National Institute for Health and Care Excellence

Draft for consultation

Rehabilitation in adults with complex psychosis and related severe mental health conditions

[R] Supporting successful transitions

NICE guideline tbc

Evidence review

January 2020

Draft for Consultation

This evidence review was developed by the National Guideline Alliance which is part of the Royal College of Obstetricians and Gynaecologists

Disclaimer

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the Welsh Government, Scottish Government, and Northern Ireland Executive. All NICE guidance is subject to regular review and may be updated or withdrawn.

ISBN:

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Supporting successful transitions

Review question 7.2: What processes are needed to support successful transitions?

Introduction

People with complex psychosis and related severe mental illness in rehabilitation will typically need to move from rehabilitation to other parts of the mental health, social care or primary care systems as their support needs change. After time in rehabilitation it is hoped that they will become more independent and so a less supported placement may be appropriate. This review aimed to examine evidence for the best ways to ensure successful transition between rehabilitation and other parts of the mental health, social care or primary care systems.

Summary of the protocol

Please see Table 1 for a summary of the Population, Intervention, Comparison and Outcome (PICO) characteristics of this review.

Table 1: Summary of the protocol (PICO table)

Population	Adults (aged 18 years and older) with complex psychosis and related severe mental health conditions (as defined in scope) who move from rehabilitation to other parts of the mental health, social care or primary care systems.

Intervention	• Having a physical and mental health care plan
	  ○ Frequent review of physical and mental health (with adjustment of people's care plans accordingly,)
	• Early planning of transition
	• Appropriate skill mix of staff within rehabilitation service
	• Integrated health and social care systems
	  ○ Collaboration & information sharing between the rehabilitation service and the receiving service and the service user
	  ○ Ongoing support from rehab services following transition
	  ○ Transitional visiting and acclimatisation
	• Placement coordination
	  ○ Local centralised system (having detailed assessment of person's needs being matched to appropriate placement for those needs).
	  ○ Process for having local knowledge about placements
	  ○ Having local process to stimulate market

Comparison	• Standard care
Outcomes	**Critical** • Successful transition from rehabilitation service to other parts of the mental health, social care or primary care systems (high to low support) • Readmission to inpatient care (moving to higher support) • Use of OATs **Important** • Delayed transitions • Patient and carer satisfaction

	• Housing stability • Physical health hospital admissions + A&E use

A&E: accident and emergency; OATs: out of area treatments

For further details see the review protocol in appendix A.

Clinical evidence

Included studies

Three RCT studies were identified for this review (Malm 2014, O'Brien 2012, and Tomita 2012).

The included studies are summarised in Table 2.

Malm (2014) compared an integrated health and social care system to standard care. O'Brien (2012) compared having a regular review of care plans to standard care. Tomita (2012) compared the addition of a collaboration and information sharing service to standard care.

Out of the three critical outcomes set by the scope no studies were identified that had outcomes relating to successful transitions to a lower level of support. All 3 identified studies had outcomes about reducing unsuccessful transitions such as readmissions or otherwise returning to a higher state of care only. No studies were identified with outcomes on the use of OATs.

See the literature search strategy in appendix B and study selection flow chart in appendix C.

Excluded studies

Studies not included in this review with reasons for their exclusions are provided in appendix K.

Summary of clinical studies included in the evidence review

A summary of the studies that were included in this review are presented in Table 2.

Table 2: Summary of included studies

Study	Population	Intervention	Comparison	Outcomes
Malm 2014 RCT Sweden	N=66 Primary diagnosis of schizophrenia - inpatients, outpatients, and clients receiving social services.	Integrated Care – regular health and care planning by a trained and resourced support group meeting weekly.	Rational Rehabilitation - the current best practice program	• Readmission to inpatient care (moving to higher support) • Patient satisfaction
O'Brien 2012 RCT Ireland	N=80 Community mental health service users with severe and enduring mental illness.	Intensive case management – including weekly formalized collaborative care planning with multidisciplinary	Standard care which includes multidisciplinary team input.	• Readmission to inpatient care (moving to higher support) • Quality of Life (as an indication of patient satisfaction)

Study	Population	Intervention	Comparison	Outcomes
		team input.		
Tomita 2012 RCT USA	N=150 Previously homeless people with a psychotic disorder in transitional residences after discharge from inpatient treatment.	Critical Time Intervention – a care coordination intervention to strengthen the individual's ties with services, family, and friends	Standard care	• Readmission to inpatient care (moving to higher support)

N: number of participants; RCT: randomised controlled trial

See the full evidence tables in appendix D and the forest plots in appendix E.

Quality assessment of clinical outcomes included in the evidence review

See the clinical evidence profiles in appendix F.

Economic evidence

Included studies

A systematic review of the economic literature was conducted but no economic studies were identified which were applicable to this review question.

Excluded studies

Studies not included in this review with reasons for their exclusions are provided in appendix K.

Summary of studies included in the economic evidence review

No economic evidence was identified for this review (and so there are no economic evidence tables)

Economic model

No economic modelling was undertaken for this review because the committee agreed that other topics were higher priorities for economic evaluation.

Evidence statement

Clinical evidence statements

Comparison 1. Integrated health and social care system versus standard care

Critical outcomes

Successful transition from rehabilitation service to other parts of the mental health, social care or primary care systems (high to low support)

- No evidence was identified to inform this outcome.

Readmission to inpatient care (moving to higher support)

- Moderate quality evidence from 1 RCT (N=66) did not indicate a clinically important difference in nights spent in psychiatric hospital after 5 years in service users with an integrated health and social care system compared to standard care.

Use of OATs

- No evidence was identified to inform this outcome.

Important outcomes

Delayed transitions

- No evidence was identified to inform this outcome.

Patient and carer satisfaction

- Moderate quality evidence from 1 RCT (N=66) indicates a clinically important increase in patient satisfaction after 24 months for service users with an integrated health and social care system compared to standard care.
- High quality evidence from 1 RCT (N=66) indicates a clinically important increase in patient satisfaction after 5 years for service users with an integrated health and social care system compared to standard care.

Housing stability

- No evidence was identified to inform this outcome.

Physical health hospital admissions + A&E use

- No evidence was identified to inform this outcome.

Comparison 2. Frequent reviewing of care plans versus standard care

Critical outcomes

Successful transition from rehabilitation service to other parts of the mental health, social care or primary care systems (high to low support)

- No evidence was identified to inform this outcome.

Readmission to inpatient care (moving to higher support)

- Very low quality evidence from 1 RCT (N=80) indicates no clinically important difference in number of service users spending time re-hospitalised after 9 months in service users with frequent reviewing of care plans compared to standard care.

Use of OATs

- No evidence was identified to inform this outcome.

Important outcomes

Delayed transitions

- No evidence was identified to inform this outcome.

Patient and carer satisfaction

- Very low quality evidence from 1 RCT (N=80) indicates a clinically important increase in patient quality of life after 9 months in service users with frequent reviewing of care plans compared to standard care.

Housing stability

- No evidence was identified to inform this outcome.

Physical health hospital admissions + A&E use

- No evidence was identified to inform this outcome.

Comparison 3. Collaboration and information sharing service versus standard care

Critical outcomes

Successful transition from rehabilitation service to other parts of the mental health, social care or primary care systems (high to low support)

- No evidence was identified to inform this outcome.

Readmission to inpatient care (moving to higher support)

- Low quality evidence from 1 RCT (N=150) indicates no clinically significant difference in the number of nights spent re-hospitalised after 18 months in service users with a collaboration and information sharing service compared to standard care.

Use of OATs

- No evidence was identified to inform this outcome.

Important outcomes

Delayed transitions

- No evidence was identified to inform this outcome.

Patient and carer satisfaction

- No evidence was identified to inform this outcome.

Housing stability

- No evidence was identified to inform this outcome.

Physical health hospital admissions + A&E use

- No evidence was identified to inform this outcome.

Economic evidence statements

No economic evidence was identified which was applicable to this review question.

The committee's discussion of the evidence

Interpreting the evidence

The outcomes that matter most

Moving on successfully from a rehabilitation service to a lower level of support in another part of the mental health system, or social care or primary care systems was a critical outcome because this is the key aim of rehabilitation in this group. A second critical outcome was needing higher level support and being readmitted to inpatient care, because when service users needs cannot be met in their current location they need quick access to appropriate levels of care. Lastly, out of area treatment was the final critical outcome as arriving in a new location further away from family and community would often not be favourable.

An important outcome was set by the committee to see whether interventions led to a delay in transitions as this would mean the service user was stuck in an inappropriate setting. Several other important outcomes were also set reflecting other areas that successful transition impact for the patient. These included patient and carer satisfaction, housing stability, and hospital admissions or A&E use for physical health.

The quality of the evidence

The evidence statements were assessed using GRADE methodology and overall it ranged in quality from very low to high quality. The evidence relating to integrated health and social care systems was assessed as moderate to high, while the quality of evidence related to promoting collaboration and information sharing was low, and the quality of evidence relating to frequent reviewing of care plans was very low. There was no evidence about early planning of transitions, having an appropriate skill mix of staff within rehabilitation service, ongoing support from rehab services following transition, transitional visiting and acclimatisation, or any aspect of placement coordination.

The evidence statements in two of the three comparisons were all downgraded due to high risk of bias in the reporting or methodology of the underlying studies. One evidence statement was downgraded due to indirectness because the outcome measured was 'quality of life' rather than 'service user satisfaction' which was specified in the scope. In the rest of the cases where downgrading occurred were due to imprecision, as differences did not meet the standard criteria to be considered clinically significant.

Benefits and harms

The review did not find any evidence about approaches or interventions that increase the chances of successful transition to lower levels of support, and so no recommendations were made about this. Limited evidence was identified about approaches and interventions that decrease readmissions/returning to a higher state of care, and so this was discussed.

The committee considered the evidence from one RCT about an 'integrated system' of shared decision makers – comprised of a group that was trained, met regularly, and operated through a shared information and technology environment. The evidence suggests this leads to a clinically significant improvement in patients' satisfaction. The committee noted that the findings also indicate the integrated system may also reduce patient's risk of readmission to inpatient care, although the single study on this intervention was not sufficiently powered to verify this. The committee concluded that this was the most promising intervention for which there was evidence about improving outcomes during transition. For this reason the committee made a weak recommendation about the effect of integrated care systems on transitions. They also made a research recommendation to investigate these types of systems further.

The committee also discussed the evidence about frequent review of care plans (weekly versus annual plus informal review). However, they concluded there wasn't convincing evidence that very frequent care planning was beneficial. Instead they recommended that review of care plans should occur monthly in inpatient settings, and 6-monthly in community settings, based on the their knowledge and clinical experience. The committee also did not feel there was evidence about collaboration and information sharing (in a care co-ordination intervention) to support a recommendation on a specific intervention.

Cost effectiveness and resource use

No relevant studies were identified in a systematic review of the economic evidence.

The committee discussed the evidence in conjunction with the evidence elicited from the review question that looked at the criteria associated with successful transitions (Evidence report Q). In the evidence review for this topic – supporting successful transitions – the committee noted the limitations of the included evidence and were mindful of the resource implications of any new interventions or services, such as an integrated care system. They noted that implementing an integrated care system might require substantial changes in working practice for some areas and resources for new information technology systems; however, they noted that service integration is a priority across the NHS, and the weak recommendation supports this direction of travel. The committee discussed the impact of care plan review frequency, and indicated that the recommended frequency reflects current practice. Owing to a lack of evidence for other aspects of transition, the committee's recommendation to follow the principles of transition in NG53 would reinforce current practice. The committee noted that where recommendations increased the rate of transition to supported housing, for areas with no or limited supported housing provision this could have a high resource impact.

Other considerations

The committee identified existing guidelines about planning transitions (NG53: Transition between inpatient mental health settings and the community) which currently applies to all UK mental health service users. They thought that sections 1.5 and 1.6 were especially relevant and concluded it would benefit service users if staff/practitioners were referred to these sections and instructed to follow the guidance.

The committee noted from their experience in practice that issues with mental capacity can cause delays to people moving to supported accommodation. They agreed it was necessary to highlight the need for staff to follow steps outlined in the Mental Capacity Act 2005 so that people can progress through the rehabilitation pathway.

References

Malm 2014

Malm UI, Ivarsson BÅ, Allebeck P. Durability of the efficacy of integrated care in schizophrenia: a five-year randomized controlled study. Psychiatric services, 65(8):1054-7, 2014

O'Brien 2012

O'Brien S, McFarland J, Kealy B, Pullela A, Saunders J, Cullen W, Meagher D. A randomized-controlled trial of intensive case management emphasizing the recovery model among patients with severe and enduring mental illness. Irish journal of medical science, 181(3):301-8, 2012

Tomita 2012

1 Tomita A, Herman DB. The impact of critical time intervention in reducing psychiatric
2 rehospitalization after hospital discharge. Psychiatric services, 63(9):935-7, 2012

Appendices

Appendix A – Review protocols

Review protocol for review question 7.2: What processes are needed to support successful transitions?

Table 3: Review protocol for processes to support successful transitions

Field (based on PRISMA-P)	Content
Review question	What processes are needed to support successful transitions?
Type of review question	Intervention review
Objective of the review	To examine the evidence on interventions to improve the transition from rehabilitation to other parts of the mental health, social care or primary care systems.
Eligibility criteria – population/disease/condition/issue/domain	Adults (aged 18 years and older) with complex psychosis and related severe mental health conditions (as defined in scope) who move from rehabilitation to other parts of the mental health, social care or primary care systems.

Eligibility criteria – intervention(s)/exposure(s)/prognostic factor(s)	• Having a physical and mental health care plan
	  ○ Frequent review of physical and mental health (with adjustment of people's care plans accordingly,)
	• Early planning of transition
	• Appropriate skill mix of staff within rehabilitation service
	• Integrated health and social care systems
	  ○ Collaboration & information sharing between the rehabilitation service and the receiving service and the service user
	  ○ Ongoing support from rehab services following transition
	  ○ Transitional visiting and acclimatisation
	• Placement coordination
	  ○ local centralised system (having detailed assessment of person's needs being matched to appropriate placement for those needs).
	  ○ Process for having local knowledge about placements

Field (based on PRISMA-P)	Content
	• Having local process to stimulate market
Eligibility criteria – comparator(s)/control or reference (gold) standard	• Standard care
Outcomes and prioritisation	**Critical** • Successful transition from rehabilitation service to other parts of the mental health, social care or primary care systems (high to low support) • Readmission to inpatient care (moving to higher support) • Use of OATs **Important** • Delayed transitions • Patient and carer satisfaction • Housing stability • Physical health hospital admissions + A&E use
Eligibility criteria – study design	RCTs. If no RCTs are available for any of the interventions, comparative observational studies will be considered.
Other inclusion exclusion criteria	Date limit: 1990 The date limit for studies after 1990 was suggested by the GC considering the change in provision of mental health services from institutionalized care in the 1970s to deinstitutionalise and community based care from 1990s onwards. Country limit: UK, USA, Australasia, Europe, Canada. The GC limited to these countries because they have similar cultures to the UK, given the importance of the cultural setting in which mental health rehabilitation takes place.
Proposed sensitivity/sub-group analysis, or meta-regression	Subgroup analysis • Setting of rehabilitation • Type of rehabilitation Observational studies should adjust for the following:

Field (based on PRISMA-P)	Content
	• Age • Measure of clinical severity • Gender
Selection process – duplicate screening/selection/analysis	No duplicate screening
Data management (software)	NGA STAR software will be used for study sifting, data extraction, recording quality assessment using checklists and generating bibliographies/citations. RevMan will be used to generate plots and for any meta-analysis. 'GRADEpro' will be used to assess the quality of evidence for each outcome
Information sources – databases and dates	Sources to be searched: Embase, Medline, PsycINFO, Cochrane library (CDSR and CENTRAL), DARE and HTA (via CRD) Limits (e.g. date, study design): Human studies /English language
Identify if an update	Not an update
Author contacts	For details please see the guideline in development web site.
Highlight if amendment to previous protocol	For details please see section 4.5 of Developing NICE guidelines: the manual 2014
Search strategy – for one database	For details please see appendix B.
Data collection process – forms/duplicate	A standardised evidence table format will be used, and published as appendix D (clinical evidence tables) or H (economic evidence tables).
Data items – define all variables to be collected	For details please see evidence tables in appendix D (clinical evidence tables) or H (economic evidence tables).
Methods for assessing bias at outcome/study level	Standard study checklists were used to critically appraise individual studies. For details please see section 6.2 of Developing NICE guidelines: the manual 2014.

Field (based on PRISMA-P)	Content
	The risk of bias across all available evidence was evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group http://www.gradeworkinggroup.org/.
Criteria for quantitative synthesis	For details please see section 6.4 of Developing NICE guidelines: the manual 2014
Methods for quantitative analysis – combining studies and exploring (in)consistency	For details please see the methods and process section of the main file
Meta-bias assessment – publication bias, selective reporting bias	For details please see section 6.2 of Developing NICE guidelines: the manual 2014.
Confidence in cumulative evidence	For details please see sections 6.4 and 9.1 of Developing NICE guidelines: the manual 2014
Rationale/context – what is known	For details please see the introduction to the evidence review.
Describe contributions of authors and guarantor	A multidisciplinary committee developed the evidence review. The committee was convened by the National Guideline Alliance (NGA) and chaired by Dr Gillian Baird in line with section 3 of Developing NICE guidelines: the manual 2014. Staff from the NGA undertook systematic literature searches, appraised the evidence, conducted meta-analysis and cost effectiveness analysis where appropriate, and drafted the guideline in collaboration with the committee. For details please see Developing NICE guidelines: the manual.
Sources of funding/support	The NGA is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists.
Name of sponsor	The NGA is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists.
Roles of sponsor	NICE funds NGA to develop guidelines for those working in the NHS, public health and social care in England
PROSPERO registration number	Not registered with PROSPERO

A&E: accident and emergency; GC: guideline committee; GRADE: Grading of Recommendations Assessment, Development and Evaluation; NGA: National Guideline Alliance; NHS: National health service; NICE: National Institute for Health and Care Excellence; OATs: out of area treatments; RCT: randomised controlled trial; RoB: risk of bias; SD: standard deviation

1 Appendix B – Literature search strategies

2 Literature search strategies for review question 7.2: What processes are needed 3 to support successful transitions?

4 Databases: Embase/Medline/PsycINFO

5 Date searched: 10/06/2019

#	Searches
1	exp psychosis/ use emczd
2	Psychotic disorders/ use ppez
3	exp psychosis/ use psyh
4	(psychos?s or psychotic).tw.
5	exp schizophrenia/ use emczd
6	exp schizophrenia/ or exp "schizophrenia spectrum and other psychotic disorders"/ use ppez
7	(exp schizophrenia/ or "fragmentation (schizophrenia)"/) use psyh
8	schizoaffective psychosis/ use emczd
9	schizoaffective disorder/ use psyh
10	(schizophren* or schizoaffective*).tw.
11	exp bipolar disorder/ use emczd
12	exp "Bipolar and Related Disorders"/ use ppez
13	exp bipolar disorder/ use psyh
14	((bipolar or bipolar type) adj2 (disorder* or disease or spectrum)).tw.
15	Depressive psychosis/ use emczd
16	Delusional disorder/ use emczd
17	delusions/ use psyh
18	(delusion* adj3 (disorder* or disease)).tw.
19	mental disease/ use emczd
20	mental disorders/ use ppez
21	mental disorders/ use psyh
22	(psychiatric adj2 (illness* or disease* or disorder* or disabilit* or problem*)).tw.
23	((severe or serious) adj3 (mental adj2 (illness* or disease* or disorder* or disabilit* or problem*))).tw.
24	(complex adj2 (mental adj2 (illness* or disease* or disorder* or disabilit* or problem*))).tw.
25	or/1-24
26	(Rehabilitation/ or cognitive rehabilitation/ or community based rehabilitation/ or psychosocial rehabilitation/ or rehabilitation care/ or rehabilitation center/) use emczd
27	(exp rehabilitation/ or exp rehabilitation centers/) use ppez
28	(Rehabilitation/ or cognitive rehabilitation/ or neuropsychological rehabilitation/ or psychosocial rehabilitation/ or independent living programs/ or rehabilitation centers/ or rehabilitation counselling/) use psyh
29	residential care/ use emczd
30	(residential facilities/ or assisted living facilities/ or halfway houses/) use ppez
31	(residential care institutions/ or halfway houses/ or assisted living/) use psyh
32	(resident* adj (care or centre or center)).tw.
33	(halfway house* or assist* living).tw.
34	((inpatient or in-patient or long-stay) adj3 (psychiatric or mental health)).tw.
35	(Support* adj (hous* or accommodat* or living)).tw.
36	(rehabilitation or rehabilitative or rehabilitate).tw.
37	rehabilitation.fs.
38	or/26-37
39	Transitional care/ use emczd
40	Transitional care/ use ppez
41	Transition.tw.

#	Searches
42	aftercare/
43	(aftercare or after care).tw.
44	*patient discharge/ use ppez
45	hospital discharge/ use emczd
46	(discharge planning/ or facility discharge/ or institutional release/ or hospital discharge/ or psychiatric hospital discharge/) use psyh
47	((discharg* or readmit* or readmission* or re-admit* or re-admission* or predischarg* or postdischarg* or release) adj4 (high-dependency unit or communit* or facility or hospital* or inpatient or in-patient* or institute* or long-stay or rehab*)).tw.
48	((return* or enter* or renter* or entry or reentry or move or moving or transfer*) adj3 (communit* or home or housing or rehab* or residential* or support* accommodation* or temporary accommodation*)).tw.
49	Case management/
50	Patient care planning/ use ppez
51	Patient care planning/ use emczd
52	(care adj2 plan*).tw.
53	("continuity of patient care"/ or patient handoff/ or patient transfer/ or retention in care/) use ppez
54	clinical handover/ use emczd
55	("continuum of care"/ or client transfer/) use psyh
56	("case management" or collaborat* or continuity or co-ordination or coordination or handover or hand-over or seamless or seam-less).tw.
57	("intermediate care" or "intermediate service" or "intermediary care" or "intermediary service").tw.
58	(step-up or step-down or stepup or stepdown).tw.
59	(step* adj2 care).tw.
60	((follow-up or followup) adj3 (care or clinic* or service* or team*)).tw.
61	("out of area*" or OOA* or OAT*).tw.
62	shared decision making/ use emczd
63	(share* adj3 decision*).tw.
64	or/39-63
65	25 and 38 and 64
66	limit 65 to (yr="1990 - current" and english language)
67	limit 66 to yr=1990-2015
68	limit 66 to yr=2016 - current
69	remove duplicates from 67
70	remove duplicates from 68
71	69 or 70
72	Letter/ use ppez
73	letter.pt. or letter/ use emczd
74	note.pt.
75	editorial.pt.
76	Editorial/ use ppez
77	News/ use ppez
78	news media/ use psyh
79	exp Historical Article/ use ppez
80	Anecdotes as Topic/ use ppez
81	Comment/ use ppez
82	Case Report/ use ppez
83	case report/ or case study/ use emczd
84	Case report/ use psyh
85	(letter or comment*).ti.
86	or/72-85
87	randomized controlled trial/ use ppez
88	randomized controlled trial/ use emczd
89	random*.ti,ab.
90	cohort studies/ use ppez

#	Searches
91	cohort analysis/ use emczd
92	cohort analysis/ use psyh
93	case-control studies/ use ppez
94	case control study/ use emczd
95	or/87-94
96	86 not 95
97	animals/ not humans/ use ppez
98	animal/ not human/ use emczd
99	nonhuman/ use emczd
100	"primates (nonhuman)"/
101	exp Animals, Laboratory/ use ppez
102	exp Animal Experimentation/ use ppez
103	exp Animal Experiment/ use emczd
104	exp Experimental Animal/ use emczd
105	animal research/ use psyh
106	exp Models, Animal/ use ppez
107	animal model/ use emczd
108	animal models/ use psyh
109	exp Rodentia/ use ppez
110	exp Rodent/ use emczd
111	rodents/ use psyh
112	(rat or rats or mouse or mice).ti.
113	or/96-112
114	71 not 113

1

2 **Database: Cochrane Library**

3 Date searched: 10/06/2019

#	Searches
1	MeSH descriptor: [Psychotic Disorders] explode all trees
2	(psychos?s or psychotic):ti,ab,kw
3	MeSH descriptor: [Schizophrenia] explode all trees
4	(schizophren* or schizoaffective*):ti,ab,kw
5	MeSH descriptor: [Bipolar Disorder] explode all trees
6	(((bipolar or bipolar type) near/2 (disorder* or disease or spectrum))):ti,ab,kw
7	MeSH descriptor: [Delusions] this term only
8	((delusion* near/3 (disorder* or disease))):ti,ab,kw
9	MeSH descriptor: [Mental Disorders] this term only
10	((psychiatric near/2 (illness* or disease* or disorder* or disabilit* or problem*))):ti,ab,kw
11	(((severe or serious) near/3 (mental adj2 (illness* or disease* or disorder* or disabilit* or problem*)))):ti,ab,kw
12	((complex near/2 (mental adj2 (illness* or disease* or disorder* or disabilit* or problem*)))):ti,ab,kw
13	(#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12)
14	MeSH descriptor: [Rehabilitation] this term only
15	MeSH descriptor: [Rehabilitation, Vocational] this term only
16	MeSH descriptor: [Residential Facilities] this term only
17	MeSH descriptor: [Assisted Living Facilities] this term only
18	MeSH descriptor: [Halfway Houses] this term only
19	((resident* near (care or centre or center))):ti,ab,kw
20	(((inpatient or in-patient or long-stay) near/3 (psychiatric or mental health))):ti,ab,kw
21	(((Support*) near (hous* or accommodat* or living))):ti,ab,kw
22	((halfway house* or assist* living)):ti,ab,kw

#	Searches
23	(rehabilitation or rehabilitative or rehabilitate):ti,ab,kw
24	(#14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23)
25	MeSH descriptor: [Transitional Care] this term only
26	(transition*):ti,ab,kw
27	MeSH descriptor: [Aftercare] this term only
28	(aftercare or after care):ti,ab,kw
29	MeSH descriptor: [Patient Discharge] this term only
30	(discharg* or readmit* or readmission* or re-admit* or re-admission* or predischarg* or postdischarg* or release) near/4 (high-dependency unit or communit* or facility or hospital* or inpatient or in-patient* or institute* or long-stay or rehab*):ti,ab,kw
31	(return* or enter* or renter* or entry or reentry or move or moving or transfer*) near/3 (communit* or home or housing or rehab* or residential* or support* accommodation* or temporary accommodation*):ti,ab,kw
32	MeSH descriptor: [Case Management] this term only
33	MeSH descriptor: [Patient Care Planning] this term only
34	(care near/2 plan*):ti,ab,kw
35	MeSH descriptor: [Continuity of Patient Care] this term only
36	MeSH descriptor: [Patient Handoff] this term only
37	MeSH descriptor: [Patient Transfer] this term only
38	MeSH descriptor: [Retention in Care] this term only
39	("case management" or collaborat* or continuity or co-ordination or coordination or handover or hand-over or seamless or seam-less):ti,ab,kw
40	("intermediate care" or "intermediate service" or "intermediary care" or "intermediary service"):ti,ab,kw
41	(step-up or step-down or stepup or stepdown):ti,ab,kw
42	("out of area*" or OOA* or OAT*):ti,ab,kw
43	(share* near/3 decision*):ti,ab,kw
44	#25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43
45	#13 AND #24 AND #44

1

2 **Database: CRD**

3 Date searched: 10/06/2018

#	Searches
1	MeSH DESCRIPTOR Psychotic Disorders EXPLODE ALL TREES IN DARE,HTA
2	(psychos*s or psychotic) IN DARE, HTA
3	MeSH DESCRIPTOR Schizophrenia EXPLODE ALL TREES IN DARE,HTA
4	(schizophren* or schizoaffective*) IN DARE, HTA
5	MeSH DESCRIPTOR Bipolar Disorder EXPLODE ALL TREES IN DARE,HTA
6	(((bipolar or bipolar type) NEAR2 (disorder* or disease or spectrum))) IN DARE, HTA
7	MeSH DESCRIPTOR Delusions IN DARE,HTA
8	(delusion* NEAR3 (disorder* or disease)) IN DARE, HTA
9	MeSH DESCRIPTOR Mental Disorders IN DARE,HTA
10	(psychiatric NEAR2 (illness* or disease* or disorder* or disabilit* or problem*)) IN DARE, HTA
11	((severe or serious) NEAR3 (mental NEAR2 (illness* or disease* or disorder* or disabilit* or problem*))) IN DARE, HTA
12	(complex NEAR2 (mental NEAR2 (illness* or disease* or disorder* or disabilit* or problem*))) IN DARE, HTA
13	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12
14	MeSH DESCRIPTOR Rehabilitation IN DARE,HTA
15	MeSH DESCRIPTOR Rehabilitation, Vocational IN DARE,HTA
16	MeSH DESCRIPTOR Residential Facilities IN DARE,HTA
17	MeSH DESCRIPTOR Assisted Living Facilities IN DARE,HTA
18	MeSH DESCRIPTOR Halfway Houses IN DARE,HTA
19	(resident* NEAR (care or centre or center)) IN DARE, HTA

#	Searches
20	((inpatient or in-patient or long-stay) NEAR3 (psychiatric or mental health)) IN DARE, HTA
21	((Support*) NEAR (hous* or accommodat* or living)) IN DARE, HTA
22	(halfway house* or assist* living) IN DARE, HTA
23	(rehabilitation or rehabilitative or rehabilitate) IN DARE, HTA
24	#14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23
25	#13 AND #24

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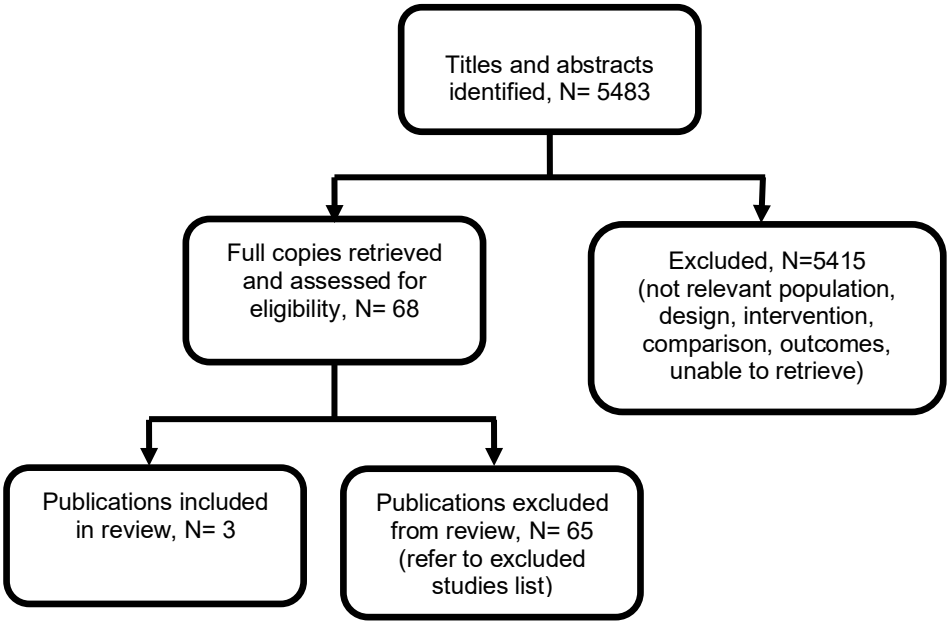
Appendix C – Clinical evidence study selection

Clinical study selection for 7.2: What processes are needed to support successful transitions?

Figure 1: Study selection flow chart



1 Appendix D – Clinical evidence tables

2 Clinical evidence tables for review question 7.2: What processes are needed to support successful transitions?

3 Table 4: Clinical evidence tables

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Malm, U. I., Ivarsson, BÅ, Allebeck, P., Durability of the efficacy of integrated care in schizophrenia: a five-year randomized controlled study, Psychiatric services (Washington, D.C.), 65, 1054-1057, 2014 **Ref Id** 935466 **Country/ies where the study was carried out** Sweden **Study type** RCT **Aim of the study** To evaluate the durability of efficacy of the Integrated Care (IC) program, a person-centred flexible assertive community treatment approach delivered through a	**Sample size** 66 participants (IC program = 35, RR program = 31) Note: 82 were randomised, but 16 who were initially randomised to the IC group had to leave the service due to external administrative reasons. **Characteristics** Mean Age (years): IC group = 37.2±9.0; RR group = 39.4±8.8 years Race-ethnicity: IC group - Caucasian N=34; Asian N=1; RR group - Caucasian N=30, Asian N=1. All had a diagnosis of schizophrenia confirmed by the Structured Clinical Interview for DSM-IV. **Inclusion criteria** 1) age 18–45, 2) diagnosis of schizophrenia,	**Interventions** Integrated Care (IC): an integrated health technology approach to the systematic coordination of general and behavioural health care. Each client had a 'social network resource group' operating within a clinical microsystem - this group of shared decision makers was trained, met regularly, and operated through a shared information and technology environment. Rational Rehabilitation (RR): the current best practice program. The two conditions were based at separately located outpatient clinics of a single university hospital, but had mostly similar characteristics, program elements, and general context. Both conditions included a combination of individualised medication,	**Details** All users of a regional service were assessed for eligibility. A third-party was used to randomise participants to either the program using random numbers. Patients were interviewed at baseline, then quarterly for two years, and at the five-year follow-up on a few outcomes. Program fidelity of the IC program was assessed annually by an external reviewer and rated as high. Outcomes relevant to the current review included number of days hospitalised and number of re-hospitalisations - as the study used psychotic relapse as indicators of severe functional deterioration. Also relevant was the UKU ConSat rating scale assessing the patient's satisfaction with care and service delivery. Additionally, symptoms and	**Results** The mean total number of days hospitalized at the five-year follow-up was 48±95.5 for the IC group and 132±364.4 for the RR group. The difference was not significant - 84 less nights (95%CI = 216.12 less to 48.12 more). User satisfaction: The UKU ConSat scale found no significant differences between the IC group and the RR group at baseline (*p*=.568). At 24 months the difference in score was significant (IC: x̄=12.3 [SD=6.1], RR: x̄=6.9 [SD=10.3], *p*=.011). At 5 years the difference in score was more significant (IC: x̄=12.9 [SD=6.3], RR: x̄=3.5 [SD=10.3], *p*=.011).	**Limitations** Cochrane RoB-2 checklist summary: Risk of bias arising from the randomization process (Low concerns) Risk of bias due to deviations from the intended interventions (Low concerns) Missing outcome data (Low concerns) Risk of bias in measurement of the outcome (Low concerns) Risk of bias in selection of the reported result (Low concerns) **Other information** Because of administrative health and social welfare structural changes related to the register of addresses of the patients and beyond the control of the researchers, 16 patients in the IC group had to be discharged from the IC

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
'resource group clinical microsystem' for each patient. **Study dates** 1994 - 2005 **Source of funding** Supported by the Swedish Medical Research Council, the University of Gothenburg Faculty of Medicine; the Vårdal Foundation, the Swedish Schizophrenia Fellowship, the Swedish National Board of Health and Welfare, the Söderström-Königska Foundation, the University of Gothenburg Center for Public Sector Research, and the Torsten and Ragnar Söderberg Foundation.	3) could give written informed consent **Exclusion criteria** 1) A substance use disorder as their primary disorder	psycho education, family interventions without the patient, living skills training, person-centred psychological interventions, and crisis interventions. The main difference involved clinical decision-making management, where IC's shared decision making was carried out by a manualised 'clinical microsystems' approach - with a small person-centred team who work together in a defined setting on a regular basis. The team has clinical and business aims, linked processes, and a shared information and technology environment and produces care and services that can be measured as performance outcomes. The RR program applied clinical decision making as usual, which involved a psychiatrist, a case manager, the client, and informal caregivers.	functioning data was collected using the Global Assessment of Functioning (GAF) scales, as well as the numbers of patients engaged and retained in services. Assessments were made by eight independent assessors who were trained to a level of high interrater reliability, not involved in treatment, and formally blind to the programs carried out. Findings were analysed using t-tests within SPSS to find the differences between groups. All tests were two-tailed, and the significance level was set at #.05. Effect sizes were calculated by the Cohen's d formula.		program during the third year of the trial. (p. 1054)
Full citation O'Brien, S., McFarland, J., Kealy, B., Pullela, A., Saunders, J., Cullen, W., Meagher, D., A randomized-controlled trial	**Sample size** 80 participants (ICM group = 40, TAU group = 40)	**Interventions** Intensive case management – individual case managers were allocated to each service user, with a low case manager to patient	**Details** Participants were identified from an annual audit of service users in a particular region, and those selected were randomised	**Results** Re-hospitalisation: The total number of hospitalisations per group at 9 month follow-up was 5 for the ICM group and 5 for the	**Limitations** Cochrane RoB-2 checklist summary: Risk of bias arising from the randomization process (High concerns)

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
of intensive case management emphasizing the recovery model among patients with severe and enduring mental illness, Irish journal of medical science, 181, 301-308, 2012 **Ref Id** 949357 **Country/ies where the study was carried out** Ireland **Study type** RCT **Aim of the study** To explore the effectiveness of intensive case management (ICM) which emphasises recovery principles in a community mental health service in Ireland. **Study dates** NR **Source of funding** NR	**Characteristics** Mean Age (years): ICM group = 41.4±11.8; TAU group = 48.6±11.6 Gender (male %): ICM group = 62, TAU group 58 All met the ICD-10 criteria for a diagnosis of schizophrenia, schizoaffective disorder, bipolar affective disorder or recurrent depressive disorder with psychosis. **Inclusion criteria** 1) aged between 18 and 64 years 2) primary diagnosis of relevant severe and enduring mental illness 3) had been attending the service for a year or more 4) had 'outstanding' socioadaptive problems (as defined by a score of C2 on at least one social subscale item of the HoNOS) **Exclusion criteria** NR	ratio (no more than 1:5). Weekly collaborative care planning meetings occurred weekly and were complementary to usual care activities, with input from a multidisciplinary team. Recovery principles were strongly emphasised within this team. Treatment as usual (TAU) – attendance at the generic community mental health service provided by a well resourced multidisciplinary care team, and including an annual care plan subject to informal review as needs arose.	to conditions by selecting alternate case numbers. Assessments were conducted at baseline and again after 9 months. Research assessments were conducted as specially scheduled meetings by the researcher and an assistant - there was no blinding, Outcomes relevant to this systematic review included number patients experienced a hospitalisation during the study period. Also relevant was patient satisfaction as indicated by the 'How Are You?' patient-rated quality-of-life scale, functionality was assessed using the Functional Analysis of Care Environments (FACE) scale, and several other predictors of change were via case manager interview and a review of the patients' records. Findings were analysed using appropriate tests within SPSS to find the differences between groups. Chi-squared tests were used to compare conditions regardi ng hospitalisation. Repeat measures ANCOVA analyses were used	TAU group, indicating no significant difference. Quality of life: On the How Are You? scale the ICM group had a mean baseline score of 73.6±38.5, and at follow-up had a score of 59.2±38.4. The TAU group had a mean baseline score of 54.9±35.6, and at follow-up had a score of 60.2±44.6. This suggests the ICM group improved significantly, while the TAU group declined significantly. The difference in improvement between the groups was significant. (IC: $\bar{x}$=12.3 [SD=6.1], RR: $\bar{x}$=-6.9 [SD=10.3], *p*=.011). However it the groups were very different at baseline perhaps due to flaws in randomisation.	Risk of bias due to deviations from the intended interventions (Low concerns) Missing outcome data (Low concerns) Risk of bias in measurement of the outcome (High concerns) Risk of bias in selection of the reported result (Low concerns) **Other information** Efforts to randomise could be considered ineffective as it was found at baseline that the ICM group was significantly younger, had fewer previous admissions, had greater severity of difficulties and had higher symptoms.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
			to compare groups on the various symptom scales while controlling for differences at baseline such as age and symptom severity, however it was not clear if this applied to the How Are You? scale findings.		
Full citation Tomita, A., Herman, D. B., The impact of critical time intervention in reducing psychiatric rehospitalisation after hospital discharge, Psychiatric services (Washington, D.C.), 63, 935-937, 2012 **Ref Id** 951662 **Country/ies where the study was carried out** USA **Study type** RCT **Aim of the study** To evaluate the impact of a rehabilitative Critical Time Intervention (CTI) on reducing rehospitalisation of formerly homeless people with severe mental	**Sample size** 150 participants (CTI group = 77, TAU group = 73) **Characteristics** Mean Age (years): 37.5±9.5 Gender (male %): 71 Race/ethnicity: African-Americans 62% Diagnoses: 61% had a lifetime diagnosis of schizophrenia, 35% had diagnoses of schizoaffective disorder. 90% also met the criteria for substance use or substance dependence. **Inclusion criteria** Individuals living in the transitional residence settings who had: 1) DSM-IV diagnosis of psychotic disorder 2) history of homelessness 3) planning on residency in NYC following discharge	**Interventions** Critical Time Intervention (CTI): a care coordination intervention aiming to prevent recurring homelessness and other adverse outcomes by working to strengthening the service users' ties with services, family, and friends. The intervention is delivered for nine months by a trained social services worker who works to build up a relationship with the service user while they are at the transitional residences. CTI was provided in addition to the usual psychiatric treatment, discharge planning services and various community-based services. Treatment as usual (TAU) – usual care within the transitional residences including psychiatric treatment, discharge planning services, and	**Details** Participants were residents at two transitional centres, invited to join if they met the inclusion criteria. Randomisation details are given in Herman (2011) stating that an independent party randomised participants grouped by gender and by diagnosis of a substance use. The relevant outcome reported was psychiatric rehospitalisation - the number and proportion of nights spent in psychiatric hospitals compared between the two groups. Hospitalisation was assessed every 6 weeks for 18 months - a total of 13 assessments, and the final three assessments (final 18 weeks) were used as the main outcome measure. Rehospitalisation was assessed by participant self-report by research interviewers blind to the	**Results** Rehospitalisation: During the last 3 observational intervals (the final 18 weeks) it was reported that the CTI group participants spent a total of 1183 nights in hospital, while the TAU group spent a total of 1508 nights in hospital. Assignment to CTI was reported to be significantly associated with a reduced odds of re-hospitalisation during the final three observation intervals (OR=.11, 95% CI=.01–.96), however not enough data was reported to calculate and verify this finding. The paper reported that the proportion for re-hospitalisation was lower in the CTI group than the TAU group (18% vs. 27%, z = 2.09, p < .05) - although it was not clear if this referred	**Limitations** Cochrane RoB-2 checklist summary: Risk of bias arising from the randomization process (Unclear concerns) Risk of bias due to deviations from the intended interventions (Low concerns) Missing outcome data (High concerns) Risk of bias in measurement of the outcome (Low concerns) Risk of bias in selection of the reported result (Low concerns) **Other information**

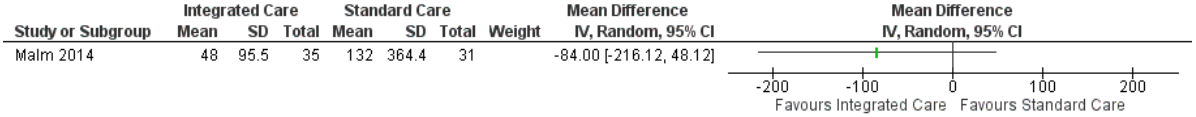
Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
illness after discharge from inpatient treatment. **Study dates** 2002-2006 **Source of funding** Supported by grants from the National Institute of Mental Health.	**Exclusion criteria** 1) don't speak English 2) were unable to provide informed consent 3) did not stay in the transitional residence for more than three week nights	various community-based services.	participants' treatment condition. Data was analysed using STATA version 11, using a random effects logistic regression to assess the intent-to-treat effect of CTI in the last three follow-up intervals.	to proportion who were hospitalised, or the proportions of nights spent in hospital. A denominator was not reported and so sufficient data was available to calculate and verify the meaning of this reported finding. As a result the conservative interpretation was taken, that the reported finding meant that 18% of those receiving CTI and 27% of those receiving TAU experienced re-hospitalisation (OR 0.59, 95%CI = 0.27 to 0 1.28).	

CI:confidence interval; CTI: crticial time intervention; GAF: Global Assessment of Functioning; ICM: intensive case management; OR: odds ratio; TAU: treatment as usual

Appendix E – Forest plots

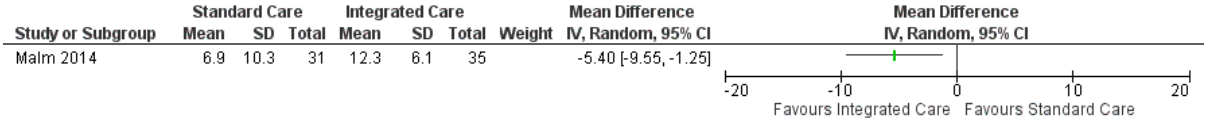
Forest plots for review question 7.2: What processes are needed to support successful transitions?

Figure 2: Comparison 1: Integrated health and social care system versus standard care: readmission to inpatient care (nights in hospital) after 5 years.



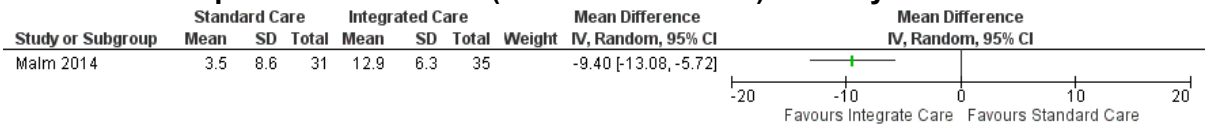
CI: confidence interval;

Figure 3: Comparison 1: Integrated health and social care system versus standard care: patient satisfaction (UKU ConSat scale) after 24 months.



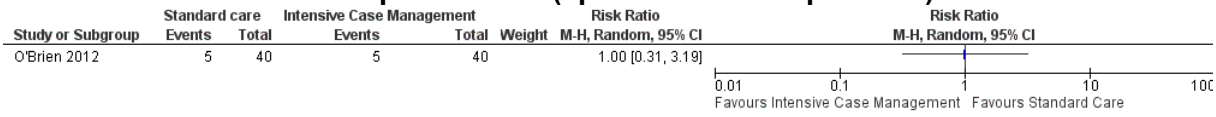
CI: confidence interval;

Figure 4: Comparison 1: Integrated health and social care system versus standard care: patient satisfaction (UKU ConSat scale) after 5 years.



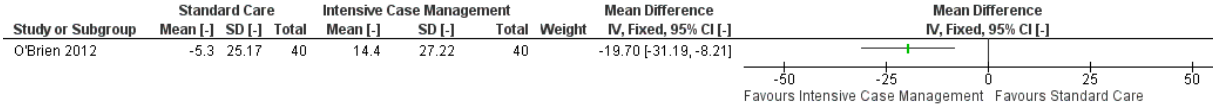
CI: confidence interval;

Figure 5: Comparison 2: Frequent reviewing of care plans versus standard care: readmission to inpatient care (spent time re-hospitalised) after 9 months



CI: confidence interval;

Figure 6: Comparison 2: Frequent reviewing of care plans versus standard care: patient satisfaction (How Are You? scale) after 9 months



CI: confidence interval;

Figure 7: Comparison 3: Promoting collaboration and information sharing versus standard care: readmission to inpatient care (spent time re-hospitalised in past 18 weeks) after 18 months

CI: confidence interval;

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1 Appendix F – GRADE tables

2 GRADE tables for review question 7.2: What processes are needed to support successful transitions?

3 Table 5: Clinical evidence profile for comparison of an integrated health and social care system versus standard care

Quality assessment							No of patients		Effect			
No of studies	**Design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Other considerations**	**Integrated care**	**Standard care**	**Relative (95% CI)**	**Absolute**	**Quality**	**Importance**
Readmission to inpatient care (nights in hospital) after 5 years.												
1	Randomised controlled trial	No serious risk of bias	no serious inconsistency	no serious indirectness	serious imprecision[1]	none	35	31	-	84 less nights (from 216.12 less to 48.12 more)	MODERATE	CRITICAL
Patient satisfaction (UKU ConSat scale; higher better) after 24 months												
1	Randomised controlled trial	No serious risk of bias	no serious inconsistency	no serious indirectness	serious imprecision[1]	none	35	31	-	Mean score 5.4 higher (from 1.25 higher to 9.55 higher)	MODERATE	IMPORTANT
Patient satisfaction (UKU ConSat scale; higher better) after 5 years												
1	Randomised controlled trial	*No serious risk of bias*	no serious inconsistency	no serious indirectness	no imprecision	none	35	31	-	Mean score 9.4 higher (from 5.72 higher to 13.08 higher)	HIGH	IMPORTANT

4 *1 Downgraded one level as 95% CI of effect crosses one default MID threshold.*
5

Table 6: Clinical evidence profile for comparison of frequent reviewing of care plans versus standard care

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	ICM Group	Standard care	Relative (95% CI)	Absolute		
Readmission to inpatient care (spent time re-hospitalised) after 9 months												
1	Randomised controlled trial	Very serious risk of bias[1]	no serious inconsistency	no serious indirectness	Very serious imprecision[3]	Randomisation unsuccessful as the groups were significantly different on many baseline characteristics.	5/40 (12.5%)	5/40 (12.5%)	RR 1.00 (0.27 to 3.76)	0 fewer per1000 (from 88 fewer to 224 more)	VERY LOW	CRITICAL
Patient satisfaction (How Are You? scale) after 9 months												
1	Randomised controlled trial	Very serious risk of bias[1]	no serious inconsistency	Serious indirectness[2]	Serious imprecision[4]	Randomisation unsuccessful as the groups were significantly different on many baseline characteristics.	40	40	-	Mean score 19.7 lower (from 8.21 lower to 31.19 lower)	VERY LOW	IMPORTANT

1 Bias due to flawed randomisation process and lack of blinding during assessments.
2 Serious indirectness as the outcome measured is Quality of Life which is related but different to patient satisfaction as specified in the scope.
3 Downgraded two levels as 95% CI of effect crosses both MID thresholds.
4 Downgraded one level as 95% CI of effect crosses one default MID threshold.

Table 7: Clinical evidence profile for comparison of promoting collaboration and information sharing versus standard care

Quality assessment							No of patients		Effect			
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	CTI group	Standard care	Relative (95% CI)	Absolute	Quality	Importance
Readmission to inpatient care (re-hospitalisation in past 18 weeks) after 18 months												
1	Randomised controlled trial	Very serious risk of bias[1]	no serious inconsistency	no serious indirectness	Serious imprecision[2]	None	14/77 (18%)	20/73 (27%)	RR 0.59 (0.27 to 1.28)	92 fewer per 1000 (from 182 fewer to 52 more)	LOW	CRITICAL

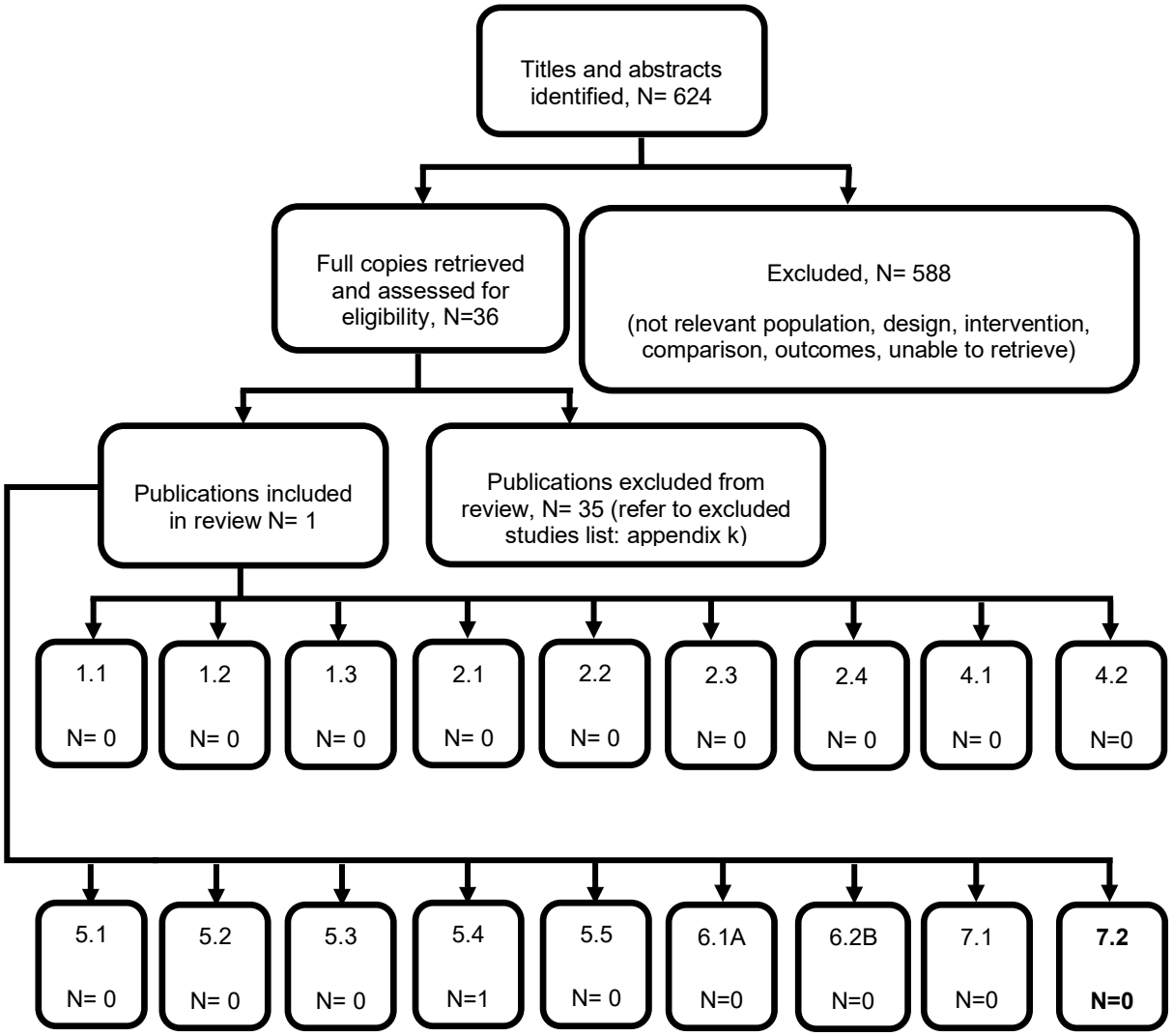
1 Bias due to an ambiguous randomisation process and missing outcome data which prevented imprecision calculations.
2 Downgraded one level as 95% CI of effect crosses one default MID threshold.

Appendix G – Economic evidence study selection

Economic evidence study selection for review question 7.2: What processes are needed to support successful transitions?

A global health economic literature search was undertaken, covering all review questions in this guideline. However, as shown in Figure 8, no evidence was identified which was applicable to this review question.

Figure 8: Health economic study selection flow chart



Appendix H – Economic evidence tables

Economic evidence tables for review question 7.2: What processes are needed to support successful transitions?

No evidence was identified which was applicable to this review question.

Appendix I – Economic evidence profiles

Economic evidence profiles for review question 7.2: What processes are needed to support successful transitions?

No evidence was identified which was applicable to this review question.

Appendix J – Economic analysis

Economic evidence analysis for review question 7.2: What is the effectiveness of rehabilitation services compared with standard care?

No economic analysis was conducted for this review question.

Appendix K – Excluded studies

Excluded clinical and economic studies for review question 7.2: What processes are needed to support successful transitions?

Clinical studies

Table 6: Excluded studies and reasons for their exclusion

Study	Reason for Exclusion
Audini, B., Marks, I. M., Lawrence, R. E., Connolly, J., Watts, V., Home-based versus out-patient/in-patient care for people with serious mental illness. Phase II of a controlled study, British Journal of Psychiatry, 165, 204-10, 1994	Study was not testing a rehabilitative intervention as was specified in the scope.
Bandeira, M., Lesage, A., Morissette, R., Granger, L., Evaluation of long-term effectiveness of a social reintegration program, Sante mentale AU quebec, 19, 177â190, 1994	Foreign language paper
Bitter, N., Roeg, D., van Assen, M., van Nieuwenhuizen, C., van Weeghel, J., How effective is the comprehensive approach to rehabilitation (CARe) methodology? A cluster randomized controlled trial, BMC Psychiatry, 17, 396, 2017	It was not clear whether at least two thirds of the population were from the target population.
Dalum, H. S., Korsbek, L., Mikkelsen, J. H., Thomsen, K., Kistrup, K., Olander, M., Hansen, J. L., Nordentoft, M., Eplov, L. F., Illness management and recovery (IMR) in Danish community mental health centres, Trials, 12, 195, 2011	Study participants were not moving from rehabilitation to other parts of the mental health, social care or primary care systems.
Drake, R. E., Frey, W., Bond, G. R., Goldman, H. H., Salkever, D., Miller, A., Moore, T. A., Riley, J., Karakus, M., Milfort, R., Assisting Social Security Disability Insurance beneficiaries with schizophrenia, bipolar disorder, or major depression in returning to work, American Journal of PsychiatryAm J Psychiatry, 170, 1433-41, 2013	Less than two thirds of the participants were from the target population.
Ford, R., Ryan, P., Norton, P., Beadsmoore, A., Craig, T., Muijen, M., Does intensive case management work? Clinical, social and quality of life outcomes from a controlled study, Journal of Mental Health, 5, 361-368, 1996	Study did not report any critical outcomes related to transitions.
Garber-Epstein, P., Zisman-Ilani, Y., Levine, S., Roe, D., Comparative impact of professional mental health background on ratings of consumer outcome and fidelity in an Illness Management and Recovery program, Psychiatric rehabilitation journal, 36, 236â242, 2013	Study was conducted in a country outside from those specified in the scope.
Hall, M., Deane, F., Beaumont, G., Evaluation of an inpatient program aimed at preparing 'hard-to-place' chronically mentally ill for the community, Behavioral Interventions, 11, 193-206, 1996	Study did not measure any of the outcomes specified in the scope.
Hansson, J., Ovretveit, J., Askerstam, M., Gustafsson, C., Brommels, M., Coordination in networks for improved mental health service, International Journal of Integrated Care [Electronic Resource], 10, 25, 2010	Study did not report any critical outcomes related to transitions.

Study	Reason for Exclusion
Hengartner, M. P., Passalacqua, S., Heim, G., Andreae, A., Rossler, W., von Wyl, A., Factors influencing patients' recovery and the efficacy of a psychosocial post-discharge intervention: post hoc analysis of a randomized controlled trial, Social psychiatry and psychiatric epidemiology, 51, 1667-1677, 2016	Study participants were not moving from rehabilitation to other parts of the mental health, social care or primary care systems.
Henry, A. D., Lucca, A. M., Banks, S., Simon, L., Page, S., Inpatient hospitalizations and emergency service visits among participants in an individual placement and support (IPS) model program, Mental health services research, 6, 227-237, 2004	Study was not testing a rehabilitative intervention that was specified in the scope.
Hobbs, C., Newton, L., Tennant, C., Rosen, A., Tribe, K., Deinstitutionalization for long-term mental illness: A 6-year evaluation, Australian and New Zealand Journal of Psychiatry, 36, 60-66, 2002	Paper was not reporting a comparison study.
Hornstra, R. K., Bruce-Wolfe, V., Sagduyu, K., Riffle, D. W., The effect of intensive case management on hospitalization of patients with schizophrenia, Hospital & Community PsychiatryHosp Community Psychiatry, 44, 844-7, 1993	Study was testing a rehabilitation intervention versus no rehabilitation intervention, and not comparing what made rehabilitation and transition more successful.
Jensen, S. B., Dalum, H. S., Korsbek, L., Hjorthoj, C., Mikkelsen, J. H., Thomsen, K., Kistrup, K., Olander, M., Lindschou, J., Mueser, K. T., et al.,, Illness management and recovery: one-year follow-up of a randomized controlled trial in Danish community mental health centers: long-term effects on clinical and personal recovery, BMC Psychiatry, 19, 2019	Study participants were not moving from rehabilitation to other parts of the mental health, social care or primary care systems.
Johnson, S., Lamb, D., Marston, L., Osborn, D., Mason, O., Henderson, C., Ambler, G., Milton, A., Davidson, M., Christoforou, M., Sullivan, S., Hunter, R., Hindle, D., Paterson, B., Leverton, M., Piotrowski, J., Forsyth, R., Mosse, L., Goater, N., Kelly, K., Lean, M., Pilling, S., Morant, N., Lloyd-Evans, B., Peer-supported self-management for people discharged from a mental health crisis team: a randomised controlled trial, Lancet, 392, 409-418, 2018	Study was not testing a rehabilitative intervention as was specified in the scope.
Karniel-Lauer, E., Szor, H., Livne, S., Melamed, Y., Spiro, S., Elizur, A., The "re-entry group"--a transitional therapeutic framework for mentally ill patients discharged from the hospital to community clinics, Canadian Journal of Psychiatry - Revue Canadienne de Psychiatrie, 45, 837-9, 2000	Study was conducted in a country outside from those specified in the scope.
Kelly, E., Duan, L., Cohen, H., Kiger, H., Pancake, L., Brekke, J., Integrating behavioral healthcare for individuals with serious mental illness: a randomized controlled trial of a peer health navigator intervention, Schizophrenia Research, 182, 135â□□141, 2017	Less than two thirds of the participants were from the target population.
Khankeh, H., Rahgozar, M., Ranjbar, M., The effects of nursing discharge plan (post-discharge education and follow-up) on self-care ability in patients with chronic schizophrenia	Study was conducted in a country outside from those specified in the scope.

Study	Reason for Exclusion
hospitalized in Razi psychiatric Center, Iranian Journal of Nursing and Midwifery Research, 16, 162-8, 2011	
Koukia, E., Madianos, M. G., The effect of rehabilitation of schizophrenic patients on their family atmosphere and the emotional well-being of caregivers, European Journal of Psychiatry, 19, 55-64, 2005	Study was testing a rehabilitation intervention versus no rehabilitation intervention, and not comparing what made rehabilitation and transition more successful.
Lafave, H. G., De Souza, H. R., Gerber, G. J., Assertive community treatment of severe mental illness: A Canadian experience, Psychiatric Services, 47, 757-759, 1996	It was not clear whether at least two thirds of the population were from the target population.
Lehman, A. F., Herron, J. D., Schwartz, R. P., Myers, C. P., Rehabilitation for adults with severe mental illness and substance use disorders. A clinical trial, Journal of Nervous and Mental Disease, 181, 86-90, 1993	Study was not testing a rehabilitative intervention that was specified in the scope.
Liu, F., Effect of supporting psycho-behavior therapy on the recent mental stress function of chronic schizophrenia, Chinese Journal of Clinical Rehabilitation, 8, 7364â7365, 2004	Study was conducted in a country outside from those specified in the scope.
Macias, C., Kinney, R., Farley, O. W., Jackson, R., Vos, B., The role of case management within a community support system: partnership with psychosocial rehabilitation, Community Mental Health Journal, 30, 323-39, 1994	It was not clear whether at least two thirds of the population were from the target population.
Muijen, M., Marks, I., Connolly, J., Audini, B., Home based care and standard hospital care for patients with severe mental illness: a randomised controlled trial, BMJ (clinical research ed.), 304, 749â754, 1992	Study was not testing an intervention in a rehabilitative setting as was specified in the scope.
Muller-Clemm, Werner J., Halting the "revolving door" of serious mental illness: Evaluating an assertive case management program, Dissertation Abstracts International: Section B: The Sciences and Engineering, 58, 5133, 1998	Study was excluded as a dissertation - due to not being peer reviewed.
Munro, Jane, Palmada, Michelle, Russell, Anneliese, Taylor, Penny, Heir, Bradley, McKay, Jan, Lloyd, Chris, Queensland extended care services for people with severe mental illness and the role of occupational therapy, Australian occupational therapy journal, 54, 257-265, 2007	Paper was not reporting a comparison study.
Oades, L., Deane, F., Crowe, T., Lambert, W. G., Kavanagh, D., Lloyd, C., Collaborative recovery: An integrative model for working with individuals who experience chronic and recurring mental illness, Australasian Psychiatry, 13, 279-284, 2005	Paper was not reporting the findings of a comparison study.
Omer, S., Priebe, S., Giacco, D., Continuity across inpatient and outpatient mental health care or specialisation of teams? A systematic review, European Psychiatry: the Journal of the Association of European Psychiatrists, 30, 258-70, 2015	The majority of the participants in the included papers were not from the target population. Relevant references were searched.

Study	Reason for Exclusion
Parker, S., Hopkins, G., Siskind, D., Harris, M., McKeon, G., Dark, F., Whiteford, H., A systematic review of service models and evidence relating to the clinically operated community-based residential mental health rehabilitation for adults with severe and persisting mental illness in Australia, BMC Psychiatry, 19, 55, 2019	Paper did not included controlled trial data
Patrick, V., Smith, R. C., Schleifer, S. J., Morris, M. E., McLennon, K., Facilitating discharge in state psychiatric institutions: a group intervention strategy, Psychiatric Rehabilitation Journal, 29, 183-8, 2006	Paper was not reporting a comparison study.
Price, L. M., Transition to Community: a program to help clients with schizophrenia move from inpatient to community care; a pilot study, Archives of psychiatric nursing, 21, 336â□□344, 2007	Study was testing a rehabilitation intervention versus no rehabilitation intervention, and not comparing what made rehabilitation and transition more successful.
Priebe, S., Hoffmann, K., Isermann, M., Kaiser, W., Do long-term hospitalised patients benefit from discharge into the community?, Social Psychiatry & Psychiatric Epidemiology, 37, 387-92, 2002	Data not reported in a format to allow inclusion in analysis of predictive factors
Prince, J. D., Practices preventing rehospitalization of individuals with schizophrenia, Journal of Nervous & Mental Disease, 194, 397-403, 2006	Paper was not reporting a comparison study.
Puschner, B., Steffen, S., Volker, K. A., Spitzer, C., Gaebel, W., Janssen, B., Klein, H. E., Spiessl, H., Steinert, T., Grempler, J., Muche, R., Becker, T., Needs-oriented discharge planning for high utilisers of psychiatric services: multicentre randomised controlled trial, Epidemiology and psychiatric science, 20, 181-192, 2011	Less than two thirds of the participants were from the target population.
Reynolds, W., Lauder, W., Sharkey, S., Maciver, S., Veitch, T., Cameron, D., The effects of a transitional discharge model for psychiatric patients, Journal of psychiatric and mental health nursing, 11, 82â□□88, 2004	It was not clear whether at least two thirds of the population were from the target population.
Roberts, S. R., Crigler, J., Ramirez, C., Sisco, D., Early, G. L., Working With Socially and Medically Complex Patients: When Care Transitions Are Circular, Overlapping, and Continual Rather Than Linear and Finite, Journal for Healthcare Quality, 37, 245-65, 2015	Paper was not reporting a comparison study.
Robinson, G. M., Pinkney, A. A., Transition from the hospital to the community: small group program, Journal of psychosocial nursing and mental health services, 30, 33-36, 1992	Paper was not reporting a comparison study.
Roldan-Merino, J., Garcia, I. C., Ramos-Pichardo, J. D., Foix-Sanjuan, A., Quilez-Jover, J., Montserrat-Martinez, M., Impact of personalized in-home nursing care plans on dependence in ADLs/IADLs and on family burden among adults diagnosed	Study participants were not starting in rehabilitation and moving to other parts of the mental health, social care or primary care systems.

Study	Reason for Exclusion
with schizophrenia: a randomized controlled study, Perspectives in psychiatric care, 49, 171-8, 2013	
Roos, E., Bjerkeset, O., Steinsbekk, A., Health care utilization and cost after discharge from a mental health hospital; An RCT comparing community residential aftercare and treatment as usual, BMC Psychiatry, 18 (1) (no pagination), 2018	Less than two thirds of the participants were from the target population.
Rose, L. E., Gerson, L., Carbo, C., Transitional care for seriously mentally ill persons: a pilot study, Archives of psychiatric nursing, 21, 297-308, 2007	Paper was not reporting a comparison study.
Rosenheck, R. A., Neale, M. S., Mohamed, S., Transition to low intensity case management in a VA Assertive Community Treatment model program, Psychiatric Rehabilitation Journal, 33, 288-96, 2010	Data not reported in a format to allow inclusion in analysis of predictive factors
Salyers, M. P., McGuire, A. B., Kukla, M., Fukui, S., Lysaker, P. H., Mueser, K. T., A randomized controlled trial of illness management and recovery with an active control group, Psychiatric services (Washington, D.C.), 65, 1005â□□1011, 2014	Study was not testing a rehabilitative intervention that was specified in the scope.
Sands RG, Cnaan RA. Two modes of case management: Assessing their impact. Community Mental Health Journal, 30(5):441-57, 1994	Study was not comparing a rehabilitation intervention to standard care, as specified in the scope.
Scanlan, J. N., Hancock, N., Honey, A., Evaluation of a peer-delivered, transitional and post-discharge support program following psychiatric hospitalisation, BMC Psychiatry, 17 (1) (no pagination), 2017	Less than two thirds of the participants were from the target population.
Shaffer, S. L., Hutchison, S. L., Ayers, A. M., Goldberg, R. W., Herman, D., Duch, D. A., Kogan, J. N., Terhorst, L., Brief critical time intervention to reduce psychiatric rehospitalization, Psychiatric Services, 66, 1155-1161, 2015	Less than two thirds of the participants were from the target population.
Shaleen, Lori A., The efficacy of residential care in the management of serious mental illness, Dissertation Abstracts International: Section B: The Sciences and Engineering, 63, 550, 2002	Excluded as a dissertation - due to not being peer reviewed.
Sharifi, V., Tehranidoost, M., Yunesian, M., Amini, H., Mohammadi, M., Jalali Roudsari, M., Effectiveness of a low-intensity home-based aftercare for patients with severe mental disorders: a 12-month randomized controlled study, Community Mental Health Journal, 48, 766-770, 2012	Study participants were not starting in rehabilitation and moving to other parts of the mental health, social care or primary care systems.
Siegel, Deborah, Patient characteristics and early treatment gains as predictors of functional outcome and symptom change at discharge in patients with treatment resistant schizophrenia in a social learning program, Dissertation Abstracts International: Section B: The Sciences and Engineering, 77, No Pagination Specified, 2016	Excluded as a dissertation - due to not being peer reviewed
Simpson, C. J., Seager, C. P., Robertson, J. A., Home-based care and standard hospital care for patients with severe mental	This paper was commentary up the quoted 'Muijen et al. 1992' paper, reviewed separately.

Study	Reason for Exclusion
illness: a randomised controlled trial, British journal of psychiatry, 162, 239â243, 1993	
Sledge, W. H., Tebes, J., Wolff, N., Helminiak, T. W., Day hospital/crisis respite care versus inpatient care, Part II: service utilization and costs, American journal of psychiatry, 153, 1074â1083, 1996	Less than two thirds of the participants were from the target population.
Smelson, D. A., Losonczy, M. F., Ziedonis, D., Sussner, B. D., Castles-Fonseca, K., Rodrigues, S., Kline, A., A brief community linkage intervention for veterans with a persistent mental illness and a co-occurring substance abuse disorder, European Journal of Psychiatry, 21, 143-152, 2007	It was not clear whether at least two thirds of the population were from the target population.
Smelson, D., Kalman, D., Losonczy, M. F., Kline, A., Sambamoorthi, U., Hill, L. S., Castles-Fonseca, K., Ziedonis, D., A brief treatment engagement intervention for individuals with co-occurring mental illness and substance use disorders: results of a randomized clinical trial, Community Mental Health Journal, 48, 127-132, 2012	Study was not testing an intervention in a rehabilitative setting as was specified in the scope.
Smith, T. E., Hull, J. W., Hedayat-Harris, A., Ryder, G., Berger, L. J., Development of a vertically integrated program of services for persons with schizophrenia, Psychiatric ServicesPsychiatr Serv, 50, 931-5, 1999	Paper was not reporting a comparison study.
Sperduto, J. S., Zechner, M. R., Spagnolo, A. B., Giacobbe, G., Tools for Moving On: Adapting an Evidence-Based Housing Curriculum for Individuals Receiving Services in an Inpatient Psychiatric Setting to Prepare for Community Living, Journal of Psychosocial Nursing and Mental Health Services, 1-6, 2019	Paper was not reporting a comparison study.
Steffen, S., Kosters, M., Becker, T., Puschner, B., Discharge planning in mental health care: a systematic review of the recent literature, Acta Psychiatrica Scandinavica, 120, 1-9, 2009	Studies in this systematic review were not testing an intervention in a rehabilitative setting as was specified in the scope.
Štrkalj-Ivezić, S., Vrdoljak, M., MuÅ¾iniÄ‡, L., Agius, M., The impact of a rehabilitation day centre program for persons suffering from schizophrenia on quality of life, social functioning and self-esteem, Psychiatria Danubina, 25(2):194-9, 2013	Study was testing a rehabilitation intervention versus no rehabilitation intervention, and not comparing what made rehabilitation and transition more successful.
Stroup, T. S., Dorwart, R. A., Impact of a managed mental health program on Medicaid recipients with severe mental illness, Psychiatric Services, 46, 885-9, 1995	Less than two thirds of the participants were from the target population.
Tibbo, P., Chue, P., Wright, E., Hospital outcome measures following assertive community treatment in Edmonton, Alberta, Canadian Journal of Psychiatry - Revue Canadienne de Psychiatrie, 44, 276-9, 1999	Paper was not reporting a comparison study.

Study	Reason for Exclusion
Tomita A, Lukens EP, Herman DB. Mediation analysis of critical time intervention for persons living with serious mental illnesses: Assessing the role of family relations in reducing psychiatric rehospitalization. Psychiatric rehabilitation journal, 37(1):4, 2014	Study did not report relevant outcomes in a format that could be extracted for analysis.
Trauer, T., Farhall, J., Newton, R., Cheung, P., From long-stay psychiatric hospital to community care unit: Evaluation at 1 year, Social Psychiatry and Psychiatric Epidemiology, 36, 416-419, 2001	Paper was not reporting a comparison study.
Tungpunkom, P., Maayan, N., Soares-Weiser, K., Life skills programmes for chronic mental illnesses, Cochrane Database of Systematic Reviews, 2012	Study was not testing a rehabilitative intervention as was specified in the scope.
Udechuku, A., Olver, J., Hallam, K., Blyth, F., Leslie, M., Nasso, M., Schlesinger, P., Warren, L., Turner, M., Burrows, G., Assertive community treatment of the mentally ill: service model and effectiveness, Australasian PsychiatryAustralas, 13, 129-34, 2005	Paper was not reporting a comparison study.
Veltro, F., Falloon, I., Venditteli, N., Oricchio, I., Scinto, A., Gigantesco, A., Morosini, P., Effectiveness of cognitive-behavioural group therapy for inpatients, Clinical Practice and Epidemiology in Mental Health, 2 (no pagination), 2006	Paper was not reporting a comparison study.
Wirshing, D. A., Pierre, J. M., Wirshing, W. C., Guzik, L. H., Resnick, S. A., Goldstein, D., Zorick, T. S., Community re-entry program training module for schizophrenic inpatients improves treatment outcomes, Schizophrenia Research, 87, 338-9, 2006	Study was not testing a rehabilitative intervention as was specified in the scope.
Zubritsky, C., Rothbard, A. B., Dettwyler, S., Kramer, S., Chhatre, S., Evaluating the effectiveness of an integrated community continuum of care program for individuals with serious mental illness, Journal of Mental Health, 22, 12-21, 2013	It was not clear whether at least two thirds of the population were from the target population.

Economic studies

A global economic literature search was undertaken for this guideline, covering all 18 review questions. The table below is a list of excluded studies across the entire guideline and studies listed were not necessarily identified for this review question.

Table 7: Excluded studies from the economic component of the review

Study	Reason for Exclusion
Aitchison, K J, Kerwin, R W, Cost-effectiveness of clozapine: a UK clinic-based study (Structured abstract), British Journal of PsychiatryBr J Psychiatry, 171, 125-130, 1997	Available as abstract only.
Barnes, T. R., Leeson, V. C., Paton, C., Costelloe, C., Simon, J., Kiss, N., Osborn, D., Killaspy, H., Craig, T. K., Lewis, S., Keown, P., Ismail, S., Crawford, M., Baldwin, D., Lewis, G., Geddes, J., Kumar, M., Pathak, R., Taylor, S., Antidepressant Controlled Trial For Negative	Does not match any review questions considered in the guideline.

Study	Reason for Exclusion
Symptoms In Schizophrenia (ACTIONS): a double-blind, placebo-controlled, randomised clinical trial, Health Technology Assessment (Winchester, England)Health Technol Assess, 20, 1-46, 2016	
Barton, Gr, Hodgekins, J, Mugford, M, Jones, Pb, Croudace, T, Fowler, D, Cognitive behaviour therapy for improving social recovery in psychosis: cost-effectiveness analysis (Structured abstract), Schizophrenia ResearchSchizophr Res, 112, 158-163, 2009	Available as abstract only.
Becker, T., Kilian, R., Psychiatric services for people with severe mental illness across western Europe: what can be generalized from current knowledge about differences in provision, costs and outcomes of mental health care?, Acta Psychiatrica Scandinavica, SupplementumActa Psychiatr Scand Suppl, 9-16, 2006	Not an economic evaluation.
Beecham, J, Knapp, M, McGilloway, S, Kavanagh, S, Fenyo, A, Donnelly, M, Mays, N, Leaving hospital II: the cost-effectiveness of community care for former long-stay psychiatric hospital patients (Structured abstract), Journal of Mental HealthJ Ment Health, 5, 379-94, 1996	Available as abstract only.
Beecham, J., Knapp, M., Fenyo, A., Costs, needs, and outcomes, Schizophrenia BulletinSchizophr Bull, 17, 427-39, 1991	Costing analysis prior to year 2000
Burns, T., Raftery, J., Cost of schizophrenia in a randomized trial of home-based treatment, Schizophrenia BulletinSchizophr Bull, 17, 407-10, 1991	Not an economic evaluation. Date is prior to 2000
Bush, P. W., Drake, R. E., Xie, H., McHugo, G. J., Haslett, W. R., The long-term impact of employment on mental health service use and costs for persons with severe mental illness, Psychiatric ServicesPsychiatr Serv, 60, 1024-31, 2009	A United States costing analysis. Outcomes which relate to the Welfare system differs in substantial ways to a UK context.
Chalamat, M., Mihalopoulos, C., Carter, R., Vos, T., Assessing cost-effectiveness in mental health: vocational rehabilitation for schizophrenia and related conditions, Australian & New Zealand Journal of PsychiatryAust N Z J Psychiatry, 39, 693-700, 2005	Australian cost-benefit analysis - welfare system differs from UK context.
Chan, S., Mackenzie, A., Jacobs, P., Cost-effectiveness analysis of case management versus a routine community care organization for patients with chronic schizophrenia, Archives of Psychiatric NursingArch Psychiatr Nurs, 14, 98-104, 2000	Study conducted in Hong Kong. A costing analysis.
Clark, R. E., Teague, G. B., Ricketts, S. K., Bush, P. W., Xie, H., McGuire, T. G., Drake, R. E., McHugo, G. J., Keller, A. M., Zubkoff, M., Cost-effectiveness of assertive community treatment versus standard case management for persons with co-occurring severe mental illness	Not cost-utility analysis. Cost-effectiveness analysis but does not consider UK setting. Date of study is prior to year 2000.

Study	Reason for Exclusion
and substance use disorders, Health Services ResearchHealth Serv Res, 33, 1285-308, 1998	
Crawford, M. J., Killaspy, H., Barnes, T. R., Barrett, B., Byford, S., Clayton, K., Dinsmore, J., Floyd, S., Hoadley, A., Johnson, T., Kalaitzaki, E., King, M., Leurent, B., Maratos, A., O'Neill, F. A., Osborn, D., Patterson, S., Soteriou, T., Tyrer, P., Waller, D., Matisse project team, Group art therapy as an adjunctive treatment for people with schizophrenia: a randomised controlled trial (MATISSE), Health Technology Assessment (Winchester, England)Health Technol Assess, 16, iii-iv, 1-76, 2012	Study not an economic evaluation.
Dauwalder, J. P., Ciompi, L., Cost-effectiveness over 10 years. A study of community-based social psychiatric care in the 1980s, Social Psychiatry & Psychiatric EpidemiologySoc Psychiatry Psychiatr Epidemiol, 30, 171-84, 1995	Practice has changed somewhat since 1980s - not a cost effectiveness study.
Garrido, G., Penades, R., Barrios, M., Aragay, N., Ramos, I., Valles, V., Faixa, C., Vendrell, J. M., Computer-assisted cognitive remediation therapy in schizophrenia: Durability of the effects and cost-utility analysis, Psychiatry ResearchPsychiatry Res, 254, 198-204, 2017	Cost effectiveness study, but population of interest is not focussed on rehabilitation for people with complex psychosis.
Hallam, A., Beecham, J., Knapp, M., Fenyo, A., The costs of accommodation and care. Community provision for former long-stay psychiatric hospital patients, European Archives of Psychiatry & Clinical NeuroscienceEur Arch Psychiatry Clin Neurosci, 243, 304-10, 1994	Economic evaluation predates 2000. Organisation and provision of care may have changed by some degree.
Hu, T. W., Jerrell, J., Cost-effectiveness of alternative approaches in treating severely mentally ill in California, Schizophrenia BulletinSchizophr Bull, 17, 461-8, 1991	A United States costing analysis. Outcomes which relate to the Welfare system differs in substantial ways to a UK context.
Jaeger, J., Berns, S., Douglas, E., Creech, B., Glick, B., Kane, J., Community-based vocational rehabilitation: effectiveness and cost impact of a proposed program model.[Erratum appears in Aust N Z J Psychiatry. 2006 Jun-Jul;40(6-7):611], Australian & New Zealand Journal of PsychiatryAust N Z J Psychiatry, 40, 452-61, 2006	Study is a New Zealand based costing analysis of limited applicability to the UK.
Jonsson, D., Walinder, J., Cost-effectiveness of clozapine treatment in therapy-refractory schizophrenia, Acta Psychiatrica ScandinavicaActa Psychiatr Scand, 92, 199-201, 1995	Costing analysis which predates year 2000.
Knapp, M, Patel, A, Curran, C, Latimer, E, Catty, J, Becker, T, Drake, Re, Fioritti, A, Kilian, R, Lauber, C, Rossler, W, Tomov, T, Busschbach, J, Comas-Herrera, A, White, S, Wiersma, D, Burns, T, Supported employment: cost-effectiveness across six European sites (Structured abstract), World Psychiatry, 12, 60-68, 2013	Available as abstract only.

Study	Reason for Exclusion
Lazar, S. G., The cost-effectiveness of psychotherapy for the major psychiatric diagnoses, Psychodynamic psychiatry, 42, 2014	Review of clinical and cost studies on psychotherapy. Studies cited do not match population for relevant review question.
Leff, J, Sharpley, M, Chisholm, D, Bell, R, Gamble, C, Training community psychiatric nurses in schizophrenia family work: a study of clinical and economic outcomes for patients and relatives (Structured abstract), Journal of Mental HealthJ Ment Health, 10, 189-197, 2001	Structured abstract. Not a cost effectiveness study.
Liffick, E., Mehdiyoun, N. F., Vohs, J. L., Francis, M. M., Breier, A., Utilization and Cost of Health Care Services During the First Episode of Psychosis, Psychiatric ServicesPsychiatr Serv, 68, 131-136, 2017	A United States costing analysis. Outcomes which relate to the Welfare system differs in substantial ways to a UK context.
Mihalopoulos, C., Harris, M., Henry, L., Harrigan, S., McGorry, P., Is early intervention in psychosis cost-effective over the long term?, Schizophrenia BulletinSchizophr Bull, 35, 909-18, 2009	Not a cost utility analysis. Australian costing analysis.
Perlis, R H, Ganz, D A, Avorn, J, Schneeweiss, S, Glynn, R J, Smoller, J W, Wang, P S, Pharmacogenetic testing in the clinical management of schizophrenia: a decision-analytic model (Structured abstract), Journal of Clinical Psychopharmacology, 25, 427-434, 2005	Structured abstract. Does not match any review question considered in this guideline.
Quinlivan, R., Hough, R., Crowell, A., Beach, C., Hofstetter, R., Kenworthy, K., Service utilization and costs of care for severely mentally ill clients in an intensive case management program, Psychiatric ServicesPsychiatr Serv, 46, 365-71, 1995	A United States costing analysis. Outcomes which relate to the Welfare system differs in substantial ways to a UK context.
Roine, E., Roine, R. P., Rasanen, P., Vuori, I., Sintonen, H., Saarto, T., Cost-effectiveness of interventions based on physical exercise in the treatment of various diseases: a systematic literature review, International Journal of Technology Assessment in Health CareInt J Technol Assess Health Care, 25, 427-54, 2009	Literature review on cost effectiveness studies based on physical exercise for various diseases and population groups - none of which are for complex psychosis.
Rosenheck, R A, Evaluating the cost-effectiveness of reduced tardive dyskinesia with second-generation antipsychotics (Structured abstract), British Journal of PsychiatryBr J Psychiatry, 191, 238-245, 2007	Structured abstract. Does not match any review question considered in this guideline.
Rund, B. R., Moe, L., Sollien, T., Fjell, A., Borchgrevink, T., Hallert, M., Naess, P. O., The Psychosis Project: outcome and cost-effectiveness of a psychoeducational treatment programme for schizophrenic adolescents, Acta Psychiatrica ScandinavicaActa Psychiatr Scand, 89, 211-8, 1994	Not an economic evaluation. Cost effectiveness discussed in narrative only, with a few short sentences.
Sacristan, J A, Gomez, J C, Salvador-Carulla, L, Cost effectiveness analysis of olanzapine versus haloperidol in the treatment of schizophrenia in Spain (Structured abstract), Actas Luso-	Available as abstract only.

Study	Reason for Exclusion
espanolas de Neurologia, Psiquiatria y Ciencias Afines, 25, 225-234, 1997	
Torres-Carbajo, A, Olivares, J M, Merino, H, Vazquez, H, Diaz, A, Cruz, E, Efficacy and effectiveness of an exercise program as community support for schizophrenic patients (Structured abstract), American Journal of Recreation Therapy, 4, 41-47, 2005	Available as abstract only
Wang, P S, Ganz, D A, Benner, J S, Glynn, R J, Avorn, J, Should clozapine continue to be restricted to third-line status for schizophrenia: a decision-analytic model (Structured abstract), Journal of Mental Health Policy and Economics, 7, 77-85, 2004	Available as abstract only.
Yang, Y K, Tarn, Y H, Wang, T Y, Liu, C Y, Laio, Y C, Chou, Y H, Lee, S M, Chen, C C, Pharmacoeconomic evaluation of schizophrenia in Taiwan: model comparison of long-acting risperidone versus olanzapine versus depot haloperidol based on estimated costs (Structured abstract), Psychiatry and Clinical Neurosciences, 59, 385-394, 2005	Taiwan is not an OECD country.
Zhu, B., Ascher-Svanum, H., Faries, D. E., Peng, X., Salkever, D., Slade, E. P., Costs of treating patients with schizophrenia who have illness-related crisis events, BMC Psychiatry, 8, 2008	USA costing analysis. The structure of the US health system means that costs do not translate well into a UK context.

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Appendix L – Research recommendations

Research recommendations for review question 7.2: What processes are needed to support successful transitions?

Research question

Is an integrated care system effective at promoting successful progress for people with complex psychosis and related severe mental health conditions to a more independent setting?

Why this is important

Integrated care systems that involve a multidisciplinary team, collaborating across multiple settings, and sharing the same information technology and electronic records systems, could help to improve transitions between services and promote progress for people moving through the rehabilitation pathway. The committee identified a single RCT that indicated that such a system might be beneficial, but recommended further research in this area.

Table 8: Research recommendation rationale

Research question	Is an integrated care system effective at promoting successful progress for people with complex psychosis and related severe mental health conditions to a more independent setting?
Why is this needed	
Importance to 'patients' or the population	A lack of integration between services can make transitions between services difficult, which can delay transitions and impact on people's healthcare.
Relevance to NICE guidance	Further research could strengthen the recommendation in this guideline, and provide further detail about an effective process.
Relevance to the NHS	Better transitions could improve clinical and economic outcomes.
National priorities	Integrated systems are a national priority.
Current evidence base	The current evidence is limited to a single randomised controlled trial.
Equality	All geographical areas and all people with complex psychosis and severe related mental health conditions could be eligible for this type of study.
Feasibility	This type of study would be feasible, but may require reorganisation in current working practices and new information technology, to achieve.
Other comments	None.

Table 9: Research recommendation modified PICO table

Criterion	Explanation
Population	Local areas providing rehabilitation to people aged 18+ with complex psychosis and severe related mental health conditions

Criterion	Explanation
Intervention	Integrated care systems (a multidisciplinary team, collaborating across multiple settings, and sharing the same information technology and electronic records systems)
Comparator	Usual working practice
Outcomes	**Critical** • Successful transition from rehabilitation service to other parts of the mental health, social care or primary care systems (high to low support) • Readmission to inpatient care (moving to higher support) • Use of out of area placements **Important** • Delayed transitions • Patient and carer satisfaction • Housing stability • Physical health hospital admissions and accident and emergency use
Study design	Cluster randomised controlled trial
Timeframe	2-5 years
Additional information	None

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