid Response Service' =

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		other care agencies' = 0 (0.0).  • 'Others' (including no arrangement with a general practitioner to retain medical responsibility; a perception that patients and their relatives are overwhelmed by the number of visits and involvement of numerous professionals; poor quality care provided in nursing or residential care homes; an increase in stress for family carers; a paucity of rehabilitation facilities; a lack of resources; and inconsistently available intravenous medication) = 3 (4.2).  • Total = 71 (100).  • Sample size = 39.  • Number per head = 1.8.	
		Limitations of the Rapid Response Service suggested by other practitioners - frequencies	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		<ul> <li>(%):</li> <li>'Inappropriate patient placement in residential or nursing homes for the Rapid Response Service care' = 20 (16.3).</li> <li>'Abuse by some relatives and disciplines as a short cut to 'free home care and nursing or residential care home' = 18 (14.6).</li> <li>'Inadequate criteria to distinguish between medical and social needs' = 11 (8.9).</li> <li>'Time taken for the innovative service and multi-disciplinary to settle down' = 13 (10.6).</li> <li>'General practitioners' pressure of work' = 1 (0.8).</li> <li>'The limited duration of care is only a short-term solution' = 11 (8.9).</li> <li>'Missed or wrong medical assessment due to the difficulty of carrying out diagnostic tests' = 4 (3.3).</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		<ul> <li>'Poor communication among Rapid Response Service team members and between them and other care professionals' = 9 (7.3).</li> <li>'Rapid Response Service devalues existing care services' = 6 (4.9).</li> <li>'Not a rapid response' = 6 (4.9).</li> <li>'Lack of publicity about the Rapid Response Service' = 5 (4.1).</li> <li>'Lack of collaboration with other care agencies' = 5 (4.1).</li> <li>'Others' (including no arrangement with a general practitioner to retain medical responsibility; a perception that patients and their relatives are overwhelmed by the number of visits and involvement of numerous professionals; poor quality care provided in nursing or</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	outcomes)	residential care homes; an increase in stress for family carers; a paucity of rehabilitation facilities; a lack of resources; and inconsistently available intravenous medication) = 14 (11.4).  • Total = 123 (100).  • Sample size = 66.  • Number per head = 1.9.  Limitations of the Rapid Response Service suggested by all practitioners - frequencies (%):  • 'Inappropriate patient placement in residential or nursing homes for the Rapid Response Service care' = 31 (13.7).  • 'Abuse by some relatives and disciplines as a short cut to 'free home care and nursing or residential care	
		home' = 26 (11.5). • 'Inadequate criteria to	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		distinguish between medical and social needs' = 25 (11.1).  • 'Time taken for the innovative service and multi-disciplinary to settle down' = 24 (10.6).  • 'General practitioners' pressure of work' = 18 (8.0).  • 'The limited duration of care is only a short-term solution' = 17 (7.5).  • 'Missed or wrong medical assessment due to the difficulty of carrying out diagnostic tests' = 17 (7.5).  • 'Poor communication among Rapid Response Service team members and between them and other care professionals' = 15 (6.6).  • 'Rapid Response Service devalues existing care services' = 13 (5.8).  • 'Not a rapid response' = 8 (3.5).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		<ul> <li>'Lack of publicity about the Rapid Response Service' = 8 (3.5).</li> <li>'Lack of collaboration with other care agencies' = 6 (2.7).</li> <li>'Others' (including no arrangement with a general practitioner to retain medical responsibility; a perception that patients and their relatives are overwhelmed by the number of visits and involvement of numerous professionals; poor quality care provided in nursing or residential care homes; an increase in stress for family carers; a paucity of rehabilitation facilities; a lack of resources; and inconsistently available intravenous medication) = 18 (8.0).</li> <li>Total = 226 (100).</li> <li>Sample size = 120.</li> <li>Number per head = 1.9.</li> </ul>	

## Review question 3 – Critical appraisal – the views and experiences of people using services, their families and carers

1. Beech R, Henderson C, Ashby S et al. (2013) Does integrated governance lead to integrated patient care? Findings from the innovation forum. Health and Social Care in the Community 21: 598-605

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Aim of the study: To explore	Is the context clearly	Does the study's research	Overall assessment of
"patients" perceptions of the	described?	question match the review	internal validity:
care received across and within	Unclear. Very few details are	question? Partly. The	-
organisational boundaries'	provided in relation to	research was designed to	
(p598) in 3 areas where	participants or the settings in	explore 'patients'	Due to the lack of details in
attempts to foster inter-	which data collection took	perceptions of the care	relation to key methodological
organisational integration was	place, and the issue of context	received across and within	issues it is not possible to
taking place. Whilst some of the	bias is not specifically	organisational boundaries'	award a higher quality rating
findings relate to crisis response	discussed by the authors.	(p598) in 3 areas where	to this study.
services, the study was not		attempts to foster inter-	
specifically designed to elicit	Was the sampling carried	organisational integration was	Overall assessment of
views on this type of service,	out in an appropriate way?	taking place. Whilst some of	external validity:
and data relating to other issues	Appropriate. Purposive	the findings relate to crisis	+
or services have not been	sampling was used to select	response services, the study	
extracted.	patient participants (and their	was not specifically designed	Overall validity rating:
	carers if possible or if	to elicit views on this type of	-
Is a qualitative approach	permitted by the patient) and	service.	
appropriate? Appropriate. The	'snowball' sampling was used		Due to the lack of details in
study aimed to explore patient,	to identify key staff involved in	Has the study dealt	relation to key methodological
carer, and staff perceptions of	the care of the patient.	appropriately with any	issues and somewhat poor
care and a qualitative approach		ethical concerns? Partly.	external validity it is not
(semi-structured interviews) is	Were the methods reliable?	Patients provided written	possible to award a higher
appropriate to do so.	Not sure. Data only appear to	consent and a regional ethics	quality rating to this study.

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	have been collected by	committee approved the	
Is the study clear in what it	interviews however the authors	study, however consent	
seeks to do? Clear. The study	state that ' findings were	processes for carers and	
has a clearly stated objective.	also informed by other data	practitioners are not reported.	
	such as interviews with senior	All interview transcripts were	
How defensible/rigorous is	managers and documentary	anonymised.	
the research	analysis' (p 600).		
design/methodology?		Were service users	
Defensible.	Are the data 'rich'? Poor.	involved in the study? No.	
	Little detail is provided in	No indication that service	
How well was the data	relation to the contexts of the	users were involved in design	
collection carried out?	data, only a limited sense of	of the study or interpretation	
Somewhat appropriately. The	the detail and depth of	of findings.	
data collection methods are	participants' views is provided	Study relevance to scope	
appropriate to the research	and there is no comparative		
question, however very little	element.	Is there a clear focus on the	
detail is reported in relation to		guideline topic? Partly. The	
this except to note that this was	Is the analysis reliable?	study focuses on the	
conducted via semi-structured	Somewhat reliable. Double	integration of services and	
interviews, and there are no	coding of data does not appear	the impact that this can have	
details relating to data	to have taken place and there	on reducing hospital	
management or record-keeping.	is no indication that	admissions for older people	
	participants were able to	experiencing a health crisis.	
	provide feedback on	Whilst the study does not	
	transcripts or data however the	explore intermediate care	
	authors report that joint coding	specifically, some of the	
	frameworks were agreed and	findings relate to crisis	
	that meetings took place to	response services (covered	
	discuss common themes	under review question 3).	
	and/or discrepancies.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Are the findings convincing? Somewhat convincing. The findings are clearly and coherently presented however few quotes are included.  Are the conclusions adequate? Adequate.	Is the study population the same as at least one of the groups covered by the guideline? Yes. All participants appear to be adults, however it should be noted that the study focuses on care provided to 'older' adults and the findings therefore may not be generalisable.	
		Is the study setting the same as at least one of the settings covered by the guideline? Yes	
		Does the study relate to at least one of the activities covered by the guideline? Yes.	
		Are the views and experiences reported relevant to the guideline? Yes. The study reports some findings in relation to crisis response services.	
		Does the study have a UK	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
		perspective? Yes. Although it is not reported specifically, the research appears to have been conducted in the east of	
		England.	

### 2. Oh KM, Warnes AM, Bath P (2009) Effectiveness of a rapid response service for frail older people. Nursing Older People 21: 25-31

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To examine the	Response rate: 150 (82%)	Does the study's research	Overall assessment of
effect of the Rapid Response	completed questionnaire in	question match the review	internal validity:
Service on older people by	Phase 1 (patients' satisfaction	question? Yes. Both the	-
evaluating its positive	with previous contact with	quantitative and qualitative	
achievements and patients'	health and social services). At	design of the study assessed	Overall assessment of
satisfaction with its care, using	90 days after discharge from	the effectiveness of a rapid	external validity:
both quantitative and qualitative	the service (post-episode),	response (crisis response)	++
methods.	91/150 (61%) completed and	service for frail older people	
	returned the postal	in terms of service use and	Overall validity rating:
Objectives of the study	questionnaire (Phase 2).	patient satisfaction.	+
clearly stated? Yes. Both the			
quantitative and qualitative	Measures for contacting	Has the study dealt	
design of the study -to evaluate	non-responders? Not	appropriately with any	
a rapid response service (Rapid	reported for either the	ethical concerns? Yes. For	
Response Service), on its	quantitative or qualitative	both the quantitative and	
clinical and therapeutic	design.	qualitative design. Ethical	
achievements, and patients'		approval from Local	
satisfaction with its care, i.e. to	Describes what was	Research Ethics Committee;	
examine the effect of Rapid	measured, how it was	consent sought from patients,	
Response Service on older	measured and the results?	confidentiality and freedom to	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
people by evaluating its positive	Partly. For both the	withdraw from study assured.	
achievements and patients'	quantitative and qualitative		
satisfaction with its care.	design - patients' use of	Were service users	
	services and satisfaction with	involved in the study? Yes.	
Research design clearly	Rapid Response Service,	For both the quantitative and	
specified and appropriate?	measured by frequencies of	qualitative design of the study	
Partly. 'Complementary, multi-	service use and patients' views	-Rapid Response Service	
method studies were used to	on satisfaction with service.	users participated in the	
provide quantitative evidence on	However mean Barthel Index	study.	
the performance of the Rapid	(physical functioning) score is		
Response Service and the	provided but not as baseline	Is there a clear focus on the	
objective outcomes for patients,	vs. follow-up. Despite that	guideline topic? Yes. Both	
and to provide insights into the	Barthel Index seems to have	the quantitative and	
process of introducing and	been measured at both those	qualitative design of the study	
implementing a radically new	points.	- effectiveness of a rapid	
service, in part by seeking the		response (crisis response)	
opinions of patients and staff'	Measurements valid? Yes.	service for older people.	
(p26). The quantitative and			
qualitative data were obtained	Measurements reliable?	Is the study population the	
using 1. Interviewer-	Partly. For both the	same as at least one of the	
administered questionnaire	quantitative design - frequency	groups covered by the	
survey to examine patients'	of service use, also the Barthel	<b>guideline?</b> Yes. Adults using	
satisfaction with previous	Index and activities of daily	the Rapid Response Service.	
contact with health and social	living. For the qualitative		
services. 2. Self-completed	design: subjective views of	Is the study setting the	
questionnaire survey and audit	satisfaction	same as at least one of the	
of patient records 90 days after		settings covered by the	
discharge to measure duration	Measurements	guideline? Yes. Both the	
of care episode and change in	reproducible? Partly. Barthel	quantitative and qualitative	
service use (post-episode).	Index is reproducible and we	design of the study - Rapid	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	assume the satisfaction survey	Response Service in the	
Clear description of context?	is but this is not clear.	community.	
Yes.	Basic data adequately		
Both the quantitative and	described?	Does the study relate to at	
qualitative design of the study –	Yes.	least one of the activities	
Rapid Response Service in the		covered by the guideline?	
community.	Results presented clearly,	Yes. Crisis response	
	objectively and in enough	intermediate care.	
References made to original	detail for readers to make		
work if existing tool used?	personal judgements? Partly.	Are the views and	
Unclear. Not reported.		experiences reported	
	Results internally	relevant to the guideline?	
Reliability and validity of new	consistent? No. For the	Yes. Both the quantitative	
tool reported? Unclear. Testing	quantitative design - data were	and qualitative design of the	
or piloting of questionnaires not	missing from 76 (50%) patients	study - effectiveness of a	
reported.	on outcomes of service use.	rapid response (crisis	
		response) service for older	
Survey population and	Data suitable for analysis?	people in terms of service	
sample frame clearly	Partly. For the quantitative	use and patient satisfaction.	
described? Partly. People	design - frequency of service		
aged =/>65 years referred to	use (note missing data from	Does the study have a UK	
Rapid Response Service.	50% of participants). For the	perspective? Yes. Barnsley.	
Cognitively impaired people	qualitative design - yes.		
were excluded from the			
evaluation because they would	Clear description of data		
be unable to comprehend the	collection methods and		
satisfaction survey.	analysis? Partly. For the		
	quantitative design - an		
Representativeness of sample	interviewer-administered		
is described? No. For both the	questionnaire survey to		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
quantitative and qualitative	examine patients' satisfaction		
design - no details given.	with previous contact with		
	health and social services at		
Subject of study represents	phase 1. A self-completion		
full spectrum of population of	questionnaire survey and audit		
interest? Unclear. For both the	of patient records were		
quantitative and qualitative	conducted 90 days after		
design - no details given.	discharge to measure duration		
	of care episode and change in		
Study large enough to	service use (post-episode,		
achieve its objectives, sample	phase 2). Descriptive statistics		
size estimates performed?	(frequencies) analysis. Limited		
Unclear. For both the	details about questionnaire		
quantitative and qualitative	content, piloting and testing of		
design - no details given.	questionnaires prior to use. For		
	the qualitative design - this		
All subjects accounted for?	included interviews in addition		
Yes. For both the quantitative	to the survey methods.		
and qualitative design. 150	Responses to the open-ended		
(82%) completed an interviewer-	questions on satisfaction		
administered questionnaire	provided evidence of service		
(Phase 1). At 90 days after	satisfaction or dissatisfaction.		
discharge from the service,	Interview data were		
91/150 (61%) completed and	transcribed and grouped into		
returned the postal	themes for content analysis.		
questionnaire (Phase 2), 25	Limited details on content of		
(17%) had died.	interviews.		
All appropriate outcomes	Methods appropriate for the		
considered? Partly. For both	data?		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
the quantitative and qualitative	Yes. For both the quantitative		
design - yes, in terms of service use and patient satisfaction	and qualitative design.		
although admission avoidance	Statistics correctly		
(the objective of the service) is	performed and interpreted?		
not measured.	Partly. For the quantitative		
	design - correctly performed		
	but not correctly interpreted		
	(missing data from 50% of		
	participants, see table 1).		
	Response rate calculation provided? Yes - for quantitative design only. 150 (82%) completed an interviewer-administered questionnaire (phase 1). At 90 days after discharge from the service, 91/150 (61%) had completed and returned the postal questionnaire (phase 2). Assumed same for qualitative data.		
	Methods for handling missing data described? No. For both the quantitative and qualitative design - no.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
•	Difference between non-respondents and respondents described? No. For both the quantitative and qualitative design - no.		
	Results discussed in relation to existing knowledge on subject and study objectives? Yes. Limitations of the study stated? Partly. Not methodologically, especially on missing data on service use (Table 1), but authors suggest that a full evaluation of the 'hospital avoidance' effect of a Rapid Response Service requires an extended prospective longitudinal design.		
	Results can be generalised? Partly. Due to missing data and subjective views of Rapid Response Service users. These views could vary in different areas where health and social services provisions differed. Also unclear if missing		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
·	data (76/150 participants also referred to qualitative data).		
	Appropriate attempts made to establish 'reliability' and 'validity' of analysis? Unclear.		
	Conclusions justified? Partly. The need to have a shared understanding between service providers and referrers about the eligibility criteria is justified on the basis of results. However they hypothesise that hospital bed days can be reduced when there's no evidence for this (because they didn't collect data).		

# Review question 3 – Critical appraisal - Health, social care and other practitioners' views and experiences

1. Oh KM and Warnes AM (2010) A nurse-led rapid response service for frail older people: An assessment. British Journal of Community Nursing 15: 333-40

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The study focuses	Response rate: The authors	Does the study's research	Overall assessment of
on a nurse-led Rapid Response	do not report on response rate.	question match the review	internal validity:

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
Service for frail older people.	-	question? Yes. The study	-
The authors aimed to report	Measures for contacting	focuses on a nurse-led Rapid	
practitioners 'assessments' of	non-responders? There are	Response Service for frail	Due to the lack of details in
the service, and participants	no details regarding measures	older people. The authors	relation to key methodological
included team members as well	used to contact non-	aimed to report practitioners	issues it is not possible to
as other professionals involved	responders.	'assessments' of the service,	award a higher quality rating
with the team. In particular, the		and participants included	to this study.
authors were interested in	Describes what was	team members as well as	
professionals' views regarding	measured, how it was	other professionals involved	Overall assessment of
the type of patient for whom the	measured and the results?	with the team. In particular,	external validity:
service was most appropriate,	Yes. Respondents were asked	the authors were interested in	++
and their views on the services	to list the health problems of	professionals' views	
'strengths and limitations'	older people for which the	regarding the type of patient	Overall validity rating:
(p334).	service was an appropriate	for whom the service was	-
	response, to suggest 3 positive	most appropriate, and their	
Objectives of the study	aspects of the service, and to	views on the services	Due to the lack of details in
clearly stated? Yes. The aims	list 3 limitations of the service.	'strengths and limitations'	relation to key methodological
of the study are clear.	Measurements valid? N/A.	(p334).	issues it is not possible to
Because design electly	The authors devised a	Hee the etudy deelt	award a higher quality rating
Research design clearly specified and appropriate?		Has the study dealt	to this study.
Yes. The research design is	bespoke survey that was piloted (no further details	appropriately with any ethical concerns? Partly.	
clearly specified by the authors	provided).	The study was approved by a	
(cross-sectional survey with	provided).	research ethics committee,	
open-ended items so that views	Measurements reliable? N/A.	however the authors do not	
data could be added) although	The authors devised a	provide details on consent	
the data resulting from this are	bespoke survey that was	processes.	
not very rich. It may have been	piloted (no further details	F	
more appropriate to conduct	provided).	Were service users	
focus groups or interviews.	,	involved in the study? No.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	Measurements	No indication that service	
Clear description of context?	reproducible? Unclear.	users were involved in the	
N/A. The study used a postal		design of the study or	
survey design.	Basic data adequately	interpretation of the findings.	
	described? Partly. The study		
References made to original	reports on the frequencies with	Is there a clear focus on the	
work if existing tool used?	which certain responses were	guideline topic? Yes. The	
N/A. The survey appears to	received. No further details are	study focuses on a nurse-led	
have been designed specifically	provided.	rapid response service for	
for this study but no details on		frail older people that was	
the design process are	Results presented clearly,	considered to be equivalent	
provided.	objectively and in enough	to a crisis response service	
	detail for readers to make	according to the definition	
Reliability and validity of new	personal judgements? Partly.	given in the National Audit of	
tool reported? Partly. Although	The results are presented	Intermediate Care.	
the authors do not report	relatively clearly and		
reliability or validity data they	objectively although very few	Is the study population the	
note that the survey was piloted	details are provided.	same as at least one of the	
through " a small number of		groups covered by the	
interviews with the populations	Results internally	guideline? Yes. The study	
of interest" (p334).	consistent? Partly. The	reports on a survey	
	results are on the whole	conducted with practitioners	
Survey population and	consistent although some of	working in a rapid response	
sample frame clearly	the percentages do not appear	service (equivalent to crisis	
<b>described?</b> No. The authors do	to be exactly correct.	response) for frail older	
not provide a clear description		people, as well as other	
of the survey population or	Data suitable for analysis?	practitioners who had contact	
discuss their sample frame, and	Yes.	with the team.	
it is not clear whether a			
sampling frame was used at all.	Clear description of data		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	collection methods and	Is the study setting the	
Representativeness of sample	analysis? Partly. There is a	same as at least one of the	
is described? No. The authors	reasonably clear description of	settings covered by the	
do not provide any details in	the survey design and data	guideline? Partly. The study	
relation to representativeness of	analysis process but this is not	reports on the results of a	
the sample.	very detailed.	postal survey completed by	
the cample.	vory detailed.	rapid response team	
Subject of study represents	Methods appropriate for the	members and other	
full spectrum of population of	data?	practitioners with experience	
interest? Unclear. Only minimal	Yes.	of the service. The service	
details are provided in relation		was based in the community.	
to the sample and the authors	Statistics correctly		
do not discuss whether the	performed and interpreted?	Does the study relate to at	
sample was representative.	Yes.	least one of the activities	
		covered by the guideline?	
Study large enough to	Response rate calculation	Yes. The study reports on	
achieve its objectives, sample	provided? No. The authors do	practitioner 'assessments' of	
size estimates performed?	not report the response rate.	a nurse-led Rapid Response	
Unclear. The authors do not	·	Service for frail older people	
report whether sample size	Methods for handling	(considered to be equivalent	
estimates were performed or	missing data described?	to a crisis response service	
whether the study sample was	N/A.	according to the definition	
large enough to achieve its		given in the National Audit of	
aims. A total of 120 practitioners	Difference between non-	Intermediate Care).	
responded to the survey.	respondents and		
	respondents described?	Are the views and	
All subjects accounted for?	No. No details are provided in	experiences reported	
N/A.	relation to differences between	relevant to the guideline?	
	respondents and non-	Yes. The study reports on	
All appropriate outcomes	respondents.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
considered? N/A.	Results discussed in relation to existing knowledge on subject and study objectives? Partly. There is only limited discussion of the wider literature on care for frail older people, and only minimal consideration of how the findings of this study fit into the wider context.  Limitations of the study stated? No. The authors do not discuss the limitations of the study.	practitioner views regarding a rapid response service.  Does the study have a UK perspective? Yes. The study reports on the results of a survey of practitioners based in the Barnsley area.	
	Results can be generalised? Unclear. Very few details are provided on the practitioners who responded to the survey and the authors do not discuss how representative the sample was. It is not therefore possible to determine whether the results of this study can be generalised.		
	Appropriate attempts made to establish 'reliability' and		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	'validity' of analysis?		
	Unclear. There is no indication		
	that the authors attempted to		
	establish the reliability or		
	validity of their analysis.		
	<b>Conclusions justified?</b> Partly.		
	The author's conclusions are		
	generally plausible however		
	the data presented in the study		
	are not really contextualised		
	and it is therefore difficult to be		
	sure that the conclusions are		
	justified and are an accurate		
	interpretation of the data. In		
	addition, the analysis and		
	detailed discussion centres		
	almost exclusively on the		
	'limitations' of the service.		

### Research question 4. Reablement:

- a) What is the effectiveness and cost effectiveness of reablement?
- b) What are the views and experiences of people using services, their families and carers in relation to reablement?
- c) What are the views and experiences of health, social care and other practitioners about reablement?

#### Research question 4 – Findings tables – Effectiveness

1. Dundee City Council and Tayside NHS (2010) Home care enablement service: Evaluation. Dundee: Dundee City Council

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The study objectives were to –  • 'Determine the views of service users and other stakeholders, of the service.	<ul> <li>Participants:</li> <li>Service users and their families, partners and carers.</li> <li>Professionals/practitioners - Enablement social care staff,</li> </ul>	Statistical data – service outcomes - No effect sizes given or calculable.	Overall assessment of internal validity:
<ul> <li>Explore the impact of working in a different way on the home care staff.</li> <li>Establish if enablement had a</li> </ul>	hospital social work teams, and independent private providers.	Total number of hours required at start of service - Control 275 vs. intervention 314.	Overall assessment of external validity:
significant impact on speed of discharge from hospital.  • Demonstrate a comparison between the service users who had completed the enablement service, and those of a trial group of service users who were	<ul> <li>Sample size:</li> <li>Comparison numbers – n=22.</li> <li>Intervention numbers – n=22.</li> <li>Number of focus group participants or survey</li> </ul>	Total number of hours required at end of 6 week period Control 204 (25.8 reduction since start) vs. intervention 154 (51% reduction).	

Research aims	PICO (population, intervention, comparison,	Findings	Overall validity rating
	outcomes)		
discharged from hospital	respondents, not provided.	Total number of hours	
during the same period of		required at end of 6 month	
time during the previous year.	Intervention: Reablement.	period: Control 279.5 (1.6%	
Draw from the experience in	Description - Enablement, is	increase) vs. intervention 107	
order to inform the	described as "a time limited	(43% reduction).	
implementation of an	intensive care and support		
enablement approach across	service, to support service	Care services required at the	
the whole of home care' (p4).	users in order that they can	end of the enablement	
	learn new skills, or re-learn	process -	
<b>Methodology:</b> Mixed methods.	skills that they have lost.	Service users requiring no	
Qualitative (focus groups and	This approach maximises	ongoing care hours: 45.	
surveys) and quantitative	the individual's long term	Service users requiring a	
(analysis of data about required	independence, choice and	reduced number of care	
number of home care hours).	quality of life' (p3).	hours: 28.	
	Delivered by - The workforce	Service users requiring the	
Country: UK – Scotland.	is not very clearly described	same number of care hours:	
On the off office NL (	but it appears that the	13.	
Source of funding: Not	enablement service was	Service users requiring an	
reported.	created from 2 mainstream	increase in hours: 3.	
	home care teams so the	Service users who were re-	
	majority of staff were former	admitted to hospital whilst on	
	home care workers. A	the scheme: 20.	
	physiotherapist was also	Service users who went into	
	seconded to the enablement	respite care: 4. Total number of service	
	teams and a NHS senior		
	occupational therapist was	users: 113.	
	deployed for 12 hours per	Narrative findings	
	week to work with the	Narrative findings – service outcomes -	
	hospital occupational	outcomes -	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	therapy and physiotherapy departments on developing 'enablement plans'.  • Delivered to - People being discharged from hospital.  • Duration, frequency, intensity, etc.: 1 to 6 weeks.  • Key components and objectives of intervention - The objective is to support people following discharge from hospital, improve their independence and reduce the amount of ongoing home care they need. Hospital social work teams screen patients using the deselection criteria (terminal illness, dementia, Motor Neurone Disease, complex moving and handling requirements, etc.) If selected, a request for the service is made to the enablement team. If necessary a request for occupational therapy is also made - also requests for equipment which seem to be	Forty-five service users did not require any ongoing social care service at the end of the 6 week enablement period; this represents 60% of the service users. None of these service users had since required a service by the time of publication (2010).  Narrative findings - qualitative and views and experiences data - Everyone who completed the enablement service was given a survey comprising 11 questions. The results are presented:  1. Was the enablement service explained to you? Not sure 13% No 0% Yes 87%. 2. Who explained the service to you? Did not answer 11% Social Worker/Care Manager 67% Enablement Organiser 22%. 3. Were you informed this would be a short term	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		service? Not sure 13% No 0% Yes 87%.  4. Did you feel your opinion was included in your enablement plan? Yes 74% Not sure 13% No 13%.  5. Did you receive the support you felt you needed? Yes 75% Not sure 25% No 0%.  6. Were you satisfied with the support you received? Not sure 13% No 0% Yes 87%.  7. Did you receive a visit from a physiotherapist? Not sure 25% No 13% Yes 62%.  7.1 Did you find this helpful? Not sure 25% No 13% Yes 62%.  8. Did you receive a visit from an occupational therapist? Yes 13% Not sure 13% No 0% Yes 74%.  8.1. Did you find this helpful? No answer 13% Not sure	
	Comparison intervention: No service (the control was created retrospectively from a randomly selected group of 22	13% No 0% Yes 74%. 9. Did you feel involved in the process? No answer 13% Not sure 13% No 0% Yes 74%.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	service users discharged from hospital the previous year. They were tracked for 6 months to monitor the amount of care they received in that time).  Outcomes measured:  • Satisfaction with services - Service user and practitioner satisfaction.  • Service outcomes - Care hours required.	10. Did you feel the enablement team benefitted you? No answer 13% Not sure 13% No 0% Yes 74%. 11. How would you rate the enablement service? Did not answer 25% V poor 0% Poor 0% Adequate 0% Good 0% V good 13% Excellent 62%.  Qualitative findings are summarised here by practitioner group:	
	Follow-up: Six months post discharge.  Costs? Data on training costs are provided. Total training costs for social care workers, social care organisers and managers was £5,915	Hospital Social Work Team - Generally positive feedback. For example, they felt the enablement teams had facilitated a quicker discharge from hospital in most cases. They agreed the enablement assessment should be conducted post discharge - not while in hospital. One concern was about the enablement service becoming 'blocked' if they had trouble accessing longer term care. Therefore people	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		with complex needs were seen as inappropriate for the enablement service.	
		Enablement Social Care Workers (from verbal feedback during the Care Commission inspection) - Generally positive. Helping people regain independence makes their role fulfilling. They felt the loss of the physiotherapist and her knowledge when her secondment was over.	
		Independent Care Providers - Independent providers weren't concerned about a lack of contract hours as a result of the enablement scheme. One criticism was that hand over from the enablement teams to the external provider could be improved - they noted inconsistency in how this is done.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Costs - The enablement teams were created from existing home care teams and the running costs are approximately the same.	
		Occupational therapy - the priority given to enablement users created a backlog of others waiting for occupational therapy. To compensate for this, in the long term, another occupational therapy would need to be funded.	
		Health - incurred additional costs due to the input of the hospital and community rehabilitation teams.	

2. Glendinning C, Jones K, Baxter K et al. (2010) Home Care Re-ablement Services: Investigating the longer-term impacts (prospective longitudinal study) York: Social Policy Research Unit, University of York

Aproopoolivo longituumiai oluuy, roiki ooolai romoy kooolai on omi, omivoloity or roik				
Research aims	PICO (population,	Findings	Overall validity rating	
	intervention, comparison,			
	outcomes)			
Study aim: To examine –	Participants:	Statistical data - service	Overall assessment of	
1. Whether home care	Service users and their	user related outcomes -	internal validity:	
reablement improved outcomes	families, partners and carers.	NB. Effect size data are not	+	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
for people by giving them greater independence, when compared with conventional home care services.	Professionals/practitioners - Managers and front-line staff.	consistently reported for all outcomes. Where they were not provided, they have been calculated by the reviewing	Overall assessment of external validity:
2. If the improved outcomes lasts over time. 3. The cost-effectiveness of reablement  Methodology: Mixed methods. Quantitative data collection and analysis for users' outcomes; qualitative data collection and analysis for views and experiences of users and care professionals. Quantitative data analysis - Univariate analysis (paired t-tests, chi-squared tests and binomial tests) and multivariate analyses. Data analysis were adjusted on baseline characteristics. Multivariate regression analyses were performed employing both a fixed and random-effects model to explore outcome changes between baseline and the 12 month follow-up.	<ul> <li>Sample characteristics:</li> <li>Age - Service users – Over 65 years of age - reablement group 93% (n=589); comparison group 92% (n=329), not significant. Family carers - The majority of informal carers were aged over 65 years. Managers and front-line staff - no details provided.</li> <li>Sex - Service users - Female - reablement group 71% (n=455); comparison group 69% (n=248), not significant. Family carers - The majority of informal carers were also female. Managers and front-line staff - not reported.</li> <li>Ethnicity - Service users - Black or from a minority ethnic background - reablement group 6% (n=40); comparison 6%</li> </ul>	team.  Perceived health (ranges from very good to very bad, with higher scores indicating better perceived health) Reablement group: The % of people perceiving their health as good or very good declined by the time of follow-up approximately 12 months after receiving reablement (baseline 31 per cent and follow-up 23 per cent).  Similarly, the percentage of people in the reablement group perceiving their health to be bad or very bad increased (baseline 22 per cent and follow-up 31 per cent).  Comparison group: The % of people perceiving their health to be good or very good	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Country: UK. Nine local councils in the United Kingdom (Brighton and Hove, Croydon, Hampshire, Haringey, Leicestershire, Lincolnshire, North East Lincolnshire, Nottinghamshire and Wirral Borough).  Source of funding: Government - Department of Health.	<ul> <li>(n=22), not significant.</li> <li>Family carers - The majority of informal carers were White British or Irish.</li> <li>Managers and front-line staff - not reported.</li> <li>Long term health condition - Service users in the comparison group were statistically significantly more likely to have been classified as having critical or substantial levels of need than those in the reablement group (Table 3.4)</li> <li>Fair Access to Care Services (reablement group n=314; comparison group n=326) - critical or substantial - reablement group 37% (n=117); comparison group 77% (n=251), p&lt;0.001.</li> <li>Moderate or low - reablement group 63% (n=197); comparison group 23% (n=75), p&lt;0.001.</li> <li>Activities of Daily Living – Unable to get up or down stairs - reablement group</li> </ul>	remained stable (27 per cent at both baseline and follow-up) but more people felt their health was bad or very bad at follow-up (25 per cent at baseline compared to 28 per cent at follow-up).  Perceived health, presented as an overall score - Reablement group: There was a statistically significant deterioration in the mean score for perceived health by the time of 12 month follow-up (baseline mean 3.24 [SD 0.91]; follow-up mean 2.94 [SD 0.99]; p<0.001).  Comparison group: There was no change in mean perceived health from a baseline score of 2.99 (SD 0.99) to a 12 month follow-up score of 2.96 (SD 1.04).  Perceived quality of life (Ranges from 'so good it could not be better' to 'so bad it could not be worse' with a	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	57% (n=358) vs. 62%	higher score indicating better	
	(n=221), not significant.	perceived quality of life)	
	Unable to get outdoors/walk	Direction of change in	
	down road - reablement	perceived health from	
	group 76% (n=477) vs. 73%	baseline to follow-up (overall	
	(n=257), not significant.	score): Reablement group	
	Unable to get around	(n=235) Comparison group	
	indoors: 11% (n=70) vs. 16%	(n=139) Perceived health	
	(n=57), p<0.05.	improved 19% (44) 27% (38)	
	Unable to get in/out of bed or	Remained the same 40%	
	chair - reablement group	(94) 42% (58) Perceived	
	10% (n=63) vs. 19% (n=69),	health declined 41% (97)	
	p<0.001.	31% (43).	
	Unable to use toilet: 11%	0170 (10).	
	(n=68) vs. 17% (n=60),	Perceived quality of life,	
	p<0.001.	presented as an overall score	
	Unable to wash face and	Reablement group: There	
	hands - reablement group	was no statistically significant	
	8% (n=53) vs. 16% (n=56),	change in the mean	
	p<0.001.	perceived quality of life score	
	Unable to bath, shower or	between baseline (mean	
	wash all over - reablement	4.48, SD 1.07) and 12 month	
	group 71% (n=453) vs. 73%	follow-up (mean 4.35, SD	
	(n=262), not significant.	1.10).	
	Unable to get	Comparison group: there was	
	dressed/undressed -	a statistically significant (but	
	reablement group 41%	slight) deterioration from a	
	(n=261) vs. 46% (n=165),	baseline mean score of 4.28	
	not significant.	(SD 1.19) to a follow-up score	

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison, outcomes)		
	Unable to feed self: 4%	of 4.05 (SD 1.10, p<0.05).	
	(n=23) vs. 7% (n=25),		
	p<0.05.	Health-related quality of life	
	Unable to control bladder -	(mean EQ-5D scores by	
	reablement group 35%	group, by time, imputed)	
	(n=223) vs. 44% (n=156),	Reablement group at	
	p<0.05.	baseline: 0.35 (n=619).	
	Unable to control bowel -	Reablement group at 12	
	reablement group 17%	month follow up: 0.47	
	(n=109) vs. 23% (n=83),	(n=233). Comparison group	
	p<0.05.	at baseline: 0.30 (n=355).	
	Informal carers: Reablement	Comparison group at 12	
	group (n=645) vs.	month follow up: 0.32	
	comparison group (n=356)	(n=135).	
	Received informal care from	A difference in difference	
	someone in same	A difference in difference	
	household: 27% (n=173) vs.	analysis was conducted (to	
	30% (n=106), not significant.	adjust for baseline	
	Received informal care from	differences) and the model	
	someone outside household:	presented (p81) shows the	
	64% (n=413) vs. 63% (n=224), not significant. Did	extent to which participants with certain characteristics	
	not receive any informal	achieve above or below	
	care: 15% (n=98) vs. 15%	mean average EQ-5D scores	
	(n=54), not significant.	(imputed data): Shows	
	Managers and front-lines	Coefficient/ Marginal effect	
	staff - not reported.	and (probability).	
	Socioeconomic position -	and (probability).	
	Service users - Reablement	Note that a negative	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	group vs. comparison group Widowed 52% (n=336) vs. 53% (n=190), not significant; Married/cohabiting 25% (n=161) vs. 25% (n=92), not significant; Retired 97% (n=617) vs. 94% (n=339), not significant; Lives alone 68% (n=438) vs. 65% (n=233); Lives in privately owned household 55% (n=354) vs. 51% (n=183), not significant. Family carers: None lived alone. Managers and front-lines staff - not reported.	coefficient marginal effect shows that participants with that characteristic (e.g. referred from hospital) scored lower than the mean average EQ-5D score.  T1 ADL ability 0.041 (0.023). T1 ADL ability (sqrd) 0.003 (0.033). Female -0.008 (0.674). Alone 0.016 (0.414). Owns home 0.001 (0.964). Age 0.007 (<0.001). Referred from hospital -0.050 (0.081).	
	<ul> <li>Sample size:</li> <li>Comparison numbers - Service users - at baseline, conventional home care (n=361). At 12 months n=141.</li> <li>Intervention numbers - Service users: at baseline, reablement home care (n=654). At 12 months n=241.</li> <li>Service users (quantitative</li> </ul>	Reablement Group at T1 0.161 (0.014). Reablement Group at T2 0.275 (0.013). Reablement Group at T1 x T1 ADL -0.025 (0.005). Reablement Group at T2 x T1 ADL -0.035 (0.015). Reablement Group at T1 x hospital referral 0.038 (0.324). Reablement Group at T2 x hospital referral 0.113	

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison, outcomes)		
	data collection and analysis):	(0.027).	
	1,015 people were recruited	T2 0.002 (0.943).	
	at baseline (654 reablement	The net effect of using	
	home care group and 361	reablement services in this	
	conventional home care	analysis was around 0.1 on	
	group). At 9 to 12 months	the EQ-5D scale. This result	
	the number of people who	is significant at better than	
	completed follow-up at 12	the 95 per cent confidence	
	months was 241 in the	level with a range of 0.02 to	
	reablement group and 141 in	0.18.	
	the comparison group (38%		
	response rate and 62%	Social care related quality of	
	attrition).	life (mean ASCOT scores by	
	Qualitative data collection	group, by time, imputed)	
	and analysis - Semi-	Reablement group at	
	structured interviews were	baseline: 0.77 (n=621).	
	conducted with service users	Reablement group at 12	
	in each of the 5 reablement	month follow up (T2): 0.80	
	sites. A total of 34	(n=238).	
	reablement service users	Comparison group at	
	and 10 of their informal	baseline: 0.76 (n=357).	
	carers interviewed in-depth	Comparison group at 12	
	about their views of the	month follow up (T2): 0.78	
	reablement service they	(n=138).	
	received.		
	Managers and front-line staff	A difference in difference	
	in 8 sites - Focus groups	analysis was conducted (to	
	comprised 37 front-line staff	adjust for baseline	
	(with between 2 weeks and 8	differences) and the model	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	years of experience in the reablement service) and 3 occupational therapists. 26 reablement visits across 5 sites were observed. Service users whose visits were observed included: 12 men and 14 women, 25 were aged over 65 years (including 5 who were over 90 years old); 20 people referred following hospital discharge and 6 referred to the service from the community. None of the service users whose visits were observed were from ethnic minority populations. In each site, the researcher observed the activities of 2 different workers - one experienced and one with less experience of working in the reablement service.	presented (p84) shows the extent to which participants with certain characteristics achieve above or below mean average ASCOT scores (imputed data): Shows coefficient and (probability). Note that a negative coefficient marginal effect shows that participants with that characteristic (e.g. reablement group at T1) scored lower than the mean average ASCOT score.  ADL ability (log) 0.029 (0.115). Female -0.051 (0.612). Female x age 0.001 (0.488). Age 0.010 (<0.001). Age (cubed) -3.20E-07 (0.019). Alone -0.003 (0.825). In good health at T1 0.073 (<0.001). EQ-5D score at T1 (sqrd) 0.226 (<0.001).	
	<ul> <li>Description - Home care reablement is described as a</li> </ul>	Referred from hospital 0.108 (0.108).	

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	service for: ' for people	Critical FACs band - 0.064	
	with poor physical or mental	(0.051).	
	health to help them	Owns home -0.025 (0.021).	
	accommodate their illness by	Area cost adj. (+1%) 0.337	
	learning or re-learning the	(0.051).	
	skills necessary for daily	Reablement Group at T1 -	
	living' (Kent et al. 2000,	0.004 (0.771).	
	quoted on p1). Four out of	Reablement Group at T2	
	the 5 reablement sites were	0.198 (0.065).	
	developed from in house	Reablement Group at T2 x	
	home care services and the	Age -0.002 (0.109).	
	other (R2) reablement team	T2 -5.77E-04 (0.97).	
	remained part of the in	The net effect of using	
	house service, with care	reablement services in this	
	workers delivering both long	analysis was around 0.03 on	
	term home care and	the ASCOT scale. The	
	reablement if a person was	authors state that this is	
	identified as having the	significant at the 10% level	
	potential to 're-able'. All 5	although this is not clear from	
	started as relatively selective	the data presented in the	
	pilots, taking referrals from	tables.	
	hospital and intermediate		
	care. Their criteria gradually	Effect sizes calculated	
	broadened to be 'intake'	according to sample	
	services, for almost	characteristics	
	everyone over 18 referred	Perceived health by sample	
	for home care services (and	characteristics and	
	meeting Fair Access to Care	dependency at baseline	
	Services criteria). People	Age: Under 65 years:	

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		, ,
	outcomes)		
	with end of life care needs	d=0.0871; 95% Confidence	
	and those with severe	Interval -0.389 to 0.5633;	
	dementia were excluded and	Over 65 years: d=0.1079;	
	2 sites excluded people	95% CI -0.0274 to 0.2433.	
	living with learning	Gender: Male: d=0.1503;	
	disabilities. The intervention	95% CI -0.0849 to 0.3855;	
	starts with assessment and	Female: d=0.1257; 95% CI	
	development of person	-0.0249 to 0.2763.	
	centred care plans/tasks.	Ethnicity: White British or	
	Family members as well as	Irish: d=0.2001; 95% CI 0.064	
	service users could also be	to 0.3363; Other: d=-0.6899;	
	involved in goal setting.	95% CI -1.14 to -0.2398.	
	Reviews took place 1 to 2	Lives alone: No: d=0.1857;	
	times during the intervention	95% CI -0.0363 to 0.4077;	
	period. Towards the end of	Yes: d=0.0854; 95% CI	
	reablement, managers	-0.0737 to 0.2446.	
	conducted a formal review to	Owner occupier: No:	
	assess whether people	d=0.1064; 95% CI -0.0899 to	
	needed ongoing home care.	0.3027; Yes: d=0.1837; 95%	
	People using reablement	CI 0.0044 to 0.363.	
	and their carers plus a senior	Informal carer in same	
	carer were generally	household: No: d=0.1049;	
	involved in this review. If no	95% CI -0.0486 to 0.2585;	
	further care was needed, a	Yes: d=0.1568; 95% CI	
	closure date was agreed.	-0.0866 to 0.4001.	
	When people had ongoing	Informal carer in another	
	needs, the review identified	household: No: d=0.0936;	
	the required level and	95% CI -0.1211 to 0.3082;	
	transferred the person to an	Yes: d=0.1464; 95% CI	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	independent provider. See other elements of the intervention for the content of reablement.  • Delivered by - Majority of teams included a home care manager, team leader, home care workers ('re-ablers') who had or were working towards NVQ 2 or 3. Also occupational therapists and nurses. All sites required specialist occupational therapists assessments for complex equipment but in most places reablement care workers could obtain smaller pieces of equipment.  • Delivered to - Mostly older people were referred via hospital discharge (75%) and the rest were community referrals. People with end of life care needs were excluded as were people with severe dementia and in 1 area, people with learning disabilities were excluded.	-0.0166 to 0.3095. FACS (Fair Access to Care Services) level: Critical or substantial: d=0.1179; 95% CI -0.1029 to 0.3388; Moderate or low: d=-0.1238; 95% CI -0.3899 to 0.1424. Perceived health by sample characteristics and dependency at follow-up Age: Under 65 years: d=0.1925; 95% CI -0.6673 to 1.0524; Over 65 years: d=-0.0312; 95% CI -0.2484 to 0.1861. Gender: Male: d=-0.0785; 95% CI -0.4663 to 0.3094; Female: d=-0.0099; 95% CI -0.2593 to 0.2395. Ethnicity: White British or Irish: d=-0.0103; 95% CI -0.2264 to 0.2059; Other: d=-0.2104; 95% CI -1.1605 to 0.7397. Lives alone: No: d=-0.021; 95% CI -0.4006 to 0.3585; Yes: d=-0.0501; 95% CI -0.2997 to 0.1995.	
	<ul> <li>Duration, frequency,</li> </ul>	Owner occupier: No:	

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	intensity, etcTypically 5 to	d=-0.0526; 95% CI -0.3896 to	
	6 weeks (range 1-23 weeks).	0.2844; Yes: d=0.02; 95% CI	
	The length of reablement	-0.2482 to 0.2882.	
	visits was very flexible	Informal carer in same	
	(compared with conventional	household: No: d=0.01; 95%	
	home care visits). If	CI -0.2355 to 0.2554; Yes:	
	someone needed the	d=-0.1876; 95% CI -0.5823 to	
	reablement worker to stay	0.2072.	
	longer, the reablement	Informal carer in another	
	phoned through to the office	household: No: d=0.157; 95%	
	to rearrange their next call.	CI -0.1531 to 0.4672; Yes:	
	However there was some	d=-0.2333; 95% CI -0.5156 to	
	inconsistency in the flexibility	0.049.	
	within and between sites.	Perceived quality of life by	
	<ul> <li>Key components and</li> </ul>	sample characteristics and	
	objectives of intervention -	dependency at baseline	
	All sites had similar	Age: Under 65 years:	
	objectives - to support	d=0.6033; 95% CI 0.0844 to	
	service users to achieve	1.1222; Over 65 years:	
	maximum independence and	d=0.0987; 95% CI -0.0391 to	
	rebuild confidence. Aimed to	0.2365.	
	do this by moving away from	Gender: Male: d=0.114; 95%	
	time and task oriented	CI -0.1252 to 0.3532;	
	services to flexible services	Female: d=0.1059; 95% CI	
	focusing on helping people	-0.0528 to 0.2646.	
	to things for themselves	Ethnicity: White British or	
	rather than doing things for	Irish: d=0.1059; 95% CI	
	them. Main components	-0.0327 to 0.2444; Other:	
	across the sites - personal	d=0.0939; 95% CI -0.3656 to	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	care, assisting with washing/dressing, practical support such as assisting with meal preparation/household duties, prompting medication, information and signposting about library services, transport etc., psychological, emotional and personal support, taking people for a walk, increasing social engagements and contacts, referrals to lunch clubs etc., advice to reduce the risk of falls, providing equipment (grab rails) was also very important.  • Location/place of delivery - own home.	0.5533. Lives alone: No: d=0.1886; 95% CI -0.037 to 0.4142; Yes: d=0.0445; 95% CI -0.1185 to 0.2076. Owner occupier: No: d=0.1186; 95% CI -0.0826 to 0.3199; Yes: d=0.0536; 95% CI -0.1282 to 0.2353. Informal carer in same household: No: d=0.089; 95% CI -0.0678 to 0.2458; Yes: d=0.1525; 95% CI -0.0966 to 0.4017. Informal carer in another household: No: d=0.1972; 95% CI -0.0226 to 0.4169; Yes: d=0.0623; 95% CI -0.1041 to 0.2288. FACS (Fair Access to Care Services) level: Critical or	
	Comparison intervention: Conventional home care service.  Outcomes measured: Service user related outcomes • Self-perceived health (a 5 point scale).	substantial: d=0.4242; 95% CI 0.1966 to 0.6517; Moderate or low: d=-0.3097; 95% CI -0.5773 to -0.0421. Perceived quality of life by sample characteristics and dependency at follow-up Age: Under 65 years:	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Perceived quality of life (a 7 point scale).</li> <li>Health-related quality of life (EQ-5D – Euro-QoL).</li> <li>Social care outcomes (ASCOT – Adult Social Care Outcomes Toolkit). For service users' outcomes, all questionnaires were administered by interviewers.</li> <li>Satisfaction with services - Service users and their informal carers were interviewed in-depth about their views of the reablement service, to explore the factors which influenced reablement progress and outcomes. Also, unpaid carers' experiences of helping service users and the impact of home care reablement service on the care-giving role were sought.</li> <li>Service outcomes</li> <li>Use of health care, equipment, social care and other services</li> </ul>	d=0.717; 95% CI -0.1339 to 1.568.  Over 65 years: d=0.2635; 95% CI 0.0452 to 0.4819.  Gender: Male: d=0.2577; 95% CI -0.1328 to 0.6482; Female: d=0.3121; 95% CI 0.0621 to 0.5621.  Ethnicity: White British or Irish: d=0.3088; 95% CI 0.0913 to 0.5263; Other: d=-0.0352; 95% CI -0.9674 to 0.897.  Lives alone: No: d=0.2396; 95% CI -0.1411 to 0.6204; Yes: d=0.3012; 95% CI 0.0508 to 0.5516.  Owner occupier: No: d=0.2774; 95% CI -0.0607 to 0.6154; Yes: d=0.3066; 95% CI 0.037 to 0.5761.  Informal carer in same household: No: d=0.3864; 95% CI 0.1393 to 0.6335; Yes: d=0.0189; 95% CI -0.3751 to 0.4129.  Informal carer in another household: No: d=0.4297; 95% CI 0.1176 to 0.7418;	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Research aims	intervention, comparison,	Yes: d=0.1714; 95% CI -0.1105 to 0.4534. Health-related quality of life (EQ-5D) by sample characteristics and dependency at baseline Age: Under 65 years: d=0.1925; 95% CI -0.6673 to 1.0524. Over 65 years: d=-0.0312; 95% CI -0.2484 to 0.1861. Gender: Male: d=-0.0785; 95% CI -0.4663 to 0.3094; Female: d=-0.0099; 95% CI -0.2593 to 0.2395. Ethnicity: White British or Irish: d=-0.0103; 95% CI -0.2264 to 0.2059; Other: d=-0.2104; 95% CI -1.1605 to 0.7397. Lives alone: No: d=-0.021; 95% CI -0.4006 to 0.3585; Yes: d=-0.0501; 95% CI -0.2997 to 0.1995.	Overall validity rating
		Owner occupier: No: d=-0.0526; 95% CI -0.3896 to 0.2844; Yes: d=0.02; 95% CI -0.2482 to 0.2882. Informal carer in same	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
outcomes)	household: No: d=0.01; 95% CI -0.2355 to 0.2554; Yes: d=-0.1876; 95% CI -0.5823 to 0.2072. Informal carer in another household: No: d=0.157; 95% CI -0.1531 to 0.4672; Yes: d=-0.2333; 95% CI -0.5156 to 0.049. Perceived quality of life by sample characteristics and dependency at baseline: Age: Under 65 years: d=0.1414; 95% CI -0.3397 to 0.6224; Over 65 years: d=0.1596; 95% CI 0.0226 to 0.2967. Gender: Male: d=0.0941; 95% CI -0.1427 to 0.3308; Female: d=0.155; 95% CI -0.0023 to 0.3122. Ethnicity: White British or Irish: d=0.1857; 95% CI 0.0481 to 0.3233; Other: d=-0.5338; 95% CI -0.9846 to -0.083. Lives alone: No: d=0.3206;	
	95% CI -0.037 to 0.4142; Yes: d=0.031; 95% CI	
	intervention, comparison,	intervention, comparison, outcomes)  household: No: d=0.01; 95% CI -0.2355 to 0.2554; Yes: d=-0.1876; 95% CI -0.5823 to 0.2072. Informal carer in another household: No: d=0.157; 95% CI -0.1531 to 0.4672; Yes: d=-0.2333; 95% CI -0.5156 to 0.049. Perceived quality of life by sample characteristics and dependency at baseline: Age: Under 65 years: d=0.1414; 95% CI -0.3397 to 0.6224; Over 65 years: d=0.1596; 95% CI 0.0226 to 0.2967. Gender: Male: d=0.0941; 95% CI -0.1427 to 0.3308; Female: d=0.155; 95% CI -0.0023 to 0.3122. Ethnicity: White British or Irish: d=0.1857; 95% CI 0.0481 to 0.3233; Other: d=-0.5338; 95% CI -0.9846 to -0.083. Lives alone: No: d=0.3206; 95% CI -0.037 to 0.4142;

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		-0.1296 to 0.1916. Owner occupier: No: d=0; 95% CI -0.1977 to -0.1977; Yes: d=0.2795; 95% CI 0.0976 to 0.4614. Informal carer in same household: No: d=0; 95% CI -0.1553 to -0.1553; Yes: d=0.4991; 95% CI 0.2502 to 0.748. Informal carer in another household: No: d=0.1837; 95% CI -0.0334 to 0.4008; Yes: d=0.1256; 95% CI -0.0393 to 0.2905.	
		Effect size of costs (£s), with imputed missing values Social care ten months: d=-0.5522; 95% CI -0.7085 to -0.3958.  Total social care costs (12 months): d=-0.1322; 95% CI -0.286 to 0.0216.  Health costs 8 weeks: d=0.2404; 95% CI 0.0863 to 0.3946.  Health costs ten months: d=0.0771; 95% CI -0.0766 to	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		0.2308. Total costs (12 months): d=0.0584; 95% CI -0.0953 to 0.212.	
		Narrative findings - service user related outcomes - Perceived health A smaller percentage of people in the re-ablement group than in the comparison group perceived their health to have improved and a greater percentage felt it had declined.	
		Perceived quality of life 'In the reablement group, there was a statistically significant deterioration in the mean score for perceived health by the time of 12 month follow-up (baseline mean 3.24 (SD 0.91); follow-up mean 2.94 (SD 0.99); p<0.001). In the comparison group, there was no change in mean perceived health from a baseline score of 2.99	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		(standard deviation 0.99) to a 12 month follow-up score of 2.96 (SD 1.04)' (p71).	
		Health related quality of life Overall, use of reablement was statistically significantly associated with better EQ-5D outcomes than the use of conventional home care services. The net effect of using reablement services in this analysis was around 0.1 on the EQ-5D scale (which runs from a score of 1 for full health to -0.5). The result is significant with a CI of 0.02 to 0.18.	
		Social care related quality of life Mean ASCOT scores for people in the reablement and comparison groups at baseline and follow up show a very small improvement for the reablement group (+0.03) over the comparison group (+0.02), before adjustment for	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		baseline differences and time effects.	
		Narrative findings - qualitative and views and experiences data - Views of services users and their informal carers (qualitative data) To avoid double counting, refer to Wilde and Glendinning (2012) for the findings from the interviews with people using reablement and their carers.	
		Views of senior managers and front-line staff (qualitative data) To avoid double counting, refer to Rabiee and Glendinning (2011) for the findings from the interviews with managers, observations of reablement visits and focus groups with front line staff involved in the organisation and delivery of reablement.	

## 3. Lewin G, Allan J, Patterson C et al. (2014) A comparison of the home-care and healthcare service use and costs of older Australians randomised to receive a restorative or a conventional homecare service. Health and Social Care in the Community 22: 328–36

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison, outcomes)		
<b>Study aim:</b> The study aimed to compare ' the health and aged care service use and costs of older home-care clients who	Participants: Service users and their families, partners and carers - Individuals were eligible for the service/trial if	NB. Effect sizes not presented by authors. Effect sizes presented here were calculated by the review	Overall assessment of internal validity:
were randomly assigned to receive either a restorative or	they were aged 65 years or more, lived in the Perth	team.	A key limitation of the study is the possibility that the
conventional home-care service' (p329).	metropolitan area (as the intervention was not provided in rural areas), had been	Statistical data – service outcomes - Service use in first year	randomisation process may have been compromised and it is therefore difficult to apply
<b>Country:</b> Australia – Perth metropolitan area.	assessed as eligible for personal care funded by the government Home and	(intention-to-treat) Hours of care (all services): The intervention group used	a higher quality rating.  Overall assessment of
<b>Methodology:</b> Randomised controlled trial.	Community Care programme as a result of ongoing difficulties in activities of daily	significantly fewer hours of care (all services) during the first year than the control	external validity:
Source of funding: Government - Australian Health Ministers' Advisory Council.	living (rather than a need for post-acute care), were English speakers, and did not have a diagnosis of dementia or terminal illness. Individuals were also excluded if they had complex support needs for which more than 15 hours per week of home care was required.	group; control (n=375) mean 116.8 (125.4 SD); intervention (n=375) mean 83.6 (81.9 SD); p<0.001. Hours of care (personal care only): The intervention group used significantly fewer hours of care (personal care only) during the first year than the control group; control (n=375) mean 45.6 (49.3 SD);	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Sample characteristics:</li> <li>Age – Intention to treat/randomised – control mean age = 82.7 years (7.7 SD); intervention mean age = 81.8 years (7.2 SD); p=0.105. Age - As treated - control mean age = 82.7 years (7.6 SD); intervention mean age = 81.9 years (7.4 SD); p=0.164.</li> <li>Sex – Intention to treat/randomised – control female n=242 (64.5%); intervention female n=263 (70.1%); p=0.102. Sex - As treated – control female n=254 (64.3%); intervention female n=224 (72.3%) p=0.025.</li> <li>Ethnicity – Not reported however details on country of birth are provided. Born in Australia - Intention to treat/randomised – control – n=183 (48.8%); intervention n=204 (54.4%); p=0.415. Born in Australia - As treated – control n=195 (49.4%);</li> </ul>	intervention (n=375) mean 19.1 (27.6 SD); p<0.001. Assessed and approved for higher level of care: A significantly lower proportion of participants in the intervention group were assessed and approved for a higher level of care during the first year compared to that in the control group; control (n=375) n=190 (50.7%); intervention (n=375) n=163 (43.5%); p=0.048. Ongoing personal care: A significantly lower proportion of participants in the intervention group were receiving ongoing personal care at the first year follow-up compared to that in the control group; control (n=310) n=160 (51.6%); intervention (n=150) n=63 (25.2%); p<0.001. Emergent personal care: A significantly lower proportion of participants in the intervention group were in	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	intervention n=173 (55.8%); p=0.211.  Religion/belief - Not reported.  Disability - Not reported.  Long term health condition - Not reported.  Socioeconomic position —  Has carer - Intention to treat/randomised — control n=254 (67.7%); intervention n=216 (57.6%); p=0.004. Has carer - As treated — control n=266 (67.3%); intervention n=176 (56.8%); p=0.004.  Co-resident carer - Intention to treat/randomised — control n=185 (72.8%); intervention n=141 (65.6%); p=0.089. Co-resident carer - As treated — control n=195 (73.3%); intervention n=109 (62.3%); p=0.014.  Lived alone - Intention to treat/randomised — control n=159 (42.4%); n=192 (51.2%); p=0.016. Lived	receipt of a new personal care service at the first year follow-up compared to that in the control group; control (n=65) n=18 (27.7%); intervention (n=125) n=17 (13.6%); p=0.017. Emergency department presentation: A lower proportion of participants in the intervention group presented to the emergency department during the first year compared to that in the control group however this difference was not statistically significant; control (n=375) n=208 (55.5%); intervention (n=375) n=188 (50.1%); p=0.143. Hospital admission: A lower proportion of participants in the intervention group were admitted to hospital during the first year compared to that in the control group however this difference was not statistically significant; control (n=375) n=218	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	alone - As treated – control n=167 (42.3%); n=164 (52.9%); p=0.005.  • Government pension - Intention to treat/randomised – control n=350 (93.3%); intervention n=333 (88.8%); p=0.097. Government pension - As treated – control n=367 (92.9%); intervention n=276 (89.0%); p=0.207.	(58.1%); intervention (n=375) n=206 (54.9%); p=0.377. Episodic length of stay: Participants in the intervention group who were admitted to hospital during the first year (unplanned) had a shorter length of stay (episodic) compared to those in the control group however this difference was not statistically significant; control	
	<ul> <li>Baseline characteristics:</li> <li>Activities of Daily Living Silver Chain – Intention to treat/randomised – control mean score 12.2 (3.2 SD); intervention mean score 12.8 (2.8 SD); p=0.013. Activities of Daily Living Silver Chain – As treated – control mean score 12.2 (3.1 SD); intervention mean score 12.9 (2.7 SD); p=0.005.</li> <li>Instrumental Activities of Daily Living Silver Chain – Intention to treat/randomised – control mean score 7.2</li> </ul>	(n=375) mean 6.3 (9.9 SD); intervention (n=375) mean 5.4 (9.2 SD); p=0.092. Cumulative length of stay: Participants in the intervention group who were admitted to hospital during the first year (unplanned) had shorter lengths of stay (cumulative) compared to those in the control group however this difference was not statistically significant; control (n=375) mean 18.6 (19.0 SD); intervention (n=375) mean 18.4 (24.2 SD); p=0.926.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	(3.6 SD); intervention mean score 8.1 (3.2 SD); p<0.001. Instrumental Activities of Daily Living Silver Chain – As treated – control mean score 7.2 (3.7 SD); intervention mean score 8.2 (3.1 SD) p<0.001.	Deaths, observed (expected): There was no significant difference between the intervention or control groups in the difference between the observed rate of death and the expected rate of death; (control n=77 (n=75.8) vs. intervention n=74 (n=75.2);	
	Service use in the previous	p=0.840.	
	year:		
	<ul> <li>Home and Community Care programme care (all</li> </ul>	Service use in first year (as treated)	
	services) - Intention to treat/randomised – control mean 49.22 hours (45.43 SD); intervention mean 45.09 hours (47.35 SD); p=0.437. Home and Community Care programme	Hours of care (all services): The intervention group used significantly fewer hours of care (all services) during the first year than the control group; control (n=395) mean 119.6 (124.9 SD);	
	care (all services) – As treated – control mean 49.55 hours (47.17 SD); intervention mean 46.65 hours (45.50 SD); p=0.287. • Home and Community Care	intervention (n=310) mean 79.5 (70.6 SD); p<0.001. Hours of care (personal care only): The intervention group used significantly fewer hours of care (personal care only)	
	programme (personal care) - Intention to treat/randomised - control mean 33.37 hours	during the first year than the control group; control (n=395) mean 48.2 (49.1 SD);	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	(36.20 SD); intervention mean 24.94 hours (34.14 SD); p=0.486. Home and Community Care programme (personal care) - As treated – control mean 39.40 hours (39.80 SD); intervention mean 17.27 hours (25.47 SD); p=0.108.  • Ongoing personal care - Intention to treat/randomised – control n=23 (6.13%); intervention n=6 (1.60%); p = 0.02. Ongoing personal care – As treated – control n=24 (6.07%); intervention n=3 (0.97%); p=0.001.  • Emergency department presentation - Intention to treat/randomised – control n=198 (52.80%); intervention n=201 (53.60%); p=0.826. Emergency department presentation – As treated – control n=209 (52.91%); intervention n=162 (52.26%); p=0.863.  • Hospital admission -	intervention (n=310) mean 16.1 (22.2 SD); p<0.001. Assessed and approved for higher level of care: A lower proportion of participants in the intervention group were assessed and approved for a higher level of care during the first year compared to that in the control group however this difference was not statistically significant; control (n=395) n=196 (49.6%); intervention (n=310) n=134 (43.2%); p=0.091. Ongoing personal care: A significantly lower proportion of participants in the intervention group were receiving ongoing personal care at the first year follow-up compared to that in the control group; control (n=336) n=175 (52.1%); intervention (n=216) n=45 (20.8%); p<0.001. Emergent personal care: A significantly lower proportion	
	Intention to treat/randomised	of participants in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>control n=224 (59.73%); intervention n=215 (57.33%); p=0.505. Hospital admission - As treated – control n=232 (58.73%); intervention n=176 (56.77%); p=0.601.</li> <li>Episodic length of stay - Intention to treat/randomised – control mean 9.21 (12.79 SD); intervention mean 9.80 (11.40 SD); p=0.493. Episodic length of stay - As treated – control mean 9.14 (12.50 SD); intervention mean 10.08 (12.11 SD); p=0.302.</li> <li>Cumulative length of stay - Intention to treat/randomised – control mean 10.51 (19.00 SD); intervention 9.83 (17.09 SD); p=0.605. Cumulative length of stay - As treated – control mean 10.71 (19.04 SD); 9.79 (17.60 SD); p=0.511.</li> <li>Sample size:</li> </ul>	intervention group were in receipt of a new personal care service at the first year follow-up compared to that in the control group; control (n=59) n=22 (37.3%); intervention (n=94) n=11 (11.7%); p<0.001.  Emergency department presentation: A significantly lower proportion of participants in the intervention group presented to the emergency department during the first year compared to that in the control group; control (n=395) n=224 (56.7%); intervention (n=310) n=146 (47.1%); p=0.011.  Hospital admission: A significantly lower proportion of participants in the intervention group were admitted to hospital during the first year compared to that in the control group;	
		control (n=395) n=233	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Comparison numbers –         Intention to treat/randomised         n=375; as treated n=395.</li> <li>Intervention numbers –         Intention to treat/randomised         n=375; as treated n=310.</li> <li>Sample size – Intention to         treat/randomised N=750; as         treated n=705.</li> <li>Intervention:         <ul> <li>Description - The               intervention is described as                 a restorative home care                 service.</li> <li>Delivered by - The service is                 delivered by a not-for profit                 care provider named Silver                Chain which is based in                 Western Australia. No details                 on the background or                 training level of staff are                 reported by the authors.</li> <li>Delivered to - Participants                 were over the age of 65 and                 had been assessed as                 eligible for personal care</li> </ul> </li> </ul>	(59.0%); intervention (n=310) n=160 (51.6%); p=0.050. Episodic length of stay: Participants in the intervention group who were admitted to hospital during the first year (unplanned) had a shorter length of stay (episodic) compared to those in the control group however this difference was not statistically significant; control (n=395) mean 6.1 (9.5 SD); intervention (n=310) mean 5.2 (9.1 SD); p=0.109. Cumulative length of stay: Participants in the intervention group who were admitted to hospital during the first year (unplanned) had longer lengths of stay (cumulative) compared to those in the control group however this difference was not statistically significant; control (n=395) mean 18.3 (18.9 SD); intervention	
	training level of staff are reported by the authors.  • Delivered to - Participants were over the age of 65 and had been assessed as	those in the control group however this difference was not statistically significant; control (n=395) mean 18.3	

outcomes)		
Home and Community Care programme as a result of ongoing difficulties in activities of daily living (rather than a need for postacute care). Eligibility was also restricted to individuals residing in the Perth metropolitan area who could speak English and did not have a diagnosis of	Deaths, observed (expected): There was no significant difference between the intervention or control groups in the difference between the observed rate of death and the expected rate of death; control n=84 (n=79.9) vs. intervention n=59 (n=63.1); p=0.489.	
dementia or terminal illness. Individuals with complex support needs requiring more than 15 hours per week of home care were excluded.  • Duration, frequency, intensity, etc The authors report that the service is usually provided for up to 12 weeks however no further details on frequency or intensity are provided.  • Key components and objectives of intervention - The intervention is described as a goal-oriented,	Service use in second year (intention-to-treat) Hours of care (all services): The intervention group used significantly fewer hours of care (all services) during the second year than the control group; control (n=298) mean 92.5 (137.9 SD); intervention (n=301) mean 50.4 (90.7 SD); p<0.001. Hours of care (personal care only): The intervention group used significantly fewer hours of care (personal care only) during the second year than the control group; control	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	that is designed to foster independence and reduce the need for ongoing care. Engagement in activities of daily living is encouraged through the use of ' task analysis and redesign, work simplification and assistive technology' (p330). The programme can be modified to according to the service user goals and can include techniques to improve mobility (by incorporating balance, endurance, and strength components); and strategies to enable selfmanagement of chronic disease, prevention of falls, management of continence, medicine and nutrition, and development of social networks.  • Location/place of delivery - The service is provided in the participant's own home.	SD); intervention (n=301) mean 13.4 (31.5 SD); p<0.001.  Assessed and approved for higher level of care: A lower proportion of participants in the intervention group were assessed and approved for a higher level of care during the second year compared to that in the control group however this difference was not statistically significant; control (n=298) n=104 (34.9%); intervention (n=301) n=92 (30.6%); p=0.258.  Ongoing personal care: A significantly lower proportion of participants in the intervention group were receiving ongoing personal care at the second year follow-up compared to that in the control group; control (n=246) n=85 (34.5%); intervention (n=201) n=23 (11.4%); p<0.001.	
	Comparison intervention: Care as usual. Individuals	Emergent personal care: A significantly lower proportion	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	intervention, comparison,	of participants in the intervention group were in receipt of a new personal care service at the second year follow-up compared to that in the control group; control (n=52) n=9 (17.3%); intervention (n=100) n=6 (6.0%); p=0.027. Emergency department presentation: A lower proportion of participants in the intervention group presented to the emergency department during the second year compared to that in the control group however this difference was not statistically significant; control (n=298) n=139 (46.6%); intervention (n=301) n=117 (38.9%); p=0.054. Hospital admission: A lower proportion of participants in	
	<ul> <li>Participants assessed and approved for higher level of care.</li> <li>Receipt of an ongoing personal care.</li> </ul>	the intervention group were admitted to hospital during the second year compared to that in the control group however this difference was	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Emergent personal care service.</li> <li>Emergency department presentations.</li> <li>Hospital admissions (unplanned).</li> <li>Episodic lengths of stay (resulting from an unplanned hospital admission).</li> <li>Cumulative length of stay (resulting from unplanned hospital admissions).</li> <li>Deaths, observed (expected).</li> <li>Costs were assessed by combining the costs of aged care and health care. Aged care included costs arising from Home and Community Care programme care. Health care included costs arising from emergency department presentations and hospital admissions.</li> </ul>	not statistically significant; control (n=298) n=132 (44.3%); intervention (n=301) n=110 (36.5%); p=0.053. Episodic length of stay: Participants in the intervention group who were admitted to hospital during the second year (unplanned) had a shorter length of stay (episodic) compared to those in the control group however this difference was not statistically significant; control (n=298) mean 4.4 (9.9 SD); intervention (n=301) mean 3.9 (10.4 SD) p=0.301. Cumulative length of stay: Participants in the intervention group who were admitted to hospital during the second year (unplanned) had longer lengths of stay (cumulative) compared to those in the control group however this difference was not statistically significant; control (n=298) mean 15.2 (15.4 SD); intervention	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Follow-up: Data were collected over the course of 2 years.  Costs? Economic evaluation – full or partial. Please read these findings in conjunction with economic evidence tables.	(n=301) mean 20.6 (27.6 SD); p=0.055. Deaths, observed (expected): There was a significant difference between the intervention and control groups in the difference between the observed rate of death and the expected rate of death; control n=62 (SD=51.2) vs. intervention n=43 (SD=53.8); p=0.035.  Service use in second year (as treated). Hours of care (all services): The intervention group used significantly fewer hours of care (all services) during the second year than the control group; control (n=311) mean 90.8 (138.7 SD); intervention (n=251) mean 46.7 (75.8 SD); p<0.001. Hours of care (personal care only): The intervention group used significantly fewer hours of care (personal care only)	
		during the second year than	

	the control group; control (n=311) mean 37.9 (52.9 SD); intervention (n=251) mean 11.0 (26.2 SD); p<0.001.  Assessed and approved for higher level of care: A lower proportion of participants in the intervention group were assessed and approved for a higher level of care during the second year compared to that in the control group however this difference was not statistically significant; control (n=311) n=110 (35.4%); intervention (n=251) n=73 (29.1%); p=0.114.  Ongoing personal care: A significantly lower proportion of participants in the intervention group were receiving ongoing personal care at the second year follow-up compared to that in the control group; control (n=266) n=85 (31.9%); intervention (n=174) n=20 (11.5%); p<0.001.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Emergent personal care: A	
		significantly lower proportion	
		of participants in the intervention group were in	
		receipt of a new personal	
		care service at the second	
		year follow-up compared to	
		that in the control group;	
		control (n=45) n=10 (22.2%);	
		intervention (n=77) n=4	
		(5.2%); p=0.004.	
		Emergency department	
		presentation: A significantly	
		lower proportion of	
		participants in the	
		intervention group presented	
		to the emergency department	
		during the second year	
		compared to that in the	
		control group; control (n=311)	
		n=143 (46.0%); intervention	
		(n=251) n=94 (37.4%);	
		p=0.042.	
		Hospital admission: A	
		significantly lower proportion	
		of participants in the	
		intervention group were	
		admitted to hospital during	
		the second year compared to	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	· · · · · · · · · · · · · · · · · · ·	that in the control group; control (n=311) n=139 (44.7%); intervention (n=251) n=87 (34.66%); p=0.016. Episodic length of stay: Participants in the intervention group who were admitted to hospital during the second year (unplanned) had a shorter length of stay (episodic) compared to those in the control group however this difference was not statistically significant; control (n=311) mean 4.5 (10.1 SD); intervention (n=251) mean 3.9 (10.8 SD); p=0.235. Cumulative length of stay: Participants in the intervention group who were admitted to hospital during the second year (unplanned) had significantly longer lengths of stay (cumulative) compared to those in the control group; control (n=311)	
		mean 15.7 (16.2 SD); intervention (n=251) mean 21.8 (29.1 SD); p=0.044.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Deaths, observed (expected): There was a significant difference between the intervention and control groups in the difference between the observed rate of death and the expected rate of death; control n=66 (n=53.7) vs. intervention n=33 (n=45.3); p=0.013.	
		Overall service use in 24 month period (intention-to-treat) - Hours of care (all services): The intervention group used significantly fewer hours of care (all services) over the 2 year follow-up period than the control group; control (n=375) mean 190.3 (230.4 SD); intervention (n=375) mean 124.0 (154.5 SD); p<0.001. Hours of care (personal care only): The intervention group used significantly fewer hours of care (personal care only) over the 2 year follow-up	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		control (n=375) mean 74.4 (86.6 SD); intervention (n=375) mean 29.8 (52.6 SD); p<0.001.  Assessed and approved for higher level of care: A significantly lower proportion of participants in the intervention group were assessed and approved for a higher level of care over the 2 year follow-up period compared to that in the control group; control (n=375) n=241 (64.3%); intervention (n=375) n=210 (56.0%); p=0.021.  Emergency department presentation: A lower proportion of participants in the intervention group presented to the emergency department over the 2 year follow-up period compared to that in the control group however this difference was not statistically significant;	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		(68.5%); intervention (n=375)	
		n=239 (63.7%); p=0.165.	
		Hospital admission: A lower	
		proportion of participants in	
		the intervention group were	
		admitted to hospital over the	
		2 year follow-up period	
		compared to that in the	
		control group however this	
		difference was not statistically	
		significant; control (n=375)	
		n=265 (70.7%); intervention	
		(n=375) n=248 (66.1%);	
		p=0.182.	
		Episodic length of stay:	
		Participants in the	
		intervention group who were	
		admitted to hospital over the	
		2 year period (unplanned)	
		had a shorter length of stay	
		(episodic) compared to those	
		in the control group however	
		this difference was not	
		statistically significant; control	
		(n=375) mean 7.6 (10.9 SD);	
		intervention (n=375) mean	
		6.8 (10.5 SD); p=0.161.	
		Cumulative length of stay:	
		Participants in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		intervention group who were admitted to hospital over the 2 year period (unplanned) had longer lengths of stay (cumulative) compared to those in the control group however this difference was not statistically significant; control (n=375) mean 22.8 (22.8 SD); intervention (n=375) mean 24.4 (36.4 SD); p=0.558.  Deaths, observed (expected): There was no significant difference between the intervention and control groups in the difference between the observed rate of death and the expected rate of death; control n=139 (n=127) vs. intervention n=117 (n=129); p=0.133.	
		Overall service use in 24 month period (as treated) Hours of care (all services): The intervention group used significantly fewer hours of care (all services) over the 2	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		year follow-up period than the control group; control (n=395) mean 191.2 (230.4 SD); intervention (n=310) mean 117.3 (129.4 SD); p<0.001. Hours of care (personal care only): The intervention group used significantly fewer hours of care (personal care only) over the 2 year follow-up period than the control group; control (n=395) mean 78.0 (87.9 SD); intervention (n=310) mean 25.0 (42.4 SD); p<0.001. Assessed and approved for higher level of care: A significantly lower proportion of participants in the intervention group were assessed and approved for a higher level of care over the 2 year follow-up period compared to that in the control group; control (n=395) n=249 (63.0%); intervention (n=310) n=171 (55.2%); p=0.034.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Emergency department presentation: A significantly lower proportion of participants in the intervention group presented to the emergency department over the 2 year follow-up period compared to that in the control group; control (n=395) n=274 (69.4%); intervention (n=310) n=188 (60.6%); p=0.016. Hospital admission: A significantly lower proportion of participants in the intervention group were admitted to hospital over the 2 year follow-up period compared to that in the control group; control (n=395) n=283 (71.6%); intervention (n=310) n=194 (62.6%); p=0.011. Episodic length of stay: Participants in the intervention group who were admitted to hospital over the 2 year period (unplanned)	
		had a shorter length of stay	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		(episodic) compared to those in the control group however this difference was not statistically significant; control (n=395) mean 7.5 (10.7 SD); intervention (n=310) mean 6.6 (10.4 SD); p=0.120. Cumulative length of stay: Participants in the intervention group who were admitted to hospital over the 2 year period (unplanned) had longer lengths of stay (cumulative) compared to those in the control group however this difference was not statistically significant; control (n=395) mean 22.8 (23.3 SD); intervention (n=310) mean 25.55 (39.5 SD); p=0.335. Deaths, observed (expected): There was a significant difference between the intervention and control	
		groups in the difference between the observed rate of death and the expected rate of death; control n=150	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		(n=133.6) vs. intervention n=92 (n=108.4); p=0.034.	
		n=92 (n=108.4); p=0.034.  Adjusted odds of emergency department presentation and hospital admission during the first year, intervention vs. control (intention-to-treat, n=748, adjusted for carer status, dependency, gender and living arrangements) – Emergency department presentation: Participants in the intervention group were less likely to present to an emergency department during the first year than those in the control group however this result was not statistically significant; odds ratio = 0.83 (95% Confidence	
		Interval 0.62 to 1.11); p=0.206. Hospital admission: Participants in the intervention group were less likely to be admitted to	
		hospital during the first year (unplanned) than those in the	

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	control group however this result was not statistically significant; odds ratio = 0.93 (95% CI 0.69 to 1.26); p=0.650.	
	Adjusted odds of emergency department presentation and hospital admission during the first year, intervention vs. control (as treated, n=704 adjusted for carer status, dependency, gender and living arrangements) Emergency department presentation: Participants in the intervention group were less likely to present to an emergency department during the first year than those in the control group. This result was statistically significant; odds ratio = 0.70 (95% CI 0.52 to 0.95); p=0.023. Hospital admission: Participants in the intervention group were less	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		hospital during the first year (unplanned) than those in the control group however this result was not statistically significant; odds ratio = 0.79 (95% CI 0.58 to 1.07); p=0.130.	
		Adjusted odds of emergency department presentation and hospital admission during the second year, intervention vs. control (intention-to-treat, n=598, adjusted for carer status, dependency, gender and living arrangements) Emergency department presentation: Participants in the intervention group were less likely to present to an emergency department during the second year than those in the control group however this result was not statistically significant; odds ratio = 0.72 (95% CI 0.52 to 1.01); p=0.056.	
		Hospital admission: Participants in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		intervention group were less likely to be admitted to hospital during the second year (unplanned) than those in the control group however this result was not statistically significant; odds ratio = 0.74 (95% CI 0.53 to 1.03); p=0.073.	
		Adjusted odds of emergency department presentation and hospital admission during the second year, intervention vs. control (as treated, n=562, adjusted for carer status, dependency, gender and living arrangements) – Emergency department presentation: Participants in the intervention group were less likely to present to an emergency department during the second year than those in the control group. This result was statistically significant; odds ratio = 0.70 (95% CI 0.49 to 0.99); p=0.045.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Hospital admission: Participants in the intervention group were less likely to be admitted to hospital during the second year (unplanned) than those in the control group. This result was statistically significant; odds ratio = 0.66 (95% CI 0.46 to 0.94); p=0.020.	
		Adjusted odds of emergency department presentation and hospital admission over 24 month follow-up period, intervention vs. control (intention-to-treat, n=748, adjusted for carer status, dependency, gender and living arrangements) – Emergency department presentation: Participants in the intervention group were less likely to present to an emergency department over the 24 month follow-up period than those in the control group however this result was	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		not statistically significant; odds ratio = 0.81 (95% CI 0.60 to 1.10); p=0.183. Hospital admission: Participants in the intervention group were less likely to be admitted to hospital (unplanned) over the 24 month follow-up period than those in the control group however this result was not statistically significant; odds ratio = 0.85 (95% CI 0.62 to 1.17); p=0.316.	
		Adjusted odds of emergency department presentation and hospital admission over 24 month follow-up period, intervention vs. control (as treated, n=704, adjusted for carer status, dependency, gender and living arrangements) Emergency department presentation: Participants in the intervention group were less likely to present to an emergency department over	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		the 24 month follow-up period than those in the control group. This result was statistically significant; odds ratio = 0.69 (95% CI 0.50 to 0.94); p=0.021.  Hospital admission: Participants in the intervention group were less likely to be admitted to hospital (unplanned) over the 24 month follow-up period than those in the control group. This result was statistically significant; odds ratio = 0.69 (95% CI 0.50 to 0.95); p=0.025.	
		Effect sizes In this study, randomisation was compromised, so the research report presented both Intention to Treat (ITT, randomised) data, and Actual Treatment (AT, non- randomised) data, about outcomes over time. LOS = Episodic length of stay. First year:	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
outcomes)	Hours of all services ITT: d=-0.3135; 95% CI -0.4575 to -0.1695. Hours personal care ITT: d=-0.6633; 95% CI -0.8103 to -0.5163. Episodic LOS ITT: d=-0.0942; 95% CI -0.2374 to 0.049. Cumulative LOS ITT: d=-0.0092; 95% CI -0.1523 to 0.1339. Hours of all services AT: d=-0.3835; 95% CI -0.5336 to -0.2334. Hours of personal care AT: d=-0.8107; 95% CI -0.9653 to -0.6561. Episodic LOS AT: d=-0.0965; 95% CI -0.2453 to 0.0523. Cumulative LOS AT: d=0.0363; 95% CI -0.1124 to 0.1851. Second year: Hours of all services ITT: d=-0.3611; 95% CI -0.5225 to -0.1996. Hours personal care ITT:	
	d=-0.3836; 95% CI -0.5514 to -0.2158.	
	intervention, comparison,	intervention, comparison, outcomes)  Hours of all services ITT: d=-0.3135; 95% CI -0.4575 to -0.1695. Hours personal care ITT: d=-0.6633; 95% CI -0.8103 to -0.5163. Episodic LOS ITT: d=-0.0942; 95% CI -0.2374 to 0.049. Cumulative LOS ITT: d=-0.0092; 95% CI -0.1523 to 0.1339. Hours of all services AT: d=-0.3835; 95% CI -0.5336 to -0.2334. Hours of personal care AT: d=-0.8107; 95% CI -0.9653 to -0.6561. Episodic LOS AT: d=-0.0965; 95% CI -0.2453 to 0.0523. Cumulative LOS AT: d=0.0363; 95% CI -0.1124 to 0.1851. Second year: Hours of all services ITT: d=-0.3611; 95% CI -0.5225 to -0.1996. Hours personal care ITT: d=-0.3836; 95% CI -0.5514 to

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Episodic LOS ITT: d=-0.0492; 95% CI -0.2094 to 0.111. Cumulative LOS ITT: d=0.2413; 95% CI 0.0806 to 0.4021. Hours of all services AT: d=-0.5347; 95% CI -0.6977 to -0.3717. Hours of personal care AT: d=-0.6245; 95% CI -0.7947 to -0.4542. Episodic LOS AT: d=-0.0576; 95% CI -0.2239 to 0.1087. Cumulative LOS AT: d=0.2667; 95% CI 0.0996 to 0.4337. Overall 24 months: Hours of all services ITT: d=-0.338; 95% CI -0.4822 to -0.1938. Hours personal care ITT: d=-0.6225; 95% CI -0.7691 to 0.4759. Episodic LOS ITT: d=-0.0748; 95% CI -0.2179 to 0.0684.	
		Cumulative LOS ITT: d=0.0527; 95% CI -0.0905 to 0.1958.	

intervention, comparison, outcomes)	Overall validity rating
Hours of all services d=-0.3836; 95% CI -0.2336. Hours of personal of d=-0.7407; 95% CI -0.587. Episodic LOS AT: d 95% CI -0.2339 to 0 Cumulative LOS AT d=0.0874; 95% CI - 0.2362.  Costs Mean total cost per all emergency depa visits over 24-month The mean total cost of all emergency de visits over the 24-m period was AU\$22 treat – intervention vs. control AU\$708; AU\$67 (as treated- intervention AU\$65; control AU\$726) lov intervention group t control group.	care AT: 1-0.8943 to d=-0.0852; 0.0636; T: -0.0614 to  r client of artment th period: st per client epartment nonth (intent to AU\$686 B) and - 59 vs. wer for the

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Mean total cost per client of all hospital admissions over 24-month period: The mean total cost per client of all hospital admissions over the 24 month period was AU\$306 (intent to treat – intervention AU\$13,369 vs. control AU\$13,675) and AU\$1,300 (as treated – intervention AU\$12,860 vs. control AU\$14,160) lower for the intervention group than the	
		Aggregated home-care and health care costs ('aged care' costs were restricted to home-care costs) - Mean aggregated home-care and health care costs per client over the 24-month period: The mean aggregated home care and health care costs per client over the 24-month period were AU\$2,869 (intent to treat – intervention AU\$19,888 vs. control AU\$22,757) and AU\$4,338	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		(as treated – intervention AU\$19,090 vs. control AU\$23,428) lower for the intervention group than the control group.	
		Generalised linear model regression of aggregated health and aged care costs over time (intention-to-treat, model variables are sample size and group, adjusted for carer status, dependency, gender and living arrangements) First year: The aggregated health and aged care costs of participants in the intervention group were less costly by a factor of 0.92 than those of participants in the control group during the first year. This result was not statistically significant; n=748; estimated relative reduction = 0.92 (95% CI 0.80 to 1.06); p=0.276. Second year: The aggregated	
		health and aged care costs of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		participants in the intervention group were less costly by a factor of 0.85 than those of participants in the control group during the second year. This result was not statistically significant; n=598; estimated relative reduction = 0.85 (95% CI 0.68 to 1.06); p=0.155.  Over total 24 month follow-up period: The aggregated health and aged care costs of participants in the intervention group were less costly by a factor of 0.89 than those of participants in the control group over 24 months period. This result was not statistically significant; n=748; estimated relative reduction = 0.89 (95% CI 0.78 to 1.02); p=0.083.	
		Generalised linear model regression of aggregated health and aged care costs over time (as treated, model variables are sample size and	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		group, adjusted for carer status, dependency, gender and living arrangements) First year: The aggregated health and aged care costs of participants in the intervention group were less costly by a factor of 0.82 than those of participants in the control group during the first year. This result was statistically significant; n=704; estimated relative reduction = 0.82 (95% CI 0.70 to 0.95); p=0.007. Second year: The aggregated health and aged care costs of participants in the intervention group were less costly by a factor of 0.86 than those of participants in the control group during the second year. This result was not statistically significant; n=562; estimated relative reduction = 0.86 (95% CI 0.68 to 1.08); p=0.197. Over total 24 month follow-up	
		period: The aggregated	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		health and aged care costs of participants in the intervention group were less costly by a factor of 0.83 than those of participants in the control group over 24 months period. This result was statistically significant; n=704; estimated relative reduction = 0.83 (95% CI 0.72 to 0.96); p=0.010.	

4. Lewin G, De San Miguel K, Knuiman M et al. (2013) A randomised controlled trial of the Home Independence Program, an Australian restorative home-care programme for older adults. Health and Social Care in the Community 21: 69-78

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To ' test the effectiveness of the Home Independence Program (HIP), a restorative home care	Participants: Service users and their families, partners and carers - Older people living in the Perth suburbs referred for	Statistical data - service outcomes - Service outcomes at 3 months (intention to treat)	Overall assessment of internal validity:
programme for adults' (p69).	home care services who were eligible to receive funding for	Ongoing personal care – A lower proportion of	Overall assessment of external validity:
Country: Australia – Perth (suburbs).	care from the Home and Community Care programme (jointly funded by the state and	participants in the intervention group required ongoing personal care	++
<b>Methodology:</b> Randomised controlled trial.	commonwealth governments). Eligibility for funding is reported by the authors as	compared to that in the control group; control n=238	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Source of funding: Government - Australian Health Ministers' Advisory Council priority-driven research programme grant.	'needing assistance with 1 or more tasks of daily living because of an ongoing disability, rather than needing acute or post-acute care' (p71).  Individuals were eligible for the study if they were over the age of 65, had been referred for personal care, did not have a diagnosis of dementia or a progressive neurological disorder, were not receiving palliative care, and were able to communicate in English.  Sample characteristics:  • Age – Intention to treat/randomised – control mean age = 82.73 years (7.70 SD); intervention mean age = 81.84 years (7.19 SD); p=0.105.  • Age - As treated - control mean age = 82.68 years (7.55 SD); intervention mean age = 81.89 years (7.36 SD);	(63.5%), intervention n=103 (27.5%).  No care required – A higher proportion of participants in the intervention group no longer required any care compared to that in the control group; control n=63 (16.8%), intervention n=166 (44.3%).  Died - A lower proportion of participants in the intervention group had died compared to that in the control group; control n=25 (6.6%), intervention n=17 (4.5%).  Residential care - A lower proportion of participants in the intervention group were residing in residential care compared to that in the control group; control n=21 (5.6%), intervention n=16 (4.2%).  Other community service – There were no differences between the 2 groups in the	
	p=0.164.	proportion of participants who	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Sex – Intention to treat/randomised – control male n=133 (35.5%), female n=242 (64.5%); intervention male n=112 (29.9%), female n=263 (70.1%); p=0.102.</li> <li>Sex - As treated – control male n=141 (35.7%), female n=254 (64.3%); intervention male n=86 (27.7%), female n=254 (72.3%); p=0.025.</li> <li>Ethnicity – Not reported however details on country of birth and language are provided.</li> <li>Country of birth - Intention to treat/randomised – control – Australia n=183 (48.8%), England n=69 (18.4%), Italy n=18 (4.8%), other n=105 (28.0%); intervention – Australia n=204 (54.4%), England n=64 (17.1%), Italy n=19 (5.1%), other n=88 (23.4%); p=0.415.</li> <li>Country of birth - As treated – control – Australia n=195 (49.4%), England n=72</li> </ul>	were receiving another community service; control n=10 (2.7%), intervention n=10 (2.7%). Declined/terminated - A higher proportion of participants in the intervention group had declined or terminated care compared to that in the control group; control n=9 (2.4%), intervention n=30 (8.0%). Admitted to hospital - A higher proportion of participants in the intervention group had been admitted to hospital compared to that in the control group; control n=6 (1.6%), intervention n=24 (6.4%). Moved out of area - A lower proportion of participants in the intervention group had moved out of the area compared to that in the control group; control n=3	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	(18.2%), Italy n=19 (4.8%), other n=109 (27.6%); intervention – Australia n=173 (55.8%), England n=56 (18.1%), Italy n=16 (5.2%), other n=65 (20.9%); p=0.211.  • Language - Intention to treat/randomised – control – English n=351 (93.6%), non-English n=24 (6.4%); intervention – English n=362 (96.5%), non-English n=13 (13.5%); p=0.064.  • Language - As treated – control – English n=369 (93.4%), non-English n=369 (93.4%), non-English n=26 (6.6%); intervention – English n=301 (97.1%), non-English n=9 (2.9%); p=0.026.  • Religion/belief - Not reported.  • Disability - Not reported.  • Long term health condition – Not reported.  • Socioeconomic position –	(0.8%), intervention n=0 (0.0%). Hospice care - A higher proportion of participants in the intervention group had received hospice care compared to that in the control group; control n=0 (0.0%), intervention n=9 (2.4%).  Service outcomes at 12 months (intention to treat) Ongoing personal care - A lower proportion of participants in the intervention group required ongoing personal care compared to that in the control group; control n=151 (40.3%), intervention n=67 (17.9%). No care required - A higher proportion of participants in the intervention group no longer required any care compared to that in the control group; control n=75	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Pension - Intention to treat/randomised – control – aged pension n=318 (85.5%), no government pension n=25 (6.7%), other government pension n=29 (7.8%); intervention – aged pension n=307 (81.9%), no government pension n=42 (11.2%), other government pension n=26 (6.9%); p=0.097.</li> <li>Pension – As treated – control – aged pension n=334 (85.2%), no government pension n=28 (7.1%), other government pension n=30 (7.7%); intervention – aged pension n=253 (81.6%), no government pension n=34 (11.0%), other government pension n=23 (7.4%); p=0.207.</li> <li>Living arrangement – Intention to treat/randomised – control – lives alone n=159 (42.4%), lives with family/others n=216 (57.6%);</li> </ul>	(20.3%), intervention n=177 (47.2%).  Died - A lower proportion of participants in the intervention group had died compared to that in the control group; control n=72 (19.2%), intervention n=65 (17.3%).  Residential care - A lower proportion of participants in the intervention group were residing in residential care compared to that in the control group; control n=48 (12.8%), intervention n=44 (11.7%).  Other community service - A lower proportion of participants in the intervention group were in receipt of another community service compared to that in the control group; control n=16 (4.3%), intervention n=10 (2.7%).  Declined / terminated - A higher proportion of participants in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	intervention – lives alone n=192 (51.2%), lives with family/others n=183 (48.8%); p=0.016.  • Living arrangement – As treated – control – lives alone n=167 (42.3%), lives with family/others n=228 (57.7%); intervention – lives alone n=164 (52.9%), lives with family/others n=146 (47.1%); p=0.005.   Baseline characteristics:  • Carer availability - Intention to treat/randomised – control – has a carer n=254 (67.7%), has no carer n=121 (32.3%); intervention – has a carer n=216 (57.6%), has no carer n=159 (42.4%); p=0.004.  • Carer availability – As treated – control – has a carer n=266 (67.3%), has no carer n=129 (32.7%); intervention – has a carer n=176 (56.8%), has no carer n=176 (56.8%), has no carer n=134 (43.2%); p=0.004.	intervention group had declined or terminated care compared to that in the control group; control n=4 (1.1%), intervention n=6 (1.6%).  Admitted to hospital - A lower proportion of participants in the intervention group had been admitted to hospital compared to that in the control group; control n=3 (0.8%), intervention n=1 (0.3%).  Moved out of area - A lower proportion of participants in the intervention group had moved out of the area compared to that in the control group; control n=5 (1.3%), intervention n=1 (0.3%).  Hospice care - A higher proportion of participants in the intervention group had received hospice care compared to that in the control group; control n=1	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Carer status - Intention to treat/randomised – control – co-resident carer n=185 (72.8%), non-resident carer n=69 (27.2%); intervention – co-resident carer n=141 (65.6%), non-resident carer n=74 (34.4%); p=0.089.</li> <li>Carer status – As treated – control – co-resident carer n=195 (73.3%), non-resident carer n=71 (26.7%); intervention – co-resident carer n=109 (62.3%), non-resident carer n=66 (37.7%); p=0.014.</li> <li>Instrumental Activities of Daily Living total - Intention to treat/randomised – control – mean score 7.19 (3.61 SD); intervention – mean score 8.14 (3.23 SD); p&lt;0.001.</li> <li>Instrumental Activities of Daily Living total – As treated – control – mean score 7.15 (3.67 SD); intervention – mean score 8.22 (3.11 SD); p&lt;0.001.</li> </ul>	(0.3%), intervention n=4 (1.1%).  Service outcomes at 3 months (as treated, control n=395 (100%), intervention n=310) Ongoing personal - A lower proportion of participants in the intervention group required ongoing personal care compared to that in the control group; control n=care 272 (68.9%), intervention n=66 (21.3%).  No care required - A higher proportion of participants in the intervention group no longer required any care compared to that in the control group; control n=50 (12.6%), intervention n=163 (52.7%).  Died - A lower proportion of participants in the intervention group had died compared to that in the control group; control n=26	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Activities of Daily Living total - Intention to treat/randomised – control – mean score 12.21 (3.18 SD); intervention – mean score 12.76 (2.75 SD); p=0.013.</li> <li>Activities of Daily Living total – As treated – control – mean score 12.20 (3.13 SD); intervention – mean score 12.85 (2.72 SD); p=0.005.</li> <li>Sample size:         <ul> <li>Comparison numbers – Randomised n=375 (recruited to subgroup n=150); completed baseline assessments n=395 (subgroup n=165); completed 3 month assessments n=395 (subgroup n=141); completed 12 month assessments n=395 (subgroup n=104).</li> <li>Intervention numbers – Randomised n=375 (recruited to subgroup n=150); completed baseline</li> </ul> </li> </ul>	(6.6%), intervention n=13 (4.2%). Residential care - A lower proportion of participants in the intervention group were residing in residential care compared to that in the control group; control n=21 (5.3%), intervention n=14 (4.5%). Other community service - A higher proportion of participants in the intervention group were in receipt of another community service compared to that in the control group; control n=10 (2.5%), intervention n=10 (3.2%). Declined / terminated - A higher proportion of participants in the intervention group had declined or terminated care compared to that in the control group; control n=9 (2.3%), intervention n=12 (3.8%).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	assessments n=310 (subgroup n=129); completed 3 month assessments n=310 (subgroup n=111); completed 12 month assessments n=310 (subgroup n=88).  • Sample size – Randomised N=750 (recruited to subgroup n=300); completed baseline assessments n=705 (subgroup n=294); completed 3 month assessments n=705 (subgroup n=252); completed 12 month assessments n=705 (subgroup n=192).  Intervention: Reablement. • Description - The intervention is described as	Admitted to hospital - A higher proportion of participants in the intervention group had been admitted to hospital compared to that in the control group; control n=4 (1.0%), intervention n=23 (7.4%).  Moved out of area - A lower proportion of participants in the intervention group had moved out of the area compared to that in the control group; control n=3 (0.8%), intervention n=0 (0.0%).  Hospice care - A higher proportion of participants in the intervention group had received hospice care compared to that in the control group; control n=0	
	<ul> <li>a restorative home care programme.</li> <li>Delivered by - The programme is delivered by the staff of Silver Chain, a care provider based in</li> </ul>	(0.0%), intervention n=9 (2.9%). Total - (100%).  Service outcomes at 12 months (as treated, control	

Research aims	PICO (population, intervention, comparison,	Findings	Overall validity rating
	outcomes)		
	Western Australia. No details	n=395 (100%), intervention	
	on the background or	n=310)	
	training level of staff are	Ongoing personal care - A	
	reported by the authors.	lower proportion of	
	<ul> <li>Delivered to - The service is</li> </ul>	participants in the	
	provided to older people who	intervention group required	
	are eligible to receive Home	ongoing personal care	
	and Community Care	compared to that in the	
	programme funded home	control group; control n=170	
	care services. Individuals are	(43.0%), intervention n= 44	
	eligible for the service if they	(14.2%).	
	require assistance in at least	No care required - A higher	
	1 task of daily living. The	proportion of participants in	
	trials eligibility criteria	the intervention group no	
	restricted recruitment to	longer required any care	
	individuals who had been	compared to that in the	
	referred for personal care (in	control group; control n=71	
	order to reduce potential	(18.0%), intervention n=156	
	variance in dependency	(49.3%).	
	levels), were over the age of	Died - A lower proportion of	
	65, and communicate in	participants in the	
	English. Individuals were	intervention group had died	
	excluded if they had a	compared to that in the	
	diagnosis of dementia or a	control group; control n=74	
	progressive neurological	(18.7%), intervention n=56	
	disorder, or were in receipt	(18.1%).	
	of palliative care.	Residential care - A lower	
	<ul> <li>Duration, frequency,</li> </ul>	proportion of participants in	
	intensity, etc The service is	the intervention group were	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	provided for up to 12 weeks or until the service user achieves their goals. NB No further details on frequency or intensity are provided.  • Key components and objectives of intervention - The service is described as an early intervention that is designed to optimise functioning, to delay any decline in function, enable individuals to self-manage chronic disease, and promote healthy ageing. It is provided to individuals when they are initially referred for home care services, or to existing service users who request extra care. The key objective of the service is to reduce the need for ongoing support, and the intention is that the service is provided to participants before they have received any ongoing home care.	residing in residential care compared to that in the control group; control n=51 (12.9%), intervention n=35 (11.3%).  Other community service - A lower proportion of participants in the intervention group were in receipt of another community service compared to that in the control group; control n=15 (3.8%), intervention n=10 (3.2%).  Declined/terminated - A higher proportion of participants in the intervention group had declined or terminated care compared to that in the control group; control n=4 (1.0%), intervention n=4 (1.3%).  Admitted to hospital - A lower proportion of participants in the intervention group had been admitted to hospital compared to that in the control group; control n=3	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Location/place of delivery - The service is provided in the participant's own home.</li> </ul>	(0.8%), intervention n=1 (0.3%). Moved out of area - A lower proportion of participants in	
	Comparison intervention: Care as usual. Participants randomised to the control group received standard Home and Community Care programme care provided by Silver Chain. This included a visit from a care co-ordinator to assess needs and complete a care plan. The authors report that the most common plan 'included 3 personal care visits a week to assist with bathing/showering and a fortnightly housecleaning visit that included heavy laundry' (p72).	the intervention group had moved out of the area compared to that in the control group; control n=5 (1.3%), intervention n=1 (0.3%).  Hospice care - A higher proportion of participants in the intervention group had received hospice care compared to that in the control group; control n=2 (0.5%), intervention n=3 (1.0%).  Logistic regression analysis – need for ongoing personal	
	Outcomes measured:	care at 3 months (intent to treat, adjusted for potential	
	<ul> <li>Service outcomes were measured by collating service data on need for ongoing personal care, no need for care, death, residential care placement,</li> </ul>	baseline confounders, n=592) Intervention vs. control: Participants in the intervention group were less likely to be in receipt of ongoing personal care than	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	other community service, declined/terminated, admission to hospital, moved out of area, hospice care.  • Activities of Daily Living and Instrumental Activities of Daily Living were both assessed using the Primary Assessment Form. This is a tool developed by care providers. The Activities of Daily Living scale appears to be based on the Modified Barthel Index (Colin et al. 1988) and the Instrumental Activities of Daily Living appears to be based on the Brody Scale (Lawton and Brody, 1969). The latter appears to have been modified to enable scoring to increase in relation to the assistance participants need for each task.  • Mobility was measured using the Timed up and go test (Podsiadlo and Richardson 1991).	those in the control group (odds ratio = 0.18; 95% CI 0.13 to 0.26; p<0.001). This result was statistically significant.  Carer availability: Participants with a carer were more likely to be in receipt of ongoing personal care than those without a carer (odds ratio = 1.68; 95% CI 0.95 to 1.09; p=0.008). The significance of this result is unclear as the confidence interval and p value contradict each other. Higher Activities of Daily Living scale score at 12 months: Participants with higher levels of dependency at 12 months were more likely to be in receipt of ongoing personal care than those with lower levels of dependency at 12 months (odds ratio = 1.02; 95% CI 0.95 to 1.09; p=0.529). This result was not statistically significant.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Fear of falling was measured using the Modified Falls Efficacy Scale (Hill et al. 1996).</li> <li>Quality of life was measured using the Assessment of Quality of Life Scale (Hawthorne et al. 1997).</li> <li>Follow-up: Follow-up assessments were conducted at 3 months and 12 months.</li> <li>Costs? No. Costs information not included.</li> </ul>	Logistic regression analysis – need for ongoing personal care at 12 months (intent to treat, adjusted for potential baseline confounders, n=473) Intervention vs. control: Participants in the intervention group were less likely to be in receipt of ongoing personal care than those in the control group (odds ratio = 0.22; 95% CI 0.15 to 0.32; p<0.001). This result was statistically significant.  Carer availability: Participants with a carer were more likely to be in receipt of ongoing personal care than those without a carer (odds ratio = 2.32; 95% CI 1.51 to 3.58; p<0.001). This result was statistically significant.  Higher Activities of Daily Living scale score at 12 months: Participants with higher levels of dependency at 12 months were more likely to be in receipt of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		ongoing personal care than those with lower levels of dependency at 12 months (odds ratio = 1.08; 95% CI 1.00 to 1.17; p=0.048). This result approached significance.	
		Logistic regression analysis – need for ongoing personal care at 3 months (as treated, adjusted for potential baseline confounders, n=558) Intervention vs. control: Participants in the intervention group were less likely to be in receipt of ongoing personal care than those in the control group (odds ratio = 0.10; 95% CI 0.07 to 0.15; p<0.001). This result was statistically significant.  Carer availability: Participants with a carer were more likely to be in receipt of ongoing	
		personal care than those without a carer (odds ratio = 1.8; 95% CI 1.19 to 2.84;	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		p=0.006). This result was statistically significant. Higher Activities of Daily Living scale score at 12 months: Participants with higher levels of dependency at 12 months were more likely to be in receipt of ongoing personal care than those with lower levels of dependency at 12 months (odds ratio = 1.04; 95% CI 0.96 to 1.12; p=0.297). This result was not statistically significant.	
		Logistic regression analysis – need for ongoing personal care at 12 months (as treated, adjusted for potential baseline confounders, n=444) Intervention vs. control: Participants in the intervention group were less likely to be in receipt of ongoing personal care than those in the control group (odds ratio = 0.15; 95% CI 0.10 to 0.24; p<0.001). This	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		result was statistically significant. Carer availability: Participants with a carer were more likely to be in receipt of ongoing personal care than those without a carer (odds ratio = 2.55; 95% CI 1.60 to 4.07; p<0.001). ). This result was statistically significant. Higher Activities of Daily Living scale score at 12 months: Participants with higher levels of dependency at 12 months were more likely to be in receipt of ongoing personal care than those with lower levels of dependency at 12 months (odds ratio = 1.01; 95% CI 1.01 to 1.19; p=0.020). This result was statistically significant.	
		NB. The authors' report that other covariates used in logistic regression analysis included age, gender, scores on an Instrumental Activities	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		of Daily Living scale, and living arrangements. Data from these analyses are not reported.  These analyses excluded participants who died or had a terminal illness, moved out of the area or in to residential care, and those who had missing data for any of the variables.	
		Statistical data – service user related outcomes - Activities of Daily Living (assessed using the Primary Assessment Form. Only participants for whom data were available at baseline, 3 months and 12 months were included in the analysis, linear regression - adjustment made for potential confounders at baseline) NB. Data not reported. The authors report narratively that both groups showed improvement on this measure between baseline and 3	

months, and between 3	
months and 12 months. It is stated that there were no between group differences on this measure.	
Instrumental Activities of Daily Living (assessed using the Primary Assessment Form. Only participants for whom data were available at baseline, 3 months and 12 months were included in the analysis, linear regression - adjustment made for potential confounders at baseline) NB Data not reported in full. The authors report narratively that both groups showed improvement on this measure between baseline and 3 months, and between 3 months and 12 months. There was a significant difference between groups between baseline and 12 months with the control group	
	stated that there were no between group differences on this measure.  Instrumental Activities of Daily Living (assessed using the Primary Assessment Form. Only participants for whom data were available at baseline, 3 months and 12 months were included in the analysis, linear regression - adjustment made for potential confounders at baseline)  NB Data not reported in full. The authors report narratively that both groups showed improvement on this measure between baseline and 3 months, and between 3 months and 12 months. There was a significant difference between groups between baseline and 12

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Mobility (measured using the Timed up and go test. Only participants for whom data were available at baseline, 3 months and 12 months were included in the analysis, linear regression - adjustment made for potential confounders at baseline) NB Data not reported. The authors report narratively that both groups showed improvement on this measure between baseline and 3 months, and between 3 months and 12 months. It is stated that there were no between group differences on this measure.	
		Fear of falling (measured using the Modified Falls Efficacy Scale. Only participants for whom data were available at baseline, 3 months and 12 months were included in the analysis, linear regression - adjustment	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		made for potential confounders at baseline) NB Data not reported. The authors report narratively that both groups showed improvement on this measure between baseline and 3 months, and between 3 months and 12 months. It is stated that there were no between group differences on this measure.	
		Quality of life (measured using the Assessment of Quality of Life Scale. Only participants for whom data were available at baseline, 3 months and 12 months were included in the analysis, linear regression - adjustment made for potential confounders at baseline)  NB Data not reported. The authors report narratively that both groups showed improvement on this measure between baseline and 3 months, and between 3	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		months and 12 months. It is stated that there were no between group differences on this measure.	
		Independence in everyday activities (% of subgroup clients with complete follow-up data [HIP: N = 100 and HACC: N = 98], baseline assessments were conducted over the telephone at referral to the service)  NB Statistical analysis of between group differences is only reported for showering. It appears that some participants had received interventions before assessments using the Initial Primary Assessment Form had been conducted (originally intended as the 'baseline' assessment. The researchers therefore used	
		the Home and Community Care programme Needs Identification telephone	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		assessment at referral as baseline data).	
		Housework Baseline Home and Community Care programme Needs Identification – At baseline a lower proportion of the intervention group had independence in housework compared to that in the control group; intervention 0%; control 2%. Initial Primary Assessment Form – At initial visit by a research assistant a lower proportion of the intervention group had independence in housework compared to that in the control group; intervention 2%; control 7%. Three month follow-up assessment – At 3 month follow-up a higher proportion	
		of the intervention group had independence in housework compared to that in the control group; intervention 9%; control 8%.	

O (population, rvention, comparison, comes)	Findings	Overall validity rating
,	1 year follow-up assessment - At 1 year follow-up a higher proportion of the intervention group had independence in housework compared to that in the control group; intervention 11%; control 6%.	
	Travel Baseline Home and Community Care programme Needs Identification – At baseline a lower proportion of the intervention group had independence in travel compared to that in the control group; intervention 15%; control 21%. Initial Primary Assessment Form – At initial visit by a research assistant a lower proportion of the intervention group had independence in travel compared to that in the control group; intervention 14%; control 28%. Three month follow-up	
		independence in travel compared to that in the control group; intervention 15%; control 21%. Initial Primary Assessment Form – At initial visit by a research assistant a lower proportion of the intervention group had independence in travel compared to that in the control group; intervention 14%; control 28%.

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		of the intervention group had independence in travel compared to that in the control group; intervention 21%; control 25%.  One year follow-up assessment – At 1 year follow-up the intervention group had lower levels of independence in travel compared to that in the control group; intervention 25%; control 31%.	
		Shopping Baseline Home and Community Care programme Needs Identification – At baseline a lower proportion of the intervention group had independence in shopping compared to that in the control group; intervention 5%; control 9%. Initial Primary Assessment Form – At initial visit by a research assistant a lower proportion of the intervention group had independence in	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		shopping compared to that in the control group; intervention 19%; control 21%.  Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had independence in shopping compared to that in the control group; intervention 33%; control 26%.  One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in shopping compared to that in the control group; intervention 34%; control 29%.	
		Medication Baseline Home and Community Care programme Needs Identification – At baseline a higher proportion of the intervention group had independence in medication compared to that in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		control group; intervention 68%; control 55%. Initial Primary Assessment Form – At initial visit by a research assistant a higher proportion of the intervention group had independence in medication compared to that in the control group; intervention 65%; control 54%. Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had independence in medication compared to that in the control group; intervention 69%; control 62%. One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in medication compared to that in the control group; intervention 64%; control 54%.	
		Finances	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Baseline Home and	
		Community Care programme	
		Needs Identification – At	
		baseline a higher proportion	
		of the intervention group had	
		independence in finances	
		compared to that in the	
		control group; intervention	
		58%; control 49%.	
		Initial Primary Assessment	
		Form – At initial visit by a	
		research assistant a higher	
		proportion of the intervention	
		group had independence in	
		finances compared to that in	
		the control group; intervention	
		62%; control 57%.	
		Three month follow-up	
		assessment – At 3 month	
		follow-up a higher proportion	
		of the intervention group had	
		independence in finances	
		compared to that in the	
		control group; intervention	
		69%; control 58%.	
		One year follow-up	
		assessment – At 1 year	
		follow-up a higher proportion	
		of the intervention group had	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		independence in finances compared to that in the control group; intervention 67%; control 49%.	
		Phone Baseline Home and Community Care programme Needs Identification – At baseline a higher proportion of the intervention group had independence in using the phone compared to that in the control group; intervention 77%; control 67%. Initial Primary Assessment Form – At initial visit by a research assistant a higher proportion of the intervention group had independence in using the phone compared to that in the control group; intervention 86%; control 85%. Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had	
		independence in using the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		phone compared to that in the control group; intervention 92%; control 89%. One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in using the phone compared to that in the control group; intervention 88%; control 84%.	
		Prepare food Baseline Home and Community Care programme Needs Identification – At baseline a higher proportion of the intervention group had independence in preparing food compared to that in the control group; intervention 27%; control 20%. Initial Primary Assessment Form – At initial visit by a research assistant a higher proportion of the intervention group had independence in preparing food compared to that in the control group;	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		intervention 46%; control 36%.  Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had independence in preparing food compared to that in the control group; intervention 60%; control 54%.  One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in preparing food compared to that in the control group; intervention 55%; control 46%.	
		Laundry Baseline Home and Community Care programme Needs Identification – At baseline a lower proportion of the intervention group had independence in laundry compared to that in the control group; intervention 17%; control 22%.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Initial Primary Assessment Form – At initial visit by a research assistant a higher proportion of the intervention group had independence in laundry compared to that in the control group; intervention 27%; control 20%. Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had independence in laundry compared to that in the control group; intervention 36%; control 29%. One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in laundry compared to that in the control group; intervention 37%; control 29%.	
		Walking Baseline Home and Community Care programme Needs Identification – At	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Outcomes)	baseline a higher proportion of the intervention group had independence in walking compared to that in the control group; intervention 67%; control 63%.  Initial Primary Assessment Form – At initial visit by a research assistant a higher proportion of the intervention group had independence in walking compared to that in the control group; intervention 97%; control 92%.  Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had independence in walking compared to that in the control group; intervention 96%; control 94%.  One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in walking	
		compared to that in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		control group; intervention 94%; control 89%.	
		Showering Baseline Home and Community Care programme Needs Identification – At baseline a lower proportion of the intervention group had independence in showering compared to that in the control group; intervention 9%; control 18%. Initial Primary Assessment Form – At initial visit by a research assistant a significantly higher proportion of the intervention group were independent in showering compared to that in the control group; intervention 49%; control 30%; $\chi$ 2(1, n=192)=18.9, p<0.001. Three month follow-up assessment – At 3 month follow-up a significantly higher proportion of the	
		intervention group were independent in showering	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		compared to that in the control group; intervention 69%; control 41%; $\chi$ 2(1, n=192)=25.9, p<0.001.  One year follow-up assessment – At 1 year follow-up a significantly higher proportion of the intervention group were independent in showering compared to that in the control group; intervention 67%; control 43%; $\chi$ 2(1, n=192)=16.65, p<0.001.	
		Grooming Baseline Home and Community Care programme Needs Identification – At baseline a higher proportion of the intervention group had independence in grooming compared to that in the control group; intervention 75%; control 63%. Initial Primary Assessment Form – At initial visit by a research assistant a higher proportion of the intervention	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		group had independence in grooming compared to that in the control group; intervention 97%; control 85%.  Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had independence in grooming compared to that in the control group; intervention 95%; control 92%.  One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in grooming compared to that in the control group; intervention 96%; control 91%.	
		Eating Baseline Home and Community Care programme Needs Identification – At baseline a higher proportion of the intervention group had independence in eating compared to that in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		control group; intervention 87%; control 71%. Initial Primary Assessment Form – At initial visit by a research assistant a higher proportion of the intervention group had independence in eating compared to that in the control group; intervention 91%; control 85%. Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had independence in eating compared to that in the control group; intervention 94%; control 88%. One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in eating compared to that in the control group; intervention 91%; control 90%.	
		Transfers	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Baseline Home and	
		Community Care programme	
		Needs Identification – At	
		baseline a higher proportion	
		of the intervention group had	
		independence in transfers	
		compared to that in the	
		control group; intervention	
		81%; control 77%.	
		Initial Primary Assessment	
		Form – At initial visit by a	
		research assistant a higher	
		proportion of the intervention	
		group had independence in	
		transfers compared to that in	
		the control group; intervention	
		98%; control 95%.	
		Three month follow-up	
		assessment – At 3 month	
		follow-up a higher proportion	
		of the intervention group had	
		independence in transfers	
		compared to that in the	
		control group; intervention	
		97%; control 94%.	
		One year follow-up	
		assessment – At 1 year	
		follow-up a higher proportion	
		of the intervention group had	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		independence in transfers compared to that in the control group; intervention 97%; control 93%.	
		Stairs Baseline Home and Community Care programme Needs Identification – At baseline a higher proportion of the intervention group had independence in using the stairs compared to that in the control group; intervention 14%; control 10%. Initial Primary Assessment Form – At initial visit by a research assistant a higher proportion of the intervention group had independence in using the stairs compared to that in the control group; intervention 39%; control 26%. Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had	
		of the intervention group had independence in using the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		stairs compared to that in the control group; intervention 44%; control 38%.  One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in using the stairs compared to that in the control group; intervention 46%; control 38%.	
		Continence Baseline Home and Community Care programme Needs Identification – At baseline a higher proportion of the intervention group had independence in continence compared to that in the control group; intervention 76%; control 68%. Initial Primary Assessment Form – At initial visit by a research assistant a lower proportion of the intervention group had independence in	
		continence compared to that in the control group;	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		intervention 91%; control 92%.  Three month follow-up assessment – At 3 month follow-up a higher proportion of the intervention group had independence in continence compared to that in the control group; intervention 93%; control 90%.  One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in continence compared to that in the control group; intervention 95%; control 85%.	
		Toileting Baseline Home and Community Care programme Needs Identification – At baseline a higher proportion of the intervention group had independence in toileting compared to that in the control group; intervention 89%; control 82%.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Initial Primary Assessment Form – At initial visit by a research assistant a lower proportion of the intervention group had independence in toileting compared to that in the control group; intervention 98%; control 95%. Three month follow-up assessment – At 3 month follow-up a lower proportion of the intervention group had independence in toileting compared to that in the control group; intervention 96%; control 97%. One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had independence in toileting compared to that in the control group; intervention 94%; control 91%.	
		Dressing Baseline Home and Community Care programme Needs Identification – At	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	outcomes)	baseline a higher proportion of the intervention group had independence in dressing compared to that in the control group; intervention 58%; control 51%.  Initial Primary Assessment Form – At initial visit by a research assistant a lower proportion of the intervention group had independence in dressing compared to that in the control group; intervention 81%; control 70%.  Three month follow-up assessment – At 3 month follow-up a lower proportion of the intervention group had independence in dressing compared to that in the control group; intervention 86%; control 73%.  One year follow-up assessment – At 1 year follow-up a higher proportion of the intervention group had	
		independence in dressing compared to that in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		control group; intervention 78%; control 72%.	

5. Lewin G and Vandermeulen S (2010) A non-randomised controlled trial of the Home Independence Program (HIP): An Australian restorative programme for older home-care clients. Health and Social Care in the Community 18: 91–9

Research aims	PICO (population, intervention, comparison,	Findings	Overall validity rating
	outcomes)		
Study aim: To test the ' hypothesis that individuals referred for home care who participated in a restorative	Participants: Service users and their families, partners and carers. The authors report that participants were elderly (over	Statistical data - Service user related outcomes – Activities of Daily Living (measured using the Primary	Overall assessment of internal validity:
programme would have better personal (functional gain and improved well-being) and service (need for ongoing home	the age of 60) who had been referred for help with personal care or domestic tasks who were found to be eligible for	Assessment Form, higher scores correspond to higher levels of dependency) - Between group differences in	Overall assessment of external validity:
care) outcomes than individuals who only received 'usual' home care' (p92).	both the Australian Home and Community Care programme and the Home Independence programme (the intervention).	total mean score at 3 months: The intervention group had a lower total mean score on a measure of dependency in	
Country: Australia - metropolitan Perth.	It is unclear what the eligibility criteria for the these were and it appears that eligibility for the	activities of daily living compared to the control group however this difference	
<b>Methodology:</b> Comparison evaluation. Controlled trial.	programmes has been conflated with eligibility for the trial however the authors go on	was not significant; intervention 9.3 (SD 0.9) vs. control 9.6 (SD 1.7). p value	
<b>Source of funding:</b> Other - Western Australian Lotteries Commission.	to report that participants were ' experiencing difficulty in completing 1 or more tasks of	not reported, described as non-significant by authors.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	daily living, did not require acute or post-acute care, did not have a diagnosis of dementia or other progressive neurological disorders and were able to communicate in English' (p92).  Sample characteristics:  • Age - Intervention mean age 79.6 years (SD 7.8); control mean age 79.8 years (SD 3.9).  • Sex - Intervention n=77 (77%); control n=73 (73%).  • Ethnicity - Not reported.  • Religion/belief - Not reported.  • Disability - Not reported.  • Long term health condition - Not reported.  • Socioeconomic position - Not reported.  • Socioeconomic position - Not reported.  Baseline characteristics:  • Lives alone - Intervention n=66 (66%); control n=77 (77%).	Between group differences in total mean score at 12 months: The intervention group had a lower total mean score on a measure of dependency in activities of daily living compared to the control group however this difference was not significant; intervention 9.3 (SD 0.8) vs. control 9.6 (SD 1.4). p value not reported, described as non-significant by authors. Between group differences in change in mean scores from baseline to 3 months: The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group; z=-3.71, p<0.001. Between group differences in change in mean scores from baseline to 12 months: The intervention group showed significantly greater improvements between baseline and 12 months	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Has carer - Intervention n=48 (48%); control n=34 (34%); p=0.044.</li> <li>Activities of Daily Living total mean score - Intervention 9.9 (SD 1.4); control 9.6** (SD 1.4); p&lt;0.01.</li> <li>Instrumental Activities of Daily Living total mean score - Intervention 16.4 (SD 4.1); control 14.8 (SD 4.5); p&lt;0.01.</li> <li>Timed Up and Go mean time - Intervention 25.0 seconds (SD 14.1); control seconds 20.3 (SD 11.8); p&lt;0.01.</li> <li>Modified Falls Efficacy Scale mean score - Intervention 7.4 (SD 1.5); control 7.7 (SD 1.6).</li> <li>Philadelphia Geriatric Morale Scale mean score - Intervention 9.0 (SD 3.7); control 10.1 (SD 3.8); p&lt;0.01.</li> <li>Sample size:</li> </ul>	compared to the control group; <i>z</i> =-2.90, p=0.004.  Instrumental Activities of Daily Living (measured using the Primary Assessment Form, higher scores correspond to higher levels of dependency) Between group differences in total mean score at 3 months: The intervention group had a lower total mean score on a measure of dependency in instrumental activities of daily living compared to the control group however this difference was not significant; intervention 14.8 (SD 3.7) vs. control 14.9 (SD 4.1). p value not reported, described as non-significant by authors. Between group differences in total mean score at 12 months: The intervention group had a lower total mean score on a measure of dependency in instrumental activities of daily living	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Comparison - Consented and assessed at baseline n=100; completed 3 months follow-up assessments n=83; completed 12 months follow-up assessments n=73.</li> <li>Intervention - Consented and assessed at baseline n=100; completed 3 months follow-up assessments n=82; completed 12 months follow-up assessments n=67.</li> <li>Total sample size - Consented and assessed at baseline N=200; completed 3 months follow-up assessments n=165; completed 12 months follow-up assessments n=165; completed 12 months follow-up assessments n=140.</li> </ul>	compared to the control group however this difference was not significant; intervention 14.0 (SD 2.8) vs. control 14.5 (SD 3.9). p value not reported, described as non-significant by authors. Between group differences in change in mean scores from baseline to 3 months: The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group; z=-4.20, p<0.001. Between group differences in change in mean scores from baseline to 12 months: The intervention group showed significantly greater	
	<ul> <li>Intervention: Reablement.</li> <li>Description - The Home Independence Programme is described as an 'early intervention programme' that is designed to optimise function; delay or prevent further functional decline,</li> </ul>	improvements between baseline and 12 months compared to the control group; z=-3.24, p=0.001.  Effect sizes for ADL and IADL, where lower score indicates more capacity to	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	enable self-management of chronic diseases, and promote healthy ageing.  • Delivered by - The programme is delivered by a home care provider called Silver Chain. Although the authors report that the service model includes an inter-disciplinary team comprised of a nurse, occupational therapist and physiotherapist they also note that only 1 of these practitioners works directly with the service user. No other details relating to the professionals delivering the intervention are provided.  • Delivered to - The intervention is specifically designed to be offered to individuals at the point of referral to home care services or to service users	live independently. ADL baseline: d=0.2143, 95% CI -0.06374 to 0.4923; ADL at 3 months: d=-0.2202, 95% CI -0.5263 to 0.0859; ADL at 12 months: d=-0.2603, 95% CI -0.5933 to 0.0727. IADL baseline: d=0.3717, 95% CI 0.0921 to 0.6513; IADL at 3 months: d=-0.0256, 95% CI -0.3308 to 0.2796; IADL at 12 months: d= -0.1463, 95% CI -0.4783 to 0.1858.  Mobility (measured using the Timed Up and Go test, lower levels of mobility are indicated by slower times) Between group differences in mean time (seconds) at 3 months: The intervention group had a quicker mean time on a measure of mobility compared to the control	
	who are already in receipt of home care but have requested an increase in support.	group however this difference was not significant; intervention 19.9 (SD 13.9) vs. control 20.8 (SD 11.4). p	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Duration, frequency, intensity, etc The service is usually provided for approximately 12 weeks, however this is dependent on success in meeting the service users goals and it should be noted that some participants may have received support for longer than 12 weeks (the number of which are not reported). No further details on frequency or intensity of the intervention are reported.</li> <li>Key components and objectives of intervention - The main aim of the intervention is to minimise the need for ongoing care through a focus on functioning in the activities of daily living. This can be achieved by ' task analysis and redesign, work simplification and assistive technology' (p93). The intervention includes</li> </ul>	value not reported, described as non-significant by authors. Between group differences in mean time (seconds) at 12 months: The intervention group had a quicker mean time on a measure of mobility compared to the control group however this difference was not significant; intervention 18.9 (SD 6.8) vs. control 20.8 (SD 11.2). p value not reported, described as non-significant by authors. Between group differences in change in mean scores from baseline to 3 months: The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group; z=-5.98, p<0.001. Between group differences in change in mean scores from baseline to 12 months: Participants in the intervention group showed	
	'comprehensive	significantly greater	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	multidimensional assessment'; goal setting in collaboration with the service user; and education to enable self-management,	improvements between baseline and 12 months compared to the control group; z=-4.58, p<0.001.	
	healthy ageing, medication management, and prevention of accidents or illnesses. Other priorities that can be included are balance, strength and endurance work for mobility, falls	Fear of falling (measured using the Modified Falls Efficacy Scale, higher scores correspond to greater levels of confidence) Between group differences in mean scores at 3 months:	
	prevention, continence management, nutrition management, and skin care. The authors also report that other key components of the intervention are 'minimised face-to-face contact' with	The intervention group had a significantly higher mean score on a measure of fear of falling compared to the control group; intervention 8.4 (SD 1.1) vs. control 7.9 (SD 1.6); p=0.034.	
	telephone support and follow up (p93); a communication strategy that enables service users and their families to take part in decisions about care through promotion of a sense of autonomy; an understanding of the	Between group differences in mean scores at 12 months: The intervention group had a higher mean score on a measure of fear of falling compared to the control group however this difference was not significant:	
	important role that home care services have as a form	was not significant; intervention 8.3 (SD 1.3) vs. control 7.9 (SD 1.7). p value	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	of social support and assistance for service users to develop this type of support for themselves via other routes; and an awareness of local resources through use of a resource file. These components are collated in a Home Independence Programme user manual.  • Content/session titles - N/A.  • Location/place of delivery - The intervention is delivered in the service user's home.  Comparison intervention: Care as usual. Participants in the comparison group received standard Home and Community Care programme services. This included a telephone assessment to determine eligibility for the programme. If low level needs and assistance with domestic tasks only were identified services were scheduled at	not reported, described as non-significant by authors. Between group differences in change in mean scores from baseline to 3 months: The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group; z=5.99, p<0.001. Between group differences in change in mean scores from baseline to 12 months: The intervention group showed significantly greater improvements between baseline and 12 months compared to the control group; z=3.62, p<0.001.  Morale (measured using the Philadelphia Geriatric Morale Scale, higher scores correspond to better morale) Between group differences in mean scores at 3 months: The intervention group had a	
	this point. For individuals with	higher mean score on a	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	higher level needs an in person assessment by a care co-ordinator was arranged to devise a care plan and arrange services accordingly. The authors report that the ' most common care plan would include 3 personal care visits a week to assist with bathing/showering and a fortnightly home help visit to clean and do the heavy laundry' (p94).  Outcomes measured: Service user related outcomes  Activities of Daily Living and Instrumental Activities of Daily Living were both assessed using the Primary  Assessment Form. This is a tool developed by care providers. The Activities of Daily Living scale appears to	measure of morale compared to the control group however this difference was not significant; intervention 10.4 (SD 3.6) vs. control 11.0 (SD 3.7). p value not reported, described as non-significant by authors.  Between group differences in mean scores at 12 months: The intervention group had a higher mean score on a measure of morale compared to the control group however this difference was not significant; intervention 10.8 (SD 3.4) vs. control 10.9 (SD 3.6). p value not reported, described as non-significant by authors.  Between group differences in change in mean scores from baseline to 3 months: The intervention group showed	
	be based on the Modified Barthel Index (Colin et al. 1988) and the Instrumental Activities of Daily Living appears to be based on the	significantly greater improvements between baseline and 3 months compared to the control group; z=2.41, p=0.016.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Brody Scale (Lawton and Brody, 1969). The latter appears to have been modified to enable scoring to increase in relation to the assistance participants need for each task. Higher scores correspond to higher levels of dependency.  • Mobility was measured in seconds using the Timed Up and Go test (Podsiadlo and Richardson 1991).  • Lower levels of mobility are indicated by slower times.  • Fear of falling was measured using the Modified Falls Efficacy Scale (Hill et al. 1996). Higher scores correspond to greater levels of confidence.  • Morale was measured using the Philadelphia Geriatric Morale Scale (Lawton 1975). Higher scores correspond to better morale.	Between group differences in change in mean scores from baseline to 12 months: The intervention group showed significantly greater improvements between baseline and 12 months compared to the control group; z=2.04, p=0.041.  Linear regression estimates for group (intervention/control) and baseline scores for activities of daily living at 3 months follow-up Activities of Daily Living total group: The amount of change in scores between baseline and 3 months follow-up was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group; estimate 0.43; 95% CI 0.12 to 0.74; p=0.006.	

Research aims	PICO (population, intervention, comparison,	Findings	Overall validity rating
	outcomes)		
	Service outcomes were	Activities of Daily Living total -	
	measured by collating provider	baseline score: The amount	
	level service data. Participants	of change in scores between	
	were classified as 'discharged	baseline and 3 months follow-	
	<ul> <li>no longer required a service';</li> </ul>	up was significantly	
	'service requirement remained	influenced by baseline	
	unchanged'; 'required a lower	scores; estimate -0.28; 95%	
	level of service'; 'required an	CI -0.40 to 0.16; p<0.001.	
	increased level of service';		
	'deceased'; 'entered residential	Linear regression estimates	
	care'; 'service cancelled or on	for group	
	hold' (participants who had	(intervention/control) and	
	been referred to palliative care	baseline scores for activities	
	services or were in hospital at	of daily living at 12 months	
	3 months) (p97).	follow up	
	, , ,	Activities of Daily Living total -	
	Follow-up: Follow-up	group: The amount of change	
	assessments took place at 3	in scores between baseline	
	and 12 months.	and 12 months follow-up was	
		significantly influenced by	
	Costs? No. Costs or resource	group assignment with	
	use information are not	participants in the	
	reported.	intervention group making	
		greater improvements than	
		those in the control group;	
		estimate 0.40; 95% CI 0.09 to	
		0.71; p=0.012.	
		Activities of Daily Living total -	
		baseline score: The amount	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		of change in scores between baseline and 12 months follow-up was significantly influenced by baseline scores; estimate -0.45; 95% CI -0.57 to -0.33; p<0.001.	
		Linear regression estimates for group (intervention/control) and baseline scores for instrumental activities of daily living at 3 months follow up Instrumental Activities of Daily Living total - group: The amount of change in scores between baseline and 3 months follow-up was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group; estimate 1.35; 95% CI 0.58 to 2.13; p=0.001. Instrumental Activities of Daily Living total - baseline score: The amount of change	

CO (population, ervention, comparison, tcomes)	Findings	Overall validity rating
	in scores between baseline and 3 months follow-up was significantly influenced by baseline scores; estimate - 0.25; 95% CI -0.34 to -0.15; p<0.001.	
	Linear regression estimates for group (intervention/control) and baseline scores for instrumental activities of daily living at 12 months follow up Instrumental Activities of Daily Living total - group: The amount of change in scores between baseline and 12 months follow-up was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group; estimate 1.32; 95% CI 0.36 to 2.27; p=0.008. Instrumental Activities of Daily Living total - baseline	
		Daily Living total - group: The amount of change in scores between baseline and 12 months follow-up was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group; estimate 1.32; 95% CI 0.36 to 2.27; p=0.008.

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		in scores between baseline and 12 months follow-up was significantly influenced by baseline scores; estimate -0.47; 95% CI -0.59 to -0.35; p<0.001.	
		Linear regression estimates for group (intervention/control) and baseline time for Timed Up and Go at 3 months follow up Timed Up and Go (minutes) - group: The amount of change in times between baseline and 3 months follow-up was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group; estimate 5.44; 95% CI 2.82 to 8.07; p<0.001.  Timed Up and Go (minutes) - baseline time: The amount of change in scores between baseline and 3 months follow-up was significantly	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	influenced by baseline scores; estimate -0.19; 95% CI -0.29 to 0.09; p<0.001.	
	Linear regression estimates for group (intervention/control) and baseline time for Timed Up and Go at 12 months follow up Timed Up and Go (minutes) - group: The amount of change in times between baseline and 12 months follow-up was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group; estimate 4.79; 95% CI 2.20 to 7.38; p<0.001.  Timed Up and Go (minutes) - baseline time: The amount of change in scores between baseline and 12 months follow-up was significantly influenced by baseline	
	intervention, comparison,	intervention, comparison, outcomes)  influenced by baseline scores; estimate -0.19; 95% CI -0.29 to 0.09; p<0.001.  Linear regression estimates for group (intervention/control) and baseline time for Timed Up and Go at 12 months follow up Timed Up and Go (minutes) - group: The amount of change in times between baseline and 12 months follow-up was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group; estimate 4.79; 95% CI 2.20 to 7.38; p<0.001.  Timed Up and Go (minutes) - baseline time: The amount of change in scores between baseline and 12 months

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		scores; estimate -0.39; 95% CI -0.52 to -0.26; p<0.001.	
		Linear regression estimates for group (intervention/control) and	
		baseline scores for Modified Falls Efficacy Scale mean score at 3 months follow up	
		Modified Falls Efficacy Scale mean score - group: The amount of change in scores	
		between baseline and 3 months follow-up was	
		significantly influenced by group assignment with participants in the	
		intervention group making greater improvements than those in the control group;	
		estimate -0.85; 95% CI -1.18 to -0.53; p<0.001.	
		Modified Falls Efficacy Scale mean score - baseline score: The amount of change in	
		scores between baseline and 3 months follow-up was	
		significantly influenced by baseline scores; estimate -	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		0.42; 95% CI -0.53 to -0.32; p<0.001.	
		Linear regression estimates for group (intervention/control) and baseline scores for Modified	
		Falls Efficacy Scale mean score at 12 months follow up Modified Falls Efficacy Scale mean score - group: The	
		amount of change in scores between baseline and 12 months follow-up was	
		significantly influenced by group assignment with participants in the	
		intervention group making greater improvements than those in the control group; estimate -0.68; 95% CI -1.14	
		to -0.21; p=0.005.  Modified Falls Efficacy Scale mean score - baseline score:	
		The amount of change in scores between baseline and 12 months follow-up was	
		significantly influenced by baseline scores; estimate	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		-0.51; 95% CI -0.67 to -0.36; p<0.001.	
		Linear regression estimates for group (intervention/control) and baseline scores for Philadelphia Geriatric Morale Scale total score at 3 months follow up Philadelphia Geriatric Morale Scale total score - group: The amount of change in scores between baseline and 3 months follow-up was influenced by group assignment with participants in the intervention group making greater improvements	
		than those in the control group; however this result was not significant; estimate -0.42; 95% CI -1.28 to 0.43; p=0.333.  Philadelphia Geriatric Morale Scale total score - baseline score: The amount of change in scores between baseline and 3 months follow-up was	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		significantly influenced by baseline scores; estimate -0.29; 95% CI -0.42 to -0.18; p<0.001.	
		Linear regression estimates for group (intervention/control) and baseline scores for Philadelphia Geriatric Morale Scale total score at 12 months follow up Philadelphia Geriatric Morale Scale total score - group: The amount of change in scores between baseline and 12 months follow-up was influenced by group assignment with participants in the intervention group making greater improvements than those in the control group; however, this result was not significant; estimate -0.59; 95% CI -1.61 to 0.43; p=0.254. Philadelphia Geriatric Morale Scale total score - baseline score: The amount of change	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		in scores between baseline and 12 months follow-up was significantly influenced by baseline scores; estimate -0.45; 95% CI -0.60 to -0.29; p<0.001.	
		Statistical data - Service outcomes — Service outcomes at 3 months follow up (significance of results not reported) 'Discharged — no longer required a service': At 3 months follow-up a larger number of participants in the intervention group were classified as no longer requiring care compared to that in the control group; intervention n=63 vs. control n=11. 'Service requirement remained unchanged': At 3 months follow-up a smaller number of participants in the intervention group were classified as having	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Outcomes)	unchanged service requirements compared to that in the control group; intervention n=18 vs. control n=67. 'Required a lower level of service': At 3 months follow- up a larger number of participants in the intervention group were classified as requiring a lower level of service compared to that in the control group; intervention n=3 vs. control n=0. 'Required an increased level of service': At 3 months follow-up a smaller number of participants in the intervention group were classified as requiring a higher level of service compared to that in the control group; intervention n=0 vs. control n=13. Deceased: At 3 months	
	participants in each group	
	intervention, comparison,	intervention, comparison, outcomes)  unchanged service requirements compared to that in the control group; intervention n=18 vs. control n=67.  'Required a lower level of service': At 3 months follow-up a larger number of participants in the intervention group were classified as requiring a lower level of service compared to that in the control group; intervention n=3 vs. control n=0.  'Required an increased level of service': At 3 months follow-up a smaller number of participants in the intervention group were classified as requiring a higher level of service compared to that in the control group; intervention n=0 vs. control n=13.  Deceased: At 3 months follow-up an equal number of

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		had died; intervention n=4 vs. control n=4. 'Entered residential care': At 3 months follow-up a smaller number of participants in the intervention group had entered residential care compared to that in the control group; intervention n=1 vs. control n=2. 'Service cancelled or on hold': At 3 months follow-up a larger number of participants in the intervention group had had their service cancelled or placed on hold compared to that in the control group; intervention n=9 vs. control n=3.	
		Service outcomes at 12 months follow up (significance of results not reported) 'Discharged – no longer required a service': At 12 months follow-up a larger number of participants in the intervention group were	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	classified as no longer requiring care compared to that in the control group; intervention n=57 vs. control n=19.  'Service requirement remained unchanged: At 12 months follow-up a smaller number of participants in the intervention group were classified as having unchanged service requirements compared to that in the control group; intervention n=19 vs. control n=58.  'Required a lower level of service': At 12 months follow-up a larger number of participants in the intervention group were classified as requiring a lower level of service compared to that in the control group; intervention n=8 vs. control n=7.  'Required an increased level	
	of service': At 12 months follow-up a larger number of	
	intervention, comparison,	classified as no longer requiring care compared to that in the control group; intervention n=57 vs. control n=19.  'Service requirement remained unchanged: At 12 months follow-up a smaller number of participants in the intervention group were classified as having unchanged service requirements compared to that in the control group; intervention n=19 vs. control n=58.  'Required a lower level of service': At 12 months follow-up a larger number of participants in the intervention group were classified as requiring a lower level of service compared to that in the control group; intervention group were classified as requiring a lower level of service compared to that in the control group; intervention n=8 vs. control n=7.  'Required an increased level of service': At 12 months

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		participants in the intervention group were classified as requiring a higher level of service compared to that in the control group; intervention n=3 vs. control n=1.  Deceased: At 12 months follow-up an equal number of participants in each group had died; intervention n=11 vs. control n=11.  'Entered residential care': At 12 months follow-up a smaller number of participants in the intervention group had entered residential care compared to that in the control group; intervention n=2 vs. control n=4.  'Service cancelled or on hold': At 12 months follow-up there were no participants in either group who had had their service cancelled or placed on hold; intervention n=0 vs. control n=0.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Service outcome (continuing to receive service vs. no longer requiring a service) at 3 months (logistic regression, n=165) Demographic: Not a significant predictor. Data not provided, reported narratively by the authors. Outcomes (scores at different follow-ups): Not a significant predictor. Data not provided, reported narratively by the authors. Group: (intervention/control): At 3 months, participants in the intervention group were 0.07 times less likely than those in the control group to still require services. This result was statistically significant; intervention n=63 (63%) vs. control n=11 (11%); odds ratio = 0.07 (95% CI 0.03 to 0.15); p<0.001.	
		NB. Variables were adjusted for age; carer availability; gender; living arrangements;	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		and scores on Activities of Daily Living, Instrumental Activities of Daily Living, Timed Up and Go, Modified Falls Efficacy and Philadelphia Geriatric Morale scale.	
		Service outcome (continuing to receive service vs. no longer requiring a service) at 12 months (logistic regression, n=140) Demographic: Not a significant predictor. Data not provided, reported narratively by the authors. Outcomes (scores at different follow-ups): Not a significant predictor. Data not provided, reported narratively by the authors. Group: (intervention/control): At 12 months, participants in the intervention group were	
		0.14 times less likely than those in the control group to still require services. This result was statistically	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	outcomes	significant; intervention n=57 (57%) vs. control n=19 (19%); odds ratio = 0.14 (95% CI 0.07 to 0.29); p<0.001.  NB. Variables were adjusted for age; carer availability; gender; living arrangements; and scores on Activities of Daily Living, Instrumental Activities of Daily Living, Timed Up and Go, Modified	
		Falls Efficacy and Philadelphia Geriatric Morale scale.	

6. Tinetti ME, Charpentier P, Gottschalk M et al. (2012) Effect of a Restorative Model of Posthospital Home Care on Hospital Readmissions. Journal of the American Geriatrics Society 60: 1521-6

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To compare readmissions of Medicare	Participants: Service users and their families, partners and	Statistical data – service outcomes -	Overall assessment of internal validity:
recipients of usual home care and a matched group of	carers - Individuals using care from a large home care agency	Number of readmissions: Matched pairs (n=341 pairs)	+
recipients of a restorative model of home care.	after hospitalisation.	restorative care 45/341 (13.2%) vs. usual care	Overall assessment of external validity:
	Sample characteristics:	60/341 (17.6%); p=0.10; 95%	++
	Age - Restorative model		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
<b>Methodology:</b> Comparison evaluation. Quasi-experimental evaluation.	mean (all) 77.4±6.7; mean (matched pairs) 77.4±6.5. Usual care mean (all)	CI 0.68 (0.43 to 1.08); odds ratio = 0.68.	
Country: USA.	77.0±6.7; mean (matched pairs) 77.4±6.5.	Number of readmissions: Unmatched analysis (n=770)	
Source of funding: Other - Private foundation.	• Sex - Restorative model male (all) 191 (47%); male (matched pairs) 159 (47%). Usual care male 168 (47%); male (matched pairs) 159 (47%).	restorative care 53/410 (12.9%) vs. usual care 62/360 (17.2%); p=0.09; 95% CI 0.71 (0.47 to 1.06); odds ratio = 0.71.	
	<ul> <li>Ethnicity - Restorative model         <ul> <li>non-white (all) 15 (4%);</li> <li>non-white (matched pairs)</li> <li>12 (4%). Usual care non-white 14 (4%); non-white (matched pairs)</li> <li>12 (4%).</li> </ul> </li> </ul>	Mean length of stay in intervention or control: Restorative care 20.3±14.8 (interquartile range 11-24) vs. usual care 29.1±31.7 (interquartile range 13-34);	
	Disability - Restorative model - dependence in >1 self-care activity of daily living (all) 211 (51%); dependence in >1 self-care activity of daily living (matched pairs) 161 (47%).	p<0.001.	
	Usual care dependence in >1 self-care activity of daily living (all) 171 (48%); dependence in >1 self-care activity of daily living		

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	(matched pairs) 161 (47%).		
	<ul> <li>Long term health condition -</li> </ul>		
	Restorative model - Cardiac		
	- All 288 (70%); matched		
	pairs 233 (68%). Respiratory		
	- all 90 (22%); matched pairs		
	82 (24%). Diabetes mellitus -		
	all 89 (22%); matched pairs		
	73 (22%). Neurological - all		
	29 (7%); matched pairs 24		
	(7%). Two or more of these		
	categories of chronic		
	conditions - 227 (55%)		
	matched pairs 189 (55%).		
	Usual care – Cardiac - all		
	247 (69%); matched pairs		
	236 (69%). Respiratory - all		
	63 (18%); matched pairs 61		
	(18%). Diabetes mellitus - all		
	90 (26%); matched pairs 84		
	(26%). Neurological - all 25		
	(7%); matched pairs 23		
	(7%). Two or more of these		
	categories of chronic		
	conditions - 208 (58%);		
	matched Pairs 200 (59%).		
	Intervention:		
	Description - A restorative		

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	model of home care based		
	on principles from geriatric		
	medicine, nursing,		
	rehabilitation, goal		
	attainment, chronic care		
	management and		
	behavioural change theory.		
	The aim is to re-orientate		
	home care from disease		
	treatment and 'taking care of'		
	patients to working together		
	to maximise function.		
	<ul> <li>Delivered by - Nursing,</li> </ul>		
	physiotherapy, occupational		
	therapy & home health aide		
	staff.		
	<ul> <li>Delivered to - People</li> </ul>		
	receiving home care from a		
	large home care agency in		
	Connecticut.		
	<ul> <li>Key components and</li> </ul>		
	objectives of intervention -		
	Important elements - (see		
	table 1, p1522) -		
	development and		
	implementation of a unified		
	plan of care based on goal		
	attainment; establishment of		
	goals based on input from		

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	the individual, family, and		
	home care staff; agreement		
	on the process for reaching		
	these goals; reorganization		
	of the home care staff from		
	individual care providers into		
	an integrated,		
	interdisciplinary team with		
	shared goals; reorientation		
	of the focus of the home		
	care team from primarily		
	treating diseases and 'taking		
	care of patients toward		
	maximising self-care		
	function; clarification of roles		
	and responsibility of		
	providers; standard		
	assessment of patients; self-		
	care progress report; track		
	progress toward reaching		
	goals; treatment plans		
	targeting physical		
	impairments and tasks of		
	daily living; behavioural		
	changes; environmental		
	adjustments and adaptive		
	equipment; counselling and		
	support; training of patient,		
	family, and caregivers; and		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	medication adjustments.		
	Outcomes measured: Service outcomes - Frequency of hospital readmissions and mean length of home care episodes.		
	Costs? No cost or economic data are reported but the authors suggest that the findings show that restorative care is cost effective, 'The reduction in hospital readmissions and ED visits,		
	coupled with shorter episodes of home care, support the costeffectiveness of the restorative model' (p1524). They also calculate that the 15 fewer		
	readmissions in the restorative compared with usual care group translates to \$108,000 in 2005 Medicare dollars saved in the study sample.		

## 7. Tuntland H, Aaslund MK, Espehaug B et al. (2015) Reablement in community-dwelling older adults: A randomised controlled trial. BMC Geriatrics 15: 145

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The authors aimed to ' evaluate whether reablement is more effective with regard to self-perceived activity performance and satisfaction with performance, physical functioning, and health-related quality of life compared with usual care' (p2).	Participants: Service users and their families, partners and carers - Individuals who had applied or been referred for home care due to self-reported limitations in activity were assessed for eligibility. The trial included both individuals who had been admitted to	Statistical data - service user related outcomes - NB. Some effect sizes were not presented by the authors. Those that were not were calculated by the review team. Usage of home-based	Overall assessment of internal validity: ++  Overall assessment of external validity: ++
<b>Country:</b> Norway. The study is reported to have been conducted in a rural municipality with a population of around 14,000.	hospital as a result of acute illness as well as those who had experienced a gradual decline in function without admission.	services and distribution of health-care professions during the first 3 months: effect sizes Mean home visits per person: d=0.0959; 95% CI -0.4516 to	
<b>Methodology:</b> Randomised controlled trial.	To be eligible, individuals had to be over the age of 18, living in their own home in the municipality, able to	0.6435.  Mean home visits per person per week: d=0.1677; 95% CI -0.3805 to 0.7159.	
<ul> <li>Source of funding:</li> <li>Government – Regional Research Funds Western Norway, grant number 229759.</li> <li>Other - Norwegian Association of Occupational Therapists.</li> </ul>	understand Norwegian and to have experienced functional decline in at least 1 daily activity.  Individuals were excluded if they needed admission to a rehabilitation unit or nursing	Mean hours home-based service per person: d=0.1506; 95% CI -0.3974 to 0.6986. Mean hours home-based service per person per week: d=0.1591; 95% CI -0.389 to 0.7072.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	home, if they had a terminal illness, or if they were assessed (by health care providers) as having a moderate or severe cognitive impairment.	Activity performance (self-reported, measured using the Canadian Occupational Performance Measure, sum score, 1–10, 10=best) Three months: There was a significant mean difference in	
	The authors note that baseline scores on outcome measures such as the Timed Up and Go test suggest that the sample was relatively frail with low physical function in comparison to the wider population of 70-79 year olds living in the community.	scores of 1.5 points on a self-reported measure of activity performance in favour of the intervention group at 3 months, with large effect sizes being observed; adjusted effect size d=0.8; treatment effect mean difference = 1.5 (95% CI 0.3 to 2.8); p=0.02.	
	<ul> <li>Sample characteristics:</li> <li>Age – Intervention mean 79.9 years (10.4 SD); control mean 78.1 years (9.8 SD); p=0.49.</li> <li>Sex – Intervention n=22 female (71.0%); control n=19 female (63.3%); p=0.53.</li> <li>Ethnicity – Not reported.</li> <li>Religion/belief – Not reported.</li> </ul>	Nine months: There was a significant mean difference in scores of 1.4 points on a self-reported measure of activity performance in favour of the intervention group at 9 months, with medium to large effect sizes being observed; adjusted effect size d=0.7; treatment effect mean difference = 1.4 (95% CI 0.2 to 2.7); p=0.03.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Disability – Not reported.</li> <li>Long term health condition – Not reported.</li> <li>Sexual orientation – Not reported.</li> <li>Socioeconomic position –</li> <li>Married/cohabitating – intervention n=10 (32.3%); control n=4 (13.3%); p=0.08.</li> <li>Education - university/university college intervention n=27 (87.1%); control n=24 (80.0%); p=0.51.</li> <li>Retired - intervention n=28 (90.3%); control n=26 (86.7%); p=0.65.</li> <li>Baseline characteristics:</li> <li>Motivation for rehabilitation (1–10, 10=best) – intervention mean 7.5 (2.3 SD); control mean 7.7 (2.1 SD); p=0.70.</li> <li>Total number of prescribed medications – intervention mean 6.1 (2.8 SD), range 13; control mean 6.7 (3.1</li> </ul>	Whole trial period of 9 months: There was a significant overall treatment effect of 1.5 points on a self-reported measure of activity performance in favour of the intervention group over the whole 9 month study period; overall treatment effect mean difference = 1.5 (95% CI 0.4 to 2.6); p=0.01.  Activity satisfaction (self-reported, measured using the Canadian Occupational Performance Measure, sum score, 1–10, 10=best) Three months: There was a mean difference in scores of 1.0 points on a self-reported measure of activity satisfaction in favour of the intervention group at 3 months, however this result was not statistically significant. Medium to large effect sizes were observed; adjusted effect size d=0.7; treatment effect mean	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>SD), range 11; p=0.46.</li> <li>Self-reported number of medical conditions – intervention mean 3.0 (1.7 SD), range 8; control mean 2.9 (1.1 SD), range 4; p=0.79.</li> <li>Category of main medical condition – p=0.42.</li> <li>Cardiovascular condition – intervention n=5 (16.1%); control n=2 (6.7%).</li> <li>Neurological condition included strokes – intervention n=8 (25.8%); control n=8 (26.7%).</li> <li>Orthopaedic condition – intervention n=10 (32.3%); control n=12 (40.0%).</li> <li>Lung condition – intervention n=4 (12.9%); control n=1 (3.3%).</li> <li>Other/unspecified condition – intervention n=4 (12.9%); control n=7 (23.3%).</li> <li>Activity performance (Canadian Occupational Performance Measure, sum</li> </ul>	difference = 1.0 (95% CI –0.3 to 2.2); p=0.13. Nine months: There was a significant mean difference in scores of 1.4 points on a self-reported measure of activity satisfaction in favour of the intervention group at 9 months, with large effect sizes being observed; adjusted effect size d=0.9; treatment effect mean difference 1.4 (95% CI 0.1 to 2.7); p=0.03. Whole trial period of 9 months: There was a significant overall treatment effect of 1.2 points on a self-reported measure of activity satisfaction in favour of the intervention group over the whole 9 month study period; treatment effect mean difference 1.2 (95% CI 0.1 to 2.3); p=0.04.  Functional mobility (measured in seconds using the Timed Up and Go)	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	score, 1–10, 10=best) – intervention mean 2.6 (1.5 SD); control mean 2.8 (1.4 SD); p=0.70.  • Activity satisfaction (Canadian Occupational Performance Measure, sum score, 1–10, 10=best) – intervention mean 2.6 (1.6 SD); control mean 3.3 (1.9 SD); p=0.12.  • Mobility and balance (Timed Up and Go, seconds, n=56) – intervention mean 24.6 (11.9 SD); control mean 23.3 (17.3 SD); p=0.73.  • Grip strength (Jamar dynamometer, men right hand, kg, n = 19) – intervention mean 24.4 (14.1 SD); control mean 28.8 (9.6 SD); p=0.43.  • Grip strength (Jamar dynamometer, men left hand, kg, n=17) – intervention mean 27.3 (13.4 SD); control mean 25.8 (9.0 SD); p=0.79.	Three months: There was a mean difference in times of -0.4 seconds on a measure of functional ability in favour of the intervention group at 3 months. This result was not statistically significant and effect sizes were small; adjusted effect size d=0.1; treatment effect mean difference -0.4 (95% CI -4.3 to 3.5); p=0.82. Nine months: There was a mean difference in times of 0.3 seconds on a measure of functional ability in favour of the control group at 9 months. This result was not statistically significant and effect sizes were small; adjusted effect size d=0.1; treatment effect mean difference 0.3 (95% CI -3.7 to 4.3); p=0.88. Whole trial period of 9 months: There was an overall treatment effect -0.1 seconds on a measure of functional ability in favour of the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Grip strength (Jamar dynamometer, women, right hand, kg, n=39) – intervention mean 17.7 (5.7 SD); control mean 15.8 (6.6 SD); p=0.34.</li> <li>Grip strength (Jamar dynamometer, women, left hand, kg, n=41) – intervention mean 17.1 (6.7 SD); control mean 14.4 (6.1 SD); p=0.18.</li> <li>Physical fitness (COOP/Wonka, scale 1–5, 1=best) – intervention mean 4.4 (0.6 SD); control mean 4.2 (0.7 SD); p=0.29.</li> <li>Feelings (COOP/Wonka, scale 1–5, 1=best) – intervention mean 2.4 (1.5 SD); control mean 2.3 (0.9 SD); p=0.71.</li> <li>Daily activities (COOP/Wonka, scale 1–5, 1=best) – intervention mean 3.5 (1.1 SD); control mean 3.5 (1.1 SD); control mean 3.5 (0.8 SD); p=0.16.</li> <li>Social activities</li> </ul>	intervention group over the whole 9 month study period; treatment effect mean difference –0.1 (95% CI –3.8 to 3.5); p=0.96. This result was not statistically significant.  Grip strength – right hand (measured in kilograms using the Jamar dynamometer) Three months: There was a mean difference in scores of -0.3 kg on a measure of right handed grip strength in favour of the control group at 3 months. This result was not statistically significant and effect sizes were small; adjusted effect size d=0.1; treatment effect mean difference –0.3 (95% CI 2.5 to 2.0); p=0.81. Nine months: There was a mean difference in scores of -0.3 kg on a measure of right handed grip strength in favour of the control group at 9 months. This result was not	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	(COOP/Wonka, scale 1–5, 1=best) – intervention mean 2.4 (1.4 SD); control mean 2.9 (1.3 SD); p=0.13.  • Change in health (COOP/Wonka, scale 1–5, 1=best) – intervention mean 2.4 (1.0 SD); control mean 2.1 (0.9 SD); p=0.34.  • Overall health (COOP/Wonka, scale 1–5, 1=best) – intervention mean 3.0 (0.9 SD); control mean 2.9 (0.8 SD); p=0.46.	statistically significant and effect sizes were small; adjusted effect size d=0.1; treatment effect mean difference -0.6 (95% CI -2.9 to 1.7); p=0.59. Whole trial period of 9 months: There was an overall treatment effect of -0.4 kg on a measure of right handed grip strength in favour of the control group over the whole 9 month study period. This result was not statistically	
	Activities prioritised by participants using Canadian Occupational Performance Measure:  • Self-care/personal care – n=36 (including - dressing n=5; eating with cutlery n=3; going to the toilet n=5; personal hygiene n=9).  • Self-care/mobility – n=89 (including - climbing stairs n=13; transferring from bed or chair n=14; walking indoors with/without walking	significant; treatment effect mean difference -0.4 (95% CI -2.4 to 1.5); p=0.66.  Grip strength – left hand (measured in kilograms using the Jamar dynamometer) - Three months: There was a mean difference in scores of -0.1 kg on a measure of left handed grip strength in favour of the control group at 3 months. This result was not statistically significant and effect sizes were small;	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	aids n=24; walking outdoors with/without walking aids n=21; walking outdoors towards defined target - n=17).  • Productivity/community management - n=19.  • Productivity/paid or unpaid work - n=2.  • Productivity/household arrangement - n=44 (including - carry items n=7; clean or vacuum house n=20; prepare food n=10; wash clothes n=7).  • Productivity/play/school - n=0.  • Leisure/quiet recreation - n=10.  • Leisure/active recreation - n=17.  • Leisure/socialisation - n=11.  Sample size:  • Comparison numbers - Randomised n=30; completed 3 month follow-up assessment n=26;	adjusted effect size d=-0.1; treatment effect mean difference -0.1 (95 % CI -3.1 to 2.8); p=0.92. Nine months: There was a mean difference in scores of -2.2 kg on a measure of left handed grip strength in favour of the control group at 3 months. This result was not statistically significant and effect sizes were small; adjusted effect size d=-0.3; treatment effect mean difference -2.2 (95% CI -5.2 to 0.9); p=0.16. Whole trial period of 9 months: There was an overall treatment effect of -1.1 kg on a measure of left handed grip strength in favour of the control group over the whole 9 month study period. This result was not statistically significant; treatment effect mean difference -1.1 (95 % CI -3.5 to 1.3); p=0.36.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	completed 9 month follow-up assessment n=26.  Intervention numbers — Randomised n=31; completed 3 month follow-up assessment n=28; completed 9 month follow-up assessment n=25.  Sample size - Randomised N=61; completed 3 month follow-up assessment n=54; completed 9 month follow-up assessment n=51.  Intervention: Reablement.	Health related quality of life – physical fitness (self-reported, measured using COOP/Wonka, scale 1–5, 1=best Three months: There was no difference in mean scores on a self-reported measure of physical fitness at 3 months. Small effect sizes were observed. The result was not statistically significant; adjusted effect size d=-0.2; treatment effect mean difference 0.0 (95% CI –0.4	
	<ul> <li>Description - The intervention is described as multicomponent home based rehabilitation.</li> <li>Delivered by - An occupational therapist and a physical therapist worked with participants to identify issues that hindered their ability to perform everyday tasks and these were translated into a rehabilitation plan that underpinned the work that</li> </ul>	to 0.5); p=0.94. Nine months: There was a mean difference in scores of -0.4 points on a self-reported measure of physical fitness in favour of the intervention group at 9 months, however this result was not statistically significant. Medium effect sizes were observed; adjusted effect size d=-0.6; treatment effect mean difference -0.4 (95% CI -0.9 to 0.1); p=0.09.	

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	home care personnel carried	Whole trial period of 9	
	out with the service user	months: There was an overall	
	(supervised by the	treatment effect of -0.2 points	
	occupational and physical	on a self-reported measure of	
	therapists). The authors	physical fitness in favour of	
	report that although some of	the intervention group over	
	the home care staff had not	the whole 9 month study	
	previously been trained in	period, however this result	
	reablement, all of those	was not statistically	
	involved received training	significant; treatment effect	
	before the intervention was	mean difference -0.2 (95%	
	rolled out. This focused on	CI -0.6 to 0.2); p=0.34.	
	the 'ideology' of self-		
	management. Home care	Health related quality of life –	
	staff and therapists held	feelings (self-reported,	
	weekly informal meetings to	measured using	
	' ensure good	COOP/Wonka, scale 1–5,	
	communication and follow-	1=best)	
	up of individual participants'	Three months: There was no	
	(p3).	difference in mean scores on	
	<ul> <li>Delivered to - Individuals</li> </ul>	a self-reported measure of	
	who had applied or been	feelings at 3 months. Small	
	referred for home care due	effect sizes were observed.	
	to self-reported limitations in	The result was not	
	at least 1 activity (included	statistically significant;	
	both individuals who had	adjusted effect size d = 0.0;	
	been admitted to hospital	treatment effect mean	
	due to an acute episode and	difference 0.0 (95% CI -0.5	
	those who had experienced	to 0.6); p=0.89.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Nine months: There was no difference in mean scores on a self-reported measure of feelings at 9 months. Small effect sizes were observed. The result was not statistically significant; adjusted effect size d=-0.1; treatment effect mean difference 0.0 (95% CI -0.6 to 0.6); p=1.00. Whole trial period of 9 months: There was no evidence of an overall treatment on a self-reported measure of feelings over the whole 9 month study period. This was not statistically	
	provided was 3 months and the authors report that the average duration was ten weeks. No further details on frequency or intensity of sessions are reported.  • Key components and objectives of intervention - The intervention aims to enable participants to perform daily activities	significant; treatment effect mean difference 0.0 (95% CI –0.5 to 0.5); p=0.90.  Health related quality of life – daily activities (self-reported, measured using COOP/Wonka, scale 1–5, 1=best)  Three months: There was a mean difference in scores of -	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
themselves rather than relying on others. The Canadian Occupational Performance Measure is used to identify issues that restricted the everyday activities of participants. These were then translated into a rehabilitation plan which home care personnel used in their work with participants. The authors report that the ' focus was on stimulating the participants to perform the daily activities themselves, rather than letting others do it for them. Among the individual features were training in daily activities, adaptations to the environment or the activity, and exercise programs' (p3). Participants also received booklets illustrating simple exercises.  • Location/place of delivery -	0.4 points on a self-reported measure of daily activity in favour of the intervention group at 3 months, however this result was not statistically significant. Medium effect sizes were observed; adjusted effect size d=-0.6; treatment effect mean difference -0.4 (95% CI -0.9 to 0.2); p=0.21. Nine months: There was a mean difference in scores of -0.4 points on a self-reported measure of daily activity in favour of the intervention group at 9 months, however this result was not statistically significant. Medium effect sizes were observed; adjusted effect size d=-0.6; treatment effect mean difference -0.4 (95% CI -0.3 to 0.5); p=0.22. Whole trial period of 9 months: There was an overall treatment effect of -0.4 on a	
the participant's own home.	activity in favour of the	
	intervention, comparison, outcomes)  themselves rather than relying on others. The Canadian Occupational Performance Measure is used to identify issues that restricted the everyday activities of participants. These were then translated into a rehabilitation plan which home care personnel used in their work with participants. The authors report that the ' focus was on stimulating the participants to perform the daily activities themselves, rather than letting others do it for them. Among the individual features were training in daily activities, adaptations to the environment or the activity, and exercise programs' (p3). Participants also received booklets illustrating simple exercises.  • Location/place of delivery - The service is provided in	themselves rather than relying on others. The Canadian Occupational Performance Measure is used to identify issues that restricted the everyday activities of participants. These were then translated into a rehabilitation plan which home care personnel used in their work with participants. The authors report that the ' focus was on stimulating the participants to perform the daily activities themselves, rather than letting others do it for them. Among the individual features were training in daily activities, adaptations to the environment or the activity, and exercise programs' (p3). Participants also received booklets illustrating simple exercises.  • Location/place of delivery The service is provided in

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Comparison intervention: Care as usual. The control intervention was not time-limited and was provided for more than 3 months where necessary. The authors report that usual care most commonly comprised of 'compensating' services such as assistive technology, meals on wheels, practical help or provision of a safety alarm. However it should be noted that 6 participants in the control group received rehabilitation provided by an occupational and/or physical therapist.  The study reports on service use during the first 3 months of the study (intervention n=29; control n=23):  • Mean home visits per person during first 3 months — intervention n=78 (65 SD);	intervention group over the whole 9 month study period, however this result was not statistically significant; treatment effect mean difference –0.4 (95% CI –0.8 to 0.1); p=0.14.  Health related quality of life – social activities (self-reported, measured using COOP/Wonka, scale 1–5, 1=best)  Three months: There was a mean difference in scores of 0.4 points on a self-reported measure of social activity in favour of the control group at 3 months, however this result was not statistically significant. Medium effect sizes were observed; adjusted effect size d=0.6; treatment effect mean difference 0.4 (95% CI –0.2 to 1.0); p=0.23.  Nine months: There was a	
	<ul> <li>control n=71 (82 SD).</li> <li>Mean home visits per person per week – intervention n=7</li> </ul>	mean difference in scores of 0.1 points on a self-reported measure of social activity in	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>(5 SD); control n=6 (7 SD).</li> <li>Mean hours home based service per person (travel time excluded) – intervention n=24.7 (21.7 SD); control n=20.1 (39.0 SD); reported as non-significant by the authors, p value not provided.</li> <li>Mean hours home based service per person per week (travel time excluded) – intervention n=2.1 (1.8 SD); control n=1.7 (3.2 SD); reported as non-significant by the authors, p value not provided.</li> <li>Distribution of home visits between professionals – There was a significant difference in groups in distribution of health professionals (p&lt;0.001).</li> <li>Nurse – intervention 15.0 %;</li> </ul>	favour of the control group at 9 months, however this result was not statistically significant. Small effect sizes were observed; adjusted effect size d=0.4; treatment effect mean difference 0.1 (95% CI -0.5 to 0.8); p=0.65. Whole trial period of 9 months: There was an overall treatment effect of 0.3 on a self-reported measure of social activity in favour of the control group over the whole 9 month study period, however this result was not statistically significant; treatment effect mean difference 0.3 (95% CI -0.3 to 0.8); p=0.35.  Health related quality of life – change in health (self-reported, measured using COOP/Works, scale 1.5	
	<ul> <li>control 24.2%.</li> <li>Auxiliary nurse – intervention 35.0%; control 43.2%.</li> <li>Assistant – intervention</li> </ul>	COOP/Wonka, scale 1–5, 1=best) Three months: There was a mean difference in scores of 0.1 points on a self-reported	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>22.7%; control 24.0%.</li> <li>Physical therapist – intervention 9.9%; control 2.6%.</li> <li>Occupational therapist – intervention 13.3%; control 0.2%.</li> <li>Social educator – intervention 1.1%; control 1.5%.</li> <li>Speech therapist – intervention 0.0%; control 0.0%.</li> <li>Student – intervention 3.0%; control 3.1%.</li> <li>Unknown profession – intervention 0.0%; control 1.2%.</li> <li>Mean number of professions involved per person (excluding students) – intervention n=5; control n=3.</li> <li>The authors also report narratively that at 3 month follow-up there was a significantly higher number of</li> </ul>	measure of change in health in favour of the control group at 3 months, however this result was not statistically significant; adjusted effect size d=0.0; treatment effect mean difference 0.1 (95% CI –0.2 to 0.5); p=0.40. Nine months: There was a mean difference in scores of -0.1 points on a self-reported measure of change in health in favour of the intervention group at 9 months, however this result was not statistically significant. Small effect sizes were observed; adjusted effect size d=-0.4; treatment effect mean difference -0.1 (95% CI -0.4 to 0.3); p=0.66. Whole trial period of 9 months: There was no overall treatment effect on a self-reported measure of change in health over the whole 9 month study period, however this was not statistically significant; treatment effect	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	co-interventions in the control group and that '12 outpatient treatments in the control group	mean difference 0.0 (95% CI -0.3 to 0.3); p=0.78.	
	versus 3 outpatient treatments in the intervention group (p=0.007), of which 10 of the	Health related quality of life – overall health (self-reported, measured using	
	outpatient treatments were physiotherapy' (p4), however it is unclear what	COOP/Wonka, scale 1–5, 1=best Three months: There was a	
	exactly the differences between groups were.	mean difference in scores of -0.2 points on a self-reported measure of overall health in	
	<ul> <li>Outcomes measured:</li> <li>Activity performance measured using the Canadian Occupational Performance Measure (Law et al., 2015, self-reported, sum score, 1–10, 10=best).</li> <li>Activity satisfaction (Law et al. 2015, self-reported,</li> </ul>	favour of the intervention group at 3 months, however this result was not statistically significant. Small effect sizes were observed; adjusted effect size d=-0.3; treatment effect mean difference -0.2 (95% CI -0.6 to 0.2); p=0.36. Nine months: There was a	
	measured using the Canadian Occupational Performance Measure, sum score, 1–10, 10=best).  • Functional mobility measured in seconds using the Timed Up and Go (Podsiadlo et al. 1991).	mean difference in scores of -0.2 points on a self-reported measure of overall health in favour of the intervention group at 9 months, however this result was not statistically significant. Small effect sizes were observed; adjusted	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Grip strength (measured in kilograms using the Jamar dynamometer).</li> <li>Health related quality of life measured using 6 domains of the COOP/Wonka (Weel et al. 1993, self-reported, scale 1–5, 1=best. The 6 domains were physical fitness, feelings, daily activities, social activities, change in health, and overall health.</li> <li>Follow-up: Follow-up assessments were conducted at 3 and 9 months.</li> <li>Costs? No. Costs or resource use information are not reported.</li> </ul>	effect size d=-0.4; treatment effect mean difference -0.2 (95% CI -0.6 to 0.2); p=0.40. Whole trial period of 9 months: There was an overall treatment effect of - 0.2 on a self-reported measure of overall health in favour of the intervention group over the whole 9 month study period, however this result was not statistically significant; treatment effect mean difference -0.2 (95% CI -0.6 to 0.2); p=0.31.	

## Research question 4 – Findings tables - the views and experiences of people using services, their families and carers

1. Ariss S (2014) National audit for intermediate care: Patient reported experiences, 2014. Sheffield: University of Sheffield

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: To obtain views and	Participants: Service users	Narrative findings -	Overall assessment of
experiences from people using	and their families, partners and	qualitative and views and	internal validity:
intermediate care (reablement)	carers – people using	experiences data –	-
by asking the following survey	intermediate care (bed based,	NB. The report is published	
question, 'Do you feel that there	home based and reablement).	without page numbers so	Overall assessment of
is something that could have	, and the second	these cannot be provided	external validity:
made your experience of the	Sample size: According to the	with the quotes. Statements	++
service better?'	abstract, responses were	about ways that the service	
	received from 1644 reablement	might be improved were	
Methodology: Survey.	users. However according to	coded into 8 distinct themes,	
	the main report, 207 responses	which emerged from the data.	
Country: UK - England only.	were received for reablement	They're listed here in	
	services.	descending order, starting	
Source of funding:		with the one cited most	
Government.	Intervention: Reablement.	frequently.	
	Description - In the broader		
	audit, reablement is defined	Timing of visits	
	as 'community based	Two main problems; the	
	services provided to service	timing of visits was	
	users in their own home'.	inappropriate or inconsistent	
	These services help people	and more time/greater	
	recover skills and confidence	frequency of visits were	
	to live at home, maximising	considered necessary,	
	their level of independence	"Timings varied, between	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	so that their need for ongoing home care support can be appropriately minimised.  • Delivered by - MDT but predominantly social care professionals.  • Duration, frequency, intensity, etc.: For the majority of people, reablement lasts for up to 6 weeks (though there may be individual exceptions).  • Key components and objectives of intervention - The objective is to maximise people's confidence and independence and minimize the need for ongoing home care.  • Location/place of delivery - In peoples own homes/care homes.	7am-10.45am. This was not suitable for my circumstances. I was told this was not a timed service."  Joined up and appropriate services This included continuity of carers, communication and coordination within and between services, timeliness or information about waiting times. Knowledgeability and information provision about other appropriate services, and discharge arrangements were also mentioned.  Personal communication and attention Included lack of appropriate or consistent information about services or care, and lack of discharge information. Also lack of communication about visit times and changes to schedules. "A more proactive approach to	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		advising me about where to go for future help."	
		Personal care Lack of consistency regarding standards of care and the tasks the reablement workers could be expected to deliver. Support for leaving the house was a common request: "On one occasion the member of staff did not help me to get undressed, I struggled on my own."	
		Staffing Main concerns were lack of provider continuity, and shortage of staff. This impacts on many other important aspects of care, such as rushed visits, not enough time to share information, unpredictable and inappropriate visit times, inconsistent standards of care and lack of understanding about individuals' needs.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Length of service Some felt the service finished before they were ready. "I feel that the time spent with me was not enough and ended abruptly I am not better than when I left hospital."	
		Therapy and assessment People wanted more physiotherapy. "In my particular circumstances a few more sessions at certain times might have helped me to make more secure progress. I had 2 sessions each week but found I could not sustain my confidence to re-store mobility with 2 sticks when I was at home alone. However I shall persevere."	

## 2. Gethin-Jones S (2013) Focus on the micro-relationship in the delivery of care. British Journal of Healthcare Assistants 7: 452-5

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The study aimed to find out what older people feel is important in terms of the delivery of their care.  Methodology: Qualitative.  Country: UK.  Source of funding: Not reported.	Participants: Service users and their families, partners and carers.  Sample characteristics:	Narrative findings - qualitative and views and experiences data - Three themes were identified through the analysis of the interview data:  The need for social interaction beyond the delivery of clinical health care tasks. The importance of the 'non clinical' relationship with practitioners was the most strongly expressed theme. Strong neighbour like relationships were created with the reablement practitioners who came to know people's preferences and details about their families and interests. This was in stark contrast with the interaction experienced after	Overall assessment of internal validity: +  Overall assessment of external validity: ++
		handover to the home care service. "'They rush in, do their tasks, change your pads	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	outcomes)	and things and rush out again, and hardly say a word. It's like you're an animal and they are just changing the litter in a pet's cage" (p454).  The need for consistent care staff in order to develop a working relationship. Consistency of staff made a significant contribution to the quality of relationships enjoyed in the reablement service. Reablement was provided by a consistent team of four, "Over the 6	
		weeks I got to know them and we had some good chats" (p454), unlike the home care service, 2 or 3 different care workers visited each day, "you just can't get to know them" (p454).  The issue of consistency of	
		staff wasn't just important for relationship building but also for protecting the dignity of people using the services,	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		"These people (carers) are doing really personal things to you. It's much more undignified getting a total stranger to come in and touch your private parts. It's very upsetting" (p454).	
		The need for the older patient to feel they had some control over how their care was delivered.  People valued being asked how they would like their care to be provided, including how their dignity could best be protected. If people felt involved in deciding how their care should be delivered, they felt valued and as though they had a more equal relationship with the carer.	

3. Ghatorae H (2013) Reablement in Glasgow: Quantitative and qualitative research. Glasgow: Glasgow City Council

or oriented in (2010) Readsterners in Glaegew. Quantitative and quantative recourses. Glaegew. Glaegew Gity Geamon				
Research aims	PICO (population,	Findings	Overall validity rating	
	intervention, comparison,			
	outcomes)			
Study aim: The researchers	Participants: Service users	Narrative findings -	Overall assessment of	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
aimed to explore service user and staff views of a 6 week reablement programme.	and their families, partners and carers - Only minimal details are provided regarding the sample of service users which	qualitative and views and experiences data –  NB. The study reports on performance activity data in	internal validity:  - This is a poor quality study
Country: UK – Scotland – Glasgow.	the study included. It appears that the service may have been provided after discharge	relation to service user outcomes (e.g. use of 'mainstream' home care,	that lacks methodological detail. The research was conducted with a very small
<b>Methodology:</b> Mixed methods.	from hospital however this is not clear and there are no	hospital admission, etc.) however as this does not	group of participants and detail on who these
Source of funding: Not reported.	details on why participants had been admitted to hospital. Eligibility criteria for the service are not reported however the findings suggest that individuals with dementia, pelvic fractures or terminal illness were ineligible.  The service was provided to individuals living in the north east of Glasgow. The majority	meet the evidence criteria for question 4 regarding the effectiveness of reablement services these have not been extracted.  Service user views and experiences (based on findings reported from quantitative telephone survey interviews and qualitative face to face interviews):	participants were is missing. The findings are limited and are very often not reported in context.  Overall assessment of external validity: ++
	of service users involved in the study appear to be female and over 60 years of age.  The author notes that in some instances a family member may have completed surveys on behalf of service users.	Reablement process (p20-1) The 13 participants who took part in face to face interviews were asked - 'When did someone come to speak to you about the Reablement Service in your	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Participants: Professionals/practitioners – Only minimal details are provided regarding the sample of professionals which the study included. It appears that members of staff from a company providing the reablement service (Cordia Homecare, included 'reablement home carers', and 'mainstream carers' as well as an administrative member of staff and care co-ordinators); members of the North East Rehabilitation Team (included administrative staff, nurses, occupational therapists, physiotherapists, and support workers); and social work staff (including administrative staff, occupational therapists, social care workers, and team leaders).  Sample characteristics:  • Age – Exact details are	home?' Less than 24 hours after discharge from hospital n=7. 24 hours after discharge from hospital n=3. 2 days after discharge from hospital n=1. 3 days after discharge from hospital n=0. More than 3 days after discharge from hospital n=1. Don't know/not sure n=1.  Did the service user understand what the service 'was about' after the first discussion they had had with reablement staff? Fully understood n=7; part understood n=4; did not understand at all n=1; not sure n=1.  Had participants received written as well as verbal information in relation to the service? Yes n=6; no n=4; not sure n=3.	
	unclear but it appears that	11-0.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	the majority of service users involved were over the age of 60 as the study reports that participants for whom quantitative data were available, the ' majority at	Of the 6 participants who had received leaflets, 5 are reported to have found them helpful.	
	64 (88%) were aged over 66' and for those sampled as part of the qualitative data collection 'ages ranged from 52 to 88 and over three	Were reablement goals discussed with participants? Yes n=8; no n=3; not sure/no comment n=2.	
	quarters (10) were aged 70 plus' (p20). No details are provided in relation to family members or professionals/practitioners.	How confident were participants in achieving the goals that had been set? Confident n=11; not confident at all n=1; not sure n=1.	
	<ul> <li>Sex – Exact details are unclear but it appears that the majority of service users involved were female as the study reports that participants for whom</li> </ul>	The study reports that ten of these participants viewed goal-setting positively, with comments (see p21) such as:	
	quantitative data were available, ' 52 (71%) were female and 21 (29%) male' (p20) and that and for those sampled as part of the qualitative data collection 8 were female and 9 were	"fantastic", "better because it makes you use yourself", "great for self encouragement and stops deterioration", "I was terribly bad at first but things have started to come together again".	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	male. No details are provided in relation to family members or professionals/practitioners.  • Ethnicity – Exact details are unclear but it appears that the majority of service users involved were of white Scottish origin as the study reports that participants for whom quantitative data were available, ' almost three quarters at 53 (73%) were of white Scottish ethnic origin whilst 19 (26%) were not known and 1 (1%) was classed as white other British' (p20) and that all of those sampled as part of the qualitative data collection were of white Scottish ethnic origin. No details are provided in relation to family members or professionals/practitioners.  • Religion/belief – Not reported for service users,	The authors report that there was 1 interview participant who was unhappy with the service noting that he was reassessed soon after the interview and " with his consent moved onto mainstream homecare as reablement was deemed to be unsuitable" (p21).  Reablement support (p22-3) The study reports that both qualitative (face to face interviews) and quantitative (telephone survey interviews) research with service users demonstrated that help with mobility around the home, support with personal care needs, and help to prepare meals were the types of support most frequently provided. Although the levels of support required varied, most service users were	
	were of white Scottish ethnic origin. No details are provided in relation to family members or professionals/practitioners.	support with personal care needs, and help to prepare meals were the types of support most frequently provided. Although the levels	
	Religion/belief – Not	of support required varied,	

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	<ul> <li>Disability – Not reported for</li> </ul>	reported to enable service	
	service users, family	users to 'feel safe', 'keep in	
	members or	touch with the community', 'have control over daily life',	
	professionals/practitioners.	and 'help others care for you'	
	<ul> <li>Long term health condition –</li> <li>Not reported for service</li> </ul>	(p22). NB Although graphs	
	users, family members or	are provided showing the	
	professionals/practitioners.	numbers of service users	
	Sexual orientation – Not	receiving this type of support	
	reported for service users,	it is not possible to accurately	
	family members or	determine the figures.	
	professionals/practitioners.		
	Socioeconomic position –	The authors also report that	
	Not reported for service	both qualitative (face to face interviews) and quantitative	
	users, family members or	(telephone survey interviews)	
	professionals/practitioners.	research suggested that	
	Sample size:	many service users had been	
	Service users – Exact	able to 'resume their usual	
	numbers are unclear. The	activities' (82% quantitative)	
	study reports that a total of	and 'do more things for	
	73 telephone survey	themselves' (74%	
	interviews (quantitative	quantitative; 69% qualitative) at the end of the programme.	
	research) were conducted	at the end of the programme.	
	with service users, as well as 4 face to face interviews	In relation to 'ability to do	
	(qualitative research) over a	more for themselves',	
	6 month period with each	quantitative research also	
	o month poriod with caon	demonstrated that more than	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
service user (13 participants	half of those service users	
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North East Rehabilitation	participants did not provide	
Service); and 11 members of	an answer.	
staff from Cordia were		
interviewed (' mainstream	In contrast, 2 participants	
staff involved in the	included in the qualitative	
handover of reablement at	`	
•	, ·	
p29).		
•		
	· · · · · · · · · · · · · · · · · · ·	
·	Thigher levels of home care.	
	The author reports that	
	<ul> <li>intervention, comparison, outcomes)</li> <li>service user (13 participants took part in these).</li> <li>Professionals/practitioners – Eleven professionals participated in focus groups (participants unclear – described as 'cross agency reablement/mainstream staff'); 31 completed the questionnaire (included Cordia reablement home carers, social work staff, and members of staff from the North East Rehabilitation Service); and 11 members of staff from Cordia were interviewed (' mainstream staff involved in the</li> </ul>	intervention, comparison, outcomes)  service user (13 participants took part in these).  • Professionals/practitioners – Eleven professionals participated in focus groups (participants unclear – described as 'cross agency reablement/mainstream staff'); 31 completed the questionnaire (included Cordia reablement home carers, social work staff, and members of staff from the North East Rehabilitation Service); and 11 members of staff from Cordia were interviewed (' mainstream staff involved in the handover of reablement at the end of the 6 week period' p29).  Intervention: Reablement.  • Describe intervention - There are no details provided in relation to the intervention other than the description of it as a reablement service.

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
	types of support most	service users who	
	commonly provided related	participated in the qualitative	
	to mobility in the home,	research (face to face	
	personal care needs, and	interviews) were on the whole	
	preparation of meals. The	positive about the care they	
	service was also reported to	had received during the	
	enable service users to 'feel	programme with 9	
	safe', 'keep in touch with the	participants describing	
	community', 'have control	reablement staff as 'very	
	over daily life', and 'help	helpful and supportive', and 1	
	others care for you' (p22).	participant reporting that staff	
	<ul> <li>Delivered by - The service is</li> </ul>	were "quite supportive but	
	delivered by 'reablement	more could have been done"	
	home carers' working for	(p23). One participant is	
	Cordia Homecare. No details	reported to have stated	
	on experience or training	"same staff as before" (p23).	
	level of these practitioners		
	are provided.	Reablement Satisfaction	
	<ul> <li>Delivered to - The study</li> </ul>	The study reports that the	
	does not report details on	qualitative (face to face	
	the population targeted or	interviews) and quantitative	
	the services eligibility criteria	(telephone survey interviews)	
	however it appears that the	research found that service	
	service may have been	user satisfaction was high	
	provided after discharge	during both the period in	
	from hospital however this is	which the service was being	
	not clear and there are no	provided and at the end of	
	details on why participants	the programme.	
	had been admitted to		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	hospital. Eligibility criteria for the service are also not reported however the findings suggest that individuals with dementia, pelvic fractures or terminal illness were ineligible. The service was provided to individuals living in the north east of Glasgow. The majority of service users involved in the study appear to be female and over 60 years of age.  • Duration, frequency, intensity, etc The study reports that the service was provided for 6 weeks however no further details in relation to frequency or intensity of the programme are provided.  • Key components and objectives of intervention - Not reported.  • Location/place of delivery - Care is provided to service users in their homes.	Participants included in the qualitative research (face to face interviews) stated that they were:  Very satisfied 69%; satisfied 23%; neither satisfied nor dissatisfied 0%; dissatisfied 8%; very dissatisfied 0%; not sure/no comment 0%.  Comments from these participants included: "staff setting the goals to work towards is good", "everyone very helpful and friendly", "can't fault it", "would rather have dinner earlier", "so far but would like consistency as to when the carer comes in the morning".  The author stresses that the final 2 comments were made by service users who were satisfied with the service overall but wanted to highlight specific concerns they had.	
		Participants included in the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		quantitative research (telephone survey interviews) stated that they were: Very satisfied 84%; satisfied 10%; neither satisfied nor dissatisfied 1%; information not provided 5%.	
		Comments from these participants included: "I feel more confident and the carers were fantastic!" "Delighted with service, all workers were great, carers & OT's" "The OT's visiting could not have been nicer. Has also improved my independence" "Very positive experience, thanks to everyone for their	
		help"  "If all the workers are like the reablement carers then we have nothing to worry about, very satisfied with service. I feel more confident with doing a lot more myself"  "All great although there were a lot of different girls in	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		house. Nothing seems to be consistent"  "One of the carers was exceptional and referred me on for other services. But found other carers to be quite unhelpful"  "Relatively happy but did state that was not happy with the last carer who attended as she only stayed half the time that she should have"	
		Service users were asked as part of the qualitative research (face to face interviews) to describe their current health status at the third stage of the research (not clearly stated what point this relates to). Six reported that their ' health had deteriorated but they were coping ok at home' (p25), 4 stated that their health was the same, and 2 reported that their ' health had improved and that they were coping well' (p25). One participant	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		had dropped out of the study and had begun to receive 'mainstream' home care. Transition from Reablement to Mainstream Home Care/ Independence Participants included in the quantitative research (telephone survey interviews) who were now in receipt of 'mainstream' home care (n=7) or were 'independent in the community' (n=5) were asked about their experiences. Responses from those receiving 'mainstream' home care varied with 4 reporting the process to be 'smooth and easy', one stating that it was 'partially smooth with difficulties' and 2 others reporting that it was difficult.	
		Service users who had experienced difficulties commented that: "I was wary at the start", "there were mixed messages	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		about the meals". An unpaid carer who participated in this stream of research is also quoted by the author to show that some service users had experienced difficulties:	
		"Could have been better communication re. transfer to mainstream homecare. Daughter was unaware her mother had reached Reablement potential and was transferring. They were initially told they would be on Reablement for 6 weeks, but it only lasted 4 which caused the daughter problems" (p26).	
		As part of the qualitative research, focus group discussions were held with 11 staff who had been nominated by the multidisciplinary reablement group. The group was asked to identify 'forces working towards reablement' and 'forces working against	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		reablement' and to weight these according to their importance.	
		Practitioner views The author only reports those 'forces working against reablement' which participants identified. The group was then asked to 'turn' these into solutions or 'forces working towards reablement'. These have been quoted verbatim as it is very often difficult to understand the meaning of each 'force' (see p28): Problem – 'Increased workload for Rehab team - no resources. Since reablement 30% increase. Cordia Home Care also feel the same' Solution – 'Use Change Fund money' Problem – 'There is a challenge to fit into other systems.' Solution – 'Use Joint systems or even partial joint'.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Problem – 'Communication'. Solution – 'Want to know more about processes across agencies who's responsible for what. Training / shadowing / pdp.' Problem – 'Cordia - more stress keeping reablement clients who need palliative care or are terminally ill. Sometimes up to 5 days.' Solution – 'Social Work Services should screen out appropriate reablement cases. Should also flag up on Social Care Direct system that case is not appropriate for reablement. Cordia coordinator should be able to phone Reablement team to say that a specific case is mainstream and not reablement'. Problem – 'Perception across care providers is different if client appropriate for Reablement'. Solution – 'Need to talk to	
		each other more'.	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Problem – 'Electronic trigger which is faceless/ nameless does screening'.  Solution – 'Can't do anything about this'.  Problem – 'Duplication of work'.  Solution – 'Need to talk to each other more'.  Problem – 'Tip of the iceberg - currently only a few people benefiting from reablement'.  Solution – 'Resource implications'.  Problem – 'Bureaucracy/ paperwork. Certain processes cannot be dealt with until gone through appropriate people and channels'.  Solution – 'Streamline the whole thing. Should be able to phone each other'.  Problem – 'Cordia - work time very unrealistic. Especially Fridays - when emergency cases sometimes double and have normal reablement	
	cases coming through as	
	intervention, comparison,	intervention, comparison, outcomes)  Problem – 'Electronic trigger which is faceless/ nameless does screening'. Solution – 'Can't do anything about this'. Problem – 'Duplication of work'. Solution – 'Need to talk to each other more'. Problem – 'Tip of the iceberg – currently only a few people benefiting from reablement'. Solution – 'Resource implications'. Problem – 'Bureaucracy/ paperwork. Certain processes cannot be dealt with until gone through appropriate people and channels'. Solution – 'Streamline the whole thing. Should be able to phone each other'. Problem – 'Cordia – work time very unrealistic. Especially Fridays – when emergency cases sometimes double and have normal reablement

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		well. The system bottlenecks	
		and staff are working flat out'.	
		Solution – 'Resource	
		implications. Resolve issues	
		at hospital end i.e. why does	
		system bottleneck on a	
		Friday?'	
		Problem – 'Guidelines	
		change constantly can cause	
		confusion/ frustration. Aware	
		that reablement is new and	
		this bound to happen'.	
		Solution – 'Each agency is	
		involved in Operational	
		Meeting where changes	
		should be discussed and	
		passed on to others. Steering	
		Group also a channel for	
		discussion and circulation of	
		information'.	
		Problem – 'Varying systems	
		across agencies'.	
		Solution – 'Joint systems or	
		partial join'.	
		Problem – 'Too many	
		procedures/criteria'.	
		Solution – 'Speak to each	
		other'.	
		Problem – 'dual client - who	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		provides OT?' Solution – 'Discuss at Operational Meeting to resolve'. Problem – 'Cordia - internal problems whether a case is mainstream or reablement'. Solution – 'Area Service Manager to deal with individual situations. Reablement staff should be able to talk to each other and resolve whether a case lies with mainstream or reablement home care' (p28).	
		These findings were then used to ' compile questionnaires for the next phase of the staff consultation' (p28). The author emphasises that the main challenges identified were a higher workload, duplication of work and 'bureaucratic' paperwork, a lack of clarity regarding roles and responsibilities, guidance and policy, screening issues,	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		bottlenecking, and 'varying cross agency systems'. (p 28)	
		Fifty-six members of staff were also asked to complete a Survey Monkey questionnaire in July 2012. This included Cordia reablement home care staff, as well as Social Work Services; and 9 (29%) from North East Rehabilitation Service.	
		Face to face interviews were also conducted with 11 'mainstream' staff members at Cordia who had involvement in the transfer of service users from the reablement programme at the end of the 6 week period. These participants were specifically asked about the handover process.	
		'What is working well?' The author reports that all types of staff understood	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		clearly the aims and objectives of the service and quote 3 participants to evidence this:	
		'Helping people and getting them back on their feet & getting their independence. Helping with confidence and self-esteem. Striving for total independence but in reality some won't get this' (p29).	
		'To establish an appropriate level of homecare service following a period of reablement. That level of service may be maintained or decreased depending on patients needs. To promote independence' (p29, North East Rehabilitation Service members of staff).	
		'To work with service users to improve their mobility/confidence to carry out tasks on their own. There would then not be a need for	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		the home care service to assist with these tasks, therefore reducing the budget' (p29, social work services member of staff).	
		The author goes on to emphasise that goal setting was generally viewed positively: 'I am able to know that the homecarers are facilitating reablement process and progressing patient goals on a regular basis. The patient is then receiving regular and consistent input to progress.' (Occupational Therapist - North East Rehabilitation Service)	
		Over half of the staff participants (54%) are reported to have rated the service as 'excellent or good' with 92% of Cordia staff, 33% of social work staff and 22% of North East Rehabilitation Service staff giving this	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		rating. The author notes that when these participants were asked 'what was working well'; 100% of those reablement staff working at Cordia were able to make a positive suggestion; whilst only 77% of social work staff and 44% of North East Rehabilitation Service could do so.	
		Positive statements made regarding the service are reported to mainly relate to the way in which the service empowered service users to gain independence, the ability to provide intensive crossagency support that helped service users, and the 'quality input' (p29).	
		"Job satisfaction is great. I enjoyed the job previously but much more satisfying with reablement. You get to see the final outcome with the service user. I feel part of the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		process in helping someone. Your opinion counts. I feel part of a bigger team, working with other agencies - I didn't have this before" (p29-30 Cordia member of staff).	
		'Reablement OTs have a good relationship with Cordia. I feel that I have had good outcomes with service users' (p29, Occupational Therapist, social work services).	
		Participants are also reported to have felt that the reablement service had enabled them to develop new skills and had been received well by service users and their families with 52% reporting that feedback had been 'mostly favourable' and 26% reporting that it had been 'partially favourable'. Participants reportedly felt that 'partially favourable'	
		feedback was often a result of the service user's	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		vulnerability or the complexity of their case.	
		Participants reported that service users and their families had expressed their appreciation of the service:	
		'Thanks & gratitude received from clients and family. They show their appreciation when service has worked & they don't need any further help. Clients are well satisfied by this achievement' (p30, no details provided in relation to source of quote).	
		'Family quite happy with service, so mostly favourable. They don't want person sit about all day - happy they can do things for themselves' (p30, no details provided in relation to source of quote). The author reports that reablement training was	
		viewed positively by staff however ' there was also a	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		strong consensus that it needed to be ongoing to keep up with any changes or updates within the service' (p30, author).	
		The author emphasises that all participants from Cordia had viewed their training positively:	
		' Without training it would have been impossible to take a step back. You get put into the position service users are in & then it makes you think different on how your approach to them would be I use it in my home life as well now' (p30, no details provided in relation to source of quote).	
		'Wearing body suits gives concept service user might be feeling or going through. How would you approach this situation? And then deal with it appropriately' (p30, no	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		details provided in relation to source of quote).	
		Participants were also asked to rate the methods (other than training) by which information on reablement had been provided to them:	
		Written information circulated - Excellent n=10; good n=6; average n=4; fair n=1; poor n=3; not sure/not known n=4; not applicable n=1. Briefings/meetings - Excellent n=11; good n=5; average n=5; fair n=4; poor n=1; not sure/not known n=2; not applicable n=2. Supervision sessions - Excellent n=7; good n=4;	
		average n=3; fair n=1; poor n=1; not sure/not known n=2; not applicable n=11.  Personal development plans - Excellent n=3; good n=3; average n=3; fair n=1; poor n=2; not sure/not known n=2; not applicable n=16.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Work colleagues - Excellent n=14; good n=12; average n=4; fair n=0; poor n=1; not sure/not known n=0; not applicable n=0. Conferences/seminars - Excellent n=1; good n=2; average n=3; fair n=1; poor n=1; not sure/not known n=2; not applicable n=19. Other - Excellent n=5; good n=4; average n=1; fair n=0; poor n=1; not sure/not known n=2; not applicable n=16.  'What needs to improve?' The author reports that there was consensus regarding 'some duplication of work' both internally and between agencies (p31); with Cordia administrative staff noting that identical referrals sometimes came from the same staff member and other agency staff raising the issue of duplicate records on a variety of databases.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		The author also reports that other concerns included duplicate assessments by reablement teams and stroke teams, and reablement and 'mainstream' Cordia staff visiting a service user at the same time.	
		Other issues were reported by agency: Social work - Occupational therapists and social care workers are reported to have felt that clearer roles and responsibilities were needed; social care workers suggested that assessment forms and communication should be improved; occupational therapists felt that there should be more policies and procedures. Occupational therapists are also reported to have felt that reablement work gave them more autonomy than their	
		previous role had ' which needed to change' (p31,	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		author); and reablement administrative staff were reported to be often ' pulled away from reablement work to cover phones/ reception for wider OPPD Team' (p32, author).	
		Cordia reablement home carers - The author reports that reablement home carers felt that screening was an issue with 'inappropriate' referrals for service users who did not meet service criteria such as those with dementia; terminal illness or pelvic fractures; they were also reported to have felt that occupational therapy input was 'too slow' and that occupational therapists did not consistently update diaries. There were also concerns regarding the medical information as '	
		home carers were having to access chemist's to get emergency set up for medical	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		provision; doss it boxes on hospital discharge did not always display relevant information; and pharmacy names were often missing from paperwork' (p32). It was also suggested that the service needed to find a way in which to improve the way in which service users were encouraged to take their medication.	
		Other issues raised in relation to reablement home carers included the need for sensitivity when starting reablement and the importance of informing service users in advance of changes; the fact that higher numbers of 'mainstream' service users meant that home carers sometimes had to spend less time with reablement clients; generally low numbers of reablement service users at the time of the research and Cordia staff	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		are reported to have felt that they were being 'pulled' towards 'mainstream' care work.	
		Cordia 'mainstream' home carers - Home carers are reported to have expressed concern regarding handovers between reablement and their own team and it was suggested that the 2 teams should meet face to face at handover to ensure that information was passed on and that reablement diaries might still be useful to mainstream home carers because they contained detailed information on any aids and adaptations in use. Missing medical information at the handover was also raised as an issue.	
		This group were also reported to have been frustrated at the fact that they were not allowed to attend	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		reablement meetings or to undertake reablement training. Although the group is reported to be somewhat cynical with regards to what could be achieved in 6 weeks, they also suggested that it was time constraints which prevented them from providing similar levels of support to reablement staff. It is also reported that some of this group felt that workload issues were a result of the failure to replace staff who had been reassigned to the reablement service.	
		North East Rehabilitation Service - This group reportedly raised a number of concerns regarding difficulties in contacting reablement workers to discuss service user goals or assessments; as well as difficulties in arranging joint visits with reablement home care co- ordinators; poor	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		communication between their own team and other reablement staff; time-consuming paperwork and problems in making copies of assessments; a lack of clarity on home carer roles and the level of training they had received; and a lack of North East Rehabilitation Service staff resources which impacts on caseloads, first visits to service users and team meetings. Some participants are also reported to have felt that a separate reablement service should have been established instead of a joint social work and North East Rehabilitation Service.	

4. Hjelle KM, Tuntland H, Førland O et al. (2016) Driving forces for home-based reablement; a qualitative study of older adults' experiences. Health and Social Care in the Community 24, doi 10.1111/hsc.12324

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Research aims	PICO (population,	Findings	Overall validity rating		
	intervention, comparison,		, ,		
	• • •				
	outcomes)				
Study aim: To describe how	Participants: Service users	Narrative findings -	Overall assessment of		
older adults experienced	and their families, partners and	qualitative and views and	internal validity:		
participation in reablement.	carers - Older people with	experiences data –	++		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Methodology: Qualitative study. Semi structured interviews with 8 older adults.  Country: Norway.  Source of funding: Government - Regional Research Funds Western Norway fund the researchers. There is no further detail about the funding of the project.	<ul> <li>Sample characteristics:</li> <li>Age - 64-92 years.</li> <li>Sex – Four men, 4 women.</li> <li>Disability - Diagnosis 1. Man, heart attack. 2. Woman, back pain, transient ischaemic attack. 3. Woman, hip fracture, osteoporosis. 4. Man, pelvis fracture, pelvis fracture, hemokromatose, glaucoma, contracture of left hand. 5. Man, stroke, heart attack, diabetes, asthma. 6. Man, stroke, knee arthrosis, diabetes. 7. Woman, hip fracture, osteoporosis. 8. Woman, pelvis fracture, rheumatoid arthritis, osteoporosis.</li> <li>Sample size: n=8.</li> <li>Intervention: Reablement.</li> <li>Description - Provided to people in their own homes involving person centred, joint goal setting,</li> </ul>	My willpower is needed. Several described their willpower as being an important factor in the reablement process. The willpower to manage daily tasks and exercises evolved as they recovered.  Participants wanted to be as good as they were before their accident or illness and knew they had to assume responsibility for this: "It depends on the willpower. Yes, that is what you need, the willpower if you sit down, then you're not going anywhere. You must have the drive to come ahead in life. Goal-setting, has been important and my willpower to exercise" (Participant 8, p5). Goal setting was perceived to be crucial to returning to their former abilities.	Overall assessment of external validity: ++

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	physiotherapy, occupational therapy, adaptations and exercise programmes.  • Delivered by - Occupational therapists, physiotherapists and home care personnel.  • Delivered to - Older people applying for and being referred to home based services.  • Duration, frequency, intensity, etc.: The aim appears to be improving independence and strength and the ability to carry out daily activities inside and outside the home. Unlike the NAIC description of reablement (and most reablement services in the UK), this reablement service lasts up to 3 months. As well as home care personnel assisted training, a minimum of 1 hour per week of physiotherapist or occupational therapist assisted training is provided. Programmes are tailored to	Being with my stuff and my people. It was important to participants to be in their own home during reablement, able to receive visits from neighbours and families and take part in leisure and social activities. With reablement being delivered at home, this gave people autonomy and independence. It meant they could choose when to do their exercises and practice their daily activities in their own time instead of having to attend appointments if the intervention was delivered elsewhere. "when you are at home you can do the exercises when you are ready for it, you have the control yourself" (Participant 1, p6). They also pointed out they could adjust their everyday lives and routines according to how they were improving.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	the person's goals so the	The reablement team is	
	rehabilitation plans vary.	important for me	
	They may include - training	The team provided essential	
	in activities of daily living	support and participants felt it	
	including dressing, food	was a real partnership.	
	preparation and visiting		
	friends at a day club or being	Two sub themes were	
	able to knit. Adaptations	identified –	
	such as advice on	Encouragement to take	
	appropriate assistive	responsibility in daily training.	
	technology or adapting the	Daily training included	
	activity or environment -	physical exercises and also	
	exercise programmes e.g.	learning to do every day	
	indoor or outdoor walking,	activities. The reablement	
	climbing stairs and	team doesn't perform the	
	performing exercises to	tasks <i>for</i> people, rather they	
	improve strength or balance.	facilitate the person to carry	
	The exercise was	them out themselves.	
	incorporated into daily	Respondents saw the benefit	
	routines and the person was	of this and felt a sense of	
	given an explanatory manual	freedom, being able to carry	
	and encouraged to train on	out activities for themselves	
	their own.	instead of waiting for staff to	
	<ul> <li>Key components and</li> </ul>	do things for them, "I have	
	objectives of intervention -	the responsibility and you	
	The intervention starts with	feel a little freer in a way. You	
	an interview conducted by	can do as you did before the	
	an occupational therapist or	illness. I used to go for a walk	
	physiotherapist where the	every day, however I don't go	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
rehabilitation plan is developed together with the participant based on the identified activity goals. Thereafter, an integrated multidisciplinary team with shared goals guided the participant during the whole rehabilitation period. During the rehabilitation period where assisted training is carried out by home care personnel, at least an hour of physiotherapist or occupational therapist assisted training is provided every week. Adaptations and exercise programmes are also provided during the intervention.  Location/place of delivery - People's own home.	down to the main road yet, but I walk a little further each day. It is the freedom to decide yourself when you want to go for a walk. It was like a new life when I could go outside." (Participant 8, p6).  Encouragement to feel confident doing everyday activities on one's own. The reablement service encouraged people and supported them to regain confidence in everyday activities. Reablement workers adjusted the support they provided according to how the person was feeling. "They supported me in the beginning, so I showered myself while someone from the reablement service was here. I got a chair to sit on to be more secure when showering. They were here until I felt secure to shower	
-	rehabilitation plan is developed together with the participant based on the identified activity goals. Thereafter, an integrated multidisciplinary team with shared goals guided the participant during the whole rehabilitation period. During the rehabilitation period where assisted training is carried out by home care personnel, at least an hour of physiotherapist or occupational therapist assisted training is provided every week. Adaptations and exercise programmes are also provided during the intervention.  • Location/place of delivery -	rehabilitation plan is developed together with the participant based on the identified activity goals. Thereafter, an integrated multidisciplinary team with shared goals guided the participant during the whole rehabilitation period. During the rehabilitation period where assisted training is carried out by home care personnel, at least an hour of physiotherapist or occupational therapist assisted training is provided every week. Adaptations and exercise programmes are also provided during the intervention.  • Location/place of delivery - People's own home.  down to the main road yet, but I walk a little further each day. It is the freedom to decide yourself when you want to go for a walk. It was like a new life when I could go outside." (Participant 8, p6).  Encouragement to feel confident doing everyday activities on one's own. The reablement service encouraged people and supported them to regain confidence in everyday activities. Reablement workers adjusted the support they provided according to how the person was feeling.  "They supported me in the beginning, so I showered myself while someone from the reablement service was here. I got a chair to sit on to be more secure when showering. They were here

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		Reablement workers were seen as the driving force behind people's recovery. However for some this meant that at the end of the reablement period they were no longer motivated and stopped doing their exercises when there were no reablement workers around to encourage them.	
		Training in physical exercises, not everyday activities The reablement team perceived the support with activities of daily living to be 'training' but the respondents generally didn't. They viewed the physical exercises as training but felt that the support with activities of daily living was simply 'practicing' because this was something they'd done throughout their lives (e.g. showering) and just needed help to become confident in the task again -	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		or to find a new way of carrying it out.	

5. Wilde A and Glendinning C (2012) 'If they're helping me then how can I be independent?' The perceptions and experience of users of home-care re-ablement services. Health and Social Care in the Community 20: 583-90

Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: To report on the	Participants: Service users	Narrative findings -	Overall assessment of
interview study component of	and their families, partners and	qualitative and views and	internal validity:
reablement service users and	carers.	experiences data –	+
carers (part of a wider multi-		Users and carers may have	
method study of reablement).	Sample characteristics:	unrealistic expectations,	Overall assessment of
Considers the immediate and	Age - 74% of the 34 Service	especially if they have prior	external validity:
onger term impact of the	users were over 65 years;	experience of home care.	++
service for the recipients and	60% of carers also over 65	Very few had received clear	
dentifies potential barriers to	years.	information while they were	
optimal outcomes for these	• Sex - 65% of 34 service	still in the care of the NHS, or	
stakeholders.	users were female, and 70%	at referral. If they were	
	of carer sample were female.	unclear that the service was	
Methodology: Qualitative	<ul> <li>Ethnicity - 9% of service</li> </ul>	designed to help them do	
study.	users were black or from a	things for themselves, they	
	minority ethnic background.	might experience the service	
Country: UK.	<ul> <li>Long term health condition -</li> </ul>	as neglectful. Those who had	
	Although not given, in	suffered from a debilitating	
Source of funding: Not	general the study included	stroke or injury were more	
reported.	people being discharged	appreciative of what the	
	from hospital after stroke or	service was about, and its	
		outcomes.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	injury, and also those referred from the community, who were likely to have ongoing long term conditions and may have had usual health care before.  • Socioeconomic position - 59% of service users lived alone.	Goal setting was also unfamiliar to users, and those recovering from stroke and trauma adapted better than did those with ongoing debilitating long-term conditions.	
	Sample size: 34 users of reablement services who had received several weeks of the service, but had not yet been transferred to any ongoing service (so as to reduce confusion between services under discussion).	Those with a permanent disability or a progressive long-term condition found goal-setting did not take account of fluctuating conditions and abilities, and sometimes goals could not be achieved because other services/equipment could not be accessed. Goals then	
	<ul> <li>Intervention: Reablement services. Four of the 5 were new specialised services, 1 was incorporated into existing in-house home care.</li> <li>Description - Intensive short-term reablement support to maximise person's capabilities to maximise practical skills and ability to</li> </ul>	became a focus of frustration. Goal-focused reablement also met with resistance among people of ethnic backgrounds where caring was seen as the desirable norm.  Interviewees wanted help to get out of the house -	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	maximise social participation.  Delivered by - Trained reablement staff (some new to home care, others with experience of usual home care).  Delivered to - Adult social care clients. All 5 services started with referrals from hospital discharge, intermediate care or the community, but gradually became more inclusive, acting as first intake service for all referrals 18+. Selection criteria (e.g. possibly not offering service to those with advanced dementia) operated but were not made explicit.  Duration, frequency, intensity, etc.: All services aimed to offer 6 weeks' reablement, but there was some flexibility to extend this in individual cases.  Key components and objectives of intervention -	reablement did not offer support for social contact. Lack of flexibility imposed unsocial bedtimes, for example. Many appreciated the actual providers, and felt their loss at the end of 6 weeks.  Carers were sometimes helped to learn new ways of managing needs of the person, but some did not recognise the purpose of the intervention, or feel it had helped them.  Overall, the study concluded that people attach different meanings to 'independence' and that benefits of reablement practice are greatest for those temporarily disabled, who can expect to recover (rather than those with long-term degenerative illnesses).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Intensive short-term reablement support to maximise person's capabilities to maximise practical skills and ability to maximise social participation. Person may then not need home care, or could be referred to more long-term, but hopefully lower level, support. Preventive element to reduce dependency.  • Location/place of delivery - The person's home.		

## Research question 4 – Findings tables – Health, social care and other practitioners views and experiences

1. Rabiee P and Glendinning C (2011) Organisation and delivery of home care re-ablement: What makes a difference? Health and Social Care in the Community 19: 495–503

Thealth and Social Safe in the Sommanity 10: 400 500			
Research aims	PICO (population,	Findings	Overall validity rating
	intervention, comparison,		
	outcomes)		
Study aim: To explore the	Participants:	Narrative findings -	Overall assessment of
organisation, content and	Professionals/practitioners -	qualitative and views and	internal validity:
features of reablement services	Service managers (8 from 5	experiences data –	+

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
in 5 local authority sites, to consider what factors have the ability to enhance or detract from effectiveness.  Methodology: Qualitative	sites interviewed) and frontline providers (focus groups).  Sample size: Service managers (8 from 5 sites interviewed) and frontline	The following were identified as internal factors contributing to service effectiveness:  • Service user characteristics	This is a convincing study which would have scored higher if more of the internal workings of the analysis had been reported.
study.	providers (37 took part in 5 focus groups).	(e.g. ability to benefit; motivation).	Overall assessment of
Country: UK.	<ul> <li>Intervention: Reablement services. Four of the 5 were new specialised services, 1 was incorporated into existing in-house home care.</li> <li>Description - Intensive short-term reablement support to maximise person's capabilities to maximise practical skills and ability to maximise social participation.</li> <li>Delivered by - Trained reablement staff (some new to home care, others with experience of usual home care).</li> <li>Delivered to - Adult social care clients. All 5 services started with referrals from</li> </ul>	<ul> <li>Staff commitment, attitudes and skills (staff new to home care generally more receptive to model).</li> <li>Ability of staff to be flexible, prompt, offer continuity of care.</li> <li>Sound proportionate staff recording.</li> <li>Access to complementary services, especially occupational therapy for equipment.</li> <li>The following external factors were identified as contributing to service effectiveness:</li> <li>Wide understanding about purpose and vision of service.</li> </ul>	external validity: ++  Five disparate local authorities suggest this study is probably generally applicable to similar services in the United Kingdom.

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	hospital discharge, intermediate care or the community, but gradually became more inclusive, acting as first intake service for all referrals 18+.  Selection criteria (e.g. possibly not offering service to those with advanced dementia) operated but were not made explicit.  • Duration, frequency, intensity, etc.: All services aimed to offer 6 weeks' reablement, but there was some flexibility to extend this in individual cases  • Key components and objectives of intervention - Intensive short-term reablement support to maximise person's capabilities to maximise practical skills and ability to maximise social participation. Person may then not need home care, or could be referred to more long-term, but hopefully	<ul> <li>Access to specialist skills.</li> <li>Capacity in home care services for intensive intervention. Nesting the service (in 1 local authority) within the existing home care service was less successful, as staff were expected to deliver a more intensive service within the usual time allotted. Staff new to home care appeared more receptive to the new approach.</li> <li>Capacity within home care services.</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	lower level, support. Preventive element to reduce dependency. • Location/place of delivery - Person's home.		

## Research question 4 – Critical appraisal – Effectiveness

1. Dundee City Council and Tayside NHS (2010) Home care enablement service: Evaluation. Dundee: Dundee City Council

Internal validity -	External validity	Overall validity rating
performance and analysis		
Quantitative component: The collection of data about the level of care need (intervention and control)	Does the study's research question match the review question? Yes.	Overall assessment of internal validity:
Are participants (organisations) recruited in a way that minimises selection bias? Unclear. The intervention participants were apparently selected 'at random' but there is no explanation about how this was done e.g. computer generated.	Has the study dealt appropriately with any ethical concerns? No. There's no mention of ethical approval and no discussion about obtaining consent to participate in the study.  Were service users involved in the study? Yes. They completed satisfaction questionnaires after the period of enablement but	Overall assessment of external validity: ++
	performance and analysis  Quantitative component: The collection of data about the level of care need (intervention and control)  Are participants (organisations) recruited in a way that minimises selection bias? Unclear. The intervention participants were apparently selected 'at random' but there is no explanation about how this was done e.g. computer	Quantitative component: The collection of data about the level of care need (intervention and control)  Are participants (organisations) recruited in a way that minimises selection bias? Unclear. The intervention participants were apparently selected 'at random' but there is no explanation about how this was done e.g. computer generated.  Does the study's research question match the review question? Yes.  Has the study dealt appropriately with any ethical concerns? No.  There's no mention of ethical approval and no discussion about obtaining consent to participate in the study.  Were service users involved in the study? Yes.  They completed satisfaction questionnaires after the

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
discharged from hospital	appropriate (clear origin, or	service users were not	
during the same period of	validity known, or standard	involved in the design or	
time during the previous year.	instrument; and absence of	conduct of the study.	
<ul> <li>Draw from the experience in</li> </ul>	contamination between		
order to inform the	groups when appropriate)	Is there a clear focus on the	
implementation of an	regarding the	guideline topic? Yes.	
enablement approach across	exposure/intervention and		
the whole of home care' (p4).	outcomes? Yes. The only	Is the study population the	
	measurement is 'care hours	same as at least one of the	
<b>Methodology:</b> Mixed methods.	needed'.	groups covered by the	
Qualitative - focus groups,	Letter on the beautiful	guideline? Yes. Although	
surveys and quantitative -	In the groups being	note that the enablement	
analysis of data about required	compared (exposed versus	service only took referrals	
number of home care hours.	non-exposed; with	from the hospital social work	
Ovelitative semmenant. France	intervention versus without;	team - no community referrals.	
Qualitative component: Focus	cases versus controls), are the participants comparable,	Teleffals.	
groups with practitioners.	or do researchers take into	Is the study setting the	
Are the sources of qualitative	account (control for) the	same as at least one of the	
data (archives, documents,	difference between these	settings covered by the	
informants, observations)	groups? Unclear. We have no	guideline? Yes.	
relevant to address the	information about the	gardonno.	
research question? Partly.	participants (except that they	Does the study relate to at	
Limited to focus groups.	have been discharged from	least one of the activities	
Individual interviews may have	hospital and have care needs)	covered by the guideline?	
been more appropriate,	so it is impossible to tell	Yes.	
particularly for eliciting the views	whether the control and		
of people using the enablement	intervention groups have the	Are the study outcomes	
service.	same characteristics.	relevant to the guideline?	
		Yes. Number of care hours	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
Is the process for analysing	Are there complete outcome	needed.	
qualitative data relevant to	data (80% or above), and,		
address the research	when applicable, an	Are the views and	
question? Unclear. Analysis is	acceptable response rate	experiences reported	
not described.	(60% or above), or an	relevant to the guideline?	
	acceptable follow-up rate for	Yes.	
Is appropriate consideration	cohort studies (depending		
given to how findings relate	on the duration of follow-	Does the study have a UK	
to the context, such as the	up)? Yes.	perspective? Yes –	
setting, in which the data		Scotland.	
were collected? No. There is	Is the mixed-methods		
no discussion about this.	research design relevant to		
	address the qualitative and		
Is appropriate consideration	quantitative research		
given to how findings relate	questions (or objectives), or		
to researchers' influence; for	the qualitative and		
example, though their	quantitative aspects of the		
interactions with	mixed-methods question?		
participants? No. No	Partly. Interview data would		
discussion about this.	have provided more in-depth		
	qualitative evidence.		
	La disa tatan and a sa f		
	Is the integration of		
	qualitative and quantitative		
	data (or results) relevant to		
	address the research		
	question? Unclear. No		
	explanation provided about the		
	integration of the qualitative		
	and quantitative components.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Is appropriate consideration given to the limitations associated with this integration, such as the divergence of qualitative and quantitative data (or results)? No. There is no discussion about the limitations of the study design.		

2. Glendinning C, Jones K, Baxter K et al. (2010) Home Care Re-ablement Services: Investigating the longer-term impacts

(prospective longitudinal study). York: Social Policy Research Unit, University of York

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To examine:  1. Whether home care reablement improved outcomes for people by giving them greater independence, when compared with conventional home care services.  2. If the improved outcomes lasts over time.  3. The cost-effectiveness of reablement.	Quantitative component: Four outcome measures assessed via questionnaires administered face-to-face on entry to reablement (T1), on discharge from reablement (T1 + R) and follow up (T2). Note that service use information was also collated from local authority records and postal questionnaires but this element of the study is reviewed as part	Does the study's research question match the review question? Yes. To examine:  1. Whether home care reablement improved outcomes for people by giving them greater independence, when compared with conventional home care services.  2. If the improved outcomes lasts over time.	Overall assessment of internal validity: + Overall assessment of external validity: ++
Methodology: Mixed methods.	of the cost effectiveness	3. Cost-effectiveness of	
Quantitative data collection and	analysis.	reablement.	
analysis for users outcomes;			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
qualitative data collection and	Are participants	Has the study dealt	
analysis for views and	(organisations) recruited in a	appropriately with any	
experiences of users and care	way that minimises selection	ethical concerns? Yes. NHS	
professionals. Quantitative data	bias? No. Participants were	ethical approval for the study	
analysis Univariate analysis	not randomised and they came	was obtained, as well as	
(paired t-tests, chi-squared tests	from different locations. The	approval from the Association	
and binomial tests) and	populations from which they	of Directors of Adult Social	
multivariate analyses. Data	were recruited are therefore	Services Research Group.	
analysis were adjusted on	likely to be different. All the	Both verbal and written	
baseline characteristics.	reablement services are likely	consent sought from	
Multivariate regression analyses	to differ (different aims/referral	participants.	
were performed employing both	routes) as are all the control		
a fixed and random-effects	interventions (home care). A	Were service users	
model to explore outcome	particular source of bias is the	involved in the study? No.	
changes between baseline and	differences in between the		
the 12 month follow-up.	groups at baseline. For	Is there a clear focus on the	
	example 70% of the	guideline topic? Yes. To	
Country: United Kingdom. Nine	reablement group were	examine the immediate and	
local councils in the United	referred on discharge from	long term benefits of home	
Kingdom (Brighton and Hove,	hospital, which is not true of	care reablement when	
Croydon, Hampshire, Haringey,	control participants.	compared with conventional	
Leicestershire, Lincolnshire,	Researchers could at least	home care services and the	
North East Lincolnshire,	have matched the 2 groups of	cost effectiveness of	
Nottinghamshire and Wirral	participants. In addition, people	reablement.	
Borough).	with severe dementia and		
	people with end of life care	Is the study population the	
Qualitative component:	needs were excluded from the	same as at least one of the	
Interviews with people using	study and in 1 site, people with	groups covered by the	
reablement and their carers	learning disabilities were	guideline? Yes. People aged	
	excluded, which introduces	over 65 years receiving home	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
Are the sources of qualitative	possible bias and limits the	care.	
data (archives, documents,	applicability of findings.		
informants, observations)		Is the study setting the	
relevant to address the	Are measurements	same as at least one of the	
research question? Partly.	appropriate (clear origin, or	settings covered by the	
Face-to-face interviews with	validity known, or standard	guideline? Yes. Home	
people using reablement, carers	instrument; and absence of	setting.	
and managers to elicit their	contamination between		
views and experiences about	groups when appropriate)	Does the study relate to at	
reablement services. Note that 1	regarding the	least one of the activities	
weakness is that the service	exposure/intervention and	covered by the guideline?	
users interviewed for the	outcomes? Yes. All outcome	Yes. Reablement home care.	
qualitative component had not	measures validated.		
participated in the comparative	1. Self-perceived health (a 5	Are the study outcomes	
part of the study so views and	point scale) 2. Perceived	relevant to the guideline?	
experiences could not be	quality of life (a 7 point scale)	Yes.	
connected with outcome data.	3. Health-related quality of life		
Similarly the observations were	(EQ-5D – Euro-QoL) 4. Social	Are the views and	
not conducted during the	care outcomes (ASCOT –	experiences reported	
delivery of care to interview	Adult Social Care Outcomes	relevant to the guideline?	
respondents so an opportunity	Toolkit). However, note that	Yes.	
for triangulation was missed.	contamination is clearly		
	possible in 1 of the reablement	Does the study have a UK	
Is the process for analysing	groups, which is a service	perspective? Yes. Nine local	
qualitative data relevant to	where the same care workers	councils in the UK (Brighton	
address the research	provide both standard home	and Hove, London Borough	
question? Yes. The data	care and reablement.	of Croydon, Hampshire	
generated was analysed using a	l	County Council, Haringey	
process of data reduction, data	In the groups being	Council, Leicestershire	
display, and conclusion drawing	compared (exposed versus	County Council, Lincolnshire	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	=xtorriar varianty	o torum varianty ranning
and verifying. It was	non-exposed; with	Council, North East	
summarised into interview	intervention versus without;	Lincolnshire Council,	
summaries and thematic	cases versus controls), are	Nottinghamshire County	
summaries according to	the participants comparable,	Council and Wirral Borough	
analytical categories generated	or do researchers take into	Council).	
by the researcher, based on	account (control for) the	,	
iterative reading. According to	difference between these		
the authors, this process meant	groups? Partly. Both groups		
interview themes could be	generally comparable in		
examined in their entirety and	demographics. However,		
contradictions between user and	service users in the		
carer accounts could be	comparison group were		
identified. Conclusions were	statistically significantly more		
drawn and verified through	likely to have been classified		
checking transcripts and	as having critical or substantial		
through discussion with the	levels of need than those in the		
other researchers.	reablement group (Table 3.4).		
	It casts doubt on the		
Is appropriate consideration	comparison group's ability to		
given to how findings relate	act as a control in relation to		
to the context, such as the	improved social care outcomes		
setting, in which the data	and perceived health related		
were collected? Partly.	quality of life. However,		
The authors note that since the	acknowledging the important		
interviews with service users	baseline differences in Fair		
were conducted separately from	Access to Care Services and		
the comparative study or	activities of daily living		
observations, reablement	dependency, the researchers		
practice may have developed by	conducted analyses which		
the time the interviews took	adjusted for them (after which		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
place. The authors fail to	a significant positive effect of		
acknowledge that since the	reablement still seems to be		
interviews were conducted	supported).		
towards the end of the			
reablement service, while still	Are there complete outcome		
receiving the intervention,	data (80% or above), and,		
people's views would not	when applicable, an		
include or be influenced by the	acceptable response rate		
often difficult process of transfer	(60% or above), or an		
to an ongoing home care	acceptable follow-up rate for		
provider.	cohort studies (depending		
	on the duration of follow-		
Is appropriate consideration	up)? No. Huge numbers were		
given to how findings relate	lost to follow up in terms of		
to researchers' influence; for	outcome data (cost data will be		
example, though their	reviewed separately) 1,015		
interactions with	people were recruited at		
participants? Unclear. There is	baseline (654 reablement		
no discussion about this aspect	home care group and 361		
- just a reference made to how	conventional home care		
the researchers tried to reduce	group). At 9 to 12 months, 633		
the influence of carers being	participants (62%) were lost to		
present during some of the	the study because of death,		
interviews with people using	illness, (re)hospitalisation or		
reablement.	refusal to participate in the		
	follow-up interview. The		
Qualitative component:	number of people who		
Collection and analysis of	completed follow-up at 12		
qualitative data relating to the	months was 241 (out of 654) in		
organisation and delivery of	the reablement group and 141		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
home care reablement -	(out of 361) in the comparison		
Interviews with service	group. So, excluding those		
managers; observation visits	who died, 53% from the		
with a sample of people using	reablement group were lost at		
reablement; focus groups with	follow-up and 49% in the		
front line reablement staff.	comparison (the difference		
	between the 2 is not		
Are the sources of qualitative	significant). This casts doubt		
data (archives, documents,	on the outcome data. Also the		
informants, observations)	follow up was 9 to 12 months		
relevant to address the	after intervention, which may		
research question? Yes. The	be regarded as medium term		
rationale for the selection of	rather than long term		
respondents for the manager	outcomes.		
interviews is clear and seems to			
represent all the reablement	Is the mixed-methods		
sites. The selection of cases for	research design relevant to		
the observation work also	address the qualitative and		
seems appropriate and the	quantitative research		
focus of the observations seems	questions (or objectives), or		
relevant. However only 26	the qualitative and		
observation visits were made for	quantitative aspects of the		
the whole study, so	mixed-methods question?		
approximately 5 per site. Finally,	Yes.		
1 focus group with front line workers was conducted in each	le the integration of		
site. There is no information	Is the integration of qualitative		
about how staff were selected	data (or results) relevant to		
	address the research		
for participation in the focus			
groups, which may or may not	question? Partly. The		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
have led to the introduction of	combination of qualitative and		
bias. Using the 3 methodologies	quantitative (including cost)		
provided the opportunity to	data provided rich data		
gather rich data and to	(including that which is		
triangulate findings.	reported elsewhere). However		
	the study would have benefited		
Is the process for analysing	from conducting face to face		
qualitative data relevant to	interviews with people who		
address the research	were part of the comparative		
question? Yes. Observation	study in order to link qualitative		
visits were analysed using the	and quantitative data.		
framework approach and by a			
process of data reduction, data	Is appropriate consideration		
display, and conclusion drawing	given to the limitations		
and verifying through	associated with this		
discussions with the research	integration, such as the		
team and recourse to the	divergence of qualitative and		
transcripts.	quantitative data (or		
	results)? Unclear. This is not		
Is appropriate consideration	discussed by the authors.		
given to how findings relate			
to the context, such as the			
setting, in which the data			
were collected? No. There is			
no discussion about the different			
contexts (e.g. different			
reablement services) in which			
the interviews/ focus groups or			
observations were conducted.			

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Is appropriate consideration given to how findings relate to researchers' influence; for example, though their interactions with participants? No. This is not discussed and is particularly surprising in the case of the			
observation visits where the presence of the researcher was very likely to affect the behaviour of the person using reablement and the reablement worker.			

3. Lewin G, Allan J, Patterson C et al. (2014) A comparison of the home-care and healthcare service use and costs of older Australians randomised to receive a restorative or a conventional homecare service. Health and Social Care in the Community 22: 328–36

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The study aimed to	Was the exposure to the	Does the study's research	Overall assessment of
compare ' the health and	intervention and comparison	question match the review	internal validity:
aged care service use and costs	as intended? Yes. The	question? Yes. The study	-
of older home-care clients who	intervention does not appear to	aimed to compare ' the	
were randomly assigned to	have been altered in anyway	health and aged care service	A key limitation of the study is
receive either a restorative or	once the trial had begun	use and costs of older home-	the possibility that the
conventional home-care service'	although it appears that there	care clients who were	randomisation process may
(p329).	were 45 participants who	randomly assigned to receive	have been compromised and
	received less than 3 hours of	either a restorative or	it is therefore difficult to apply
	either comparison or	conventional home-care	a higher quality rating.

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Methodology: Randomised	intervention treatment. The	service' (p329). The authors	
controlled trial.	authors report that these	note that the service is	
	participants were excluded	usually described as home	Overall assessment of
Description of theoretical	from the as treated analysis.	care reablement in the United	external validity:
approach? No. The authors do		Kingdom and the intervention	++
not describe their theoretical	Was contamination	appears to meet the definition	
approach or present a logic	acceptably low? Yes. There	of reablement outlined in the	
model, instead simply	is no indication that any	2015 National Audit of	
hypothesising that the	participants received	Intermediate Care.	
intervention will reduce the need	interventions to which they		
for home care services, reduce	were not allocated.	Has the study dealt	
the likelihood of use of		appropriately with any	
residential aged care, reduce	Did either group receive	ethical concerns? Partly.	
the number of presentations to	additional interventions or	The study was approved by	
emergency departments as well	have services provided in a	the Western Australian	
as the number of unplanned	different manner? No. There	Department of Health and the	
hospital admissions, and reduce	is no indication that either	care providers own research	
costs to the aged and health	group received extra services	ethics committee however the	
care sectors.	or received them in a different	study does not report details	
	manner however analysis of	in relation to participant	
How was selection bias	baseline differences showed	consent.	
minimised? Randomised.	that participants in the control		
Randomisation by computer	group were significantly more	Were service users	
algorithm.	likely to have been in receipt of	involved in the design of	
	a personal care service during	the study? No. Service users	
Was the allocation method	the previous year (p=0.02).	involved as participants only.	
concealed? No. It appears that		There is no indication that	
some staff were able to	Were outcomes relevant?	service users were involved	
circumnavigate the	Yes. The study aimed to	in the design of the study or	
randomisation process and	examine the impact of the	interpretation of the findings.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
assign participants to the group	intervention on health and		
which they felt most appropriate.	aged care use and costs.	Is there a clear focus on the	
	These data were collated from	guideline topic? Yes. The	
Were participants blinded?	service records.	study evaluates a restorative	
Blinding not possible. Due to the		home care service that	
nature of the intervention it	Were outcome measures	appears to meet the definition	
would not have been possible to	reliable? Yes. Data were	of reablement outlined in the	
blind participants to group	collected using national	2015 National Audit of	
allocation.	databases of service use.	Intermediate Care.	
	However it should be noted		
Were providers blinded?	that some data were only	Is the study population the	
Blinding not possible. Due to the	available in calendar quarters	same as at least one of the	
nature of the intervention it	rather than financial years and	groups covered by the	
would not have been possible to	the authors report that this may	guideline? Yes. All	
blind providers to group	have resulted in an over or	participants were over the	
allocation.	under estimation of the number	age of 18 however it should	
	of service hours used by each	be noted that the study's	
Were investigators, outcome	participant or the results of	inclusion criteria specified an	
assessors, researchers, etc.,	aged care assessments for	age of at least 65 years.	
blinded? Not reported. The	each year of the follow-up		
authors do not discuss blinding	period. It is suggested however	Is the study setting the	
of outcome assessors.	that this 'measurement bias	same as at least one of the	
	was non-differential and, if	settings covered by the	
Did participants represent the	present, would have weakened	guideline? Yes.	
target group? Partly. The study	the measure of association	Interventions and	
does not report the proportion of	towards the null' (p335).	assessments were conducted	
eligible individuals who agreed		in the homes of participants.	
to participate however the trials	Were all outcome		
inclusion/exclusion criteria	measurements complete?	Does the study relate to at	
appear appropriate.	Yes. All data appear to have	least one of the activities	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Were all participants accounted for at study conclusion? Not reported. The number of participants lost to follow-up is not reported by the authors. These data are available in Lewin G et al. (2013).	been collected and reported as intended.  Were all important outcomes assessed? Yes.  Were there similar follow-up times in exposure and comparison groups? Yes. Both groups were followed up for the same length of time.  Was follow-up time meaningful? Yes. The follow-up period was 2 years although it is not clear whether the follow-up period was measured from referral, randomisation, etc.  Were the analytical methods appropriate? Yes. Analysis included use of t-tests, chisquare tests, logistic regression, etc.  Were exposure and comparison groups similar at baseline? If not, were these adjusted? No. Analysis	covered by the guideline? Yes. Restorative care is considered to be equivalent to reablement.  Are the study outcomes relevant to the guideline? Yes. The study measured use of care and service costs.  Was the study conducted in the UK? No. The study was conducted in Australia.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	on the basis of intention to		
	treat showed that participants		
	in the intervention group were		
	significantly less likely to have		
	a carer (p=0.004); significantly		
	more likely to live alone		
	(p=0.016), and to have		
	significantly higher scores (i.e.		
	to be more independent) on		
	the care provider's Activities of		
	Daily Living (p=0.013) and		
	Instrumental Activities of Daily		
	Living (p<0.001) scales. This		
	analysis also showed that		
	participants in the control		
	group were significantly more		
	likely to have been in receipt of		
	a personal care service during		
	the previous year (p=0.02)		
	although the authors suggest		
	that these participants '		
	represented a very small proportion of the group as a		
	whole' (p331).		
	whole (post).		
	Analysis on the basis of care		
	received showed that		
	participants in the intervention		
	group were still significantly		
	less likely to have a carer		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	(p=0.004); and to have significantly higher scores on scales of Activities of Daily Living (p=0.005) and Instrumental Activities of Daily Living (p<0.001). This analysis also showed that participants in the intervention group were significantly more likely to be female (p=0.025); significantly more likely to live alone (p=0.005); and significantly less likely to have a coresident carer (p=0.014). Participants in the control group were still significantly more likely to have been in receipt of a personal care service during the previous year (p=0.001).		
	These differences were not adjusted for in all analyses of between group differences (i.e. use of aged care and health care).		
	Was intention to treat (ITT) analysis conducted? Partly. The authors state that data		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	were analysed on both an		
	intent to treat and an as		
	treated basis.		
	10.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Yes. Although the		
	authors do not present a power		
	calculation they report that the		
	trial had 79% power.		
	Were the estimates of effect		
	size given or calculable?		
	Yes. Odds and risk ratios are		
	provided with 95% confidence		
	intervals.		
	Was the precision of		
	intervention effects given or		
	calculable? Were they		
	meaningful? Yes. p values		
	are reported.		
	Do conclusions match		
	findings? Partly. The		
	conclusion tends to rely on		
	data from the as treated rather		
	than intention-to-treat analysis.		

4. Lewin G, De San Miguel K, Knuiman M et al. (2013) A randomised controlled trial of the Home Independence Program, an Australian restorative home-care programme for older adults. Health and Social Care in the Community 21: 69-78

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To ' test the	Was the exposure to the	Does the study's research	Overall assessment of
effectiveness of the Home	intervention and comparison	question match the review	internal validity:
Independence Program (HIP), a	as intended? Yes. The	question? Yes. The study	-
restorative home care	interventions do not appear to	aimed to ' test the	
programme for adults' (p69).	have been modified once	effectiveness of the Home	The possibility that operators
	participants had begun to	Independence Program	may have been able to
Methodology: Randomised	receive care however it should	(HIP), a restorative home	circumvent the randomisation
controlled trial.	be noted that 45 participants	care programme for adults'	process, the apparently high
	did not receive 'sufficient	(p69). Restorative home care	numbers of eligible
Description of theoretical	service' (three hours of	is a term used in Australia	individuals who did not take
approach? Partly. The authors	personal care for the control	and denotes an intervention	part, the decision to only
do not present a theory of	group and 3 visits for the	with similar features to those	measure function and quality
change or logic model, they	intervention group). These	interventions described as	of life related outcomes for a
simply hypothesise that the	participants were included in	reablement in the United	subgroup of participants (and
intervention will reduce the need	the intention to treat analysis	Kingdom. The intervention	the method by which
for ongoing personal care	but excluded from the as-	also appears to meet the	participants were recruited to
services. However, the authors	treated analysis.	definition of reablement used	subgroups), and the use of
describe the intervention as a		in the 2015 National Audit of	modified activities and
'new paradigm'.	Was contamination	Intermediate Care.	instrumental activities of daily
	acceptably low? Not reported.		living scales suggest that the
How was selection bias	The researchers had agreed in	Has the study dealt	results of this trial should be
minimised? Randomised. The	advance that if participants	appropriately with any	interpreted with caution.
providers referral handling	who had been randomised to	ethical concerns? Partly.	
programme appears to have	the intervention group were	Although a research ethics	Overall assessment of
been modified to allocate	(after 2 weeks) not	committee approved the	external validity:
eligible individuals ' to either	participating for 'any reason'	study this appears to be a	++
the intervention or control group	they would be reassigned to	committee based within a	
based on alternating tenths of a	the control group (p72). The	private care company rather	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
second' (p71). However, it	number of participants for	than an academic or	
appears that operators were	whom this was the case is not	regional/local authority based	
able to circumvent this process.	reported. In addition, the	body. In addition, it appears	
The study also measured	authors note in their discussion	that participants were only	
functional ability and quality of	that the control group could	asked for formal consent after	
life related outcomes for a	have been contaminated by '	they had been randomised	
subgroup of participants.	an increased emphasis on	and had begun to receive	
Recruitment to these subgroups	independence across the	their allocated intervention.	
does not appear to have been	home-care agency' (p69).		
randomised as recruitment was		Were service users	
restricted to a maximum of 4	Did either group receive	involved in the design of	
intervention and 4 control	additional interventions or	the study? No. Service users	
subjects each week however	have services provided in a	involved as participants only.	
the groups were calculated to	different manner? Partly. The	There is no indication that	
be representative. A research	researchers	service users were involved	
assistant (blinded) was	recorded/measured the receipt	in the design of the study or	
instructed which participants to	of other community services	interpretation of the findings.	
contact to take part in this	over the course of the trial		
subgroup and this process	however they do not report	Is there a clear focus on the	
continued until each group	whether there were statistically	guideline topic? Yes. The	
included the target number of	significant between group	study evaluates a restorative	
150 participants.	differences in relation to this.	home care service that	
		appears to meet the definition	
Was the allocation method	Were outcomes relevant?	of reablement outlined in the	
concealed? No. Operators	Yes. The study's primary	2015 National Audit of	
were able to circumvent the	outcome was use of personal	Intermediate Care.	
process and assign participants	care and this was measured		
to either the control or the	directly using service data.	Is the study population the	
intervention group according to		same as at least one of the	
their belief regarding which		groups covered by the	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
would be most beneficial for that	Were outcome measures	guideline? Yes. All	
individual.	reliable? Partly. Service data	participants were over the	
	were collected from a number	age of 18 however it should	
Were participants blinded?	of databases and the authors	be noted that the trial's	
Blinding not possible. Due to the	do not discuss the issue of	inclusion criteria specified an	
nature of the intervention it	missing data. This information	age of at least 65 years.	
would not have been possible to	was used to establish		
blind participants to group	important demographic	Is the study setting the	
allocation.	information which was then	same as at least one of the	
	used to control for in results of	settings covered by the	
Were providers blinded?	the data analysis. Functional	guideline? Yes.	
Blinding not possible. Due to the	ability and quality of life appear	Interventions and	
nature of the intervention it	to have been assessed using	assessments were conducted	
would not have been possible to	the Primary Assessment Form;	in the homes of participants.	
blind providers to group	a tool developed by care		
allocation.	providers. This includes an	Does the study relate to at	
	Activities of Daily Living scale	least one of the activities	
Were investigators, outcome	(based on the Modified Barthel	covered by the guideline?	
assessors, researchers, etc.,	Index, Colin et al. 1988) and	Yes. Restorative home care	
blinded? Not blind. It appears	an Instrumental Activities of	is considered to be equivalent	
that participants often revealed	Daily Living (based on the	to reablement.	
group allocation to research	Brody Scale, Lawton and		
assistants during the course of	Brody, 1969). The latter	Are the study outcomes	
their outcome assessments. It is	appears to have been modified	relevant to the guideline?	
not clear whether researchers	to enable scoring to increase in	Yes. The study's primary	
collating service level data were	relation to the assistance	outcome is need for personal	
blinded to group allocation.	participants need for each	care services. Secondary	
	task. Although these scales	outcomes relate to functional	
Did participants represent the	appear to have established	ability and quality of life.	
target group? No. The authors	reliability and validity their		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	Laternal validity	Overall validity rating
do not report the number of	incorporation into the Primary	Was the study conducted	
eligible individuals who agreed	Assessment Form and the	in the UK? No. The study	
to participate and it appears that	reliability and validity of this	was conducted in Australia.	
high numbers of individuals	format is not established.	was conducted in Australia.	
1 9	loimat is not established.		
could not take part because of	Mobility foor of folling and		
service availability in their area.	Mobility, fear of falling and		
In the participant flow diagram	quality of life were assessed		
the authors report this figure as	using measures that appear to		
532, however the narrative	have established reliability and		
suggests that this number also	validity however data to		
included individuals who were	support this are not presented.		
not randomised because the	Were all outcome		
target sample for a group had			
been achieved. Due to the	measurements complete? All		
problems with service	data appears to have been		
availability the sample size was	collected and reported as		
recalculated so that each of the	planned but functional and		
main groups was comprised of	quality of life outcomes were		
n=375 participants.	only assessed for a subgroup		
Ware all participants	of participants and data for this		
Were all participants	subgroup are not reported in		
accounted for at study	full (the authors simply state in their narrative that no between		
conclusion? Not reported. The			
number of participants lost to	group differences were found.		
follow up appears to be	In addition, some participants		
acceptable (approximately 14%)	in the subgroup had already		
and this appears to be	begun to receive care as allocated before baseline		
comparable by group however			
these figures may also include	assessments of functional		
participants who developed a	ability and quality of life were		

Internal validity -	External validity	Overall validity rating
1		
conducted. The authors		
therefore incorporated data		
· · · · · · · · · · · · · · · · · · ·		
· ·		
Were all important outcomes		
assessed? Yes. Although it is		
were not assessed.		
Were there similar follow-up		
times in exposure and		
comparison groups? Yes.		
for the same length of time.		
Was follow-up time		
• •		
assessments took place at 3		
months and 12 months,		
although it is not clear whether		
1		
-		
•		
	therefore incorporated data from the provider's telephone referral assessments as baseline data. There are no details provided on procedures for missing data, a significant omission.  Were all important outcomes assessed? Yes. Although it is disappointing that the effects of the interventions on carers were not assessed.  Were there similar follow-up times in exposure and comparison groups? Yes. Both groups were followed up for the same length of time.  Was follow-up time meaningful? Partly. Follow-up assessments took place at 3 months and 12 months,	conducted. The authors therefore incorporated data from the provider's telephone referral assessments as baseline data. There are no details provided on procedures for missing data, a significant omission.  Were all important outcomes assessed? Yes. Although it is disappointing that the effects of the interventions on carers were not assessed.  Were there similar follow-up times in exposure and comparison groups? Yes. Both groups were followed up for the same length of time.  Was follow-up time meaningful? Partly. Follow-up assessments took place at 3 months and 12 months, although it is not clear whether this was post-referral, post- randomisation, etc. and the rationale for these follow-up

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Were the analytical methods appropriate? Yes. Logistic regression and linear regression as well as t-tests and chi-square tests.		
	Were exposure and comparison groups similar at baseline? If not, were these adjusted? No. At baseline there were a number of differences between the 2 groups. The intervention group was statistically significantly less likely to have a carer (in both intent to treat analysis and as treated analysis, both p=0.004) and more likely to live alone (intent to treat analysis p=0.016; p=0.005 and as treated analysis). There was also a statistically significant difference between groups in relation to gender when as treated analysis was conducted, with a higher proportion of females in the intervention group than in the control group (p=0.025). The		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
and sample	authors also report narratively that there was a statistically significant (but clinically insignificant) difference between the 2 groups in level of dependency measured using the Home and Community Care programme Needs Identification scale. However, it appears that this measure is actually a combination of the Activities of Daily Living and the Instrumental Activities of Daily Living scales, and there were significant differences between groups on both of these. The intervention group had better scores on the Activities of Daily Living scale when both intent to treat and as treated analysis were conducted (p=0.013; p=0.005) and on the Instrumental Activities of Daily Living scale when both intent to treat and as treated analysis were conducted (p<0.001; p<0.001).		
	,		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	The study only measured		
	functional outcomes for a		
	subgroup of participants and		
	the authors report that there		
	were also differences between		
	subgroup participants in		
	relation to treatment group		
	when as-treated analysis was		
	conducted (for whom there		
	was complete follow-up data).		
	Subgroup participants		
	randomised to the intervention		
	group were statistically		
	significantly more likely to live		
	alone (χ2[1, n=192]=4.212,		
	p=0.04) and less likely to have		
	a carer (x2[1, n=106]=4.499,		
	p=0.03).		
	The authors state that these		
	differences were adjusted for		
	in the analyses but do not		
	report how this was done.		
	ispatition and mad dollo.		
	Was intention to treat (ITT)		
	analysis conducted? Yes.		
	The authors report the results		
	of intention to treat and as		
	treated analyses however it		
	appears that some participants		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	were excluded from certain		
	analyses that are reported as		
	intention to treat.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Yes. Although the		
	authors do not present a power		
	calculation, they report that the		
	study overall had 90%		
	statistical power to detect a		
	difference of 12% in service		
	outcomes at a significance		
	level of 5%. For the subgroup		
	analysis, the study had 90%		
	statistical power to detect a		
	difference of 0.4 SD in		
	functional outcomes at a		
	significance level of 5%.		
	Were the estimates of effect		
	size given or calculable?		
	Yes. Odds ratios are provided.		
	Was the precision of		
	intervention effects given or		
	calculable? Were they		
	meaningful? Partly. p values		
	are provided for some data.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
-	Do conclusions match findings? Yes.		

5. Lewin G and Vandermeulen S (2010) A non-randomised controlled trial of the Home Independence Program (HIP): An Australian restorative programme for older home-care clients. Health and Social Care in the Community 18: 91–9

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To test the '	Was the exposure to the	Does the study's research	Overall assessment of
hypothesis that individuals	intervention and comparison	question match the review	internal validity:
referred for home care who	as intended? Yes. There is no	question? Yes. The	-
participated in a restorative	indication that the intervention	researchers aimed to test the	
programme would have better	or control treatments were	' hypothesis that individuals	Overall assessment of
personal (functional gain and	modified after the trial had	referred for home care who	external validity:
improved well-being) and	begun.	participated in a restorative	++
service (need for ongoing home		programme would have	
care) outcomes than individuals	Was contamination	better personal (functional	
who only received 'usual' home	acceptably low? Yes. There	gain and improved well-	
care' (p92).	is no indication that	being) and service (need for	
	participants in the intervention	ongoing home care)	
Methodology: Comparison	group received the control	outcomes than individuals	
evaluation. Controlled trial.	treatment or vice versa.	who only received 'usual'	
		home care' (p92).	
Description of theoretical	Did either group receive		
approach? No. The authors do	additional interventions or	Has the study dealt	
not outline the theoretical basis	have services provided in a	appropriately with any	
of the intervention.	different manner? No. There	ethical concerns? Yes. A	
l	is no indication that either	university based research	
How was selection bias	group received additional	ethics committee approved	
minimised? Unmatched	services or had care provided		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
groups. The study reports the	in a different manner.	the study and written consent	
results of a controlled trial and		was sought from participants.	
baseline comparisons showed	Were outcomes relevant?		
that there were a number of	Partly. The study aimed to	Were service users	
differences between groups.	examine the effect of the	involved in the design of	
The authors note that it was not	intervention on service user	the study? No. Service users	
possible to conduct a	outcomes such as confidence	involved as participants only.	
randomised controlled trial as	in everyday activities,	There is no indication that	
' the operational trial had	functional dependency,	service users were involved	
been implemented such that	functional mobility, morale, etc.	in the design of the study or	
individuals living in the areas	as well as service outcomes	interpretation of the findings.	
where the trial was being run	and these were measured		
were either directly referred to	directly.	Is there a clear focus on the	
HIP or had chosen at referral to		guideline topic? Yes. The	
participate in the new	Were outcome measures	study reports on an	
programme. The control group	reliable? Partly. Although the	evaluation of a short-term	
therefore included clients living	majority of outcome measures	restorative programme of	
in suburbs outside the	appear to have established	care that appears to meet the	
catchment area for the	reliability and validity, data to	definition of reablement	
operational trial, who were	support this are not presented.	outlined in the 2015 National	
similar to clients in the	In addition, it is not clear why	Audit of Intermediate Care.	
intervention group in terms of	the study used the provider		
commencing services in the	developed Primary	Is the study population the	
same week and meeting the	Assessment Form (based on	same as at least one of the	
study inclusion criteria' (p92).	the Modified Barthel Index and	groups covered by the	
Recruitment was conducted on	the Lawton and Brody scale) to	guideline? Yes. All	
a weekly basis, with those	measure activities and	participants were over the	
referred to the Home	instrumental activities of daily	age of 18 however it should	
Independence Programme	living. It should also be noted	be noted that the intervention	
being contacted by phone to ask	that service data were	is targeted at older home	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
if they were willing to participate	collected using the providers	care service users and the	
in the study. After these	own database rather than	authors report that	
participants had consented, the	national/official sources.	participants were over the	
researchers then tried to recruit		age of 60. The mean age of	
an equal number of 'controls'.	Were all outcome	the intervention group at	
	measurements complete?	baseline was 79.6 years and	
Was the allocation method	Yes. All data appears to have	the mean age of the control	
concealed? N/A.	been collected and reported as	group at baseline was 79.8	
	planned however there were	years.	
Were participants blinded?	some participants who did not		
Blinding not possible. Due to the	complete the Timed Up and	Is the study setting the	
nature of the intervention it	Go test at baseline.	same as at least one of the	
would not have been possible to		settings covered by the	
blind participants to group	Were all important outcomes	guideline? Yes.	
allocation.	assessed? Partly. The study	Interventions and	
	did not measure the impact of	assessments were conducted	
Were providers blinded?	the intervention on	in the homes of participants.	
Blinding not possible. Due to the	informal/unpaid care, use of		
nature of the intervention it	other care services (e.g.	Does the study relate to at	
would not have been possible to	presentation at accident and	least one of the activities	
blind providers to group	emergency department), and it	covered by the guideline?	
allocation.	seems disappointing that only	Yes. The restorative	
	the Modified Falls Efficacy	programme is considered to	
Were investigators, outcome	Scale was used in relation to	be equivalent to reablement.	
assessors, researchers, etc.,	falls as this only measures		
blinded? Not blind. Research	confidence rather than number	Are the study outcomes	
assistants who conducted	of falls.	relevant to the guideline?	
outcome assessments were not		Yes. The study reports on	
blinded. The authors' narrative	Were there similar follow-up	service user outcomes such	
reports that these individuals	times in exposure and	as confidence in everyday	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
were members of staff from the	comparison groups? Yes.	activities, functional	
home care provider who '	Both groups were followed-up	dependency, functional	
could not be blinded to whether	for the same length of time.	mobility, morale, etc., as well	
the individual was in the		as service outcomes.	
intervention or the control group	Was follow-up time		
as it was common knowledge	meaningful? Yes. Final follow-	Was the study conducted	
throughout the organisation	up assessments were	in the UK? No. The study	
which service centre was	conducted at 12 months which	was conducted in Australia.	
running the HIP operational trial'	would allow both short-term		
(p94).	and intermediate-term effects		
	of the intervention to be		
Did participants represent the	detected.		
target group? Not clear. The			
study does not clearly report the	Were the analytical methods		
number of eligible individuals	appropriate? Yes. Analyses		
who agreed to participate.	included Mann–Whitney U-		
Although the authors report that	tests, linear regression and		
131 participants receiving the	logistic regression.		
intervention were asked to			
participate (100 agreed) and	Were exposure and		
147 participants receiving the	comparison groups similar		
control intervention were asked	at baseline? If not, were		
to participate (100 agreed) it is	these adjusted? No.		
not clear how the sample for this	Baseline comparisons showed		
study relates to the wider	that there were a number of		
population of participants	differences between groups.		
receiving the 2 services. In	The authors report that		
addition, it is not clear what the	participants in the intervention		
eligibility criteria for the services	group were less likely to live		
are or what the	alone (although it is not clear if		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
inclusion/exclusion criteria for	this difference was statistically		
the trial were and these appear	significant), and significantly		
to be conflated by the authors.	more likely to have a carer		
	(p=0.044) than those in the		
Were all participants	control group. At baseline,		
accounted for at study	participants in the intervention		
conclusion? Partly. Although	group were also more		
loss to follow up appears to be	dependent in activities of daily		
comparable by group and the	living (p<0.01) and		
reasons for these losses are	instrumental activities of daily		
reported, by the 12 month	living (p<0.01) both measured		
assessment point 30% of	using the Primary Assessment		
participants had been lost to	Form; and had slower times on		
follow-up.	the Timed Up and Go test		
	(p<0.01), and poorer scores on		
	the Philadelphia Geriatric		
	Morale Scale (p<0.01). It is not		
	clear whether these		
	differences were adjusted for		
	in all analyses.		
	Was intention to treat (ITT)		
	analysis conducted? Not		
	reported.		
	reported.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Yes. Although power		
	calculations are not presented,		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	the authors determined that a		
	sample size of 96 was needed		
	to detect differences at 80%		
	power and a significance level		
	of 0.05. The number of		
	participants in each group who		
	consented and took part in		
	baseline assessments was 100.		
	100.		
	Were the estimates of effect		
	size given or calculable?		
	Yes.		
	Was the precision of		
	intervention effects given or		
	calculable? Were they		
	meaningful? Yes. p values		
	and 95% confidence intervals		
	are reported where		
	appropriate.		
	Do conclusions match		
	findings? Yes.		

6. Tinetti ME, Charpentier P, Gottschalk M et al. (2012) Effect of a Restorative Model of Posthospital Home Care on Hospital Readmissions. Journal of the American Geriatrics Society 60: 1521-6

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To compare	Was the exposure to the	Does the study's research	Overall assessment of
readmissions of Medicare	intervention and comparison	question match the review	internal validity:
recipients of usual home care	as intended? Yes. No	question? Yes. Matches	+
and a matched group of	attempt was made to change	both our intervention	
recipients of a restorative model	the home care practice.	(restorative care) and our	Overall assessment of
of home care.		outcomes (readmissions and	external validity:
	Was contamination	length of care episode).	++
Methodology: Comparison	acceptably low? Yes.		
evaluation. Quasi-experimental		Has the study dealt	
evaluation.	Did either group receive	appropriately with any	
	additional interventions or	ethical concerns? Partly.	
Description of theoretical	have services provided in a	The Yale School of Medicine	
approach? Yes. The basis for	different manner? No.	human investigations	
the study is the need to reduce		committee approved the	
healthcare costs incurred	Were outcomes relevant?	study. However, there is no	
through readmissions to	Yes.	evidence that participants	
hospital. Older age is cited as 1		gave their consent to be	
of the factors associated with	Were outcome measures	involved in the study and	
readmissions. Many older adults	reliable?	given that 1 group received	
with chronic conditions and	Yes. Results of the OASIS	restorative care and the other	
functional limitations receive	(Outcome and Assessment	received usual care this	
home care from a Medicare-	Information Set) were	seems ethically questionable.	
qualified home care agency	dichotomized as remaining at		
after an acute hospital stay.	home or readmission to an	Were service users	
Since there is a link between	acute hospital.	involved in the design of	
functional dependence and		the study? No.	
readmissions, the authors			
suggest that enhancing physical			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
recovery during receipt of home	Were all outcome	Is there a clear focus on the	
care could reduce the risk of	measurements complete?	guideline topic? Yes.	
hospital readmissions.	Yes.	Intervention and outcomes	
Restorative home care offers		are within the scope of the	
this support with functional	Were all important outcomes	guideline topic.	
recovery hence the theory that	assessed? Partly. Only		
the intervention will reduce	service outcomes are	Is the study population the	
hospital readmissions.	measured. No service user or	same as at least one of the	
	carer outcomes were included	groups covered by the	
How was selection bias	so we have no idea about the	guideline? Yes. Although	
minimised? Quasi-	effect of the intervention on	people under 65 years were	
experimental. Allocation was not	people's wellbeing. Also, the	excluded.	
randomised although risk of bias	authors did not investigate		
minimised through prospective	service user views or	Is the study setting the	
matching.	experiences so we do not	same as at least one of the	
	know about the acceptability or	settings covered by the	
Was the allocation method	accessibility of the service.	guideline? Yes. Peoples	
concealed? Yes. Matched via a		own homes.	
computerised algorithm.	Were there similar follow-up	Does the study relate to at	
	times in exposure and	least one of the activities	
Were participants blinded?	comparison groups? Yes.	covered by the guideline?	
Not reported. Blinding to the 2		Yes. Restorative care.	
groups was not reported.	Was follow-up time		
However, it also appears that	meaningful?	Are the study outcomes	
participants were blinded to their	No. Follow up isn't clearly	relevant to the guideline?	
participation in the study as a	described. It appears that	Yes.	
whole.	outcomes were measured at		
	the end of the home care	Was the study conducted	
Were providers blinded? Not	episode rather than at any	in the UK? No. The study	
blind.	fixed point. The study would		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Were investigators, outcome assessors, researchers, etc., blinded? Not blind.	have benefitted from follow up at a later stage to assess outcomes in the medium to long term.	was conducted in the United States.	
Did participants represent the target group? Partly. People with severe cognitive impairment (that would impede ability to participate) were excluded as were people requiring total assistance with care.  Were all participants accounted for at study conclusion? Yes.	Were the analytical methods appropriate? Yes. Analysis of data is appropriate. Participants were matched using a computerized algorithm and any differences between the matched restorative and usual care groups were assessed using the McNemar test for binary variables and the paired t-test for continuous variables. In addition logistic regression, using the entire sample, was used to test the robustness of the matched results. In this confirmatory unmatched analysis, demographic, medical, and functional factors that may confound the relationship between the restorative effect and readmissions were controlled for.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	Were exposure and		
	comparison groups similar		
	at baseline? If not, were		
	these adjusted? Yes. The		
	majority of the participants		
	were matched and for those		
	(88) that weren't, results were		
	adjusted.		
	aajaotoa.		
	Was intention to treat (ITT)		
	analysis conducted? Not		
	reported.		
	reported.		
	Was the study sufficiently		
	powered to detect an		
	intervention effect (if one		
	exists)? Not reported.		
	exists): Not reported.		
	Were the estimates of effect		
	size given or calculable?		
	Yes. Odds ratios are		
	presented.		
	Was the presision of		
	Was the precision of		
	intervention effects given or		
	calculable? Were they		
	meaningful? Yes. p values		
	and confidence intervals are		
	provided.		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
	Do conclusions match		
	findings? Yes.		

## 7. Tuntland H, Aaslund MK, Espehaug B et al. (2015) Reablement in community-dwelling older adults: A randomised controlled trial. BMC Geriatrics 15: 145

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The authors aimed	Was the exposure to the	Does the study's research	Overall assessment of
to ' evaluate whether	intervention and comparison	question match the review	internal validity:
reablement is more effective	as intended? Yes. There is no	question? Yes. The authors	++
with regard to self-perceived	indication that care provided to	aimed to ' evaluate whether	
activity performance and	those in the intervention or	reablement is more effective	Overall assessment of
satisfaction with performance,	comparison group was altered	with regard to self-perceived	external validity:
physical functioning, and health-	once the trial had begun. It	activity performance and	++
related quality of life compared	does however appear that	satisfaction with performance,	
with usual care' (p2).	there were recruitment	physical functioning, and	
	problems and the authors	health-related quality of life	
Methodology: Randomised	narrative suggests that the	compared with usual care'	
controlled trial.	intervention was therefore	(p2).	
	implemented in districts in		
Description of theoretical	which this was not originally	Has the study dealt	
approach? No. The authors do	planned.	appropriately with any	
not describe the rationale		ethical concerns? Yes. A	
underpinning the intervention.	Was contamination	research ethics committee	
	acceptably low? Yes. There	approved the study and	
How was selection bias	is no indication that any	participants provided written	
minimised? Randomised.	participants in the control	consent.	
Computerised permuted block	group received the intervention		
randomisation sequence	or vice versa. The authors do	Were service users	
(randomly selected block sizes	report that there may have	involved in the design of	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
of 2 and 4) and an allocation	been contamination due to the	the study? No. Service users	
ratio of 1:1.	same practitioners delivering	involved as participants only.	
	both the intervention and the	There is no indication that	
Was the allocation method	control to different participants	service users were involved	
concealed? Yes. Allocation	however this is unlikely to have	in the design of the study or	
was concealed using sealed	had a significant impact.	interpretation of the findings.	
opaque envelopes.			
	Did either group receive	Is there a clear focus on the	
Were participants blinded?	additional interventions or	guideline topic? Yes. The	
Blinding not possible. Due to the	have services provided in a	study focuses on an	
nature of the intervention it	different manner? Partly.	intervention described as	
would not have been possible to	Both groups received home	reablement that appears to	
blind participants to group	based care from a range of	meet the definition used in	
allocation.	practitioners with nurses and	the 2015 National Audit of	
	auxiliary nurses being the most	Intermediate Care.	
Were providers blinded?	frequent provider of care for		
Blinding not possible. Due to the	either group. The authors	Is the study population the	
nature of the intervention it	report that there was a higher	same as at least one of the	
would not have been possible to	emphasis on rehabilitation in	groups covered by the	
blind providers to group	the intervention group with	guideline? Yes. All	
allocation.	more visits being made by	participants were over the	
	therapists. In contrast, the	age of 18 however it should	
Were investigators, outcome	authors also report narratively	be noted that although the	
assessors, researchers, etc.,	that at 3 month follow-up there	authors did not exclude	
blinded? Part blind. Although	was a significantly higher	younger adults the mean age	
the research assistants who	number of co-interventions in	of the intervention group was	
conducted follow-up	the control group and that	79.9 years and the mean age	
assessments were originally	'12 outpatient treatments in	of the control group was 78.1	
blinded to group allocation it	the control group versus 3	years.	
appears that participants may	outpatient treatments in the		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
have revealed this information.	intervention group (p=0.007),	Is the study setting the	
The authors report a success	of which 10 of the outpatient	same as at least one of the	
rate in relation to blinding of	treatments were physiotherapy	settings covered by the	
research assistants of 63% at	' (p4), however it is unclear	guideline? Yes. The	
the 3 month assessment and	what exactly the differences	interventions and	
64% at the 9 month	between groups were.	assessments were conducted	
assessment.		in participant's homes.	
	Were outcomes relevant?		
Did participants represent the	Yes. The authors aimed to	Does the study relate to at	
target group? Yes. An	evaluate the effect of	least one of the activities	
acceptable number of eligible	reablement on daily activity,	covered by the guideline?	
individuals agreed to participate	health-related quality of life,	Yes. The study evaluates the	
(over 80%).	and physical functioning.	impact of a reablement	
	These were assessed using	service.	
Were all participants	suitable measures.		
accounted for at study		Are the study outcomes	
conclusion? Yes. The number	Were outcome measures	relevant to the guideline?	
of participants lost to follow-up	reliable? Partly. Although all	Yes. The study measured	
was acceptable and appears to	outcome measures appear to	self-perceived performance of	
be comparable by group.	have established reliability and	activities, functional mobility,	
	validity data to support this are	grip strength and health	
	not presented. In addition, it	related quality of life.	
	should be noted that although		
	the study's primary outcome	Was the study conducted	
	related to performance of	in the UK? No. The study	
	everyday activities this was a	was conducted in Norway.	
	measure of service user self-		
	perception rather than an		
	observable and objective		
	measure.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Were all outcome measurements complete? Yes. All data appear to have been collected and reported on as planned.		
	Were all important outcomes assessed? Partly. It is disappointing that an observable measure of ability in relation to daily living was not used in the study.		
	Were there similar follow-up times in exposure and comparison groups? Yes. Both groups were followed up for the same amount of time.		
	Was follow-up time meaningful? Partly. The final follow-up assessment took place at 9 months, which is unlikely to have been sufficient to allow medium or long-term effects to be detected. It is not clear whether the follow-up period was measured from		
	period was measured from referral, randomisation, etc.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Were the analytical methods appropriate? Yes. Mixed effect models.		
	Were exposure and comparison groups similar at baseline? If not, were these adjusted? Yes. There were no significant differences between groups at baseline in relation to demographics or outcome measures. Although there were no significant differences at baseline the researchers adjusted for potential baseline differences by subtracting baseline effect sizes from follow-up effect sizes. It is not clear why this was done.		
	Was intention to treat (ITT) analysis conducted? Partly. The authors report that intention-to-treat analysis however participants who were lost to follow-up appear to have been excluded from analyses.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	Was the study sufficiently powered to detect an intervention effect (if one exists)? Yes. The authors estimated that we estimated that 42 participants were required in order to detect an effect at 80 % power. This target was increased to 60 to allow for a 40% rate and 61 participants were randomised.		
	Were the estimates of effect size given or calculable? Yes. Effect sizes using Cohen's d are provided.		
	Was the precision of intervention effects given or calculable? Were they meaningful? Yes. 95% confidence intervals and p values are reported.		
	Do conclusions match findings? Yes.		

## Review question 4 – Critical appraisal – the views and experiences of people using services, their families and carers

1. Ariss S (2014) National audit for intermediate care: Patient reported experiences, 2014. Sheffield: University of Sheffield

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To obtain views and	Describes what was	Does the study's research	Overall assessment of
experiences from people using	measured, how it was	question match the review	internal validity:
intermediate care (reablement)	measured and the results?	question?	_
by asking the following survey	N/A. Nothing was measured as	Yes. The survey, which was	
question, 'Do you feel that there	such because the survey only	part of the NAIC 2014 asked	Overall assessment of
is something that could have	comprised of 1 open ended	the question, 'do you feel that	external validity:
made your experience of the	questions to elicit people's	there is something that could	++
service better?' (Pages not	views.	have made your experience	
numbered, so page numbers of		of the (intermediate care)	
quotes not attributed.)	Measurements valid? N/A.	service better? Yes or no'	
		and then a space to provide	
Methodology: Survey.	Measurements reliable? N/A.	further detail. The question	
		was asked to people using	
Objectives of the study	Measurements	bed based and home based	
clearly stated? Partly. The	reproducible? N/A.	intermediate care and	
objective is simply to answer 1		reablement.	
single survey question.	Basic data adequately		
	described?	Has the study dealt	
Research design clearly	Partly. More data on the	appropriately with any	
specified and appropriate?	numbers/ proportions making	ethical concerns? No. There	
Partly. It is not clear exactly how	certain responses could have	is no discussion of handling	
the survey was conducted	been provided.	ethical issues or obtaining	
although the methods of		ethical approval for the	
analysis are described.	Results presented clearly,	survey.	
	objectively and in enough		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Clear description of context?	detail for readers to make	Were service users	
Partly. The context of the survey	personal judgements? Partly.	involved in the study? No.	
is clear but we do not know the			
context of the respondents	Results internally	Is there a clear focus on the	
(except that they've used	consistent? Partly. On the	guideline topic? Yes.	
reablement).	whole, yes although numbers		
	weren't routinely provided	Is the study population the	
References made to original	against responses.	same as at least one of the	
work if existing tool used?		groups covered by the	
No.	Data suitable for analysis?	guideline? Yes.	
	Yes.		
Reliability and validity of new		Is the study setting the	
tool reported? Unclear. No	Clear description of data	same as at least one of the	
information about the validity	collection methods and	settings covered by the	
and reliability of the single	analysis? Partly. Clear	guideline? Yes.	
survey question, why it was chosen or worded the way it	description of data analysis but not data collection.	Does the study relate to at	
was.	Tiot data collection.	least one of the activities	
was.	Methods appropriate for the	covered by the guideline?	
Survey population and	data?	Yes.	
sample frame clearly	Yes.	103.	
described? Partly. We do not	1 66.	Are the views and	
have a description of the	Statistics correctly	experiences reported	
sampling frame (total numbers	performed and interpreted?	relevant to the guideline?	
in England using reablement)	Partly. In terms of statistics,	Yes.	
but the sample is described in	only frequencies were		
the abstract which states that	produced and even then, not	Does the study have a UK	
the survey was sent to '250	for all the themes, which	perspective? Yes. England	
service-users from 48	means we don't know how	only.	
reablement services between	many respondents cited each		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
May and August 2013'.	issue - this could have been		
	provided in the ranked table.		
Representativeness of sample	Further statistical analyses		
is described? No. We have no	could have been usefully		
idea how representative the	produced, e.g. cross		
sample is.	tabulations or, if the data had		
O bis of affect all as a second	been collected, responses		
Subject of study represents	could have been linked with		
full spectrum of population of interest? Unclear. The author	service users' characteristics.		
does not provide any	Response rate calculation		
information that would help us	provided? No. Reviewers		
judge whether the study	worked out the response rate.		
represents the full spectrum of	worked out the response rate.		
the population of interest.	Methods for handling		
	missing data described? No.		
Study large enough to	<b>G</b>		
achieve its objectives, sample	Difference between non-		
size estimates performed?	respondents and		
No. There is no evidence that	respondents described? No.		
sample size estimates have			
been made.	Results discussed in relation		
	to existing knowledge on		
All subjects accounted for?	subject and study		
No. The paper does not provide	objectives? No.		
a figure for the total number of	l imitations of the atual-		
people who received the survey.	Limitations of the study stated? No.		
All appropriate outcomes	Stateur NO.		
considered? N/A. No outcomes	Results can be generalised?		
Considered: IN/A. NO odloomes	ivesuits can be deneralised:		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
were considered. The survey simply comprises of 1 open	Partly. Within England probably, although it's hard to		
ended question.	tell because the author does not provide any information		
Response rate: 12,000 reablement users received the	about the respondents.		
survey. Although it is unclear, it appears that responses were	Appropriate attempts made to establish 'reliability' and		
received from 1,644 people, giving a response rate of 13.7%.	'validity' of analysis? No.		
gg a respense rate or reminer	Conclusions justified?		
	Unclear. No conclusions are		
	provided in this paper.		

## 2. Gethin-Jones S (2013) Focus on the micro-relationship in the delivery of care. British Journal of Healthcare Assistants 7: 452-5

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: The study aimed to find out what older people feel is important in terms of the delivery of their care.	Is the context clearly described? Clear. The context is the move between reablement and long	Does the study's research question match the review question? Yes. Views of people who have used	Overall assessment of internal validity:
Methodology: Qualitative.	term home care.	reablement.	Overall assessment of external validity:
	Was the sampling carried	Has the study dealt	++
Is a qualitative approach appropriate? Appropriate.	out in an appropriate way?  Somewhat appropriate. The sampling wasn't random but	appropriately with any ethical concerns? Yes. Ethical approval was	
Is the study clear in what it seeks to do? Clear.	this seems to be appropriate because respondents	obtained from the ethics committee of Cardiff	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	specifically had to have used	University and also the	
How defensible/rigorous is	reablement and be moving to	relevant local authority's	
the research	long term home care.	ethics committee, which had	
design/methodology?		oversight of the project. In	
Somewhat defensible. The	Were the methods reliable?	addition, consent to	
sampling was conducted	Somewhat reliable. Only 1	participate in the study was	
through care managers acting	means of data collection was	obtained from all participants	
as gatekeepers so they could	used. No opportunity for	during the first of 2 interviews	
choose people who had recently	triangulation. However the	in which interviewers also	
used reablement and then	author does discuss his	ensured service users were	
moved onto long term home	findings alongside other	fully aware of the use of the	
care. This is somewhat	studies.	data.	
defensible although clearly care			
managers could potentially	Are the data 'rich'? Mixed.	Were service users	
identify people they knew to	Considering interviews were	involved in the study? Yes.	
have had a particularly positive	conducted with 30	As participants but not as co-	
experience of the reablement	respondents, the data	researchers.	
service or by contrast who	presented and discussed was		
would have something critical to	not terribly rich. Themes were	Is there a clear focus on the	
say of the home care service.	developed from the responses	guideline topic? Yes.	
The approach to interviewing	so we know there is a great		
was certainly defensible with the	deal of consistency but we are	Is the study population the	
rationale given as '[this] allowed	given very little information	same as at least one of the	
the individuals the chance for	about the contexts of	groups covered by the	
self-expression and the ability to	respondents, including where	guideline? Yes. Although	
expand on the experience of	quotes are provided.	everyone had been	
having intimate care delivered in		discharged from hospital - no	
their own home' (p453).	Is the analysis reliable?	community referrals.	
	Somewhat reliable. On the		
How well was the data	face of it, analysis seems		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
collection carried out? Appropriately.	reliable and the author describes the process of identifying themes and then using the themes as categories within which the data were	Is the study setting the same as at least one of the settings covered by the guideline? Yes.	
	analysed. However, it appears that only 1 researcher was involved in the data collection and analysis so there was no scope for differences in	Does the study relate to at least one of the activities covered by the guideline? Yes.	
	interpretation to be identified and resolved. Furthermore, participants didn't have the	Are the views and experiences reported relevant to the guideline?	
	opportunity to feedback on transcripts.	Yes.	
	Are the findings convincing? Convincing. Findings are clearly presented and coherent themes are identified. Findings are also supported with quotes from the original data, although more contextual information about the people quoted would have been helpful.	Does the study have a UK perspective? Yes.	
	Are the conclusions adequate? Somewhat adequate. The conclusions are plausible and are supported by		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	the findings. However, they're		
	minimal and don't really reflect		
	the depth of some of the		
	findings and supporting		
	quotes. The conclusions don't		
	add a great deal of		
	understanding to the research		
	topic; not least because they		
	say more about the importance		
	of improving relationships		
	between older people and care		
	workers in long term care. The		
	author does recognise that the		
	study could have been		
	improved by increasing the		
	sample size and ethnic		
	diversity.		

3. Ghatorae H (2013) Reablement in Glasgow: Quantitative and qualitative research. Glasgow: Glasgow City Council

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: The researchers	Quantitative component:	Does the study's research	Overall assessment of
aimed to explore service user	Survey monkey questionnaire	question match the review	internal validity:
and staff views of a 6 week	(service users and	question? Yes. The	-
reablement programme.	practitioners).	researchers aimed to explore	
, ,	,	service user and staff views	This is a poor quality study
Methodology: Mixed methods.	Is the sampling strategy	of a 6 week reablement	that lacks methodological
	relevant to address the	programme.	detail. The research was
Qualitative component: Face	quantitative research		conducted with a very small
to face interviews with service	question (quantitative aspect	Has the study dealt	group of participants and

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
users and focus groups with	of the mixed-methods	appropriately with any	detail on who these
practitioners.	question)? Unclear. Whilst the	ethical concerns? Partly.	participants were is missing.
	source of both the service user	Although the study includes	The findings are limited and
Are the sources of qualitative	and practitioner samples are	an example service user	are very often not reported in
data (archives, documents,	clearly relevant no details	consent form there are no	context.
informants, observations)	relating to the sampling	details on consent processes	
relevant to address the	strategy are provided.	used for staff and there are	
research question? Partly.		no details provided regarding	Overall assessment of
Whilst the inclusion of service	Is the sample representative	ethical approval for the study.	external validity:
users with recent experience of	of the population under		++
the service and practitioners	study? Unclear. No details in	Were service users	
who work as part of or with the	relation to inclusion/exclusion	involved in the design of	
team is standard practice there	criteria are provided and it is	the study? No. Service users	
are no details provided in	not clear how many individuals	involved as participants only.	
relation to the sampling strategy	who were asked to take part	There is no indication that	
used to select these participants	did so.	service users were involved	
and no information on the		in the design of the study or	
number of individuals who were	Are measurements	interpretation of the findings.	
approached to participate are	appropriate (clear origin, or		
provided.	validity known, or standard	Is there a clear focus on the	
	instrument)? N/A. The survey	guideline topic? Yes. The	
Is the process for analysing	appears to have been	study focuses on a	
qualitative data relevant to	designed specifically for this	reablement service.	
address the research	study.		
question? Unclear. Only		Is the study population the	
minimal detail in relation to the	Is there an acceptable	same as at least one of the	
method of data collection is	response rate (60% or	groups covered by the	
provided and no information is	above)? Unclear. The	guideline? Yes. All service	
provided at all in relation to data	response rate is not reported.	user participants were over	
management and data analysis		the age of 18 however the	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
techniques.	Mixed methods component:	majority appear to have been	
	Is the mixed-methods	over the age of 60 years.	
Is appropriate consideration	research design relevant to		
given to how findings relate	address the qualitative and	Is the study setting the	
to the context, such as the	quantitative research	same as at least one of the	
setting, in which the data	questions (or objectives), or	settings covered by the	
were collected? No. The	the qualitative and	guideline? Yes. Details on	
author does not discuss the	quantitative aspects of the	study settings are unclear	
context in which the research	mixed-methods question?	however the service appears	
took place or how the findings	Partly. Integrating quantitative	to have been provided in the	
relate to this.	and qualitative findings is	service user's home.	
	acceptable however the author		
Is appropriate consideration	does not discuss this the	Does the study relate to at	
given to how findings relate	rational for this or process for	least one of the activities	
to researchers' influence; for	doing so.	covered by the guideline?	
example, though their		Yes. The study reports on a	
interactions with	Is the integration of	reablement service, a service	
participants? No. The author	qualitative and quantitative	model described in the 2015	
does not discuss their own role	data (or results) relevant to	National Audit of Intermediate	
or the issue of context bias.	address the research	Care.	
	question? Partly. The		
	integration of qualitative and	Are the views and	
	quantitative findings is minimal	experiences reported	
	and the author does not	relevant to the guideline?	
	explain when integration	Yes. The study reports	
	occurred and the process by	service user and staff views	
	which this was done.	in relation to reablement	
		service.	
	Is appropriate consideration		
	given to the limitations	Was the study conducted	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	associated with this	in the UK? Yes. The study	
	integration, such as the divergence of qualitative and quantitative data (or results)? No. The author does not consider the limitations of integration or discuss divergence.	was conducted in Glasgow.	

4. Hjelle KM, Tuntland H, Førland O et al. (2016) Driving forces for home-based reablement; a qualitative study of older adults' experiences. Health and Social Care in the Community 24, doi 10.1111/hsc.12324

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To describe how	Is the context clearly	Does the study's research	Overall assessment of
older adults experienced participation in reablement.	described? Clear.	question match the review question? Yes.	internal validity:
participation in readiement.	Was the sampling carried	Has the study dealt	
Methodology: Qualitative	out in an appropriate way?	appropriately with any	Overall assessment of
study. Semi structured	Somewhat appropriate. The	ethical concerns? Yes.	external validity:
interviews with 8 older adults.	participants were recruited	Ethics approval was obtained	++
	from the intervention group of	from the Norwegian Regional	
Is a qualitative approach	the related randomised	Medical Ethics Committee.	
appropriate? Appropriate.	controlled trial so they were	Participants were invited to	
Because the question seeks to	already positive (and	participate and those who	
understand subjective	motivated) about reablement. It	agreed gave their written	
experiences.	is also possible that the project	consent to the reablement	
	leader who recruited	staff before the interviews	
Is the study clear in what it	participants only asked people	began.	
seeks to do? Clear. There isn't	who had a good experience of		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
a section on 'study aims' but	or successful reablement. For	Were service users	
from the introduction it's clear	these reasons the sample may	involved in the study? Yes.	
that the authors (rightly) believe	not be entirely representative.	Yes as respondents but they	
research on the experiences of		were not involved in the	
people using reablement is so	Were the methods reliable?	design or conduct of the	
far lacking. They seek to fill this	Somewhat reliable. The data	study.	
gap with their own research.	was only collected via 1		
	method although for some	Is there a clear focus on the	
How defensible/rigorous is	participants more than 1	guideline topic? Yes.	
the research	interview was conducted,		
design/methodology?	providing the opportunity for a	Is the study population the	
Defensible. There is a clear	deeper understanding of their	same as at least one of the	
account of the purposeful	experiences. Although only	groups covered by the	
sampling for this study, which is	means of data collection fails	<b>guideline?</b> Yes. The focus is	
linked to a randomised	to provide the opportunity for	older people, rather than	
controlled trial. There's a clear	triangulating findings, the	younger adults.	
account of the rationale behind	authors do discuss their result		
data collection, especially	in the context of other	Is the study setting the	
conducting 2 interviews, where	research.	same as at least one of the	
possible. Analysis is also clearly		settings covered by the	
described and justified.	Are the data 'rich'? Mixed.	guideline? Yes.	
	Findings under some themes		
How well was the data	are presented and illustrated in	Does the study relate to at	
collection carried out?	more detail than others.	least one of the activities	
Somewhat appropriately. The		covered by the guideline?	
rationale for conducting 2	Is the analysis reliable?	Yes.	
interviews with some	Reliable. All 4 authors themed		
participants is made clearly so it	and coded the data. Analysis is	Are the views and	
is unfortunate that not all	clearly described and	experiences reported	
participants were interviewed	comprised of 4 main stages:		

All read each interview as y were carried out and a liminary analysis started so	relevant to the guideline?	
y were carried out and a		
,	3.7	
liminary analysis started so	Yes.	
illilliary arialysis started so		
y could go into more depth	Does the study have a UK	
he second interview. Once	perspective? No. Conducted	
nterviews had been	, ,	
iducted the transcripts were		
•	•	
	the United Kingdom.	
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the the state of the state of	nterviews had been	in Norway although the reablement service broadly compares with reablement as delivered and evaluated in the United Kingdom.  Weaning units' were ntified. These are 'text ments reflecting ticipants' experiences of olement' (p3). Coding was a conducted by identifying sorting meaning units. all codes were based on sensus among all authors. Transcripts were read tematically to identify and esify the meaning units into matic code groups. Similly, 'data were contextualised by developing criptions providing stories areflected the wholeness of original context' (p5). The second of the transcripts were read to the transcripts

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
•	illustrate the trustworthiness of		
	the themes and sub themes.		
	Are the findings convincing? Convincing. Findings are clearly presented and supported by quotes from the transcripts.		
	Are the conclusions adequate? Somewhat adequate. The conclusions certainly relate to the aims of the study and are clearly linked with the findings and quotes presented. Discussion of practice implications arising from the data are not terribly in-depth and only go as far to say that follow up programmes		
	should be provided to people following a period of		
	reablement (in order to maintain motivation).		

5. Wilde A and Glendinning C (2012) 'If they're helping me then how can I be independent?' The perceptions and experience of users of home-care re-ablement services. Health and Social Care in the Community 20: 583-90

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To report on the	Is the context clearly	Does the study's research	Overall assessment of
interview study component of	described?	question match the review	internal validity:
reablement service users and	Not sure. As part of the study,	question? Yes.	+
carers (part of a wider multi-	observations of reablement		
method study of reablement).	sessions took place - but these	Has the study dealt	Overall assessment of
Considers the immediate and	are not described (nor in the	appropriately with any	external validity:
longer term impact of the	Rabiee and Glendinning 2011	ethical concerns? Yes.	++
service for the recipients and	paper).	Ethics approval, staged	
identifies potential barriers to		method of consent described.	
optimal outcomes for these	Was the sampling carried		
stakeholders.	out in an appropriate way?	Were service users	
	Appropriate. As far as can be	involved in the study? Yes.	
Methodology: Qualitative	ascertained.		
study.		Is there a clear focus on the	
	Were the methods reliable?	guideline topic? Yes.	
Is a qualitative approach	Reliable.		
appropriate? Appropriate.		Is the study population the	
	Are the data 'rich'? Not sure.	same as at least one of the	
Is the study clear in what it	Very little primary data is	groups covered by the	
seeks to do? Clear.	included, but this is likely to be	guideline? Yes. Adults over	
	a restriction for publication.	18.	
How defensible/rigorous is			
the research	Is the analysis reliable?	Is the study setting the	
design/methodology?	Reliable. Thematic analysis	same as at least one of the	
Defensible.	using different levels of	settings covered by the	
Ha all and the date	construct, with the ability to	guideline? Yes.	
How well was the data	compare and contrast different		
collection carried out?	sources and interpretations		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Appropriately.	through intra-case and cross-case comparison.	Does the study relate to at least one of the activities covered by the guideline?	
	<b>Are the findings convincing?</b> Convincing.	Yes.	
	Are the conclusions adequate? Adequate.	Are the views and experiences reported relevant to the guideline? Yes.  Does the study have a UK perspective? Yes.	

# Review question 4 – Critical appraisal – health, social care and other practitioners views and experiences

1. Rabiee P and Glendinning C (2011) Organisation and delivery of home care re-ablement: What makes a difference? Health and Social Care in the Community 19: 495–503

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: To explore the organisation, content and features of reablement services in 5 local authority sites, and to consider what factors have the ability to enhance or detract from effectiveness.	Is the context clearly described? Clear. There is little detail on the observation of the 26 reablement visits (probably for reasons of space in journal reporting).  Was the sampling carried	Does the study's research question match the review question? Yes. Specific to reablement.  Has the study dealt appropriately with any ethical concerns? Partly.	Overall assessment of internal validity: + Overall assessment of external validity: ++
Methodology: Qualitative	out in an appropriate way?	Unlike its companion study,	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
study.	Appropriate. Purposive	Wilde and Glendinning	
	sampling of local authorities,	(2012), ethics approval is not	
Is a qualitative approach	all of which were 'screened' to	reported. Although involving	
appropriate? Appropriate.	ensure they were offering the	mostly staff, observation of	
	services of interest, were	care in one's own home	
Is the study clear in what it	willing to take part and staff	should have entailed consent.	
seeks to do? Clear.	had time to collect data and		
	work with research team.	Were service users	
How defensible/rigorous is		involved in the study? No.	
the research	Were the methods reliable?	But they were in companion	
design/methodology?	Reliable.	study (Wilde and Glendinning	
Defensible.		2012).	
	Are the data 'rich'? Mixed.		
How well was the data	The contexts of the data are	Is there a clear focus on the	
collection carried out?	described and detailed findings	guideline topic? Yes.	
Appropriately.	are provided. However, no		
	supporting quotes are provided	Is the study population the	
	and this is a shortcoming.	same as at least one of the	
		groups covered by the	
	Is the analysis reliable?	guideline? Yes.	
	Reliable. Framework analysis		
	seems sensible, with data from	Is the study setting the	
	a range of sites to supply	same as at least one of the	
	confirming or conflicting data.	settings covered by the	
		guideline? Yes.	
	Are the findings convincing?		
	Convincing.	Does the study relate to at	
		least one of the activities	
	Are the conclusions	covered by the guideline?	
	adequate? Adequate.	Yes.	

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
		Are the views and experiences reported relevant to the guideline? Yes.	
		Does the study have a UK perspective? Yes.	

Research question 5. Dementia and Intermediate care or Reablement:

- a) What is the effectiveness and cost effectiveness of intermediate and reablement for people living with dementia?
- b) What are the views and experiences of people living with dementia, their families and carers in relation to intermediate care and reablement?
- c) What are the views and experiences of health, social care and other practitioners about intermediate care and reablement for people living with dementia?

#### **Research question 5 – Findings table – Effectiveness**

1. Culverwell A and Milne A (2010) Intermediate care: evaluating a specialist home treatment service. Journal of Dementia Care 18: 32-5

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: Formative	Participants	Narrative findings –	Overall assessment of
evaluation of the Home	Service users and their	Effectiveness	internal validity:
Treatment Service for People	families, partners and	Only descriptive analyses	-
living with Dementia in Eastern	carers - During its first full	were conducted which are	
and Coastal Kent (ECK). The	year of activity, the HTS	reported as aggregated totals	Overall assessment of
aim is to inform the cycle of	worked with 148 completed	for user/carer characteristics	external validity:
service improvement and	cases	and as percentages where	+
specifically to aid decision		relationships are discussed.	
making about whether to roll out	Sample characteristics	The majority (80%) of	
the service to other parts of East	Age - Average age of the	referrer's goals were either	
Kent.	client group was 82 years	'fully met' or 'partially met'.	
	with the age range	The goals most frequently	
<b>Methodology:</b> Mixed methods.	spanning 57 to 98 years.	achieved were: supporting	
The outcomes reported here are	Two thirds of the 148 cases	carer/care staff, avoiding	
drawn primarily from routine		hospital admission,	

data gathered during the HTS's first full year of activity and a 6 month follow up period. It incorporates data from staff records including key characteristics of the user (and carer) population, severity of dementia, referrers' goals, and the Short Form Camberwell Assessment of Need in the Elderly (CANE).

Country: UK. East Kent only.

**Source of funding:** Not reported.

- were aged over 80 with a sixth being aged 90 or over.
- Sex a third were male and two thirds female.
- Ethnicity Not reported.
- Country of birth Not reported.
- Language Not reported.
- Religion/belief Not reported.
- Disability Over half of cases had a moderate level of dementia, about a third had severe, and a fifth mild. On admission half of the clients were living in their own homes, a sixth were in mental health hospital, and a quarter were in care homes. In terms of the CANE, the most frequently identified unmet needs were: daytime activities, distress, challenging behaviours and carer or care staff need. On average just over 3 unmet needs were identified per client, with the number ranging from 1 to 9.

conducting an assessment of problems/need, facilitating discharge from hospital, supporting a transition, and engaging the user with services. In relative terms the HTS was less effective at promoting user functioning.

Overall, the majority (73%) of all CANE needs identified as unmet on entry to the service were either wholly or partially met at discharge; nearly half were wholly met. A quarter (25%) of unmet needs remained the same and only 2% got worse. For two thirds of users, their location was the same at the end of HTS involvement as it was at the start; a quarter moved to a more supported environment, i.e. from home to a care home or care home to hospital, and a sixth moved to a less supported environment, i.e. were discharged from hospital home or care home, or from a care home to their own home.

- Long term health condition
   Not reported.
- Socioeconomic position
   Not reported.
- Pension Not reported.
- Living arrangement Not reported.

#### Sample size:

 Intervention number - 148 cases accepted to the HTS programme. No comparison cases.

**Intervention:** Home-based community care.

- Description Community
   Mental Health Team works
   alongside, and augments
   health and social care
   services already being
   provided, reviewing their
   input and accessing
   additional services e.g. day
   care and respite, as
   required.
- Description The Home Treatment Service (HTS) was set up to provide specialist mental health intermediate care for

Overall, over two thirds of all those in mental health hospital were discharged after the HTS intervention; two fifths were discharged to their own home and a quarter to a care home. Of those remaining in hospital all were discharged within 3 months of the HTS intervention. At 6 months follow up, of those clients who remained alive. 44% were still living in the same care environment, 37% had moved to a more supported care environment, and 19% to a less supported.

The latter group reflects the potential for people with moderate to severe dementia to be rehabilitated i.e. to achieve improved physical and psychosocial functioning and thereby enhance their capacity to live more independently. Significantly, over half of those in their own homes at the beginning of the HTS intervention were still here at follow up and all those whose discharge from

people living with dementia. mental health hospital had Consistent with the aims been facilitated during the and principles of HTS intervention, remained intermediate care, the HTS out. Almost all of those in works with complex specialist residential care transitions, particularly also remained there. where a breakdown in the care situation is imminent. It aims to reduce the need for unnecessary moves, particularly to mental health hospital, and to minimise the level of distress should such moves be required. The intention is to enable people to live in the least restrictive and/or most appropriate setting, preferably one of their choosing. The HTS provides a multiprofessional comprehensive assessment of need, which informs the provision of a set of interventions focused on meeting the needs of their family carer and/or care staff. It has a distinctive focus on the context of care. The evaluation focused on the

 impact of the HTS on users
and carers, and on the use
of acute mental health
inpatient services e.g.
avoidance of unnecessary
admissions, and promotion
of timely discharge.
Delivered by – Community
health team working
through the Home
Treatment Service.
Duration, frequency,
intensity, etc. – The
outcomes reported are
drawn primarily from
routine data gathered
during the HTS's first full
year of activity and a 6
month follow up period.
Key components and
objectives of intervention –
The extent to which the
referrer's goals were
achieved and whether the
unmet needs identified via
CANE on entry to the HTS
were met on discharge
formed the core of the
evaluation.
Location/place of delivery —
East Kent, England.

#### Outcomes measured:

- Service user related outcomes Incorporates data from staff records including key characteristics of the user (and carer) population, severity of dementia, referrers' goals, and the Short Form Camberwell Assessment of Need in the Elderly (CANE).
- Family or caregiver related outcomes- The evaluation also included an assessment of whether carer needs were being alongside those of the user/client.
- Satisfaction with services The extent to which the
   referrer's goals were
   achieved and whether the
   unmet needs identified via
   CANE on entry to the HTS
   were met on discharge
   formed the core of the
   evaluation.

#### Follow- up:

 Outcomes were assessed during the HTS's first full

year of activity and a 6 month follow up period.	
Costs? No.	

### Research question 5 – Critical appraisal – Effectiveness

## 1. Culverwell A and Milne A (2010) Intermediate care: evaluating a specialist home treatment service. Journal of Dementia Care 18: 32-5

Care 10. 32-3			
Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: Formative	Was the exposure to the	Does the study's research	Overall assessment of
evaluation of the Home	intervention and	question match the review	internal validity:
Treatment Service for People	comparison as intended?	question? Partly. Reports only	-
living with Dementia in Eastern	Not reported.	on the effectiveness of	
and Coastal Kent (ECK). The		intermediate and reablement	Overall assessment of
aim is to inform the cycle of	Was contamination	for people living with dementia	external validity:
service improvement and	acceptably low? Not	(no views/ experiences).	+
specifically to aid decision	reported.		
making about whether to roll		Has the study dealt	
out the service to other parts	Did either group receive	appropriately with any	
of East Kent.	additional interventions or	ethical concerns? Partly.	
	have services provided in a	All data are anonymised and	
Methodology: Mixed	different manner? Not	numbered, i.e. no user	
Methods. The outcomes	reported.	identification data are used in	
reported here are drawn		the analysis or the paper.	
primarily from routine data	Were outcomes relevant?	Approval for the service	
gathered during the HTS's first	Yes.	evaluation was obtained via	
full year of activity and a 6		the Trust Clinical Audit and	
month follow up period. It	Were outcome measures	Effectiveness Committee. Not	
incorporates data from staff	reliable?	clear if participant consent was	
records including key	Not reported.	gained.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
characteristics of the user (and			
carer) population, severity of	Were all outcome	Were service users involved	
dementia, referrers' goals, and	measurements complete?	in the study? No. Neither as	
the Short Form Camberwell	Not reported.	co-researchers no participants.	
Assessment of Need in the		Data was obtained from	
Elderly (CANE).	Were all important	routinely collected information	
	outcomes assessed? Yes.	and assessments made by	
Is this study a prospective		professionals about the users.	
evaluation? Yes,	Were there similar follow-up		
prospective. The outcomes	times in exposure and	Is there a clear focus on the	
reported here are drawn	comparison groups? NA (no	guideline topic? Partly. The	
primarily from routine data	comparison group).	study focuses on the	
gathered during the HTS's first		effectiveness of a 'Home	
full year of activity and a 6	Was follow-up time	Treatment Service' for people	
month follow up period.	meaningful? Not reported.	living with dementia which	
		includes assessing user goals	
Description of theoretical	Were the analytical methods	which include living more	
approach? Partly. Home	appropriate? Not reported.	independently and avoiding	
Treatment Service conducted		hospitalisation/re-admissions.	
within model of intermediate	Were exposure and	However, there is no data on	
care but no theoretical	comparison groups similar	cost effectiveness and the data	
approach described as such.	at baseline? If not, were	collected do not report on	
Group allocation.	these adjusted? NA (no	views and experiences of	
	comparison group).	health, social care and other	
How was selection bias		practitioners about	
minimised? No comparison	Was intention to treat (ITT)	intermediate care and	
group.	analysis conducted? Not	reablement for people living	
	reported.	with dementia.	
Was the allocation method concealed? NA.			

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
and sample	Was the study sufficiently	Is the study population the	
Were participants blinded?	powered to detect an	same as at least one of the	
NA.	intervention effect (if one	groups covered by the	
	exists)? Not reported.	guideline? Yes. Study	
Were providers blinded? NA.	omete, i italiapantaa.	examines adults, aged 18	
	Were the estimates of effect	years and older, living with	
Were investigators, outcome	size given or calculable? Not	dementia and with experience	
assessors, researchers, etc.,	reported.	of intermediate care and	
blinded? NA.	•	reablement. Also, their	
	Was the precision of	families, partners and carers.	
Did participants represent	intervention effects given or		
the target group? Yes.	calculable? Were they	Is the study setting the same	
	meaningful? Not reported.	as at least one of the	
		settings covered by the	
Were all participants	Do conclusions match	guideline? Yes. Participants	
accounted for at study	findings? Yes.	in the programme were in:	
conclusion? Not reported.		Dedicated intermediate care	
		and reablement facilities,	
		residential and nursing care	
		homes and people's own	
		homes.	
		Does the study relate to at	
		least one of the activities	
		covered by the guideline?	
		Yes. Includes information	
		about assessment for and	
		planning of intermediate care	
		and reablement that is person	
		centred and identifies needs,	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
		aspirations and social context,	
		including support networks.	
		(For effectiveness	
		questions) Are the study	
		outcomes relevant to the	
		guideline? Partly. Covers	
		some but not all the outcomes.	
		The evaluation assesses	
		mostly person centred	
		outcomes related to needs,	
		unmet needs and goals. Also	
		services outcomes by	
		examining the % of users who	
		were admitted and/or avoided	
		hospital care during the length	
		of the intervention and 6	
		months after the intervention.	
		Was the study conducted in	
		the UK? Yes. Intervention is	
		based in East Kent	

Research question 6. Intermediate care and reablement – information, advice, advocacy, training and support:

- a) What is the effectiveness and cost effectiveness of information, advice, advocacy, training and support for people using intermediate care, and reablement and their families and carers?
- b) What are the views and experiences of people using intermediate care and reablement, and their families and carers, about information, advice, advocacy, training and support?
- c) What are the views and experiences of health, social care and other practitioners about information, advice, advocacy, training and support for people using intermediate care and reablement and their families and carers?

Research question 6 – Findings tables – the views and experiences of people using services, their families and carers

1. Ariss S (2015) National Audit of Intermediate Care: patient reported experiences. Sheffield: University of Sheffield School of Health and Related Research Care

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To describe the findings from the qualitative analysis of responses from patients for the 2015 National Audit of Intermediate Care (NAIC). Question asked: 'Do you feel that there is something that could have made your experience of the service better?'	Participants  • Service users and their families, partners and carers as well as people with experience of home and bed based IC and reablement  Sample characteristics	Narrative findings – Qual and V&E Views and experiences of people using IC&R, and their families and carers, about information, advice, advocacy, training and support.  A. People with experience of bed based IC felt improvement	Overall assessment of internal validity:  Lack of methodological details.  Overall assessment of external validity:
SCIVICE DELICI :	<ul> <li>Age - Not reported.</li> <li>Sex - Not reported.</li> <li>Ethnicity - Not reported.</li> </ul>	needed in provision of information and advice by staff	

<b>Methodology:</b> Survey.
Questionnaire Survey.

Country: UK. England.

# Source of funding:

Government. NHS England.

- Country of birth Not reported.
- Language Not reported.
- Religion/belief Not reported.
- Disability Not reported.
- Long term health condition - Not reported.
- Socioeconomic position Not reported.
- Pension Not reported.
- Living arrangement Not reported.

#### Sample size:

Sample size - Responses were received for the 3 types of services: Bed Based, 302; Home-based, 298: Reablement Services, 176: totalling 776 participants.

- 1. Appropriate or consistent information about services or care
- a. People specifically needed better information about their condition, medication and pain management:
- "could have received more information about my condition and to my medication".
- "Information about pain" (p9).
- b. general information needed about the facilities, staff etc.: "It would be very helpful if, on admission, patients could be given a list of all facilities available. E.g. bathing, hairdressing, newspapers etc." (p9).
- c. People with experience of bed based IC gave advice on how information could be provided: "I think it would be better if other information was in written form. It is quite impossible to remember all that is said in verbal exchanges. I think it would be useful if points raised in discussions were collected in the form of answers to question[s]" (p10).

d. There was concern for people	
who were less able than herself	
to ask for information:	
"I can't help feeling that I was	
lucky enough to be able to ask	
for any information I needed and	
therefore received" (p10).	
2. Patient and family	
communication and inclusion	
People with experience of bed	
based IC felt it important to	
involve family members in	
decision making, and	
sometimes felt pressured into	
making decisions which my	
family should be involved in.	
"It would have been better to	
have my wife involved in all	
discussion about my care once I	
was able to go home" (p10).	
"We as a family never got a	
straight answer to questions that	
was asked" (p10).	
3. Lack of knowledge or	
understanding of patient's	
condition or treatment	
People with experience of bed	
based IC felt that physio didn't	
know their condition.	
"The condition of my leg has	
deteriorated since my stay in X	
Hospital mainly because up to	

date in information of treatment was not relayed. The staff had no knowledge of current treatment" (p18). "Also information at handover was poor. My file was rarely read!" (p18). 4. Joined up, appropriate, timely & informed services, continuity issues & discharge "More time to speak to social worker about after care" (p18). No data on support, training, or advocacy was reported. B. People with experience of home based IC felt improvement in services needed in: 1. Joined-up, appropriate, timely and informed services, for example in Discharge & after care plans. People with experience of home based IC experienced difficulties around discharge arrangements and after-care planning owing to lack of responsiveness of, or lack of communication with after-care services, such as telecare, resulting in an extended stay in hospital.

"My husband and I would like
someone to explain what
aftercare is available to us, as
we are not sure how to proceed"
(p20).
"Discharged too early before
arrangements could be made,
on a bank holiday Monday"
(p21).
2. Timeliness and information
about how long to wait, People
with experience of home based
IC felt that they have a long wait
for services to be put in place,
delaying discharge from
hospital, and a slower recovery.
On occasions the information
given to patients regarding
waiting time was inaccurate.
"We had to wait a long time for
someone to come" (p21).
3. Lack of appropriate,
consistent information about
services or care a concern.
People with experience of home
based IC felt they had very little
information about the services
that they were receiving or could
have access to. Contact
information for services was
also lacking

"Some written information about
what exercises to do and some
phone numbers to get help
from" (p24).
"The hospital did not give much
info - about the visits. Perhaps a
quick phone call to let us know
when to expect a visit could
have helped. I had to ring the
hospital to find out" (p24).
4. People with experience of
home based IC reported having
little or no information about
discharge information:
"More information needed to
when the services came to an
end" (p24).
No data on support, training, or
advocacy was reported.
C. People with experience of
Reablement services felt
improvement in services needed
in provision of information and
advice to address lack of
appropriate, consistent
information about services or
care.
1. Joined-up, appropriate, timely
and informed services related to
2. Continuity issues as
potentially confusing for people

with experience of Reablement	
services to have different	
aspects of care provided by	
different teams, suggesting that	
"One continuous contact point	
across services from discharge	
to home care" (p28).	
3. Critical of discharge	
arrangements involved planning	
and organisation on leaving	
hospital services. "The	
transition from hospital to home	
could have been better I didn't	
have enough information about	
my condition symptoms - the	
importance of changing	
stockings" (p28).	
4. Organisational problems in	
Communication, coordination	
and organisation within and	
between services, resulting in	
lack of relevant information	
being passed between	
colleagues about patients'	
conditions or situations.	
"with so many teams	
involved, I felt your colleagues	
couldn't keep up with each other	
along [with] the deterioration of	
my condition" (p29).	
5. Clear explanation: "A better	
explanation of the service at the	

beginning Messages
beginning. We were very
confused and it took a call to the
coordinator to explain what was
happening. (Different [people]
were saying different things)"
(p30).
6. Timeliness and information
about how long to wait. Waiting
times for services for some
patients considered
unacceptable. "It took 5 weeks
for the physiotherapist to visit,
we have had no support from
OT at all" (p29).
7. Felt service to be
inappropriate for their needs,
"The service bore no real
relation to how ill I was" (p29).
No data on support, training, or
advocacy was reported.

2. Hoffmann T and Tooth L (2004) Patient perceptions of the quality of information provided in a hospital stroke rehabilitation unit. British Journal of Occupational Therapy 67: 111-7

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
<b>Study aim:</b> The study aimed to explore the extent, source and format of the information	<ul> <li>Participants</li> <li>Service users and their families, partners and</li> </ul>	Narrative findings – Qual and V&E	Overall assessment of internal validity:
received by stroke patients while undergoing rehabilitation, along with their perceptions of	carers - Patients who had	Findings are presented in the following themes:	Overall assessment of external validity:

the quality of that information. The specific aims were to determine:

- 1. What written/non-written information was provided during stroke rehabilitation
- 2. Which rehabilitation unit health professionals provided this information
- 3. Patients' perceptions of the quality of this information in terms of:
- How well it provided the necessary information that they required and whether they wanted more
- Whether there were gaps and/or undue repetition
- Its relevance to their particular concerns and needs
- How it assisted them in coping with the lifestyle and the family reorganisations that occurred following stroke
- How easy it was to access, read and/or understand – The readability level of the written information (p112).

**Methodology:** Qualitative study.

stroke rehabilitation unit in a Brisbane hospital.

#### Sample characteristics

- Age Mean age 68 years old.
- Sex 53% male and 47% female.
- Ethnicity Not reported.
- Country of birth Not reported.
- Language English speaking only.
- Religion/belief Not reported.
- Disability Not reported.
- Long-term health condition The participants stayed in the rehabilitation unit for a median of 29 days (IQR 14-35). The main types of stroke experienced by the participants were partial anterior circulatory infarcts (40%), lacunar (27%) and posterior circulatory infarcts (13%). Other types, including subarachnoid haemorrhages,

- 1. Types of information received and desired: Participants were asked whether they received information and whether they wanted more information on 21 topics which is presented in figure 1 on p113.
- All participants (n=15) received information about returning home and activities/exercises after stroke, with very few wanting more information (n=3).
- 13 participants received further information about equipment/assistive devises and the prevention of strokes.
- Participants who wanted more information on the following areas: Treatment after a stroke (n=8), causes of a stroke (n=8), stroke support groups (n=7), prevention of a stroke (n=6) and risk factors for stroke (n=6).
- Participants identified additional topics that were not on the original list which were medications and their side effects (n=4), specific medical information about their type of stroke (n=2) and specific symptoms such as dizziness, pain and loss of taste (n=4).

Qualitative interviews (n=15) were conducted with consenting patients discharged from a stroke rehabilitation unit of a hospital in Brisbane.

**Country:** Not UK. Brisbane, Australia.

Source of funding: Other. University. This study was supported by a University of Queensland New Staff Research Start-up Fund grant (2000).

- represented 20% of the strokes. For 87% of the participants, it was their first stroke (p.113).
- Socioeconomic position

   Forty per cent were
   married, with 33%
   widowed, 7% single and 20% divorced or separated.
- Pension Not reported.
- Living arrangement Not reported.

#### Sample size:

• Sample size- n=15.

**Costs?** Not reported.

- Most information (19/21 topics) was given to participants verbally with the main source of information coming from occupational therapists or doctors. Additionally, other health professionals i.e. physiotherapists, speech and language pathologists and social workers, gave information to participants.
- Written communication, with verbal, was given only on 2 topics emotional problems and the impact of stroke on relationships.
- 60% of participants reported information was given when a family or caregiver was present.
- Overall, 70% of participants felt that they had not received enough information after their stroke.
- 93% of participants stated their preferred method of information would be through a discussion with health professionals.
- 33% identified a preference for written information, additionally 20% further expressed information be cascaded through audio-visual,

computerised information or
stroke education groups.
2. Perception of the quality of
information received
- The perception of information
received was generally positive,
with participants rating 1-10 on
the following areas: satisfaction
with written information (9);
Ease of reading and
understanding (8.5); relevance
(8); satisfaction with non-written
information (8); how the
information assisted them to
cope with life after the stroke
(8); and ease of access (5).
- General comments were
positive, for example 'giving
them the information they
needed' (n=8) and 'making it
easier for them to do what was
expected during recovery' (n=6).
- One participant commented
that, "I felt more safe and more
confident after things were
explained to me". Another
commented, "it [the information]
gave guidelines and helped to
decrease my fears and
anxieties" (p.114).

 , , , , , , , , , , , , , , , , , , ,
- Conversely, 87% of
participants felt that there were
gaps in the information which
are reported above (see types of
information received and
desired).
3. Readability of written
materials - 25 materials were
reviewed by the research team
for analysis which were
generally fact sheets, brochures
or posters from stroke
organisations (n=14),
government departments (n-5),
hospital departments (n=5) and
pharmaceutical companies (n-
1) SMOG readability level of
the 25 materials was at an
equivalent grade of 12 (SD 1.5,
range 10-15) level of education:
8% at grade 10, 36% at grade
11, 24% at grade 12, 8% at
grade 13 and 12% each at
grades 14 and 15.
grade in and io.

# Research question 6 – Critical appraisal – the views and experiences of people using services, their families and carers

# 1. Ariss S (2015) National Audit of Intermediate Care: patient reported experiences. Sheffield: University of Sheffield School of Health and Related Research Care

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: To describe the	3. Measurement and	Does the study's research	Overall assessment of
findings from the qualitative	observation	question match the review	internal validity:
analysis of responses from		question?	-
patients for the 2015 National	3.1 Describes what was	Yes. Views and experiences of	
Audit of Intermediate Care	measured, how it was	people using IC &R, and their	Lack of methodological
(NAIC). Question asked: 'Do	measured and the results?	families and carers, about	details.
you feel that there is something	Yes.	information, advice, advocacy,	
that could have made your	Data driven by views and	training and support.	Overall assessment of
experience of the service	experiences on the question		external validity:
better?'	'Do you feel that there is	Has the study dealt	++
	something that could have	appropriately with any ethical	
Methodology: Survey.	made your experience of the	concerns? No. Not reported.	
Questionnaire Survey.	service better?' (Yes or No		
	response), with free text box	Were service users involved	
1. Objectives	to give further information.	in the study? Yes. Involved as	
	_	participants of the study.	
Objectives of the study	3.2 Measurements valid?	_	
clearly stated? Yes. To	Yes. Valid qualitative data.	Is there a clear focus on the	
describe the findings from the		guideline topic? Yes. Views	
qualitative analysis of	3.3 Measurements	and experiences of people using	
responses from patients for the	reliable? Yes.	IC &R.	
2015 National Audit of			
Intermediate Care (NAIC).	3.4 Measurements	Is the study population the	
Question asked: 'Do you feel	reproducible? Unclear.	same as at least one of the	

that there is something that could have made your experience of the service better?'

### 2. Design

# 2.1 Research design clearly specified and appropriate? Partly

insufficient information on study design. Report was described as a questionnaire survey (quantitative data related to frequency counts on the question of, 'Do you feel that there is something that could have made your experience of the service better?' (Yes or No response)). Following this there was a space to provide further information (qualitative data).

- **2.2 Clear description of context?** Partly. Insufficient information, participants are service users of IC&R
- 2.3 References made to original work if existing tool used? Yes.
  Using coding work that was

#### 4. Presentation of results

- **4.1 Basic data adequately described?** Partly. Insufficient data reported.
- 4.2 Results presented clearly, objectively & in enough detail for readers to make personal judgements? Partly. Results complemented by quotes from users.
- 4.3 Results internally consistent? Yes.
- 5. Analysis5.1 Data suitable for analysis? Partly. Due to insufficient info on survey methodology
- **5.2 Clear description of data collection methods and analysis?** Yes. Data collected using questionnaires. Analysis of qualitative data using NVivo (V.10).

groups covered by the guideline? Yes.
People using IC&R.

Is the study setting the same as at least one of the settings covered by the guideline? Yes. Participants in the programme were in: Dedicated intermediate care and reablement facilities, residential and nursing care homes and people's own homes.

Does the study relate to at least one of the activities covered by the guideline? Yes.

(For views questions) Are the views and experiences reported relevant to the guideline? Yes.

Was the study conducted in the UK? Yes. England.

undertaken in 2014 NAIC
report. Changes were made to
Coding Themes with 3 sub-
themes were added: 'Lack of
knowledge or understanding of
patient's condition or
treatment', 'Social interaction',
and 'Cleanliness'. 12 sub-
themes were modified to better
represent the data.
2.4 Reliability and validity of

- **2.4 Reliability and validity of new tool reported?** Unclear. Not reported
- 2.5 Survey population and sample frame clearly described? No. Sampling process not reported.
- 2.6 Representativeness of sample is described? No.
- 2.7 Subject of study represents full spectrum of population of interest?
  Unclear. Insufficient information.
- 2.8 Study large enough to achieve its objectives, sample size estimates

- **5.3 Methods appropriate for the data?** Yes.
- **5.4 Statistics correctly** performed and interpreted? No. Only descriptive statistics used for frequency counts in no. of positive and negative remarks (p3).
- **5.5 Response rate calculation provided?** No.
  Not possible for the reviewers to calculate.
- **5.6 Methods for handling missing data described?** No. Not reported
- **5.7 Difference between non-respondents and respondents described?** No. Not reported.
- 6. Discussion
- 6.1 Results discussed in relation to existing knowledge on subject and study objectives? Yes. Also

performed? Unclear. Not	compared with data from the	
reported.	NAIC Audit 2014.	
2.9 All subjects accounted	6.2 Limitations of the study	
for? Unclear. Not reported.	stated? No. Not reported.	
2.40 All appropriate	6.2 Descrite con he	
2.10 All appropriate outcomes considered? Yes.	<b>6.3 Results can be generalised?</b> Partly. Due to	
Views and experiences of	insufficient methodological	
people using IC&R to answer a	details and nature of	
survey question Do you feel	qualitative data.	
that there is something that	'	
could have made your	6.4 Appropriate attempts	
experience of the service	made to establish	
better?' (Yes or No response),	'reliability' and 'validity' of	
respondents used the free text	analysis? No.	
box to give further information.	Not reported.	
2.11 Response rate. Not	7. Interpretation	
reported. 776 respondents		
were involved (Bed Based,	7.1 Conclusions justified?	
302; Home-based, 298;	Partly. Due to	
Reablement Services, 176), but	methodological limitations	
no information on how many		
were sent questionnaires and not responded (response rate).		
Not possible to calculate the		
RR.		
2.12 Measures for contacting		
non-responders? Not		
reported.		

# 2. Hoffmann T and Tooth L (2004) Patient perceptions of the quality of information provided in a hospital stroke rehabilitation unit. British Journal of Occupational Therapy 67: 111-7

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The study aimed to	Is the context clearly	Does the study's research	Overall assessment of
explore the extent, source and	described? Clear. Clear	question match the review	internal validity:
format of the information	contextualisation of patients	question? Yes. Paper relates	+
received by stroke patients	detailed in results - i.e.	to views and experiences of	
while undergoing rehabilitation,	information on socio-economic	people who received support	Overall assessment of
along with their perceptions of	status, age, sex and whether	after a stroke, about	external validity:
the quality of that information.	this was a first stroke.	information and advice.	+
The specific aims were to	However, no consideration on		
determine:	race or religion therefore	Has the study dealt	
1. What written/non-written	uncertain of whether the	appropriately with any	
information was provided	sample is representative of the	ethical concerns? Partly.	
during stroke rehabilitation.	demographic. Caution to	Ethical clearance was	
2. Which rehabilitation unit	generalise.	obtained from the University of	
health professionals provided		Queensland and the hospital	
this information.	Was the sampling carried	involved. The paper states	
3. Patients' perceptions of the	out in an appropriate way?	that 'All the patients who were	
quality of this information in	Somewhat appropriate.	approached consented' but no	
terms of:	Participants are accessed	details are provided about how	
<ul> <li>How well it provided the</li> </ul>	through the chief occupational	this was achieved.	
necessary information that they	therapist over a period of 5		
required and whether they	months subject to meeting	Were service users involved	
wanted more	eligibility criteria. It is not clear	in the study? No. Study is not	
<ul> <li>Whether there were gaps</li> </ul>	whether sampling is purposive	co-produced.	
and/or undue repetition	or random, whether there is		
<ul> <li>Its relevance to their</li> </ul>	bias. Patients were identified	Is there a clear focus on the	
particular concerns and needs	over a period of 5 months by	guideline topic? Partly.	
	the rehabilitation ward's senior	Paper relates to views and	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
<ul> <li>How it assisted them in</li> </ul>	occupational therapist.	experiences of people who	
coping with the lifestyle and the	Important to note that a	received support after a	
family reorganisations that	requirement to partake was to	stroke, about information and	
occurred following stroke	speak English, thus excluding	advice. The nature of the	
<ul> <li>How easy it was to access,</li> </ul>	the perspective of non-English	setting and intervention is	
read and/or understand – The	speaking which impacts on the	stroke rehabilitation.	
readability level of the written	inclusion and equality of all		
information (p112).	accessing information.	Is the study population the	
		same as at least one of the	
Methodology: Qualitative	Were the methods reliable?	groups covered by the	
study.	Somewhat reliable. Data only	guideline? Partly.	
Qualitative interviews (n=15)	collected through 1 method -	The nature of the setting and	
were conducted with	qualitative interviews.	intervention is stroke	
consenting patients discharged		rehabilitation. Information	
from a stroke rehabilitation unit	Are the data 'rich'? Rich.	provided is to re-able stroke	
of a hospital in Brisbane.	Consistent findings which	victims who are provided	
	enable analysis across 21	information relating to	
Is a qualitative approach	topics to determine an average	returning home and	
<b>appropriate?</b> Appropriate. The	of how participants felt about	activities/exercises after	
paper seeks to explore 15	information they received, who	stroke.	
patients' perceptions of the	gave it to them and what was		
quality of information provided	the accessibility. Data is	Is the study setting the	
from a hospital stroke	presented under 3 key findings	same as at least one of the	
rehabilitation unit, therefore	that appear inductive from the	settings covered by the	
administer a 20-item	structured questionnaire.	guideline? Partly. Stroke	
questionnaire face-to-face.		rehabilitation unit of hospital in	
Data is consistent across the	Is the analysis reliable?	Australia.	
interviews because follows	Somewhat reliable. Data were		
same format with opportunities	analysed using SMOG (a		
for participants to elaborate.	reputable readability formula		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Is the study clear in what it seeks to do? Clear. Paper meets the aim which is defined to ascertain what information is provided to patients rehabilitating from a stroke, where the information is cascaded from and ascertaining the views and experiences of how accessible the information is. The paper includes relevant literature to contextualise the current status of the quality of information provided to stroke patients. The underpinning values of the study are cited to explore the effective methods of providing	used in the analysis of health education materials). The quantitative data were descriptively analysed using frequencies, means, standard deviations (SD), medians and interquartile ranges (IQR), using the Statistical Package for Social Sciences (SPSS, version 11.0). The participants' open-ended comments were grouped under common themes. It is not clear how these common themes were determined, whether there was a quality assurance process or how many researchers were involved in the analysis.	Does the study relate to at least one of the activities covered by the guideline? Partly. The activity is stroke rehabilitation rather than 1 of the 4 IC service models.  (For views questions) Are the views and experiences reported relevant to the guideline? Yes. Study gathers 15 participants' views and experiences about information received after suffered stroke. Important to note that for most participants this was their first stroke.	
information to stroke patients and conduct a pilot study to examine current practices in information provision in 1 hospital in Australia.  How defensible/rigorous is the research design/methodology?  Somewhat defensible. Thorough eligibility	Are the findings convincing? Convincing. Internally quantitative, coherent findings which are supported by open ended comments and clustered to ensure most common response is presented.  Are the conclusions adequate? Adequate. There is	Was the study conducted in the UK? No. Australia.	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
consideration to include	a clear link between the data		
participants who are recruited	and implications for practice.		
to partake in study. However,	However, caution to generalise		
could be considered exclusive	due to small scale study in 1		
due to only including English-	hospital in Australia. Other		
speaking participants.	hospitals might follow different		
Recruited through senior	procedures. Limitations are		
occupational therapist but no	interwoven in the discussion.		
information on sampling,			
therefore could be susceptible			
to bias. Clear aims with			
thematic findings to highlight			
practical implications for			
professional/policy audience.			
How well was the data			
collection carried out?			
Appropriately. Methodology			
meets research aim to collect			
the views and experiences of			
patients (n=15) experiences of			
returning home after a stroke.			
The 20-item questionnaire			
consisted of closed and open-			
ended questions to be			
administered face-to-face by			
the research team, typically			
interviews lasted 1½ hours.			
Patients were identified over a			
period of 5 months by the			

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
ehabilitation ward's senior			
ccupational therapist. Little			
onsideration of limitations of			
lata collection methodology			
especially as the eligibility			
riteria included patients who: -			
vere being discharged to			
community living (nursing home			
or care facilities were			
xcluded); - comprehensive			
nderstanding of England, so			
ble to give consent; - and, no			
sychiatric comorbidity that			
vould impact participation			
p112).			

# Research question 7.

- a) What characteristics of intermediate care and reablement service models and approaches are associated with improving outcomes for adults using these services and their families?
- b) What do adults using intermediate and reablement care services, their carers and families consider to be the important characteristics of service models and approaches?
- c) What do health, social care and other practitioners consider are the important characteristics of intermediate care and reablement service models and approaches?

# Research question 7 – Findings tables – Effectiveness

1. Ariss S, Enderby P, Smith T et al. (2015) Secondary analysis and literature review of community rehabilitation and intermediate care: an information resource. Southampton: National Institute for Health Research

Research aims	PICO (population, intervention,	Findings	Overall validity
Study aim: This review relates to 4 questions, 1 of which matches our review question - To examine the effectiveness of different models of intermediate care, i.e. What team-level factors are	<ul> <li>comparison, outcomes)</li> <li>Participants: Service users and their families, partners and carers.</li> <li>Sample characteristics:         <ul> <li>Age - Older people, (age not reported).</li> <li>Sex - Not reported.</li> <li>Ethnicity - Not reported.</li> <li>Religion/belief - Not reported.</li> </ul> </li> </ul>	Narrative findings – effectiveness - Results of the systematic review (Data from 5 included studies): Characteristics of service models and approaches to IC: A. Interprofessional/interdisciplinary teamworking (defined as work groups that include more than 2 professional groups of disciplines) - Blewett 2010 (non-RCT, N=339): Patients who received care from an interprofessional team	Overall validity rating Overall assessment of internal validity:  Overall assessment of external validity: ++
associated with the greatest benefits for patients in terms of health status?	<ul> <li>Disability - Not reported.</li> <li>Long term health condition - Unclear, IC users likely to have long term health conditions.</li> <li>Sexual orientation - Not</li> </ul>	had significantly shorter lengths of stay (20.3 days) than patients receiving care by the traditional model (27 days). These team-level factors were suggested as contributing to these improvements:	

#### Methodology:

Systematic review. From the findings of the literature review, secondary analysis of the relationship between structural team-level variables and patient outcomes were conducted Other. From the findings of the systematic review, secondary analysis of the relationship between structural team-level variables and patient outcomes were conducted.

Country: UK.

# Source of funding: No. Not reported.

- reported.
- Socioeconomic position Not reported.

# Sample size:

Systematic reviews: number of studies - 5 studies (different designs) included in SR, also used in the secondary analyses.

#### Intervention:

- Intervention category -Intermediate care.
- Describe intervention no details.
- Delivered by health and social care professionals.
- Delivered to older people who used IC
- Duration, frequency, intensity, etc. no details.
- Key components and objectives of intervention - no details.
- Content/session titles no details.
- Location/place of delivery home and bed based

**Comparison intervention:** One included study compared care

- a. team composition- right size and able to counteract negative effects of status differences
- b. team tenure a core of the interdisciplinary team had all worked together for several years c. Regular team meetings to discuss patient care were held several times a week and a formal team meeting was held every 3 weeks d. task allocation tasks were matched between roles and responsibilities
- e. cohesiveness be actively promoted f. open communication to encourage interdisciplinary team members to share information about both progress and process. Communication a positive aspect of the team. (p52).

#### B. Skill Mix -

Dixon 2010 (multivariate analysis of patient data, N=between 337 to 443 patients): This study assessed the relationship between skill mix, patient outcomes, length of stay and service costs in 14 IC team services in England, working primarily with older people. Independent variables included the numbers of different types of staff within a team and the ratio of support staff to professionally qualified staff within teams. It found that an increased skill mix (raising the number of different types of staff by one) is associated with a 17% reduction in service costs (p=0.011). There is weak evidence (p=0.090) that a higher ratio of

from an interprofessional team with care from a traditional single providers (Blewett 2010); one compared the use of an integrated care facilitator (ICF) vs. no ICF (Bird 2010).

# Outcomes measured:

Service user related outcomes.

# Follow-up:

No details.

**Costs?** Cost effectiveness of different models of IC; data not extracted as not part of the review question.

support staff to qualified staff leads to greater improvements in EQ-5D scores of patients.

C. Integrated Care Facilitators -Bird 2010 (a comparative study, N= not reported) This study 'trialled the use of 'integrated care facilitators' for patients with COPD and CHF. The study was a collaboration between acute and community-based services to reduce hospital (re)admissions and improve health outcomes in patients who frequently presented to hospitals. The care model was designed by a multidisciplinary care team and involved the co-ordination of care between different disciplines and agencies by the facilitator. Health facilitators undertook a comprehensive assessment of needs using established disease-specific assessment tools. The assessment results were discussed at a case conference and an individual care plan was developed from these discussions. The facilitator then provided information, education and advice to the patient and facilitated the patient's access to the services they required, including making appointments and ensuring the care was delivered in a way appropriate for the client' (p53).

#### **Findings**

- 1. For COPD patients:
- a. Emergency readmissions were reduced by 10% in the intervention group (integrated care

facilitators) compared with an increase of 45% in the control group (no integrated care facilitator).

- b. Hospital admission were reduced by 25% in the intervention group (integrated care facilitators) compared with an increase of 41% in the control group (no integrated care facilitator).
- c. Length of stay were decreased by 18% in the intervention group (integrated care facilitators) compared with an increase of 51% in the control group (no integrated care facilitator).
- 2. For the CHF patients:
- a. Emergency readmissions were reduced by 39% in the intervention group (integrated care facilitators) compared with a reduction of 26% in the control group (no integrated care facilitator).
- b. Hospital admission were reduced by 36% in the intervention group (integrated care facilitators) compared with a reduction of 20% in the control group (no integrated care facilitator).
- c. Length of stay were decreased by 36% in the intervention group (integrated care facilitators) compared with an increase of 15% in the control group (no integrated care facilitator). Mortality for both intervention arms groups (integrated care facilitators) combined was 18% at 365 days compared with 36% in

the non-intervention groups (no integrated care facilitator). No other team-level factors were tested in the trial.

- D. Characteristics Of High-Quality Care Burton 2009 (qualitative study, N=not reported) This study examined the organisational features staff felt were important for the delivery of high-quality care. Members of multidisciplinary stroke rehabilitation teams (in acute care settings) were interviewed and the following factors were identified as important:
- 1. Teamworking, supported by multidisciplinary rounds.
- 2. Supervision and personal development reviews to ensure continuous improvement and development and education and training for staff to access relevant training opportunities.
- 3. Leadership, both internally and externally, a holistic approach to care in which staff get to know patients and understand family and social relationships.
- 4. Communication via multidisciplinary notes and bedside notices can be effective ways of ensuring all staff understand the therapy regime/plan.
- 5. Informal communication was recognised as extremely important and strong interpersonal relationships were vital to ensure effective communication.
- 6. Barrier to effective interdisciplinary

teamworking included rotation of staff, location of staff and risk aversion (p53).

E. Challenges For IC – Regen 2008 (Qualitative case study, N=61 interviews and N=21 focus groups: p53) The challenges, benefits and weaknesses' of IC as perceived by patients:

- a. Benefits of IC-flexibility, patient centeredness, promotion of independence, with the 'home-like' environment.
- b. Challenges at a structural level, workforce and funding shortages, poor collaboration between health and social care agencies and lack of support/involvement from clinicians.
- c. Weaknesses insufficient capacity and problems of access and awareness between mainstream care and IC services.
- d. Service user benefits from the fact that all of the services operated as interdisciplinary teams.

Secondary analysis of data of the above 5 studies (App 3-5, p155-61) This 2-stage secondary data analysis investigated the relationship between 13 different variables at team levels (such as no. of team leaders, management staff, social care staff, domiciliary support staff, clinical support staff and non-clinical staff, % of skilled workers in team) and 6 patient outcomes variables (such as change in TOM [Therapy Outcome Measures] in

impairment, well-being, activity, quality of life, length of hospital stay etc.). A multiple imputational approach was used to address the impact of a substantial amount of missing data.

# Findings:

- 1. Skill mix TOM impairment improves more among teams that have a higher skill mix (i.e. larger number of different disciplines: p= 0.052 for complete case data [ignoring missing data], p=0.050 incorporating imputations), with TOM impairment change scores increasing by 0.029 units with each additional discipline represented in the team. (Coefficient 0.029, 95% CI –0.000 to 0.057, p= 0.052 for complete case data; Coefficient 0.032, 95%CI -0.000 to 0.065 0.050a: p155).
- 2. Ratio of support staff to professionals
- a. Having more clinical support staff in teams was associated with a small improvement in TOM impairment scores (p=0.025 for complete case data, p=0.040 incorporating imputations). For every unit increase in clinical support staff, TOM impairment scores increased by approximately 0.01 units; this increase was consistent whether or not the complete case data set or a data set with imputed data was used. (Coefficient 0.010, 95% CI 0.001 to 0.019, p=0.025 for complete case data; Coefficient 0.011, 95% CI 0.001 to 0.021, p=0.040 incorporating imputations: p155).

	b. A similar relationship between TOM impairment and number of domiciliary support workers (p=0.030 for complete case data, p=0.023 incorporating imputations) but this was heavily influenced by the data from 1 team. The largest standardised mean TOM impairment change (0.6 units greater than predicted by its case mix) was observed in the team with the highest number of domiciliary staff but removing this data point from the analysis resulted in a substantially reduced (and non-significant) relationship. No significant relationships found between other team variables and outcome variables (well-being, activity, quality of life, length of hospital stay).
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2. Smith T, Harrop D, Enderby P et al. (2013) Exploring differences between different intermediate care configurations: a review of the literature. Sheffield: Sheffield Hallam University, University of Sheffield

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To explore the relationship between different team characteristics and patient outcomes in intermediate care.  Methodology:	Participants:  Service users and their families, partners and carers - Some included studies report data including service user views.  Professionals/practitioners - Most of the included studies report the views of	Effect sizes - Data not routinely reported. Only odds ratios in Fearon et al BUT this is a review of single condition rehab (stroke) and therefore does not meet our review criteria for Q7.  Narrative findings – effectiveness – Note that none of the included papers directly addressed team level factors that influence	Overall assessment of internal validity: + Overall assessment of external validity: ++
Methodology: Systematic review.			

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Country: Range of countries.  Source of funding: Not reported.	team characteristics that contribute to positive outcomes.  Sample characteristics:  Age - Not reported.  Sex - Not reported.  Ethnicity - Not reported.  Religion/belief - Not reported.  Disability - Not reported.  Long term health condition - This was not systematically reported but the review was searching for IC services supporting older people with multiple morbidities. Some of the single condition interventions included people who had suffered strokes, people with COPD and people with diabetes.  Sexual orientation - Not reported.  Socioeconomic position - Not reported.  Sample size: 18 studies: Systematic reviews: Batty (2010),	them mention team characteristics that are associated with positive patient outcomes or staff satisfaction:  Supervision and Personal Development, promote and reward - 2 papers  Education and Training - 2 papers  Co-location of team members - 1 paper  Appropriate Staff/Skill Mix - 1 paper  Recruit Staff with IdT skills - 1 paper  Patient Centredness - 3 papers  Holistic approach - 3 papers  Delivery of care at home -one1 paper  Systematic Approach to Quality - 1 paper  Interdisciplinary Teamworking - 18 papers  Interdisciplinary Team Leadership - 2 papers  Team tenure (longer is better) - 2 papers  Team Meetings (regular) - 4 papers  Multidisciplinary Rounds - 1 paper  Multidisciplinary Notes - 1 paper  Multidisciplinary Notes - 1 paper  Effective Communication - 3 papers  Interpersonal Relationships - 1 papers  Flat Team Structure - 1 paper  Goal and Outcome Focus - 1 paper.  Narrative findings - qual and v&e —  Qualitative studies in the review found 'indicative evidence that a number of team process	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Winkel et al. (2008), Trivedi et al., Fearon et al. (2012, Cochrane), Zwarenstein et al. (2009, Cochrane); Literature reviews: Brewer and Williams (2010), Boult et al. (2009); Empirical studies: Blewett et al. (2010), Jesmin et al. (2012), Roblin et al. (2011); RCTs: Borgemans et al. (2009), Bird et al. (2010); Cross-sectional study: Dixon et al. (2009); Qualitative studies: McClimens et al. (2010), Regen et al. (2008); Mixed methods: Nancarrow et al. (2012), Ryvicker et al. (2011); Case study: Burton et al. (2009).		
	Intervention:  Intervention category - Interdisciplinary intermediate care teams (although note that not all of the teams featured in the included studies qualify as intermediate care according to the review protocol for RQ7) Only 4 papers addressed factors directly relating to interdisciplinary, intermediate care teams - the others fitted		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>wider definitions of IC.</li> <li>Description - The interventions in the included studies included: Interprofessional care for COPD and CHD Stroke rehab - include ESD IC teams Team based primary care.</li> <li>Delivered by - A range including nurses, social workers, occupational therapists and physiotherapists, primary care professionals.</li> <li>Delivered to - Older people, often with multiple morbidities, some with single conditions.</li> <li>Duration, frequency, intensity, etc Not generally specified.</li> <li>Key components and objectives of intervention - To rehabilitate patients more effectively, facilitate earlier discharge, promote greater independence and prevent readmissions.</li> <li>Content/session titles - Not specified.</li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Location/place of delivery -     Mainly home based     interventions.		
	Comparison intervention: Care as usual e.g. acute hospital care.		
	<ul> <li>Outcomes measured:</li> <li>Service user related outcomes - Quality of life.</li> <li>Family or caregiver related outcomes - Caregiver 'strain'.</li> <li>Satisfaction with services - From both service user and practitioner perspective.</li> <li>Service outcomes - Length of stay, emergency admissions, re-admissions.</li> </ul>		
	Follow-up: In some but not all of the included studies.		
	Costs? Some of the included studies reported that the models being evaluated achieved savings (service costs) and 1 systematic review found that early discharge to therapy based rehab "may be cost-effective" if delivered by a		

PICO (population, intervention, comparison, outcomes)	Overall validity rating
multi-disciplinary team.	

## Review question 7 – Critical appraisal – the views and experiences of people using services, their families and carers

3. Dixon S, Nancarrow SA, Enderby PM et al. (2015) Assessing patient preferences for the delivery of different community-based models of care using a discrete choice experiment. Health Expectations 18: 1204–14

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The aim	Participants: Service users and	Effect sizes -	Overall assessment
is 'to assess patient	their families, partners and carers	In the regression analysis, data is provided on	of internal validity:
preferences for	- Participants were service users	how the care preferences of the respondents	+
different models of	who were patients using an	vary according to their EQ-5D and TOMS	
care defined by	Intermediate Care service who	scores. In order to allow comparisons to be	Overall assessment
location of care,	had recently been discharged	made, the preferences are shown firstly for all	of external validity:
frequency of care	home from hospital.	respondents, and then for the following sub-	++
and principal carer	·	groups of respondents: those scoring EQ-	
within community-	Sample characteristics:	5D>0.5; those scoring EQ-5D<0.5; those whose	
based health-care	<ul> <li>Age - All participants 65 or</li> </ul>	TOMS measure is less than 3; those whose	
services for older	over. 9.1% were aged <70,	TOMS measure is greater than or equal to 3;	
people' (p1204).	37.7% were aged 70-79,	LoC<2; and LoC>1 (LoC data omitted from this	
	48.0% were aged 80-89, and	summary, as insufficient data provided about	
Methodology:	5.2% were aged 90+.	what the quoted values mean for interpretation	
Surveys. Using the	• Sex - 37.7% were male, 62.3%	of the measurement). A baseline measure is	
Discrete Choice	female.	selected for each parameter, against which	
Experiment	Ethnicity - Information not	participants preferences can be measured. The	
approach, a	provided.	baseline preference has a coefficient of 0, with a	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
quantitative survey was administered via interviews.  Country: UK. Unidentified large city within the United Kingdom.  Source of funding: Government. 'The research was funded by the National Institute for Health Research via its Service Delivery and Organisation research programme' (p1213). This is a government health research funding body.	<ul> <li>Religion/belief - Information not provided.</li> <li>Disability - Information not provided.</li> <li>Long term health condition - The state of health of the service users was measured using the EQ-5D, on a scale of -0.6 to 1, 'where 1 is full health and 0 represents a health state considered by the general population to be equally preferable to being dead' (p1208). Below 0 is considered to be worse than death. Using this scale, 9.1% measured &lt;0, 13.0% measured 0 to 0.39, 54.5% measured 0.4 to 0.69, and 23.4% measured 0.7 to 1. Only 4/77 participants measured over 0.8.</li> <li>Sexual orientation - Information not provided.</li> <li>Socioeconomic position - Not repo Information not provided.</li> <li>Sample size: 77 service user participants.</li> </ul>	negative coefficients suggesting a variable is less preferred than the baseline option, and positive coefficients that it is more preferred. The selected baseline options are: care at home; once a week; with support worker as principal carer.  For all respondents, the coefficients are: Outpatients -0.39, P-value 0.003; Hospital -0.77, P-value<0.001; Nursing home -0.95, P-value<0.001; 1 contact pw 0.00; 3 contacts pw 0.02, P-value 0.869; 7 contacts pw 0.03, P-value 0.792; 15 contacts -0.28, P-value 0.018; Support worker 0.00; Nurse 0.22, P-value 0.241; Therapist 0.27, P-value 0.295; Doctor 0.08, P-value 0.701.  For EQ5D>0.5: Home 0.00; Outpatients -0.24, P-value 0.095; Hospital -0.64, P-value<0.001; Nursing home -0.80, P-value<0.001; 1 contact pw 0.00; 3 contacts pw -0.1, P-value 0.927; 7 contacts pw -0.6, P-value 0.666; 15 contacts pw -0.34, P-value 0.009; Support worker 0.00; Nurse 0.241, P-value 0.08; Therapist 0.20, P-value 0.498; Doctor -0.01, P-value 0.962.  For EQ5D<0.5: Home 0.00; Outpatients -1.0, P-value 0.002; Hospital -1.18, P-value 0.002; Nursing home -1.72, P-value <0.001; 1 contact	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	Intervention:  • Intervention category - The study involved service users' views about hypothetical options for 3 aspects of service provision or intervention:	pw 0.00; 3 contacts pw 0.14, P-value 0.674; 7 contacts pw 0.61, P-value 0.068; 15 contacts pw 0.02, P-value 0.938; Support worker 0.00; Nurse 1.06, P-value 0.039; Therapist 0.65, P-value 0.293; Doctor 0.42, P-value 0.369.	
	location of care, frequency of care and principal caregiver.	Any TOMS<3: Home 0.00; Outpatients -0.31, P-value 0.125; Hospital -0.32, P-value 0.143; Nursing home -0.73, P-value 0.000; 1 contact	
	<ul> <li>Outcomes measured:</li> <li>Service user related outcomes</li> <li>The outcome measured was the preference of service users</li> </ul>	pw 0.00; 3 contacts pw 0.01, P-value 0.942; 7 contacts pw 0.18, P-value 0.360; 15 contacts pw -0.16, P-value 0.367; Support worker 0.00; Nurse 0.33, P-value 0.220; Therapist 0.43, P-value 0.234; Poster 0.33, P-value 0.334	
	receiving Intermediate Care for the delivery of IC in terms of: location (home, nursing home, outpatients or day centre); frequency per week of contacts	value 0.234; Doctor 0.28, P-value 0.324.  All TOMS>3: Home 0.00; Outpatients -0.69, P-value <0.001; Hospital -1.27, P-value <0.001;  Nursing home -1,35, P-value <0.001; 1 contact	
	(1, 3, 7 or 15); and profession of principal carer (support worker, therapist, nurse or doctor). A regression analysis was carried out of the degree	pw 0.00; 3 contacts pw -0.06, P-value 0.730; 7 contacts pw -0.14, P-value 0.407; 15 contacts pw -0.48, P-value 0.005; Support worker 0.00; Nurse 0.10, P-value 0.708; Therapist 0.02, P-value 0.955; Doctor -0.23, P-value 0.460.	
	to which participants expressed a preference, according to their EQ5D measure of health-related quality of life, and Therapy Measuring Outcome Scale	The study uses the combined coefficients to rank the 64 possible permutations of care package in order of service user preference; full details of the rankings are not provided, but could be worked out using the table showing the	

PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
(TOMS) measure of care needs. TOMS measures service' care needs and functioning in relation to impairment, activity, social participation and well-being on a scale of 0-5, with lower scores indicating higher levels of impairment. EQ-5D is quality of life measure based on	regression analysis data. The highest ranked permutation is care at home, 7 times per week, with a therapist as principal carer, which has a linear predicted value of 0.30, and a 95% confidence interval of LPV -0.27 to 0.88. The lowest ranked is care being provided in a residential home 15 times per week by a support worker, which has LPV -1.23 and 95% CI of LPV of -1.60 to -0.86.	
<ul> <li>service user responses, on a scale of -0.6 to 1, with -0.6 indicating the worst possible health.</li> <li>Family or caregiver related outcomes - Family or caregiver outcomes not measured.</li> <li>Satisfaction with services - Not measured.</li> <li>Service outcomes - Not measured.</li> </ul>	When participants in the survey were asked to rank different aspects of care as very important/quite important/little importance/not important, the aspect they were most likely to rank as very important was location. Although most carers rated all aspects of care as very important, the aspect which was most likely to be rated as of little or no importance was type of carer. Taking 'home' as the baseline for comparison of placement preference in the regression analysis, it is preferred to other	
Follow-up: There was no follow-up.  Costs? No. Economic evaluation and cost information were not considered in this study.	options (outpatients, hospital, nursing home) by all respondents and by all sub-groups of respondents. When contact with caregivers at once per week was used as the baseline for comparison, that level was strongly preferred by all respondents to contact at 15 times per week	
	(TOMS) measure of care needs. TOMS measures service' care needs and functioning in relation to impairment, activity, social participation and well-being on a scale of 0-5, with lower scores indicating higher levels of impairment. EQ-5D is quality of life measure based on service user responses, on a scale of -0.6 to 1, with -0.6 indicating the worst possible health.  • Family or caregiver related outcomes - Family or caregiver outcomes not measured.  • Satisfaction with services - Not measured.  • Service outcomes - Not measured.  Follow-up: There was no follow-up.  Costs? No. Economic evaluation	regression analysis data. The highest ranked permutation is care at home, 7 times per week, with a therapist as principal carer, which has a linear predicted value of 0.30, and a 95% confidence interval of LPV -0.27 to 0.88. The lowest ranked is care being provided in a residential home 15 times per week by a support worker, which has LPV -1.23 and 95% CI of LPV of -1.60 to -0.86.  Narrative findings – effectiveness When participants in the survey were asked to rank different aspects of care as very important/quite important/little importance/not important, the aspect they were most likely to rank as very important was location. Although most carers rated all aspects of care as very important, the aspect which was most likely to be rated as of little or no importance was type of care. Taking 'home' as the baseline for comparison of placement preferred to other options (outpatients, hospital, nursing home) by all respondents and by all sub-groups of respondents. When contact with caregivers at once per week was used as the baseline for comparison, that level was strongly preferred by

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		be set at 3 or 7 times per week. The negative response to contacts being 15 times per week was present among all sub-groups apart from those with a lower health-related quality of life where it was slightly preferable to once per week. This group showed a far stronger preference for contact to be set at 7 times per week. Participants with the highest functioning level were the most likely to prefer once per week contact to all other suggested levels. When support worker was the baseline for comparison with other possible caregivers, the response among all respondents was to prefer the other options, with the strongest preference being for therapists. There was a strong preference for the caregiver to be a nurse among those with a low health-related quality of life. The findings indicate a strong preference among all participants for Intermediate Care being provided at home. With regard to level of care and preferred caregiver, these choices can vary according to the service user's circumstances and needs, with service users with poor health preferring nursing care and contact 7 times per week, while those whose functioning is scored at a lower level would prefer a therapist as principal caregiver. Using the values from the linear regression table to rank the different options, the highest ranking	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		option would be for care to be provided at home, 7 times per week, by a therapist. However, apart from the preference for care being provided at home, the other preferences are not absolute and can vary according to the health and functioning levels of the service users.	

4. Pearson M, Hunt H, Cooper C et al. (2015) Providing effective and preferred care closer to home: a realist review of intermediate care. Health & social care in the community 23: 577–93

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The aim of the study was to explore what factors need to be taken into account, in terms of service users, practitioners and organisations, when local Intermediate Care services are being designed and delivered.  Methodology: Systematic review. The study is a 'realist	<ul> <li>Participants:         <ul> <li>Service users and their families, partners and carers - The reports reviewed deal with service users and their carers.</li> <li>Professionals/practitioners - The reports reviewed deal with support workers, professionals and service organisers.</li> </ul> </li> <li>Sample characteristics:         <ul> <li>Age - 24/38 studies reviewed identify 'older people' as their service user group, although no specific definition of the term is provided.</li> </ul> </li> </ul>	Effect sizes – Data about effect size in the studies considered in this realist review are not provided.  Narrative findings – effectiveness The study draws on 38 research studies to identify ways to improve the effectiveness of procedures for delivering Intermediate Care, and describes its findings as a 'roadmap' for delivering this service. It does not prioritise particular features as being more important, or distinguish between necessary and sufficient causes, but suggests that it could be used as a 'diagnostic checklist' (p589) to improve currently existing services. It suggests that Intermediate Care can best achieve its objectives by: making	Overall assessment of internal validity:  + Overall assessment of external validity: ++

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
review', a particular form of systematic review which aims to use evidence to address the practical realities and challenges of public policy and practice.  Country: UK. The study was carried out by UK researchers, and 33/38 studies reviewed were by UK authors.  Source of funding: Government. The research project was funded by the National Institute for Health Research Service Delivery and Organisation (NIHR SDO), a government body.	presented about the religion or beliefs of the samples.	sure the service user remains the central focus; involving service users and their carers collaboratively in decision-making; making sure this happens at organisational and practitioner level, to help service users develop confidence that their input will be listened to and influential on service delivery; ensuring that the goal is delivering 'proactive, holistic and person-centred care' (p590) rather than responding to crises and economic drivers.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Sample size:</li> <li>Systematic reviews: number of studies - 38 studies.</li> <li>Where participation in the study is recorded or applicable, there were a total of 3896 participants in 30 studies, with the number of participants varying from eight-2,253.</li> </ul>		
	<ul> <li>Intervention:</li> <li>Intervention category - The interventions in the sample are community and bed based, and include both admission avoidance (AA) and early supported discharge (ESA).</li> <li>Description - The realist review does not provide specific information about the types of intervention used in the studies it considers, other than that they all concern the provision of Intermediate Care.</li> <li>Delivered by - The interventions are delivered by support workers and professionals.</li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>Delivered to - The service are delivered to people receiving Intermediate Care.</li> <li>Duration, frequency, intensity, etc Information not provided.</li> <li>Key components and objectives of intervention - The objectives of the interventions were admission avoidance (AA) or early supported discharge (ESD).</li> <li>Content/session titles - Information not provided.</li> <li>Location/place of delivery - Service users' homes and other care environments, including residential ESD services.</li> <li>Comparison: This was not a comparison study.</li> </ul>		
	Outcomes measured  • Service user related outcomes - Factors in procedures of delivering Intermediate Care that when present make Intermediate Care 'work'. Measures for assessing		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	effectiveness of procedures are not presented, but it is likely that different measures were used in the different studies included in the realist review, which would have made it difficult to apply a standardised measure of assessment.  • Family or caregiver related outcomes - The review presents 1 study where the role of carers in providing Intermediate Care, their relationship with professionals, and difficulties in this relationship that professionals, are described.  • Satisfaction with services - No measure of satisfaction is presented, but the review does consider what factors when present in the delivery of Intermediate Care services make them 'work'.  • Service outcomes - The service outcome is a 'roadmap' of factors it is recommended that decision-makers should		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	consider when designing Intermediate Care services, so as to maximise their effectiveness in any local context.		
	Follow-up: There is no data about follow-up time periods of the studies in this realist review.		
	<b>Costs?</b> No. There is no economic evaluation or cost information.		

## 5. Wilson A, Richards S, and Camosso-Stefinovic J (2007) Older people's satisfaction with intermediate care: A systematic review. Reviews in Clinical Gerontology 17: 199–218

Research aims	PICO (population, intervention, comparison, outcomes)		Overall validity rating
Study aim: The aim of the review was to explore service user satisfaction of older people being provided with Intermediate Care.  Methodology: This is a systematic review of 31 studies	Participants: The review selected only papers which were studies of service user satisfaction or captured service users' views about Intermediate Care. Where there were views and satisfaction of partners and carers in the studies, these are not reported.  Sample characteristics  Age - The review reports that	In RCTs: Rudd (1997) found 79% with IC v 65% in control group satisfied with hospital care (p=0.032); 58%	Overall assessment of internal validity:  Overall assessment of external validity:  +

dealing with user satisfaction of older people being provided with in the 15 Randomized controlled trials the average age of service users in all but 2 trials was over 65. In all 5 non-satisfaction with IC v control for different	
Intermediate Care.  Intermediate Care.  Intermediate Care.  In all was over 05. In all 101- randomized studies with a comparison group, the average age of service users was over 65. In the 11 case series and qualitative studies, 4 give a mean age of over 65. One specifies an age range of 22- 76; 1 states that 20 (30%) are aged over 60; 1 states that 20 (30%) are specifies an age range of 22- 76; 1 states that 20 (30%) are aged over 60; 1 states that 89% of participants were aged 65 or over, 1 gives a mean age of 58; 1 provides a median age is not stated.  Source of funding:  Not reported.  In all 7 states with a comparison group, the average age of service users was over 65. In the 11 case series and qualitative studies, 4 give a mean age of Over 65. One specifies an age range of 22- 76; 1 states that 20 (30%) are aged over 60; 1 states that 89% of participants were aged 65 or over, 1 gives a mean age of 58; 1 provides a median age of 58; 1 provid	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	disabled in the UK.  Long term health condition - The majority of the studies were of service users with non- specific or general health issues, or were being provided with IC following a fracture or an operation. Five were studies where the service users had had a stroke, 3 where they had COPD, 1 where they cellulitis, and 1 where they cellulitis, and 1 where they had breast cancer.  Sexual orientation - Information not provided.  Socioeconomic position - Information not provided.  Sample size:  31 studies included: 15 RCTs, 5 Non-RCTs, 11 case series/qualitative studies. 30 included studies provided clear details of number of participants. A total of 3106 received the intervention, and 1437 were in control groups. The systematic review presented data about 1 study	75% vs. 48% favouring IC p=0.06. Corwin (2004) found no difference in overall satisfaction p=0.12, but IC patients scored more highly on location of care p<0.0001 and IC recipients' preference for home care was stronger p<0.0001. Donelly (2004) found higher satisfaction scores in IC group: mean satisfaction (SD) was 10.72 (1.44) vs. 9.70 (2.09) and mean overall satisfaction was 50.0 (9.66) vs. 11.19 (42.62) p=0.001. Wells (2002) found no differences in satisfaction scores for all dimension p=NS, but more IC would opt for the care they received again (88% vs. 69%, p<0.0001). Harris (2005) found % IC recipients rated services good or excellent 83.0 v 72.5 p=0.05, 95.7 vs. 91.3 not feeling under pressure (p=NS) and 94.8 v 96.5 would recommend to others (p=NS). Caplan (2006) found man (SD) scores higher in IC group: 4.66 (0.64) vs. 4.06 (0.94) p=0.0057. In non-randomised studies: O'Cathain (1994) found no difference between IC and control groups in satisfaction. Rink (1998) compared before and after participating in the scheme: pre-scheme 50% complained about transport and 40% about time	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	in a way that did not make clear how many service users participated.  Comparison numbers - The numbers in the control groups in the RCTs reviewed are: 164, 40, 49, 39, 124, 46, 17, 81, 49, 97, 30, 32, 101, 40, 99, 54, 54, 142 and 34: total 1392, mean no. of participants 73 The numbers in the control groups of studies with non-randomised designs are 28, 60 and 57: total 145, mean no. of participants 48. In 2 of these studies no control group numbers are given. Total in control groups: 1437. There are no control groups in the qualitative studies.  Intervention number - In the RCTs, the numbers receiving the intervention are: 167, 41, 37, 47, 114, 50, 15, 160, 51, 102, 30, 34, 121, 42, 101, 59, 54, 143 and 70. Total 1438, mean no. participants per study 76. In the non-randomised studies, the	of day of discharge; afterwards, 17% and 15%. No difference in satisfaction with medication or adequacy of care plan on discharge.  Boston (2001) found higher satisfaction from IC group in response to 19/20 questions across all domains (staff, communication, facilities, other) P<0.05.  Leff (2006) found higher satisfaction with IC group in 5 domains (physicians p=0.007, other staff p=0.042, convenience/comfort p=0.0003, admission p=0.0003 and overall satisfaction p=0.034), but no significant difference in 4 domains (nurses, pain control, safety, discharge), and no difference in % who would choose care in the same setting again or who would recommend to others.  Narrative findings – effectiveness Of the 18 studies comparing service users receiving Intermediate Care with those receiving usual care, 13 'observed statistically significant differences in evaluative satisfaction scores (overall evaluations, or for component scores)' (p212) favouring IC, with the rest observing no difference. 'All studies employing preference measures observed stronger preferences for home-based care' (p213).  Narrative findings - qual and v&e	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	numbers receiving the intervention are: 64, 67, 132 and 84, with 1 where the number of participants is unclear. Total 347, mean no. participants per study where numbers provided 87. In the case series and qualitative studies, the numbers receiving the intervention are: 91, 67, 29, 84, 32, 50, 16, 20, 60, 843 and 29. Total 1321, mean no. participants per study 120. Total receiving intervention in all studies: 3106. Mean no participants per study where numbers are given: 86.	Qualitative papers reviewed showed a preference for care being provided in the service user's home. Reasons included convenience, comfort, closeness to family and more personalised service delivery. However hospital could feel like a safer environment for patients with some conditions, as service users' main priorities were recovery and survival.	
	<ul> <li>Intervention:         <ul> <li>Intervention category - The intervention was community or bed-based, multi/interdisciplinary support designed to avoid hospital admission and facilitate hospital discharge. This service is termed Intermediate Care.</li> <li>Delivered by - Specific information about who</li> </ul> </li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	delivered the services in the studies reviewed is not provided.  Delivered to - The participants in the studies receiving the intervention were all being provided with Intermediate Care, and were mostly older service users. The control group participants were hospitalised, or were described as receiving 'usual care'.  Duration, frequency, intensity, etc Information not provided.  Key components and objectives of intervention - The key component of the intervention was that care was being provided to people who would otherwise have been in hospital. The objective of the intervention was to avoid hospital admission or facilitate hospital discharge.  Content/session titles - Details about the content of the interventions is not provided.  Location/place of delivery - 22 studies specify that the		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	services were being provided at home. In 5 others it is likely that the location of service delivery was at home, although this is not specified, e.g. early discharge or outreach schemes. Three were in specialist units, and 1 was in hospital and home.		
	Comparison: In the studies where there was a comparison, it was between service users being provided with Intermediate Care and those receiving services in hospital or being provided with 'usual care' services.		
	Outcomes measured:  Service user related outcomes The outcome measured was the satisfaction of older service users being provided with Intermediate Care.  Family or caregiver related outcomes - Family and caregiver related outcomes were not measured.  Satisfaction with services - The		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	quantitative studies used questionnaires and interviews to measure service user satisfaction with services provided to them, including satisfaction with Intermediate Care overall and with components including therapy, community support, active participation in programme planning, location of care, transport arrangements, whether care was well coordinated, communication, nurses/staff, pain control, safety, discharge and whether they would recommend the service to others.  • Service outcomes - Service outcomes not measured.		
	Follow-up: Only 1 study (Cunliffe 2004) used follow-up interviews, carrying out interviews before hospital discharge and then 4 weeks and 3 months later.		
	<b>Costs?</b> The review does not include cost information or an		

PICO (population, intervention, comparison, outcomes)	Overall validity rating
economic evaluation.	

## Research question 7 – Findings tables – Health, social care and other practitioners' views and experiences

6. Barton P, Bryan S, Glasby J et al. (2006) A national evaluation of the costs and outcomes of intermediate care services for older people: final report. University of Birmingham: Health Services Management Centre

	people. Illiai report. Oniversity of Birmingham. Health Services Management Centre			
Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating	
Study aim: 1. To establish the range, spread and speed of development of intermediate care services across England (data not relevant to review question). 2. To explore the views of intermediate care leads on the benefits and challenges of implementing intermediate care policy. 3. To assess the	<ul> <li>Participants:</li> <li>Service users and their families, partners and carers - Adults who used IC services.</li> <li>Professionals/practitioners - managers, clinicians, front line staff.</li> <li>Sample characteristics</li> <li>Age - IC managers and staff: age not reported. People using IC services were adults: Age not reported.</li> <li>Sex - IC managers and staff: not reported. People using IC services: not reported.</li> <li>Ethnicity - IC managers and staff: not reported. People using IC services: not reported.</li> </ul>	Narrative findings - qual and v&e Quantitative data from survey to establish the range, spread and speed of development of intermediate care services across England (data not relevant to review question) Combined qualitative data from postal survey of IC coordinators (ICC) and from IC managers, clinicians, front line staff in case study from 5 sites (Views on the benefits and challenges of implementing intermediate care policy):  A. Drivers and facilitators in the development of intermediate care:  a) The need to resolve the systemic problem of delayed discharges or 'bed-blocking': "If we can reduce our activity in the acute trust then we can divert resources to support our own services. That flow through intermediate care is crucial to help us by keeping beds free" (Site D, p64).  b) Partnership working between health and		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
impact of intermediate care on the service system as a whole and on individual service users (p8).  Methodology: Mixed methods.  1. Postal surveys (qualitative).  2. Case studies (qualitative).  3. Patient satisfaction survey.  Country: UK.  Source of funding: Government. Department of Health and the Medical Research Council	reported. People using IC services: not reported.  • Sexual orientation - IC managers and staff: not reported. People using IC	social services, good relations between health and social care staff at service delivery level to progress "I think it's the only way to have a range of services to actually slot in together and I think especially intermediate care which is really not just social care, it's very much social care plus, so it makes sense and I think it's extremely difficult to do it without it being a joint process" (Site A, p64).  c) The national policy context for intermediate care "Certainly the NSF and then the subsequent intermediate care guidance really focused everybody's minds within the service and within the organisation as a system to really try and think a bit more systematically about what we were doing" (Site A, p65).  d) Local 'champions' for intermediate care, i.e. individuals with some influence, actively involved in the promotion and delivery of intermediate care services: "He (a clinician) was the only person that was really very supportive and keen for it to carry on [] he was putting in a good word really and saying he wanted to continue to work with the services" (Site A, p65).  e) Perceived benefits for patients, developing 'patient-centred' services that promoted patient choice and independence: "It is about enabling people to stay in their own homes [] Meeting what the customer wants" (Site C, p65).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	within the 5 case-study sites): N= 82 Patient satisfaction survey: N= 843 (of a total of 1470 completed episodes of care, a response rate of 57%).  Outcomes measured:  • Satisfaction with services  • Service outcomes  Costs?  Data NOT extracted: not within scope of Q7	B. Barriers to the development of intermediate care:  1a) Poor partnership working between health and social care, i.e. competing organisational priorities and 'cultural' differences between PCTs, acute trusts and social services departments. "Separate 'political agendas', organisations saying they are committed but actually adhering to their own agendas, consequently putting up barriers to IC progress" (Postal survey- ICC, p67). "it still feels to me like there's quite a bit of potential in-fighting between social services and [the] PCT about who owns it" (Site E, p67).  1b) Different employment conditions for health and social services staff doing similar jobs within intermediate care teams had been problematic, also different policies held by health and social services organisations with respect to health and safety issues "if you were working say with rehab assistants or working with home care staff because there are certain policies in terms of manual handling that they are not allowed to do certain things that makes life quite difficult" (Site C, p67).  1c) Incompatibility of health and social services IT systems and the inability of staff to access 'each other's' systems: "But computers don't talk	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		to each other, we have problems, we are not allowed access to social services computers because I'm health employed so we have to fax everything across instead of getting it off the computer" (Site E, p67).  1d) The desire of organisations for autonomy and to retain control of their own budgets. The existence of separate budgets (as opposed to joint or pooled budgets) was identified as a hindrance to joint working: "Everybody is all for joint working and collaboration until you start asking people to give over money and that is a constant tension and I think perhaps has stood in the way of really making good progress and having a more flexible model" (Site A, p67).  2. Insufficient funding for intermediate care: with monies for intermediate care not 'ring-fenced', this affects recruitment of qualified staff, care workers and rehabilitation assistants, also beds/place, operating hours etc.: 'Resources hinder the development as there is not enough funding available through the Local Development Plan to allow the development of comprehensive domiciliary intermediate care services' (Postal survey- ICC, p67).  3. Staff shortages and recruitment problems, such as in rural areas, mainly due to lack of sufficient funding and low wages "but when	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		people can get the same sort of salary for a nice sanitized job, then some of the work is not very attractive" (Site C, p67).  4. Perceived 'inflexibility' of some intermediate care staff and resistance to performing new tasks or delegating work to other professionals or support staff had resulted in a 'professional protectionism' that was incompatible with multidisciplinary working.  5. Perceived resistance from the acute sector and medical profession, the acute sector and GPs felt they had been excluded from discussions about setting up intermediate care services due to genuine concerns about the lack of real evidence for intermediate care. "GPs were disinterested because they saw it as they were going to be bleeped every time the drip didn't work and there wasn't the medical support for it (Site B).  3. Difficulties associated with the national policy context.  3a) The government's 'official' definition of intermediate care (Department of Health, 2001a) and its emphasis upon intermediate care as a time-limited (no longer than 6 weeks) intervention posed a particular challenge to those services that pre-dated the 2001 guidance. There was a great deal of variation in how the definition had been implemented: "I	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		think we still have differences of what intermediate care is I know I have a different perception of what I think intermediate care is to perhaps the director of ops or someone in social services, so I still don't think we have properly defined what is intermediate care and what interventions are appropriate to be called under that banner" (Site D, p73).  3b) Use of targets and performance measures regarding intermediate care also a barrier: "Each organisation has independent targets/performance measures they need to focus on hence less time and commitment for intermediate care which could benefit all" (Postal survey- ICC, p73).	
		C. Strengths/benefits of intermediate care (I interpret this as what IC should be like, i.e. the positive features/characteristics which benefit users and practitioners and the system- Irene).  1. Benefits for service users:  1a) Both in terms of the experience or quality of the service and in terms of outcomes, particularly when compared with more 'traditional' forms of care. In particular the patient-centred nature of intermediate care and its ability to provide personalised care to suit individual needs: "They get like a one to one service They get individual attention whether	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		it's from us, whether it's from their own district nurse in their own home and they thrive on it" (Site A, p74).  1b). The flexibility and level of input provided by intermediate care services were identified as key components of the holistic approach which was perceived to bring benefits to service users: "We are very flexible in that we will move between hospital, community, you know, the places that we work to deliver intermediate care are vast and we don't have to hand the patient over to anybody else – we've got seamless care" (Site D, p74).  1c) The 'homely environment' in which intermediate care services were delivered, generally regarded as being beneficial, particularly in achieving outcomes such as independence and increased confidence: "To think that those older people can stay in their own homes. They still have their independence [,] they can have that level of independence is quite an achievement." (Site D, p74). "You find somebody who's been in hospital for 6 weeks, they've never made themselves a cup of tea or a sandwichor a cooked meal or anything, and when they come homeThey've been away from the home for so long it doesn't feel like their home, I've had that said to me, 'It doesn't feel like my home any more, I don't know where	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		anything is" (Site B, p75).  1d) By delivering services in an individual's own home, the 'upheaval' and potential for confusion in response to unfamiliar hospital surroundings could be avoided. Service users could retain much valued social support networks and social activities, essential to their rehabilitation: " if somebody wants to be able to go to Bingo or to visit a relative that wouldn't be addressed on a ward where as in our team you have got the capabilities to do that. There are more realistic goals, genuine goals, motivations" (Site A).  1e) It was seen as being more conducive to encouraging involvement by patients in their rehabilitation plans and goal setting. By being 'on their own territory' both patients and their relatives had more influence over the care process, when compared with hospital settings: "It's time limited, they know what they're aiming for, we know what they're aiming for and asking them what they want to achieve while they're here" (Site D, p75).	
		2. Benefits for staff: 2a) The positive nature of multi-disciplinary (and inter-disciplinary) team working was reported as a clear strength within many intermediate care services, crucial in delivering a flexible and responsive service to users. Interviewees spoke	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		positively of the support they received from fellow team members and of being able to access expertise from a range of professionals: "in this team we've got really expert people who know an awful lot and I think we achieve much better outcomes for our patients in terms of therapy input, aides, adaptations, more imaginative solutions and that's a combination of several heads and I just don't think you get that in other systems" (Site A, p76).  2b) Operating within a multi-disciplinary or interdisciplinary environment was seen as a prerequisite for the delivery of holistic, patient-centred care. Many professionals welcomed the opportunities for role flexibility in the intermediate care setting: " I wouldn't just go out there and do my nursing tasks, which would happen on a ward You couldn't have that happening going out to see the patient in the home. So if they're having to carry out an exercise programme then it would be expected of me as a nurse to go through that exercise programme with them on behalf of the physio" (Site A, p76).  2c) With team working and, involvement with intermediate care, staff perceived increased levels of autonomy and opportunities to be involved in the development of innovative services. This increased job satisfaction gained	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Research aims		from being involved in the delivery of intermediate care, linked with the goal of restoring or maintaining the independence of service users: "The challenge to me is to get that person up and running again" (Site E, p76).  3 Benefits for the whole system: 3a) The 'whole-systems' working both in terms of process and outcomes to strengthen the integration and interconnectedness with 'mainstream' services, to foster closer working between intermediate care services and between intermediate care and 'mainstream' services and establish clear access points, providing effective referral and care pathways for patients before and after intermediate care, a 'seamless' experience for patients: "The link with community hospitals is a crucial one and we have staff who can pick somebody up during their admission and then see them through back into the community until they are discharged into	rating
		into the community until they are discharged into intermediate care. So those links, as far as the patient pathway continuity goes, are good" (Site D, p78).  3b) Many who was involved in the management	
		and delivery of intermediate care were convinced that their services had resulted in fewer inappropriate admissions to acute and long-term care, making an important contribution	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		to capacity within health and social care systems: "We think it saves the health service a lot of money and we can put in a few weeks of very intensive support, get them back on their feet again and they have never had the unpleasantness of spending time in a hospital ward" (Site C, p78).	
		D. Weaknesses of intermediate care  1) Capacity issues, mainly relate to funding and resources (see funding and staff recruitment above, i.e. shortage of professional and non-qualified staff resulting from insufficient resources and recruitment problems), also to inability to provide care or to respond to referrals outside hours and on weekends "We can't provide that service, that may be another reason why the patient had to go into hospital" (Site C, p80).  1a) A lack of care workers and rehabilitation assistants, non-qualified assistants staff was the difficulty in ensuring that such staff always operated within a culture of reablement: "The main challenge has been staffing and encouraging staff to develop an enabling culture rather than a 'doing-to' culture They've struggled with sometimes not doing things for people and encouraging them to do it for themselves" (Site B, p79).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		1b) Shortage of home care provision, in particular, domiciliary care with patients who could otherwise receive intermediate care in their own homes but were sometimes admitted to hospital as a result: "Sometimes getting home care is difficult and sometimes non-available has led to people being admitted when they don't really need to be." (Site D, p79).  1c) Intermediate care services becoming 'blocked' due to unavailability of home care services  1d) Lack of out-of-hours IC provision (outside the 9.00-5.00 Monday-Friday period) a significant weakness and deterrent to using intermediate care, particularly for GPs.	
		2) 'Whole-systems' working. 2a) Effective integration with mainstream services: i) Under use and the inappropriate use of intermediate care. Many GPs and hospital staff lacked awareness and understanding of intermediate care services, the lack of a clear access point was regarded as a significant barrier to use for GPs who, under pressure, were likely to 'default' to admitting patients to hospital: "It is still perceived as a bit of an add on and to a certain extent we still have a legacy of these projects and short termisms" (Site A,	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		p81). " Having to sit in somebody's house and phone several different places and have various different time scales etc., etc. To not be able to leave the house with a plan organised, that is the main problem" (Site A, p81).  ii) Despite attempts to promote intermediate care locally, the concept of IC failed to become embedded within the mindsets of many mainstream practitioners, resulting in under-use of the IC services. The availability of IC still needed to be heavily promoted.  iii) Eligibility criteria for intermediate care often perceived as being too narrow by mainstream practitioners, sometimes seen as being rather 'elitist' with accusations of 'cherry-picking', unhelpful and viewed negatively by hospital staff. Recurring difficulties in getting patients admitted to intermediate care meant that practitioners reverted to using more traditional forms of care, i.e. hospital admission. " hospital staff being prepared to take the risk and discharge somebody to something new that is relatively untested and unknownSo it is starting to overcome those barriers. Part of it is actually once somebody has put a patient through intermediate care then they have got the confidence to do it again" (Site D, p82). iv) Inappropriate use of intermediate care services. Hospital services were felt not to fully	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		appreciate the nature of intermediate care, therefore making inappropriate referrals and potentially distorting the role of intermediate care. IC staff were concerned that intermediate care was becoming dominated by an acute care agenda, and that they had to regularly 'fight off' the acute sector but admitted that there were occasions when inappropriate referrals had been accepted where capacity allowed it. "We do get quite a high percentage of people who are destined for a nursing home or a residential home and it's 'oh, can't you take this person because they're blocking our acute bed'They don't have an understanding of all the input that's available to them [patients]" (Site A, p83). (At the time of the report, the authors noted that while those sites that had implemented a single point of access and clear screening mechanisms generally perceived that their levels of inappropriate referrals had improved as a result.)  3) Service development and delivery issues.  3a) IC staff experienced difficulty in achieving collaboration and faced the challenge of bringing together a set of individual services, some of which had operated independently for several years, into a wider framework or 'umbrella' of intermediate care provision. This lack of integration manifested itself in having poor	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		knowledge of other intermediate care services and to working more flexibly: "I think the weaknesses in terms of the linking, the weaknesses are around linking in with other bits and smooth pathways between what we are doing and they don't easily work across what I would call boundaries you know" (Site E, p84). 3b) The evolution of intermediate care from individual services into a wider framework of provision presented a significant challenge to the roles and expertise of the frontline staff and was perceived to be threatening: "Maybe there is more liaison between the different branches but I still feel we are under some pressure to be able to do everything and I feel that we have been in separate teams previously and I think that we can't do everything for everyone and we can't keep all the balls in the air" (Site E, p84). 3c) Knowledge about the range of services available and their eligibility criteria varied among IC staff " there are boundaries between the intermediate care teams and sometimes we don't quite understand what the criteria would be for somebody being seen by another team" (Site A, p84). 3d) Lack of co-location, management by separate organisations (typically PCTs and social services) and operating across large rural areas identified as some of the practical barriers	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		to closer collaboration between services - a general lack of strategic planning in intermediate care: "We haven't really taken a thorough stock-take of what do we really need and shape services from that. It has been a case of, we have got some money to do this and well let's do this and we are about to plan a complete review of our services and think about what we need" (Site D, p84).  4. Stakeholder involvement in the planning and delivery of intermediate care.  4a) Membership of these forums varied greatly. It was felt that involvement by clinicians, the independent sector, the voluntary sector and housing organisations was essential in order to bolster capacity within intermediate care and promote its use. Acute clinicians had felt excluded from the development and provision of intermediate care to some degree, and GP engagement had proved difficult. Marginalisation of clinicians and practitioners meant that the development of intermediate care had been managerially dominated in some cases, and proposed service developments not always perceived to have been practical or patient-centred: "I think that's only natural that it would be because they're [managers] not out in the field working, and their [priorities] are not client driven and client centred they need to tick	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		their boxes for the government, they need to be financially driven, they have different pressures on their agenda than we do" (Site D, p85). 4b) The involvement of the independent sector: barriers in the form of costs and insufficient capacity presented challenges to greater collaboration: "Yes I think they do have a role and part of that whole system model I think they are being constrained currently by legislation and things like the care standards [there's] this constant battle around costs and funding that maybe constrains some of the more proactive work about doing things differently and developing new ways of providing services" (Site A).  4c) The involvement of the voluntary sector in providing transport, befriending and sitting services: some IC staff had reservations about the ability of voluntary sector providers to be more directly involved in service delivery, particularly considering other demands upon their resources such as having secure funding in facilitating this: "So we are doing quite a lot of work at the moment in trying to involve the voluntary sector in particular more in what we do because they can take a tremendous amount of pressure off us. The bit that I don't think, both health and social services haven't done effectively yet is funded them talking about at	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		least 3 years type funding so they know they have got security because otherwise they can't offer it. A year funding doesn't work for these organisations" (Site E, p86).  4d) The involvement of housing associations and local authority housing departments in providing sheltered housing environments for IC: the lack of dedicated staff to support people in such environments (particularly at night) was a significant barrier to use, many staff challenged the very concept of delivering intermediate care in a non-home setting: "I don't agree with taking people out of their home environments [to] put [them] into a strange flat and expected to rehabilitate and then go home and readjust to their home environment and to me that seems slightly odd" (Site D, p86). Sometime, such facilities being used inappropriately, to resolve accommodation issues rather than to deliver intermediate care.  5. Service development and delivery issues.  5a) 'Gaps' in intermediate care - a lack of provision for older people with mental health problems. Some attributed the problem to intermediate care 'cherry-picking' clients and the 6-week time limit that effectively excluded some people with mental health problems who could benefit from intermediate care. There was also a lack of specialist mental health input in	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		intermediate care teams which was highlighted as the main barrier: "because the intermediate care units don't have a great deal of old age psychiatry support and so many, many patients are excluded from going to intermediate care because they are confused and yet these actually were the patients who are most vulnerable for being in hospital" (Site B, p87).  5b) gaps in provision due to geographical inequalities in terms of the coverage of and access to particular intermediate care services: "	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		5d) In service delivery, 2 particular areas of weakness: i) the physical environment in which services were delivered - a shortage of office accommodation and storage space for equipment seen as problematic by many staff. The delivery of intermediate care services in non-purpose built environments (e.g. hospital wards, nursing/residential homes) presented particular challenges: "[The building] wasn't designed with any rehabilitation space for either physiotherapists or ADL type facilitieswe wouldn't do any ADL OT specific kitchen focus work at the unit. We would concentrate on being able to assess and help people to re learn making cups of tea and using microwaves, and things that if you are going to live independently but with help coming in, you can probably manage" (Site B). ii) The challenges of delivering intermediate care in large, rural areas: time, distance and transport as issues which could impact on service responsiveness and efficiency: " there have been big recruitment issues because of house prices and cost of living [here] so we struggle to recruit. There are also rural transport issues as well so people actually can't come into a central base" (Site D, p88). 6. Future priorities (reflected a need to address	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		the weaknesses and barriers associated with intermediate care).  a) Service expansion: i) Expansion of bed capacity within intermediate care to be established in a range of settings including, community hospitals, independent nursing and residential homes and the development or strengthening of non-residential intermediate care services. ii) Extend the operating hours of existing services to include evening and weekend cover. iii) Extend intermediate care to people with mental health problems (Additional CPN/mental health support worker input in intermediate care teams). b) Workforce development: i) Financial constraints and recruitment problems were identified as the main challenges to workforce development. The development of rotational placements, enabling workers to experience a number of different settings (acute, community, intermediate care) was suggested as an opportunity to raise the profile of intermediate care, increase awareness of other people's roles and help to furnish practitioners with the skills needed to deliver intermediate care. ii) To develop the workforce from 'within' - With appropriate support and supervision, junior	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		practitioners could be nurtured to become the intermediate care workforce of the future.  iii) To increase the number of support workers such as health care assistants and rehabilitation assistants- regular and on-going training for rehabilitation assistants together with open dialogue between professional and non-professional staff (p92).  c) 'Whole-systems' working:  i) The integration of health and social care organisations (typically PCTs and social services) - to assimilate individual intermediate care services into a single system and the promotion of access to intermediate care from mainstream care, for example, integration on various levels ranging from the use of pooled budgets and integrated provision to facilitate a more strategic approach to the future development of intermediate care particularly in the use of resources (both financial and human) and commissioning.  ii) Actively promoting and reinforcing awareness of intermediate care services amongst mainstream practitioners, especially GPs, or that IC services would be 'attached' to primary health care teams or GP.  iii) Make plans to establish new services in A&E/Medical Assessment Units (MAU) in order to divert patients into intermediate care with the	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		the questionnaire to be some components of care experienced positively by IC users-Irene):  1. Start of my care was very efficient (mean score 4.41).  2. Team were careful to check everything at the start of my care (mean score 4.35).  3. Team gave all the information I wanted about my condition (mean score 4.15).  4. Team gave all the information I wanted about the care I was receiving (mean score 4.25).  5. I had problems getting pain relief when I needed it (mean score 3.86).  6. I had all the equipment necessary to care for me (mean score 4.28).  7. The team did their best to help me become more independent (mean score 4.42).  8. I felt able to talk to team about any problems or worries (mean score 4.33).  9. The team always had time for me (mean score 4.39).  10. I have been treated with kindness, respect & dignity by the team (mean score 4.58).  11. The team worked together and knew what each other was doing (mean score 4.24).  12. I was well prepared for when the team finished providing care for me (mean score 4.10).  13. The service finished providing care for me too early (mean score 3.85).	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
		14. The care I received after the team finished providing care for me was well coordinated (mean score 3.92). 15. The team did everything that they could to make me well again (mean score 4.31). 16. The care I received was just about perfect (mean score 4.20). 17. There are some things team could have done better (mean score 3.81). 18. I am happy with the amount of recovery I made while being cared for by the service (mean score 4.24). Levels of satisfaction were high, and comparable with other surveys of health service provision. The aspect of care with lowest scores was timing of discharge.	

## 7. Elbourne HF and le May A (2015) Crafting intermediate care: one team's journey towards integration and innovation. Journal of Research in Nursing 20: 56-71

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: To evaluate the effectiveness of the PCIC (Person Centred Intermediate Care) model of	with Person Centred	Measures of central tendency and dispersion were calculated in analysing the quantitative data, and a one-tail paired-sample t-test applied to measurements taken using the Barthel Index	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Intermediate Treatment being used in a nursing home or Total Care Living Complex, by studying service user outcomes and staff team functioning during 12 months from the nursing home's first 2 years of operation.  Methodology: Mixed methods. This case study of IC in 1 nursing home used a mixed methods approach, concurrently collecting and triangulating quantitative and qualitative data on the impact that care received during the stay in the nursing had on outcomes for the service users.	Staff providing care and other support services to service users, and key informants (CEO and senior managers).  Sample characteristics  Age - Service users: not	the score, the greater the likelihood of being able to manage at home) service users were assessed on admission with scores of minimum 3 and maximum 88, mean (DS) 53.95 (19.1), and on discharge minimum 28, maximum 100, mean (SD) 78.2 (14.2). Change in BI 100 scores was: minimum score -28, maximum score 76, mean (SD) 24.3 (19.6), correlation 0.350, p<0.001. 64 service users had a marked improvement in their level of functioning, 5 had a reduced level, and 4 had no change in their BI 100 scores, with their scores of 64, 84, 85 and 85 remaining the same. One service user died, and 9 were transferred back to hospital.  Narrative findings – effectiveness Outcomes for service users: - Functioning: Measured using the Barthel Index 100, where higher scores indicate an increased capacity to function independently, service users generally showed an improved score at the end of their stay, with the mean score rising from 53.95 to 78.2, and 64 participants showing a 'marked improvement in their level of functioning' (p63), with 4 remaining level, and only 5 a reduced level, although there are a further 10 service users who were not given a score but where it may be presumed to have decreased, as 9 returned to hospital and 1 died.	+

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Quantitative data was collected which measured the service users' ability to manage the tasks of daily living at the beginning and end of their stay. Qualitative data was collected using semi-structured interviews with service users and with staff and key informants. The study also states that it analysed documents related to the unit's development, and routinely collected activity data held within the facility about each service user, but the findings from these data sources are not presented.  Country: UK.	<ul> <li>Sexual orientation - Service users: not reported. Staff and key informants: not reported.</li> <li>Socioeconomic position - Service users: not reported. Staff and key informants: not reported.</li> <li>Sample size</li> <li>Intervention number - 168 service users were admitted to</li> </ul>	- Destination: The study states that 74.1% of service user participants were discharged to their own homes. It does not provide data about post-PCIC destination for the remainder, although the report does state the 9 service users returned to hospital and 1 died in the nursing home.  Narrative findings - qual and v&e 91.6% of service users stated that they were satisfied with the amount of recovery they made during their stay, 96.5% felt they became more independent, and 96.7% believed the team treated them with kindness, dignity and respect. A Balanced Scorecard diagram indicates that around 90% rated as good or excellent the PCIC unit's performance in terms of 'Value for money the service received adapted to meet my needs and preferences', but no precise data or further information is provided. Several issues with the way the staff group was functioning emerged from their interviews, due in their view to: Inappropriate referrals from local transferring hospitals, who had not been educated about the services and resources the unit provided; - Inadequate information for staff group about the theoretical model they were working to and the responsibilities of multi-disciplinary team (MDT) members.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Source of funding: Not reported. Report states that the 'research received no specific grant from any funding agency in the public, commercial, or not-for profit sectors' (p70).	interviews with 12 staff providing care and other support services to service users, and 4 key informants who were the lead charity's CEO and 3 senior managers  Intervention: Intervention category - Intermediate care (bed-based, using Person Centred Intermediate Care (PCIC) model in a nursing home/Total Care Living Complex). Describe intervention - Explores the impact of PCIC on service users who were either being discharged early from hospital (step-down care) or from the community to prevent hospital admission (step-up care) within a community-based nursing home/intermediate care unit. Services were delivered on the basis that care-givers should appreciate service users' need for privacy and respect their dignity and freedom of choice	- Factionalism within the team Clashes of ideologies, e.g. between encouraging service users to participate in rehabilitation and respecting a choice not to participate Incompatibility between the regulator CSCI's requirements of the unit as a registered nursing home and their functioning as an Intermediate Care unit Concern that instability, arising from the departure of 2 out of 4 key members of the initial staff group, was leading to the initial vision, aims and goals of the unit being lost A concern that professional power struggles were leading to professional judgements being ignored A perception that autocratic leadership was manipulating the MDT meetings. However service users perceived the team as being highly effective at improving their functional abilities, and 88% of service users believed the team worked well together. It appears that practitioner dissatisfaction did not impact significantly on the service users' experience of the care and support services they provided.	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	<ul> <li>in all circumstances.</li> <li>Delivered by - Nurses, health care and rehabilitation assistants, physiotherapists, occupational therapists, and social workers from public sector health and social care providers and a local charity. A Senior House Officer was present for 2 full and 2 half days per week, as part of a vocational training scheme for GPs.</li> <li>Delivered to - Service users who were either being discharged early from hospital (80% of sample) or being supported to prevent admission to hospital (20% of sample). 56.3% of participants had a history of falls, and 63.8% had 3 or more preexisting ailments.</li> <li>Duration, frequency, intensity, etc Service users stayed in PCIC unit for between 1 and 105 days. Frequency and intensity of intervention provided according to needs</li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
			1
	<ul> <li>their effectiveness in providing care and support services.</li> <li>Location/place of delivery - The service was delivered</li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	within a recently opened nursing home which was a purpose built unit within a Total Care Living Complex. The complex 'provided a variety of living arrangements for older people ranging from independent to wardenassisted housing, to rehabilitative care within the PCIC unit' (p58-9), enabling service users to be supported with care appropriate to their needs, and for the level of support to be changed as their needs changed.		
	Comparison: Service users' performance in acts of daily living was measured using the Barthel Index, at the points when they entered and when they left the unit. Service users also participated in semi-structured interviews. On admission they discussed what they needed from the service, and on discharge discussed whether the service met their expectations. They also		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	completed a service user satisfaction questionnaire. Staff and key informants participated in a series of semi-structured interviews, where they discussed emerging themes about their functioning as a staff group.		
	<ul> <li>Outcomes measured</li> <li>Service user related outcomes         <ul> <li>Outcomes that were measured for service users included length of stay in the nursing home, whether they left the unit to go home or return to hospital, and whether their mobility and self-care improved or not while they were in the unit.</li> </ul> </li> <li>Family or caregiver related outcomes - not reported.</li> <li>Satisfaction with services - Service users' satisfaction with services is reported in terms of how satisfied they were with the amount of recovery they made during their stay, whether they felt they became more independent, and</li> </ul>		

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
	whether they felt the team treated them with kindness, dignity and respect.  • Service outcomes - The service was measured in terms of the self-perceived functioning of the team of practitioners, and checked for correlation with service users' satisfaction with the services they provided.		
	Follow-up: Service users were assessed using the Barthel Index 100 and interviewed when they arrived in the nursing home and when they left. The time between these dates ranged from one-105 days.		
	Costs? No. A Balanced Scorecard Diagram, illustrating service user satisfaction, shows that around 90% of service users rated the service good or excellent in terms of 'Value for money - the service received adapted to meet my needs and preferences', but the report provides no additional		

	PICO (population, intervention, comparison, outcomes)	Overall validity rating
	information.	

## 8. Nancarrow SA, Booth A, Ariss S et al. (2013) Ten principles of good interdisciplinary team work. Human Resources for Health 11

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Study aim: The aim of the research was to identify the key characteristics of interdisciplinary team working with a particular (although not exclusive) focus on community rehabilitation and intermediate care services (CRAICS).  Methodology: Qualitative study. Facilitated discussions with IC teams based on evidence from a systematic review about the key	Participants: Professionals/practitioners - IC team members.  Sample characteristics  Age - Not reported.  Sex - Not reported.  Ethnicity - Not reported.  Religion/belief - Not reported.  Disability - Not reported.  Long term health condition - Not reported.  Sexual orientation - Not reported.  Socioeconomic position - Not reported.  Sample size: 11 CRAICS including 253 staff were recruited to participate in a related study to	Narrative findings - qual and v&e These are the findings from the facilitated workshops. They are the characteristics, which IC team members believed to be associated with a 'good team'.  1. Good communication - referring to intra-team communication. Team members need to feel as though communication is 2 way. They need to be able to listen as well as be able to speak out. Being a part of a large team seems to make communication more difficult.  2. Respecting/ understanding roles - the importance of respecting and understanding the roles of other team members, including the boundaries of each role.  3. Appropriate skill mix - teams value diversity and they need input from a range of staff with complementary skills and experiences.  4. Quality and outcomes of care - ensuring quality and outcomes of care is an important component of a good team. It's therefore	Overall assessment of internal validity: +  Overall assessment of external validity: +

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
characteristics of effective interdisciplinary working. Participating staff were recruited to participate in a related study to exam the impact of implementing an Interdisciplinary Management Tool (IMT). As part of this research, staff attended facilitated workshops and one of the outcomes of the workshops was a report of their views about what they considered to be the characteristics of a 'good team'.	exam the impact of implementing an Interdisciplinary Management Tool (IMT). We can only assume that all 253 staff contributed to the report although no concrete information is provided.	important to have systems for capturing patient outcomes. Emphasized the importance of setting targets, defining outcomes, following up patients and providing feedback to other services e.g. about appropriateness of referrals.  5. Appropriate team processes and resources - staff need to have time and space to be able to make sensitive phone calls in privacy and appropriate procedures and systems are needed e.g. induction processes, policies, paperwork. The patient's pathway and the integration of the team with wider services are also seen as important procedural issues.  6. Clear vision - important for establishing appropriate referral criteria into the team.  7. Flexibility - described as an important individual attribute so that team members can respond to people's constantly changing needs. The service also needs to be flexible, in terms of eligibility criteria.  8. Leadership and management - importance of a good leader was cited by all teams.  9. Team culture, camaraderie and team support	
Country: UK.  Source of funding Government: NIHR Health Services and	<ul> <li>important role.</li> <li>Delivered to - Older people who meet the eligibility criteria (details not provided).</li> </ul>	<ul> <li>the importance of team culture was the largest theme. Trust, reliability, commitment and support were the most commonly raised themes.</li> <li>10. Training and development opportunities - continuing professional development.</li> </ul>	

Research aims	PICO (population, intervention, comparison, outcomes)	Findings	Overall validity rating
Delivery Research program.	<ul> <li>Duration, frequency, intensity, etc Not reported.</li> <li>Key components and objectives of intervention - Not reported.</li> <li>Content/session titles - Not reported.</li> <li>Location/place of delivery - Not reported.</li> <li>Describe comparison intervention - Not reported.</li> <li>Outcomes measured</li> <li>Service user related outcomes - Not measured.</li> <li>Family or caregiver related outcomes - Not measured.</li> <li>Satisfaction with services - Not measured.</li> <li>Service outcomes - Not measured</li> <li>Follow-up: No follow-up.</li> <li>Costs? No.</li> </ul>	12. Personal attributes - e.g. approachability, ability to compromise, empathy, confidentiality, patience, personal responsibility etc.  13. Individual rewards and opportunities - individual returns have a positive impact on teamwork. Note that the findings from the document review have not been extracted because this element of the work focussed on interdisciplinary team working in a general sense. It did not have a specific focus upon intermediate care.	

#### **Question 7 – Critical appraisal – Effectiveness**

1. Ariss S, Enderby P, Smith T et al. (2015) Secondary analysis and literature review of community rehabilitation and intermediate care: an information resource. Southampton: National Institute for Health Research

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: This review	Appropriate and clearly	Does the study's research	Overall assessment of
relates to 4 questions, 1 of	focused question? Yes. To	question match the review	internal validity:
which matches our review	examine the effectiveness of	question? Yes. This review	-
question - To examine the	different models of	relates to 4 questions, 1 of	
effectiveness of different	intermediate care: What team-	which match our review	Overall assessment of
models of intermediate care,	level factors are associated	question.	external validity:
i.e. What team-level factors	with the greatest benefits for		++
are associated with the	patients in terms of health	Has the study dealt	
greatest benefits for patients	status?	appropriately with any	
in terms of health status?	_	ethical concerns? Yes.	
	Inclusion of relevant	Received ethics and research	
Methodology: Systematic	individual studies?	governance approval from	
review.	Somewhat relevant. Two	relevant institutions.	
From the findings of the	included studies were not		
systematic review, secondary	specifically IC but were related	Were service users involved	
analysis of the relationship	to 'good quality care' and	in the design of the study?	
between structural team-level	community care of patients	Not reported.	
variables and patient	with COPD and CHF.		
outcomes were conducted.		Is there a clear focus on the	
	Rigorous literature search?	guideline topic? Yes. One of	
Country: UK.	Yes. Two different literature	the objectives focuses on our	
	searches conducted of studies	review question: to examine	
	published between 2008 and	the effectiveness of different	
	2012. Search strategy	models of intermediate care.	
	available.		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
and sample	Study quality assessed and reported? Unclear.  Adequate description of methodology? No. No information on quality assessment of studies, scant information on characteristics and details of included studies such as sample size, study designs.  Do conclusions match findings? Partly.	Is the study population the same as at least one of the groups covered by the guideline? Yes. People who use IC services.  Is the study setting the same as at least one of the settings covered by the guideline? Yes. IC setting.  Does the study relate to at least one of the activities covered by the guideline? Yes. IC&R.  Are the study outcomes relevant to the guideline? Yes. Patients' health status.  Was the study conducted in the UK? Yes.	

2. Smith T, Harrop D, Enderby P et al. (2013) Exploring differences between different intermediate care configurations: a review of the literature. Sheffield: Sheffield Hallam University, University of Sheffield

	and the state of t				
Internal validity - approach	Internal validity -	External validity	Overall validity rating		
and sample	performance and analysis				
Study aim: To explore the	Appropriate and clearly	Does the study's research	Overall assessment of		
relationship between different	focused question? Yes. To	question match the review	internal validity:		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
team characteristics and	explore the association	question? Yes. Exploring the	+
patient outcomes in	between team characteristics	association between team IC	
intermediate care.	and outcomes of IC.	team characteristics and	Overall assessment of
		outcomes.	external validity:
Methodology: Systematic	Inclusion of relevant		++
review (Lit review, not SR).	individual studies?	Has the study dealt	
	Somewhat relevant. At least 5	appropriately with any	
<b>Country</b> : Range of countries.	of the studies evaluate	ethical concerns? Not	
	interventions that would not be	reported.	
	included according to the		
	review protocol for Q7 e.g.	Were service users involved	
	'primary care teams' and	in the design of the study?	
	single condition rehab.	No	
	Rigorous literature search?	Is there a clear focus on the	
	Partly rigorous. 20 databases	guideline topic? Yes.	
	were searched using a clear,	Intermediate care.	
	systematic search strategy		
	and inclusion criteria, which is	Is the study population the	
	positive. However, there is no	same as at least one of the	
	reporting of any technical	groups covered by the	
	testing of search terms or the	guideline? Yes. Older people	
	development of a technical	using IC.	
	strategy. In addition to the 20	la dia at al angles di	
	databases, the literature	Is the study setting the	
	search could have benefitted	same as at least one of the	
	from citation searching and	settings covered by the	
	reference harvesting, author	guideline? Yes. The included	
	checking and searching	studies evaluated	
	current trials, plus searching		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	for grey sources of literature	interventions in people's own	
	and organisational knowledge.	homes or in specialist IC beds.	
	Study quality assessed and	Does the study relate to at	
	reported? No. This is a	least one of the activities	
	significant weakness of the	covered by the guideline?	
	review; the authors do not	Yes. Intermediate care -	
	report any critical appraisal of	mainly home based. Not	
	the included studies.	reablement.	
	Adequate description of	Are the study outcomes	
	methodology? Yes.	relevant to the guideline?	
	Databases, inclusion criteria	Yes. Service level and	
	and screening on title, abstract	individual outcomes.	
	and full text are clearly		
	described.	Are the views and	
		experiences reported	
	Do conclusions match	relevant to the guideline?	
	findings? Partly. The	Yes. Some included studies	
	conclusions are rather brief	report the views of IC	
	and lacking in substance but	practitioners.	
	this reflects the nature of the		
	findings from the review. The	Was the study conducted in	
	included studies covered a	the UK? Yes. But included	
	range of interventions - not all	international studies.	
	fitting our IC definition - and		
	very few addressed team level		
	factors in relation to IC so it is		
	unsurprising that the authors		
	could not make strong		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	conclusions. The conclusions		
	that are presented are a little		
	overstated given that many of		
	the team characteristics		
	supposedly associated with		
	improved care are only		
	supported by 1 study and		
	often that study does not fit the		
	'IC' definition. It is also difficult		
	to judge the authors'		
	conclusions about the		
	associations between team		
	characteristics and outcomes		
	when there is no assessment		
	of the quality of the included		
	studies.		

# Review question 7 – Critical appraisal – the views and experiences of people using services, their families and carers

3. Dixon S, Nancarrow SA, Enderby PM et al. (2015) Assessing patient preferences for the delivery of different community-based models of care using a discrete choice experiment. Health Expectations 18: 1204–14

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: The aim is 'to assess patient preferences for different models of care defined by location of care, frequency	Measures for contacting non-responders? There is no mention of non-responders.	Does the study's research question match the review question? Yes. Question 7(b).	Overall assessment of internal validity:
of care and principal carer within community-based health-	Describes what was measured, how it was		Overall assessment of external validity:

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
care services for older people'	measured and the results?	Has the study dealt	++
(p1204).	Yes. The measurements are	appropriately with any	
	of service users' chosen care	ethical concerns? Yes. It is	
<b>Methodology:</b> Surveys. Using	preferences. The other	stated that the local research	
the Discrete Choice Experiment	measurements presented are	ethics committee provided	
approach, a quantitative survey	the participants' Therapy	ethical approval, and an	
was administered via	Outcome Measured Scale	ethics approval number is	
interviews.	(TOMS), which is described	provided. However it is not	
	as 'a therapist-measured	explicitly stated that this is a	
Country: Unidentified large city	outcome measure' (p1207),	health service approval.	
within the United Kingdom.	and EQ-5D, a quality of life	Details of ethical	
	measure based on service	considerations are provided:	
Objectives of the study	user responses to 5 questions	'equity of participation, the	
clearly stated? Yes. 'To	with 3 possible responses	risks of respondent burden	
assess patient preferences for	each. A table showing	and/or distress, maintaining	
different models of care defined	participants' care preferences	participant confidentiality, and	
by location of care, frequency	according to these 2	the consideration of the trade-	
of care and principal carer	measures is presented in the	off of the risks versus the	
within community-based health-	report.	benefits to the participants'	
care services for older people'		(p1207).	
(p1204).	Measurements valid? Yes.		
	No reason to doubt the validity	Were service users involved	
Research design clearly	of the measurements.	in the study? No. There is no	
specified and appropriate?		statement in the study that	
Yes. The survey finds out	Measurements reliable?	would indicate service users	
hypothetical choices by using a	Yes. No reason to doubt the	were involved in its design.	
DCE, collecting data using	reliability of the		
interviews. Using interviews	measurements.	Is there a clear focus on the	
rather than questionnaires		guideline topic? Yes.	
would be an effective way to			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
maximise participation, and to	Measurements	Intermediate care is the sole	
ensure questions and choices	reproducible? Yes.	focus of this study.	
were properly understood by	There is transparency about		
participants, since they could	the process and the measures	Is the study population the	
check their understanding with	used, and it would be possible	same as at least one of the	
the interviewers - it is reported	to reproduce the	groups covered by the	
that 26% of the sample found	measurements.	guideline? Yes. The study	
the questions to be 'hard', and		population is older people	
20% found them to be 'not	Basic data adequately	being provided with home-	
sensible'.	described? Yes. There is	based Intermediate Care	
	adequate description of the	following discharge from	
Clear description of context?	basic data.	hospital.	
Yes. The context is an			
Intermediate Care Service	Results presented clearly,	Is the study setting the	
being provided by 1 of 6 teams	objectively & in enough	same as at least one of the	
within a large UK city.	detail for readers to make	settings covered by the	
	personal judgements? Yes.	guideline? Yes. Participants	
References made to original	There is no evidence of bias in	in the study were living in a	
work if existing tool used?	the presentation of the data.	community setting, i.e. their	
N/A. The DCE questionnaire	There is plenty of details to	own home.	
used was devised specifically	allow readers to make		
for this study, so no use was	personal judgements about	Does the study relate to at	
made of an existing tool.	the meaning of the findings.	least one of the activities	
		covered by the guideline?	
Reliability and validity of new	Results internally	Yes. By soliciting the views of	
tool reported? Yes. The	consistent? Yes	service users being provided	
process of designing the new	There are no apparent	with Intermediate Care, the	
tool and carrying out the	contradictions in the findings	study contributes towards	
interviews is described,	presented.	assessment for planning of	
including checking with		person centred Intermediate	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
respondents that they	Data suitable for analysis?	Care and Reablement,	
understood the experiment,	Yes. The data consisted of	identifying needs and	
and whether they felt anything	responses to 3 very	aspirations, within the social	
important had been missed.	straightforward, multiple	context of a service being	
There is no reason to doubt the	choice questions, measured	provided at home.	
reliability or validity of the new	against 2 other measures of		
tool.	participants' functioning and	Are the views and	
	quality of life. It is very suitable	experiences reported	
Survey population and	for analysis.	relevant to the guideline?	
sample frame clearly		Yes. The study reports views	
described? Yes. Older service	Clear description of data	but not experiences. The	
users, recently discharged from	collection methods and	views presented are all	
hospital, who were being	analysis? Yes. Data was	concerned with preferences	
provided with an Intermediate  Care service at home.	collected by asking multiple	for the delivery of Intermediate Care from those	
Care service at nome.	choice question in an interview. The analysis	receiving the service.	
Representativeness of	method is clearly described.	receiving the service.	
sample is described? Yes.	Intelliod is clearly described.	Does the study have a UK	
The study describes the	Methods appropriate for the	perspective? Yes. The study	
representativeness, and	data? Yes. Analysis method is	was carried out in a large but	
limitations of this, in that the	suitable for the data.	unidentified city within the UK.	
sample comprises all the			
service users they could recruit	Statistics correctly		
from just a single location, but	performed and interpreted?		
is said to incorporate a spread	Yes. Statistical analysis		
of needs and health issues.	carried out using STATA		
	statistical software.		
Subject of study represents			
full spectrum of population	Response rate calculation		
of interest? Partly. The	provided? No. No mention is		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
representativeness of the	made of response rate, i.e.		
sample is limited: it includes	whether any service users		
only older IC service users,	who could potentially have		
they are all urban dwellers, all	participated in the study		
from 1 team out of 6 in the city	refused to do so. Nor does the		
where the DCE was carried	study state how many		
out, and being provided with IC	potential participants were		
to promote early hospital	ruled out as unsuitable by the		
discharge and not to prevent	researchers, either because		
admission. The study	they could not communicate in		
acknowledges that 'this will not	English or had severe		
produce generalizable findings	cognitive impairment.		
beyond the city or even the			
team' (p1213), although the	Methods for handling		
service users included are	missing data described?		
described as representing a	Unclear. The study reports on		
wide range in terms of their	the missing data rate, i.e. 31		
care needs and health. The	out of a possible 616		
study also failed to recruit their	responses (5%) were given		
target number of participants,	the code 'don't know', which		
achieving only 77 instead of the	covers all reasons for no		
200 aimed for, so it is less	choice being made. The report		
representative than the	does not explain how they		
researchers hoped for.	were factored into the		
	calculations.		
Study large enough to			
achieve its objectives,	Difference between non-		
sample size estimates	respondents and		
performed? Partly. The study	respondents described? No.		
aimed to recruit 200			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
participants, but achieved only	No mention is made of non-		
77. The researchers	respondents.		
acknowledge that this had an			
impact on the power of the	Results discussed in		
study to detect relationships	relation to existing		
within the data, but they still	knowledge on subject and		
describe it as being 'one of the	study objectives? Yes. The		
largest con joint analysis	study states that by identifying		
studies in the field' (p1211).	service user preferences with		
	regard to Intermediate Care		
All subjects accounted for?	care package choices, it is		
Unclear. The study does not	adding to existing knowledge,		
state whether anybody who	and contributing to the aim of		
was recruited dropped out.	moving towards more patient		
	centred care.		
All appropriate outcomes			
considered? Partly. The	Limitations of the study		
regression analysis showing	<b>stated?</b> Yes. The researchers		
the links between service users'	present all the limitations of		
IC preferences and their TOMS	the study in the report: not		
and EQ-5D ratings are	being generalisable due to		
presented in full. However, the	geographic limitations,		
table presenting the rankings of	including only older		
the different types of care	participants, only hospital		
package in order presents only	leavers, only those receiving		
9 out of the 64 possible	care at home, only English		
combinations, and does not	speakers, only those without		
give their reason for selecting	severe cognitive impairment.		
those 9 and omitting the others.			

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
Response rate: All 77 service users responded to at least 1 set of choices, and there were only 31 codings of 'don't know' from 616 possible choices, where 'don't know' covered any reason for not making a choice.	Results can be generalised?  No. Researchers are very clear that since this was effectively a case study of 1 area within 1 city, the findings cannot be generalised.  Appropriate attempts made to establish 'reliability' and 'validity' of analysis? Yes. Researchers used interviews to ensure respondents understood the choices they were being asked to make, and interviewers clarified any questions that arose, with this being recorded. Participants were asked 2 questions after the experiment interview, i.e. whether they found the questions 'hard' and whether they found them 'sensible'. The researchers also produced 2 versions of the interview questionnaire, which were randomly assigned to the study participants.  Conclusions justified? Yes.		
	The researchers recognise the		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	study's limitations, and do not		
	draw more conclusions from		
	the data than is warranted.		
	They recognise also the		
	impact on the strength of the		
	findings of not achieving their		
	target number of interviews,		
	and do not try to overstate the		
	significance of their findings.		
	The conclusions that they do		
	draw are justified by the data.		

# 4. Pearson M, Hunt H, Cooper C et al. (2015) Providing effective and preferred care closer to home: a realist review of intermediate care. Health & social care in the community 23: 577–93

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
Study aim: The aim of the	Appropriate and clearly	Does the study's research	Overall assessment of
study was to explore what	focused question? Unclear.	question match the review	internal validity:
factors need to be taken into	The study makes clear	question? Yes. The study	+
account, in terms of service	statements about its aims and	aims to provide information	
users, practitioners and	methods, but there is no clear	about the characteristics of	Overall assessment of
organisations, when local	statement of what the research	Intermediate Care service	external validity:
Intermediate Care services	question is.	delivery that will improve	++
are being designed and		outcomes for service users	
delivered.	Inclusion of relevant	and their families.	
	individual studies? Yes. All		
Methodology: Systematic	studies included in the review	Has the study dealt	
review. The study is a 'realist	are relevant to the subject of	appropriately with any	
review', a particular form of	good practice in person	ethical concerns? Not	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	External validity	Overall validity rating
systematic review which aims to use evidence to address	centred Intermediate Care provision.	reported. Ethical issues are not discussed, other than to state	
the practical realities and challenges of public policy and practice.	Rigorous literature search? Yes. The study used broad	that none of the authors of the study have a conflict of interest.	
Country: Various – although 33/38 of included studies were by UK authors.	definitions to carry out database searches of Medline, Medline in process, Embase, Social Policy and Practice, HMIC, British Nursing Index, The Cochrane Library, Cinahl and Assia, as well as editorials, commentaries and	Were service users involved in the design of the study? Not reported. Description of methodology makes no mention of service user involvement in the design of the study.	
	grey literature reports.  Study quality assessed and reported? Partly reported. The review states that sources were critically appraised 'using the Wallace et al. (2004) tool	Is there a clear focus on the guideline topic? Yes. This is specifically a study aimed at making proposals for best practice in the provision of Intermediate Care services.	
	for assessing the quality of applied social policy research', but it provides no details of how this process was carried out.	Is the study population the same as at least one of the groups covered by the guideline? Yes. The service users in the studies covered by	
	Adequate description of methodology? Partly adequate. The study describes the process of database	this realist review are all being provided with Intermediate Care.	

te study setting the same t least one of the ings covered by the leline? Yes. The setting re IC is being provided is described for each of the ies covered by the review, does include studies where	
t least one of the ings covered by the leline? Yes. The setting re IC is being provided is described for each of the ies covered by the review,	
as being provided at e, and where it was being ided in specialist units, for stroke victims.  s the study relate to at t one of the activities ered by the guideline? The study examines ures of Intermediate Care ice provision that can e the service person red.  the study outcomes vant to the guideline? The study makes mmendations on ways to	
id for straice re the me	the study relate to at one of the activities red by the guideline? The study examines res of Intermediate Care re provision that can the service person red. The study outcomes ant to the guideline? The study makes

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
		Are the views and	
		experiences reported	
		relevant to the guideline?	
		Yes. In 29 out of the 38 studies	
		included in the review, data	
		was collected using individual	
		or focus group interviews,	
		either as the only method used	
		or in conjunction with other	
		data collection methods. The	
		data they provide concern	
		what are the features of	
		Intermediate Care provision	
		that can make it more	
		successfully person centred.	
		Was the study conducted in	
		the UK? Yes. The study was	
		conducted by researchers	
		based in the UK. 33/38 studies	
		included in the review are UK	
		studies.	

5. Wilson A, Richards S, and Camosso-Stefinovic J (2007) Older people's satisfaction with intermediate care: A systematic review. Reviews in Clinical Gerontology 17: 199–218

Systematic reviews in chinical defontology 17: 103-210			
Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim: The aim of the	Appropriate and clearly	Does the study's research	Overall assessment of
review was to explore service	focused question? No. The	question match the review	internal validity:

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
user satisfaction of older	review does not provide a	question? Partly. The study	-
people being provided with	research question. It provides	deals mainly with the level of	
Intermediate Care.	a statement of what it is: 'Older	satisfaction that service users	Overall assessment of
	people's satisfaction with	have with Intermediate Care,	external validity:
Methodology: This is a	intermediate care: a	and in 18 comparison studies	+
systematic review of 31	systematic review'.	how it compares with service	
studies dealing with user		users receiving 'usual care'.	
satisfaction of older people	Inclusion of relevant	Although there is some data	
being provided with Intermediate Care.	individual studies? Somewhat relevant. A number	from case series and	
intermediate Care.	of included studies are not	qualitative studies about what they consider to be important	
Country: Range of countries.	relevant, as 14 of the deal with	characteristics in providing	
The review was carried out by	single condition rehabilitation.	satisfaction, little detail is	
academics from UK	Single condition renabilitation.	provided.	
universities, but included	Rigorous literature search?	provided	
14/31 studies from non-UK	Yes. The review searched the	Has the study dealt	
countries (Australia 5, New	MEDLINE, EMBASE, BNI,	appropriately with any	
Zealand 2, US 2, and Sweden,	CINAHL and PsycINFO	ethical concerns? Not	
Spain, Norway, Thailand and	databases, using search terms	reported. Ethical issues not	
Canada 1 each) with 1 country	described in the Cochrane	discussed in the report.	
unspecified).	Review search strategy and		
	from several published papers	Were service users involved	
	which concerned Intermediate	in the design of the study?	
	Care.	Not reported. There is no	
		indication of service users	
	Study quality assessed and	having any involvement in the	
	reported? No. No assessment	study's design.	
	of the quality of the included	le there e clear feetie en the	
	studies is reported.	Is there a clear focus on the	
		guideline topic? Yes. The	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	Adequate description of	focus of the study is	
	methodology? Partly	Intermediate Care.	
	adequate. The report identifies		
	the databases that were	Is the study population the	
	searched for relevant studies,	same as at least one of the	
	but not the search terms that	groups covered by the	
	were used. The inclusion and	guideline? Partly. Although	
	exclusion criteria are	the study is of user	
	presented. The results of the	satisfaction with Intermediate	
	analysis of the included	Care, 14 of the studies	
	studies are presented in 4	considered in the review dealt	
	tables.	with single condition	
		rehabilitation, which is outside	
	Do conclusions match	the scope of the guideline.	
	findings? Yes. The findings		
	and the conclusions are	Is the study setting the	
	consistent, i.e. that older	same as at least one of the	
	people are generally more	settings covered by the	
	satisfied with Intermediate	guideline? Yes. The studies	
	Care non-hospital care than	reviewed concern people	
	with hospital or usual care,	being provided with	
	where these are alternative	Intermediate Care in their own	
	options for the same condition.	homes or in specialist units.	
	The qualitative studies present		
	some data on why this	Does the study relate to at	
	preference is expressed, and	least one of the activities	
	why in some cases it might not	covered by the guideline?	
	be preferred. The study	Yes. The studies reviewed	
	presents references for 2 SRs,	concern the effectiveness of	
		Intermediate Care in terms of	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	_	
	but details of the findings of these SRs are not presented.	service user satisfaction when it is being provided to people in their own homes or in specialist bed based units to avoid hospital admission or to facilitate early hospital discharge.	
		Are the study outcomes relevant to the guideline? Partly. In the studies where there was a control group, effectiveness was measured through a comparison between service users receiving Intermediate Care and those receiving usual care. In 13/18 comparison studies IC was measured as providing higher levels of service user satisfaction to an extent that was statistically significant. In the remainder there was not a significant difference. However, relevance to the guideline topic is limited, since 10 of these 18 studies fall outside the review protocol's 'intervention' criterion for	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
		inclusion, as they deal with	
		single condition rehabilitation.	
		Are the views and	
		experiences reported	
		relevant to the guideline?	
		Yes. In the case series and	
		qualitative studies included in	
		the review, factors influencing	
		service users' preference for	
		being provided with IC at	
		home were identified. These	
		included convenience and	
		comfort, nearness to family,	
		and more personalised care.	
		However, service users with	
		some conditions could feel	
		safer in hospital, and 1 study	
		reported that service users'	
		main concerns were recovery	
		and survival.	
		Was the study conducted in	
		the UK? Yes. The SR was	
		conducted by UK based	
		academics, but included a	
		range of countries (UK, US,	
		Canada, Australia, New	
		Zealand, Norway, Spain,	
		Thailand).	

## Review question 7 – Critical appraisal – Health, social care and other practitioners' views and experiences

6. Barton P, Bryan S, Glasby J et al. (2006) A national evaluation of the costs and outcomes of intermediate care services for older people: final report. University of Birmingham: Health Services Management Centre

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
Study aim:	Quantitative component:	Does the study's research	Overall assessment of
1. To establish the range,	Patient Satisfaction survey.	question match the review	internal validity:
spread and speed of		question? Yes. Benefit and	+
development of intermediate	Is the sampling strategy	challenges of implementation	
care services across England	relevant to address the	if the IC system.	Overall assessment of
(data not relevant to review	quantitative research		external validity:
question).	question (quantitative	Has the study dealt	++
2. To explore the views of	aspect of the mixed-	appropriately with any	
intermediate care leads on the	methods question)? Partly.	ethical concerns? Yes.	
benefits and challenges of	Patient satisfaction survey:	Approved by the Trent MREC	
implementing intermediate	People who use IC at the 5	(Medical research ethics	
care policy.	case study sites, no sampling.	committee).	
3. To assess the impact of			
intermediate care on the	Is the sample representative	Were service users involved	
service system as a whole and	of the population under	in the study? Yes. As	
on individual service users	study? Yes. Case studies with	participants.	
(p8).	quantitative data: IC staff at 5		
	case study sites. Patient	Is there a clear focus on the	
Methodology: Mixed	satisfaction survey: People	guideline topic? Yes. To	
methods.	who use IC at the study sites.	explore the views of	
1. Postal surveys (qualitative).		intermediate care leads on the	
2. Case studies (qualitative).	Are measurements	benefits and challenges of	
<ol><li>Patient satisfaction survey.</li></ol>	appropriate (clear origin, or		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	-	
4. Qualitative focus: Views	validity known, or standard	implementing intermediate	
and experiences of IC	instrument)? Yes.	care policy.	
managers, clinicians and	-		
people using IC.	Is there an acceptable	Is the study population the	
	response rate (60% or	same as at least one of the	
Country: UK.	above)? No. 57% response	groups covered by the	
	rate.	guideline? Yes. Intermediate	
Quantitative component:		care co-ordinators, managers,	
Postal surveys.	Mixed methods component	frontline staff, and patients.	
	Is the mixed-methods		
Are the sources of	research design relevant to	Is the study setting the	
qualitative data (archives,	address the qualitative and	same as at least one of the	
documents, informants,	quantitative research	settings covered by the	
observations) relevant to	questions (or objectives), or	guideline? Yes. All IC	
address the research	the qualitative and	settings.	
question? Yes. Response to	quantitative aspects of the		
open questions of postal	mixed-methods question?	Does the study relate to at	
survey.	Yes.	least one of the activities	
		covered by the guideline?	
Is the process for analysing	Is the integration of	Yes. All stages of IC.	
qualitative data relevant to	qualitative and quantitative		
address the research	data (or results) relevant to	Are the study outcomes	
question? Yes.	address the research	relevant to the guideline?	
	question? Yes.	Partly. This report includes a	
Is appropriate consideration		systematic review on the	
given to how findings relate	Is appropriate consideration	impact of IC on service users	
to the context, such as the	given to the limitations	(effectiveness). The included	
setting, in which the data	associated with this	studies were all published	
were collected? Yes.	integration, such as the	before 2005, and effectiveness	
	divergence of qualitative		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Is appropriate consideration given to how findings relate to researchers' influence;	and quantitative data (or results)? Yes.	is not within the scope of Question 7.	
for example, though their interactions with participants? Unclear.		Are the views and experiences reported relevant to the guideline? Yes. Views of service users and practitioners.	
		Does the study have a UK perspective? Yes.	

7. Elbourne HF and le May A (2015) Crafting intermediate care: one team's journey towards integration and innovation. Journal of Research in Nursing 20: 56-71

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
Study aim: To evaluate the	Quantitative component: The	Does the study's research	Overall assessment of
effectiveness of the PCIC	research was a case study of all	question match the review	internal validity:
(Person Centred Intermediate	service users considered	question? Partly. The study	+
Care) model of Intermediate	eligible to participate, after	assesses the impact of 1	
Treatment being used in a	screening all admissions to a	service model for delivering	Overall assessment of
nursing home or Total Care	unit providing Intermediate Care	Intermediate Care to service	external validity:
Living Complex, by studying	over a 12 month period.	users, i.e. person-centred	+
service user outcomes and	Changes in their mobility and	care, but no mention is made	
staff team functioning during	ability to manage activities of	of the impact on their families.	
12 months from the nursing	daily living during their period of	The study gives a brief	
home's first 2 years of	residence in the unit were	description of what makes this	
operation.	measured using the Barthel	service model distinctive, with	
	Index 100.	1 quote from a service user	

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
Methodology: Mixed		describing why they	
methods. This case study of	Are participants	appreciated the way they	
IC in 1 nursing home used a	(organisations) recruited in a	were treated, but it does not	
mixed methods approach,	way that minimises selection	provide specific examples of	
concurrently collecting and	bias? Partly. The study did	what is meant by care being	
triangulating quantitative and	screen all service users	provided by 'people who	
qualitative data on the impact	admitted to the unit for eligibility	appreciate their [service	
that care received during the	to participate in the research,	users'] need for privacy and	
stay in the nursing had on	meaning that participation was	respect their dignity and	
outcomes for the service	fairly wide. However although	freedom of choice in all	
users. Quantitative data was	55.9% of people admitted to the	situations' (p57), so it is hard	
collected which measured the	unit were considered eligible,	to assess which	
service users' ability to	there are no measures of	characteristics of this	
manage the tasks of daily	improvements or decline in the	approach make it successful.	
living at the beginning and	functioning of those who did not	Similarly, the study reports	
end of their stay. Qualitative	meet the eligibility criteria. The	the high level of user	
data was collected using	experiences of non-English	satisfaction with this model,	
semi-structured interviews	speakers is not measured, but	but there is no analysis of	
with service users and with	information on how many were	what components of the	
staff and key informants. The	ruled ineligible on these	methods led to these high	
study also states that it	grounds is not provided, nor on	scores. The study also does	
analysed documents related	the outcomes for those unable	not analyse what the	
to the unit's development, and	or unwilling to express	practitioners thought were the	
routinely collected activity	themselves verbally.	important characteristics of	
data held within the facility		the model, focusing only on	
about each service user, but	Are measurements	what they thought of the way	
the findings from these data	appropriate (clear origin, or	the unit and they as a staff	
sources are not presented.	validity known, or standard	group worked.	
	instrument; and absence of		
Country: UK.	contamination between		

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
	groups when appropriate)	Has the study dealt	
Qualitative component:	regarding the	appropriately with any	
Semi-structured interviews	exposure/intervention and	ethical concerns? Partly.	
with service users.	outcomes? Yes. The	The study was given ethical	
	measurements are appropriate.	approval by the Research	
Are the sources of	They use the Barthel Index 100,	Ethics Committee at the	
qualitative data (archives,	an established measure	University of Southampton,	
documents, informants,	regarded as reliable which	and it states that all	
observations) relevant to	brings together scores in 10	participants gave informed	
address the research	variables to measure people's	consent. It does not state	
question? Yes. Interviews	mobility and performance in	whether this process involved	
with the recipients of PCIC.	activities of daily living.	gaining NHS approval,	
		although several of the	
Is the process for analysing	In the groups being	practitioners involved in	
qualitative data relevant to	compared (exposed versus	meeting the services users'	
address the research	non-exposed; with	needs, and some who	
question? Unclear. The study	intervention versus without;	participated in the study, are	
states that 'inductive thematic	cases versus controls), are	health practitioners.	
analysis' was used to 'elicit	the participants comparable,	·	
core themes from the	or do researchers take into	Were service users	
qualitative data' (p60), but the	account (control for) the	involved in the study? No.	
process of thematic analysis	difference between these	Service users provided	
is not described.	groups? Yes. All participants in	quantitative data, but were not	
	the study were being provided	consulted on the research	
Is appropriate consideration	with the same model of	design and did not participate	
given to how findings relate	Intermediate Care, and subject	as researchers.	
to the context, such as the	to the same eligibility criteria.		
setting, in which the data	_	Is there a clear focus on the	
were collected? Yes.	Are there complete outcome	guideline topic? Yes. The	
Consideration of the context	data (80% or above), and,	focus of the study is the bed	

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis	-	
of the study, a PCIC unit	when applicable, an	based provision of a model of	
located within a nursing home	acceptable response rate	Intermediate Care to adults.	
for older people, is present	(60% or above), or an		
throughout the study.	acceptable follow-up rate for	Is the study population the	
	cohort studies (depending on	same as at least one of the	
Is appropriate consideration	the duration of follow-up)?	groups covered by the	
given to how findings relate	Partly. Outcome data is	guideline? Yes. The study	
to researchers' influence;	provided for 55.9% of those	population of this component	
for example, though their	being provided with	is adults being provided with 1	
interactions with	Intermediate Care in the unit	model of intermediate care.	
participants? No. The	during the study period, with the		
researchers' influence on the	remainder deemed not to meet	Is the study setting the	
study is not discussed.	the eligibility criteria for	same as at least one of the	
	inclusion in the study. Of those	settings covered by the	
Qualitative component:	who did participate, interviews	guideline? Yes. The setting	
Semi-structured interviews	were carried out at admission	is a residential nursing home.	
with practitioners delivering	and discharge with 94/94		
care and services to service	(100%), changes in Barthel	Does the study relate to at	
users, and with key	Index scores were recorded for	least one of the activities	
informants who were senior	74/94 (82%), and	covered by the guideline?	
managers in the unit and the	questionnaires were completed	Yes. Key area 2: the study	
CEO of the charity organising	by 59/95 (62%). Data on all the	deals with the effectiveness of	
the care and services being	BI index outcome scores is	1 model of Intermediate Care,	
delivered.	provided, although detailed	i.e. bed based Intermediate	
	breakdown of individual	Care in a nursing home to	
Are the sources of	components of the index is not	prevent premature admission	
qualitative data (archives,	provided.	to long-term residential care	
documents, informants,	0	or hospital and support earlier	
observations) relevant to	Quantitative Component:	discharge from hospital. The	
address the research			

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
question? Yes. The source of	The study took the form of a	study also relates to	
data is semi-structured	case study using qualitative	reablement.	
interviews with those with responsibility for directly	methods to measure the change in service users'	Are the study outcomes	
delivering care and services	mobility and ability to carry out	relevant to the guideline?	
or for organising delivery.	everyday tasks independently	Yes. The effectiveness of the	
	between arriving at and leaving	approach to Intermediate	
Is the process for analysing	the unit.	Care in the unit is discussed.	
qualitative data relevant to		The study presents the views	
address the research	Is the sampling strategy relevant to address the	and of service users about the	
question? Unclear. The study states that 'inductive thematic	quantitative research	care and support services provided for them, but there is	
analysis' was used to 'elicit	question (quantitative aspect	little detail about their	
core themes from the	of the mixed-methods	experiences. The study	
qualitative data' (p60), but the	question)? Yes. The sampling	presents the views and	
process of thematic analysis	strategy was to screen all	experiences of practitioners	
is not described.	service users admitted to the	about the way the unit and	
Is appropriate consideration	nursing home to receive Person Centred Intermediate Care	they as a staff group work, but little about their views and	
given to how findings relate	during a defined 12 month	experiences about bed based	
to the context, such as the	period for eligibility to participate	intermediate care.	
setting, in which the data	in the study. Because the		
were collected? Yes. The	research was studying a	Are the views and	
findings deal in part with how	particular approach to delivering	experiences reported	
practitioners and key informants view the context,	Intermediate Care, it was appropriate to use the	relevant to the guideline? Yes. The views and	
i.e. they present participants'	screening process to make the	experiences of the service	
views on certain matters	sample as inclusive as possible.	users and of the practitioners	
affecting how the unit runs.		are relevant to the guideline.	

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
Is appropriate consideration	Is the sample representative	Does the study have a UK	
given to how findings relate	of the population under	perspective? Yes. The	
to researchers' influence;	study? Unclear. No information	historical and policy	
for example, though their	is provided which would enable	background section of the	
interactions with	an assessment of how	study explains the UK context	
participants? No. The	representative the sample is,	in which the study took place.	
researchers' influence on the	either of all service users		
study is not discussed.	admitted to the unit, or of the		
	wider population of people		
Qualitative component:	being provided with		
Service users were invited to	Intermediate Care.		
complete a service user			
satisfaction questionnaire,	Are measurements		
which yielded both	appropriate (clear origin, or		
quantitative and qualitative	validity known, or standard		
data.	instrument)? Yes. The		
	measurements were carried out		
Are the sources of	using the Barthel Index 100,		
qualitative data (archives,	which uses 10 variables to		
documents, informants,	measure people's performance		
observations) relevant to	in acts of daily living and		
address the research	mobility. The purpose of		
question? Yes. The views of	Intermediate Care is to improve		
service users in how satisfied	service users' ability to manage		
they were with the model of	independently, making the BI an		
Intermediate Care provided to	appropriate measure. The		
them is relevant to the	Barthel Index is considered to		
research question.	be reliable, although it does		
	depend to an extent on		

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		3
Is the process for analysing	consistency between those		
qualitative data relevant to	using it as a measurement tool.		
address the research			
question? Unclear. The	Is there an acceptable		
process of analysing data	response rate (60% or		
from the service user	above)? Partly. 55.9% of		
satisfaction questionnaire is	potential participants in the		
not described.	study were considered to be		
	eligible. Of those considered to		
Is appropriate consideration	be eligible, 74/95 (78%) were		
given to how findings relate	measured using the BI scale,		
to the context, such as the	while 59/95 (62%) completed		
setting, in which the data	the service users' satisfaction		
were collected? Yes.	questionnaire.		
Although the study does not			
provide details of the	Quantitative Component:		
questions asked in the	Service users were invited to		
questionnaire, the satisfaction	complete a service user		
of service users with their	satisfaction questionnaire,		
experience of the provision of	which yielded both quantitative		
Intermediate Care within a	and qualitative data.		
nursing home is extremely			
relevant to the context in	Is the sampling strategy		
which the data was collected.	relevant to address the		
	quantitative research		
Is appropriate consideration	question (quantitative aspect		
given to how findings relate	of the mixed-methods		
to researchers' influence;	question)? Yes. The sampling		
for example, though their	strategy was to screen all		
interactions with	service users admitted to the		

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis	-	
participants? Unclear. Possible researchers' influence on the findings, e.g. through interaction with participants or help with completing questionnaires is not explored in the study.	nursing home to receive Person Centred Intermediate Care during a defined 12 month period for eligibility to participate in the study and to ask all those eligible to complete the service user satisfaction questionnaire.		
not explored in the study.	Is the sample representative of the population under study? Unclear. The study does not provide data which would allow an assessment of how representative the sample is of the population under study.  Are measurements appropriate (clear origin, or validity known, or standard instrument)? No. Very little information is provided about what was asked in the questionnaire, and how the responses were measured.  Is there an acceptable response rate (60% or above)? Partly. 55.9% of potential participants were		

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		, ,
•	in the study, and of those		
	considered eligible 62.1%		
	completed the service user		
	satisfaction questionnaire.		
	Mixed methods component		
	Is the mixed-methods		
	research design relevant to		
	address the qualitative and		
	quantitative research		
	questions (or objectives), or		
	the qualitative and		
	quantitative aspects of the		
	mixed-methods question?		
	Yes. The study considered the		
	effectiveness of 1 approach to		
	providing Intermediate Care.		
	The Barthel Index 100 provided		
	quantitative data to measure the		
	progress made by service users		
	admitted to the unit. Interviews		
	with service users and the		
	service user satisfaction		
	questionnaire provided		
	qualitative, subjective data on		
	the experiences of service		
	users. Interviews with staff and		
	key informants provided		
	qualitative data on their		

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis	_	
	perceptions of the functioning of		
	the unit and the staff group.		
	Is the integration of		
	qualitative and quantitative		
	data (or results) relevant to		
	address the research		
	<b>question?</b> Partly. The objective		
	measures of changes to service		
	users' ability to manage		
	independently and the service		
	users' own subjective measure		
	of their experience both address		
	the question about what the		
	outcomes are of using this		
	model of Intermediate Care, but		
	little information is provided		
	about what are the		
	characteristics of this particular		
	model.		
	Is appropriate consideration		
	given to the limitations		
	associated with this		
	integration, such as the		
	divergence of qualitative and		
	quantitative data (or results)?		
	Partly. The study does not		
	make a comparison of the data		
	it presents on service users'		

Internal validity - approach	Internal validity - performance	External validity	Overall validity rating
and sample	and analysis		
	improved functioning as measured using the Barthel Index 100 scale and the service users' satisfaction ratings. It does comment on the staff group and key informants' perception of the staff group as being dysfunctional and contrasts this with the service users' belief that the team was 'highly effective and worked well together' (p69), and offers the explanation that the staff put on a show of working well together in front of service users, despite their dissatisfactions.		

## 8. Nancarrow SA, Booth A, Ariss S, et al. (2013) Ten principles of good interdisciplinary team work. Human Resources for Health 11

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
Study aim: The aim of the	Is the context clearly	Does the study's research	Overall assessment of
research was to identify the key characteristics of	described? Unclear. The characteristics of the	question match the review question? Partly. The	internal validity:
interdisciplinary team working	participants of the workshops	systematic review element	
with a particular (although not exclusive) focus on community	are not described - all we know is that they work in	does not match our review guestion but the element that	Overall assessment of external validity:
rehabilitation and intermediate	intermediate care teams	collated views of intermediate	+
care services (CRAICS).	which have implemented the	care teams did because it	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
	Interdisciplinary Management	sought data about the	
Methodology: Qualitative	Tool. The workshops were	characteristics of a good	
study. Facilitated discussions	informed by the systematic	intermediate care team.	
with IC teams based on	review of interdisciplinary		
evidence from a systematic	team working and this	Has the study dealt	
review about the key	introduces a risk of bias by	appropriately with any	
characteristics of effective	influencing the views of	ethical concerns? Yes. With	
interdisciplinary working.	participants about what	regard to the facilitated	
Participating staff were	constitutes a 'good team'.	workshops: 'NHS ethics	
recruited to participate in a	Data were only gathered	approval was obtained on 11	
related study to exam the	during facilitated workshops	September 2008	
impact of implementing an	and not for example through	(08/H1004/124). All	
Interdisciplinary Management	additional one to one	participating team members	
Tool (IMT). As part of this	interviews or during	provided written consent for	
research, staff attended	observations. One positive	their involvement in this	
facilitated workshops and 1 of	aspect is that the workshops	research' (p4).	
the outcomes of the workshops	were facilitated by external,		
was a report of their views	trained facilitators so this	Were service users involved	
about what they considered to	reduces the risk of researcher	in the study? No. Neither as	
be the characteristics of a 'good	bias.	participants, advisors, nor co-	
team'.		researchers.	
	Was the sampling carried		
Country: UK.	out in an appropriate way?	Is there a clear focus on the	
	Inappropriate. As far as we	guideline topic? Partly. The	
Is a qualitative approach	can tell from the paper there	systematic review work is not	
appropriate? Appropriate. The	was no sampling at all. The	specifically relevant but the	
research question seeks to	intermediate care workers	facilitated workshops are	
understand the views of	were involved in the		
intermediate care team	workshops because of their	Is the study population the	
members and the meanings	team's engagement in the IMT	same as at least one of the	

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
they attach to the concept of a	intervention. The fact that they	groups covered by the	
good team.	have been involved in the IMT	guideline? Partly. The views	
	intervention also risks bias	of people included in the SR	
Is the study clear in what it	because the intermediate care	were not specifically relevant	
seeks to do? Mixed. The	workers are likely to be	but the population involved in	
purpose of the study is fairly	particularly attuned to issues	the facilitated workshops are	
well discussed in terms of	around interdisciplinary	(intermediate care teams).	
aims/objectives and research	working, which will have		
question. However it is a little	influenced their perceptions of	Is the study setting the	
unclear why the systematic	a 'good team'. It is possible	same as at least one of the	
review is being used to develop	that teams who had not been	settings covered by the	
a competency framework for	involved in the IMT	guideline? Partly. For the	
intermediate care when this is	intervention would have given	facilitated workshops but not	
not the specific focus of the SR,	different answers to those	the SR.	
apart from the assertion that	reported in this paper.		
CRAICs 'exemplify the practice		Does the study relate to at	
of interdisciplinary team work'	Were the methods reliable?	least one of the activities	
(p3).	Somewhat reliable. Data	covered by the guideline?	
	about intermediate care	Partly. Not the SR but yes for	
How defensible/rigorous is	teams' perceptions of a good	the facilitated workshops.	
the research	team were only collected via		
design/methodology?	facilitated workshops, which is	Are the views and	
Somewhat defensible. The	fairly limiting. Those findings	experiences reported	
design is a little questionable,	were triangulated with the	relevant to the guideline?	
particularly the use of data	results of the systematic	Partly. The views of	
derived from a systematic	review, which does not seem	intermediate care team	
review about 'interdisciplinary	entirely justified since the	members but not necessarily	
team working' rather than	systematic review had a	the views reported in the SR.	
intermediate care. The fact that	broad focus on		
the SR findings are then	interdisciplinary team working		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis	External validity	Overall validity fathing
triangulated with the workshop	rather than intermediate care	Does the study have a UK	
outputs appears to confuse the	in particular. The facilitated	perspective? Yes.	
results and does not seem	workshops did investigate	peroposition ros.	
justified. Although the workshop	what the research set out to -		
data are derived from	perceptions of a 'good team'		
discussions with intermediate	although, as highlighted there		
care teams, which is positive, it	were limitations to the data		
does appear that the results	collection.		
were secondary outputs of the			
workshops which had been	Are the data 'rich'? Mixed.		
convened to evaluate the	The contexts of the data are		
impact of an interdisciplinary	not well described - we only		
management tool (IMT). The	know that participants are		
teams have therefore been	members of IC teams who		
chosen for their roles	have implemented the IMT.		
implementing the IMT and we	We are provided with some		
have no idea to what extent	detail about the factors that		
they reflect typical intermediate	are felt to be important		
care teams or how their	characteristics of a good team		
implementation of the IMT	but the diversity of		
influenced their views.	perspectives are not explored		
Have well was the date	and responses are not		
How well was the data	compared and contrasted		
collection carried out?	across teams or individuals.		
Somewhat appropriately.	le the analysis reliable?		
Appropriate data were collected	Is the analysis reliable? Unreliable. There is no		
to address the question of how a good interdisciplinary team	description of researchers'		
can be identified e.g. through	involvement in the theming		
the systematic review.	and coding of the output of		
the systematic review.	and county of the output of		

Internal validity - approach	Internal validity -	External validity	Overall validity rating
and sample	performance and analysis		
However, data collection	the facilitated workshops, let		
specifically on intermediate care	alone more than 1 researcher		
teams was not reported as	being involved in this process.		
being very systematic and			
appears to have been	Are the findings		
conducted as part of	convincing? Somewhat		
discussions about the	convincing. The findings are		
implementation of the IMT. We	convincing and appear to be		
are told that the workshops	internally coherent. However		
were facilitated but we do not	data are not referenced and		
know anything about the	no extracts from the original		
facilitator except that they are	workshop outputs are		
trained. We also do not know	included to support the		
what research tools were used	findings.		
to guide discussions. The data			
analysed by researchers for the	Are the conclusions		
purpose of this study was	adequate? Somewhat		
provided from reports from the	adequate. The findings are		
workshops rather than raw data	broadly relevant to the aims of		
and we do not know who wrote	the study and there are basic		
the workshop reports.	links between data,		
	interpretation and		
	conclusions. The conclusions		
	themselves are plausible but		
	only quite sketchy and lacking		
	in detail. The study does		
	enhance understanding in		
	terms of the characteristics of		
	a good interdisciplinary		
	intermediate care team but it		

Internal validity - approach and sample	Internal validity - performance and analysis	External validity	Overall validity rating
	should be noted that the data collection method for the teams' views is somewhat unreliable and the systematic review data does not relate specifically to IC teams. There is some discussion of study limitations.		