National Institute for Health and Care Excellence

Final

Stroke rehabilitation in adults (update)

[A1] Evidence reviews for early supported discharge

NICE guideline NG236

Evidence reviews underpinning recommendations 1.1.8 to 1.1.11 in the NICE guideline

October 2023

Final

These evidence reviews were developed by NICE

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1 Intensity of rehabilitation

1.1 Review question

In people after stroke what is the clinical and cost effectiveness of early supported discharge compared with usual care?

This question includes two subquestions:

- In people after stroke what is the clinical and cost effectiveness of early supported discharge compared with usual care?
- In people after stroke what factors are associated with effective delivery of early supported discharge care?

1.1.1 Introduction

Early supported discharge (ESD) is a recognised approach/intervention to provide ongoing rehabilitation to stroke survivors in their own homes instead of remaining in hospital. The rehabilitation/recovery program is delivered by specialist members of the multidisciplinary team (MDT) in the community. The key advantage of ESD is that stroke survivors can be discharged from hospital sooner and supported to continue recovering at home. Most patients prefer to get better/ recover at home, and the ESD model offers the possibility.

This community rehabilitation/ recovery program is delivered by specialist members of the MDT such as physiotherapists, occupational therapists, speech and language therapists, and rehabilitation assistants. The amount of therapy provided at home should be equal to therapy provided in hospital.

Some hospitalised stroke survivors will be eligible for ESD depending on the amount of therapy they require, their current physical/ functional abilities, the amount/ level of support they have at home, and the practicality of delivering therapy in patients' homes. The decision to refer some stroke patients to ESD is made by the hospital MDT. This decision should be discussed with and agreed by patients and their family members or carers before patients are discharged from hospital.

There is robust published evidence that ESD results in stroke patients spending less time in hospital, and that their recovery is comparable to those who remained in hospital.

Provision of ESD varies around the UK, with some regions having longer waiting times for the community MDT to start therapy at home than others.

This review is split into four documents:

- 1.1 early supported discharge A introduction and quantitative
- 1.1 early supported discharge B qualitative, mixed methods and committee discussion
- 1.1 early supported discharge C appendix A to E (protocol, study selection diagrams, quantitative and qualitative evidence tables)
- 1.1 early supported discharge D appendix F to O (results, forest plots, GRADE and GRADE CerQUAL tables, economic evidence appendices, excluded studies, research recommendations)

1.1.2 Summary of the protocol

Table 1: PICO characteristics of review question

Population	• Adults (age ≥16 years) who have had a first or recurrent stroke (including people after subarachnoid haemorrhage) who are in hospital • Family members of adults who have had a first or recurrent stroke • Carers supporting adults after a first or recurrent stroke • Healthcare professionals supporting adults after a first or recurrent stroke • Adult social care workers supporting adults after a first or recurrent stroke • Voluntary sector professionals supporting adults after a first or recurrent stroke
Interventions	• Early supported discharge for people after a stroke • Early supported discharge with team co-ordination and delivery • Early supported discharge with team co-ordination only • Early supported discharge with no early supported discharge team
Comparisons	Quantitative data • Usual care Confounding factors (for non-randomised studies only): • Stroke severity • Age • Dependency (measured by Activities of Daily Living)
Outcomes	At time period: • End of scheduled follow up • Mortality (dichotomous outcome) • Person/participant generic health-related quality of life (continuous outcomes will be prioritised) • Carer generic health-related quality of life (continuous outcomes will be prioritised) • Physical dependency (dependent on help for transfers, mobility, washing, dressing or toileting) (dichotomous outcome) • Activities of daily living (continuous outcomes will be prioritised) • Extended activities of daily living (continuous outcomes will be prioritised) • Length of hospital stay (continuous outcomes will be prioritised) • Caregiver strain index (continuous outcomes will be prioritised) • Falls (dichotomous outcome) • Readmissions to hospital (dichotomous outcome) • Psychological distress/mood (continuous outcomes will be prioritised) • Stroke-specific Patient-Reported Outcome Measures (continuous outcomes will be prioritised)

Study design	Quantitative data:
	• Parallel RCTs (including primary mixed methods studies if any are present with this design)
	• Non-randomised studies (if insufficient RCT evidence is available)
	  ○ Prospective cohort studies
	  ○ Retrospective cohort studies

	○ For each of these, this includes primary mixed methods studies conducted as cohort studies for the quantitative component (if any are present) Qualitative data • Qualitative interview and focus group studies (including studies using grounded theory, phenomenology or other appropriate qualitative approaches). This includes primary mixed methods studies. Survey data or other types of questionnaires will only be included if they provide analysis from open-ended questions, but not if they reported descriptive quantitative data only.

For full details see the review protocol in Appendix A.

1.1.3 Methods and process

This evidence review was developed using the methods and process described in Developing NICE guidelines: the manual. Methods specific to this review question are described in the review protocol in Appendix A and the methods document.

Declarations of interest were recorded according to NICE's conflicts of interest policy.

2 Efficacy of early supported discharge (quantitative evidence)

2.1 Review question

In people after stroke what is the clinical and cost effectiveness of early supported discharge compared with usual care?

2.1.1 Effectiveness evidence

2.1.1.1 Included studies

This review updated a published Cochrane review [22] which included seventeen papers from up to January 2017. This review included one systematic review and nineteen randomised controlled trial studies (48 papers); [1-4, 6, 8-14, 16-19, 21, 23-25, 31-39, 41, 43-46, 48, 49, 51-55, 58] these are summarised in **Table 2**.

Evidence from these studies is summarised in the clinical evidence summary (**Table 3**).

Evidence from randomised controlled trial studies investigated any form of early supported discharge compared to conventional care. Early supported discharge care was separated into the following stratifications.

- Early supported discharge with team co-ordination and delivery (9 studies)
- Early supported discharge with team co-ordination only (5 studies)
- Early supported discharge with no early supported discharge team (4 studies)

Studies took place in a range of countries world-wide including: Australia, Canada, Denmark, India, Holland, Thailand, Portugal, Norway, Sweden and the United Kingdom. The people included in the studies generally had mild severity stroke and a Modified Rankin score of >2, however, these were both poorly reported in the studies.

Early supported discharge interventions were on average delivered less than 5 days a week, but the reporting of this information was unclear. The duration of the interventions varied between studies but was in general around 6 weeks.

Indirectness

Several outcomes were downgraded for indirectness due to outcome indirectness. This was for including mortality in the outcome rather than only physical dependency as reported by the Cochrane review.

Inconsistency

A number of outcomes showed significant heterogeneity. In each case, this was not resolved by sensitivity or subgroup analyses and so random effects models were used, and the outcomes were downgraded for inconsistency.

See also the study selection flow chart in Appendix C, study evidence tables in Appendix D, forest plots in Appendix F and GRADE tables in Appendix G.

2.1.1.2 Excluded studies

See the excluded studies list in Appendix L.

2.1.2 Summary of studies included in the quantitative evidence

Table 2: Summary of quantitative studies included in the evidence review

Study	Intervention and comparison	Population	Outcomes	Comments
Anderson 2000[2] Subsidiary papers: Anderson 2000[1]	**Early supported discharge** (n=42) Multidisciplinary community rehabilitation team, comprising medical, physiotherapy, occupational therapy, speech and language therapy and social work input. Combination of hospital out-reach and community in-reach services. Team co-ordinated and delivered care. Therapy sessions were conducted in the person's home and were individually tailored, with the aim of achieving a set of mutually agreed-upon goals over several weeks. **Usual care** (n=44) Conventional rehabilitation in a neurological rehabilitation unit with specialist interests in stroke and neurological disability. Controls received multidisciplinary care co-ordinated through weekly meetings. Care was either on an acute-care medical/geriatric ward or in a multidisciplinary stroke rehabilitation unit run by specialists in rehabilitation or geriatric medicine.	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 72 (11), 71 (11) N = 86 Ability to transfer prior to discharge/study (with or without use of aids): 'Needing light/moderate assistance with transfers' Severity: not stated/unclear Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: ≤6 weeks	Mortality at end of scheduled follow up (6 months) Person/participant generic health-related quality of life at end of scheduled follow up (6 months) Physical dependency at end of scheduled follow up (6 months) Activities of daily living at end of scheduled follow up (6 months) Extended activities of daily living at end of scheduled follow up (6 months) Length of hospital stay at end of scheduled follow up (6 months) Caregiver strain index at end of scheduled follow up (6 months) Falls at end of scheduled follow up (6 months) Readmissions to hospital at end of scheduled follow up (6 months) Psychological distress/mood at end of scheduled follow up (6 months	Setting: Australia Funding: Supported through a grant from the Federal Government. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Adelaide 2000 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	Concomitant therapy: No additional information.			
Askim 2004[3]	**Early supported discharge** (n=31) Hospital out-reach stroke team (physiotherapy, occupational therapy, nurse and the consulting service of a physician) based in the stroke unit who made contact with patients in hospital, arranged discharge to home or rehabilitation unit, co-ordinated rehabilitation and support services and provided follow-up. ESD co-ordination for 4 to 6 weeks, terminated by outpatient consultation (30 to 45 minutes driving distance) or home visit (> 45 minutes driving distance). **Usual care** (n=31) Conventional procedures with acute care and early rehabilitation in a stroke unit, and discharge home or to a rehabilitation unit **Concomitant therapy**: No additional information.	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 76.9 (NR), 76.3 (NR) years N = 62 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale - intervention, control: 3.7 (NR), 3.5 (NR) Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: not stated/unclear	Mortality at end of scheduled follow up (52 weeks) Physical dependency at end of scheduled follow up (52 weeks) Activities of daily living at end of scheduled follow up (52 weeks) Length of hospital stay at end of scheduled follow up (52 weeks) Physical	Setting: Norway Funding: No additional information. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Trondheim 2004 in the Cochrane review.
Bautz-Holter 2000[4] Subsidiary papers: Bautz-Holter 2000[5]	**Early supported discharge** (n=42) Multidisciplinary team, experienced in stroke rehabilitation (nurse, physiotherapist, occupational therapist) visited patient in hospital,	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 79.5 (69 to 84), 78 (74 to 82) N = 82	Mortality at end of scheduled follow up (6 months) Physical dependency at end of scheduled follow up (6 months) Extended activities of daily	Setting: Norway Funding: No additional information. This study was included in the Cochrane review that this review was

Study	Intervention and comparison	Population	Outcomes	Comments
	prepared discharge and co-ordinated rehabilitation. Rehabilitation at home provided by both the team and community services. Input as long as required. In co-operation with the ordinary hospital staff, the primary contact started immediate preparations for the discharge and co-ordination of the continued rehabilitation, which was provided by the general community services **Usual care** (n=40) Acute care and rehabilitation in co-ordinated multidisciplinary stroke units. The control group received conventional procedures for discharge and continued rehabilitation, which were anticipated to be less well organised. **Concomitant therapy**: All people were initially cared for in an acute stroke unit for 3-12 days, and then were either discharged or transferred to the stroke rehabilitation unit. Both study groups had access to the same kind and amount of rehabilitation services during their hospital stay. In principle, the same community	Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: not stated/unclear	living at end of scheduled follow up (6 months) Length of hospital stay at end of scheduled follow up (6 months) Falls at end of scheduled follow up (6 months) Psychological distress/mood at end of scheduled follow up (6 months	based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Oslo 2000 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	rehabilitation services were available. The rehabilitative measures were able to be continued as long as considered necessary in both rehabilitation groups.			
Dey P 2001[8]	**Early supported discharge** (n=12) Community-based, nurse-led, stroke-specific multidisciplinary team (nursing, physiotherapy, occupational therapy, speech and language therapy). Patients assessed pre-discharge and allocated up to daily input at home for up to 3 months **Usual care** (n=11) Conventional discharge planning by mobile stroke team or hospital stroke unit. **Concomitant therapy**: No additional information.	**Adults who have had a first or recurrent stroke** Mean age: 69 (9) N = 23 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: not stated/unclear	Mortality at end of scheduled follow up (12 months) Physical dependency at end of scheduled follow up (12 months) Activities of daily living at end of scheduled follow up (12 months) Extended activities of daily living at end of scheduled follow up (12 months) Length of hospital stay at end of scheduled follow up (12 months) Psychological distress/mood at end of scheduled follow up (12 months	Setting: United Kingdom Funding: No additional information. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Manchester 2001 in the Cochrane review.
Donnelly 2004[9]	**Early supported discharge** (n=59) Community rehabilitation in-reach team with specialist interest in rehabilitation. The community-based multidisciplinary stroke team service consisted of a team comprising 0.33 coordinator, 1 occupational therapist, 1.5 physiotherapists, 1	**Adults who have had a first or recurrent stroke** Mean age: 75 (8.2) N = 113 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear	Mortality at end of scheduled follow up (12 months) Person/participant generic health-related quality of life at end of scheduled follow up (12 months) Physical dependency at end of scheduled follow up (12 months) Activities of daily living at end of	Setting: Northern Ireland Funding: No additional information. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke.

Study	Intervention and comparison	Population	Outcomes	Comments
	speech and language therapist, 2 rehabilitation assistants. On average the number of home visits (each lasting 45 minutes) over a 3 month period was 2.5 per week. People randomised to the service were to be discharged as soon as the liaison therapist had assessed their home and ensured that any necessary aids and equipment were in place. **Usual care** (n=54) Conventional care comprised medical ward, geriatric medical ward, and stroke unit services. The majority of these patients were managed by a multidisciplinary team with a specialist interest in stroke and rehabilitation, which was co-ordinated through weekly multidisciplinary team meetings and often included pre-discharge home visits. Discharge and after care for people who were randomised to hospital rehabilitation were arranged in the usual way by the hospital-based multidisciplinary team. This comprised inpatient rehabilitation in a stroke unit and follow-up rehabilitation in a day hospital.	Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: < 5 days Length of intervention: not stated/unclear	scheduled follow up (12 months) Extended activities of daily living at end of scheduled follow up (12 months) Length of hospital stay at end of scheduled follow up (12 months) Caregiver strain index at end of scheduled follow up (12 months) Readmissions to hospital at end of scheduled follow up (12 months)	Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Belfast 2004 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	Concomitant therapy: No additional information.			
Hofstad 2004[16] Subsidiary papers: Gjelsvik 2013[15] Hofstad 2013[18] Hofstad 2012[17] Taule 2013[43] Taule 2015[44] Hofstad 2015[45]	**Early supported discharge** (n=207) Patients in 2 of the 3 study arms were treated according to the ESD concept. They were followed-up by a designated multi-disciplinary ambulatory team consisting of a nurse, a physiotherapist, and an occupational therapist from soon after admission to the stroke unit until shortly after discharge to home. This team originated from the rehabilitation department and served as a co-ordinating link between the patient, relatives, hospital personnel, and the personnel in primary health care. The scheduled treatment period was 5 weeks and maximally 4 hours per day 5 days a week, but many patients did not comply with this. **Usual care** (n=99) Patients in the third study arm constituted a control group and were treated as usual without any intervention from the study, except outpatient appointments for testing. Treatment	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 71.31 (NR), 74.19 (NR) N = 306 Ability to transfer prior to discharge/study (with or without use of aids): Not stated/unclear Severity: Mild (or NIHSS 1-5) Median 3 (IQR 4) Modified Rankin Scale - intervention, control: Mean (SD) = 2.59 (1.22) Number of days of rehabilitation provided per week: 5 days Length of intervention: ≤6 weeks	Physical dependency at end of scheduled follow up (6 months) Activities of daily living at end of scheduled follow up (6 months) Length of hospital stay at end of scheduled follow up (6 months)	Setting: Norway Funding: The study has been supported by grants from the Norwegian Research Council, the Western Norway Regional Health Trust, the Ministry of Health and the Sophies Minde Foundation This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Bergen 2014 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	'as usual' mainly comprised institutional stay if necessary and/or physiotherapy as needed in the municipality (0 to 2 hours per week). Patients in all 3 study arms received language therapy as needed, regardless of allocated arm. **Concomitant therapy**: No additional information.			
Indredavik 2000[19] Subsidiary papers: Fjaeroft 2011[10] Fjaeroft 2000[11] Fjaeroft 2004[12] Fjaeroft 2003[13] Fjaeroft 2005[14]	**Early supported discharge** (n=160) Hospital out-reach stroke team (nurse, physiotherapy, occupational therapy) based in the stroke unit who made contact with patients in hospital, arranged discharge to home or rehabilitation unit, co-ordinated rehabilitation and support services and provided follow-up. Variable duration of input. Team co-ordinated care which was largely delivered by other agencies. The close follow-up by the mobile team was present for the first month after discharge to home and was terminated with an outpatient consultation. **Usual care** (n=160) Conventional procedures with acute care and early rehabilitation in a stroke unit, and discharge home or	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 74 (NR), 73.8 (NR) N = 320 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale: >2 Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: >6 weeks	Mortality at end of scheduled follow up (12 months) Physical dependency at end of scheduled follow up (12 months) Extended activities of daily living at end of scheduled follow up (12 months) Length of hospital stay at end of scheduled follow up (12 months) Caregiver strain index at end of scheduled follow up (12 months) Psychological distress/mood at end of scheduled follow up (12 months	Setting: Norway Funding: This study was supported by the Norwegian Department of Health and the Stroke Units Fund of Stroke Research, University Hospital of Trondheim This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Trondheim 2000 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	to a rehabilitation unit. **Concomitant therapy**: No additional information.			
Kjaer 2009[21] Subsidiary papers: Rasmussen 20016[35]	**Early supported discharge** (n=38) Hospital out-reach multidisciplinary team, based within stroke unit. Co-ordinated and delivered low intensity (1 to 3 times per week) home based rehabilitation for a period of 1 month. All staff were skilled in stroke care and co-ordinated via weekly multidisciplinary meetings. The multidisciplinary team included a nurse, physiotherapists, occupational therapists and physicians experienced in stroke treatment. These ongoing therapeutic interventions were continued for up to four weeks according to the ability and needs of the person. **Usual care** (n=33) Conventional discharge planning from combined acute/rehabilitation stroke unit and conventional after discharge care. Control patients were treated following standard care procedures in the Stroke Unit. In order not to risk changing standard	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 78 (72 to 84), 79 (71 to 85) N = 71 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale: >2 Number of days of rehabilitation provided per week: 5 days Length of intervention: ≤6 weeks	Mortality at end of scheduled follow up (5 months) Physical dependency at end of scheduled follow up (5 months) Activities of daily living at end of scheduled follow up (3 months) Length of hospital stay at end of scheduled follow up (3 months) Readmissions to hospital at end of scheduled follow up (5 months)	Setting: Denmark Funding: No additional information. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Copenhagen 2009 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	procedures, members of the multidisciplinary team and other investigators did not interfere with standard procedures besides testing control patients at baseline. After hospital discharge, all control patients were treated according to standard procedures by municipality health care professionals. In order not to risk changing standard procedures, members of the multidisciplinary team or other investigators did not interfere with standard procedures besides testing control patients at 90 days post-stroke. **Concomitant therapy**: No additional information.			
Mayo 2000[24] Subsidiary papers: Mayo 1998[23] Teng 2003[46]	**Early supported discharge** (n=58) Community rehabilitation team providing intensive home rehabilitation. Team comprised nursing, physiotherapy, occupational therapy, speech therapy and dietitian input. Intervention was co-ordinated and individualised. Intervention lasted 4 weeks with further care as required. Rehabilitation care was provided at	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 70.3 (12.7), 69.6 (12.7) N = 114 Ability to transfer prior to discharge/study (with or without use of aids): 'Before study able to transfer with assistance of one from bed to chair People were excluded if they required the assistance of	Mortality at end of scheduled follow up (3 months) Person/participant generic health-related quality of life at end of scheduled follow up (3 months) Physical dependency at end of scheduled follow up (3 months) Activities of daily living at end of scheduled follow up (3 months) Extended activities of daily living at end of	Setting: Canada Funding: This project was funded by National Health Research Development Program (grant 6605-4714-404) This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue

Study	Intervention and comparison	Population	Outcomes	Comments
	home, and all people received at least 1 home visit from nursing personnel. Subsequent home visits were arranged as needed and supplemented with telephone monitoring. The amount of therapy received by people was set by the therapist on the basis of assessment of need. **Usual care** (n=56) Conventional care incorporated a variety of inpatient services (owing to health care cutbacks, only 27% of control patients received home care or rehabilitation center care). The current practices for discharge planning and referral for follow-up services. These comprised a range of services, including physiotherapy, occupational therapy and speech and language therapy, as requested by the person's care provider and offered through extended acute-care hospital stay; inpatient or outpatient rehabilitation; or home care via local community health clinics. People could also arrange for private care for which they	more than one person to walk.' Severity: not stated/unclear Modified Rankin Scale: not stated/unclear Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: ≤6 weeks 4 weeks	scheduled follow up (3 months) Length of hospital stay at end of scheduled follow up (3 months)	7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Montreal 2000 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	themselves paid (rehabilitation services are covered by the government only if offered through a designated hospital or community center). **Concomitant therapy**: No additional information.			
Pandian 2015[31]	**Early supported discharge** (n=50) People with their family-nominated caregiver trained by a trial physiotherapist, using a structured assessment (cognition, language, function, and mobility) and recommended rehabilitation package. The caregiver training advised commencing in the hospital for approximately 60 min per day for about 3 days (with the intention of accelerating the patient's hospital discharge when safe). The caregiver would then continue the intervention when the patient was discharged home. The trial therapist could be contacted through telephone for support and guidance over the next 3 months. **Usual care** (n=54) Patients were free to access rehabilitation services provided on an in or	**Adults who have had a first or recurrent stroke** Mean age: 60 (13) N = 104 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale: not stated/unclear Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: not stated/unclear	Mortality at end of scheduled follow up (6 months) Physical dependency at end of scheduled follow up (6 months) Activities of daily living at end of scheduled follow up (6 months) Length of hospital stay at end of scheduled follow up (6 months)	Setting: India Funding: No additional information.. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named ATTEND pilot 2015 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	outpatient basis after discharge from hospital but caregivers were not provided with trial-specific training. **Concomitant therapy**: No additional information.			
Rafsten 2019[33] Subsidiary papers: Rafsten 2020[34]	**Early supported discharge** (n=69) Very early supported discharge. Continued rehabilitation in their homes from a rehabilitation team consisting of a physiotherapist, an occupational therapist, and a stroke nurse from the stroke care unit. The people who received very early supported discharge received 2-4 visits per week by the physiotherapist and/or occupational therapist and if necessary 1-2 visits by the stroke nurse, with a maximum length of 4 weeks. **Usual care** (n=71) People were discharged when they were medically stable and no longer in need of stroke unit care. In accordance with the stroke unit's usual discharge routines, the people had neither a goal-setting meeting nor a follow up by the stroke team, but they could, if necessary, be referred to continued	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 75 (11), 73 (12) N = 140 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: Mild (or NIHSS 1-5) Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: <5 days Assumed from the number of contacts with professionals that can be had. Length of intervention: ≤6 weeks 4 weeks	Mortality at end of scheduled follow up (12 months) Length of hospital stay at end of scheduled follow up (12 months)	Setting: Sweden Funding: Supported in part by grants from The Swedish Research Council (VR 2012-70X-22122-01-3VR2017-00946) and the Health Medical Care Committee of the Regional Executive Board, Region Vastra Gotaland, the Gothenburg Centre for Person-Centred Care, King Gustaf V's and Queen Victoria's Freemasons Foundation, the Swedish National Stroke Association, Local Research and Development Board for Gothenburg and South Bohuslan, Felix Neubergh's Foundation, Hjalmar Svensson's Research Foundation, Greta and Einar Asker's Foundation, Swedish Heart and Lung Foundation, Agneta Prytz-Folkes and Gosta Folkes foundation, FRF foundation and Sahlgrenska University Hospital funds.

Study	Intervention and comparison	Population	Outcomes	Comments
	outpatient rehabilitation. **Concomitant therapy**: No additional information.			
Rodgers 1997[36] Subsidiary papers: McNamee 1998[25] Soutter 1998[39]	**Early supported discharge** (n=46) Community in-reach multidisciplinary rehabilitation team with a specialist interest in stroke and co-ordinated through weekly multidisciplinary meetings. Medical support by general practitioner and stroke physician. Rehabilitation team contacted patients and carers and carried out assessment of home circumstances prior to discharge. Following discharge, daily therapy and home care could be provided if required. Median duration of input was 9 weeks (range 1 to 44 weeks). Team co-ordinated and delivered care. **Usual care** (n=46) These patients received conventional hospital care, usually provided in general medical wards (less than half the patients received organised multidisciplinary stroke unit care). **Concomitant therapy**: No	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 73 (47 to 93), 73 (44 to 91) N = 92 Ability to transfer prior to discharge/study (with or without use of aids): Not stated/unclear Severity: not stated/unclear Modified Rankin Scale: not stated/unclear Number of days of rehabilitation provided per week: 7 days Up to 7 days per week Length of intervention: as long as required	Mortality at end of scheduled follow up (12 months) Physical dependency at end of scheduled follow up (12 months) Extended activities of daily living at end of scheduled follow up (12 months) Length of hospital stay at end of scheduled follow up (12 months) Readmissions to hospital at end of scheduled follow up (12 months) Psychological distress/mood at end of scheduled follow up (12 months	Setting: United Kingdom Funding: Funded by National CVD & Stroke R & D Programme, and by Newcastle Health Authority Primary Care Development Fund. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Newcastle 1997 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	additional information.			
Rønning 1998[32]	**Early supported discharge** (n=124) Community rehabilitation provided by a variety of municipality-based rehabilitation services (41% admitted to nursing homes for rehabilitation, 25% received ambulatory physiotherapy, 4% speech therapy, 30% no treatment). Community rehabilitation services did not specialise in stroke and were not consistently co-ordinated through regular multidisciplinary team meetings. Medical input from primary care physician with variable degree of nursing input. The rehabilitation services offered to stroke survivors consisted of nursing home rehabilitation, on either an inpatient or day-patient basis and further ambulatory rehabilitation by a visiting physical therapist, speech therapist and/or nurse. **Usual care** (n=127) Control patients received conventional inpatient rehabilitation in a 6-bed bay of a rehabilitation unit.	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 76.5 (6.4), 75.5 (6.7) N = 251 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: not stated/unclear	Mortality at end of scheduled follow up (7 months) Person/participant generic health-related quality of life at end of scheduled follow up (7 months) Physical dependency at end of scheduled follow up (7 months) Activities of daily living at end of scheduled follow up (7 months)	Setting: Norway Funding: Supported by grants from the National Association for Heart and Vascular Diseases. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Akershus 1998 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	This comprised multidisciplinary rehabilitation provided by staff with a specialist interest in stroke rehabilitation and co-ordinated through weekly team meetings. **Concomitant therapy**: No additional information.			
Rudd 1997[37] Subsidiary papers: Beech 1999[6]	**Early supported discharge** (n=167) Multidisciplinary community therapy team comprising physiotherapy, occupational therapy, speech and language therapy and medical input. The team had a special interest in neurology and stroke and were co-ordinated through weekly multidisciplinary meetings. The community team liaised with hospital-based rehabilitation staff and then provided a package of care after discharge. The maximum duration of the intervention was 3 months. Team co-ordinated and delivered care. **Usual care** (n=164) These patients received conventional care (less than 50% managed in co-ordinated multidisciplinary stroke units) with conventional	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 70 (11), 72 (12) N = 331 Ability to transfer prior to discharge/study (with or without use of aids): 'Either independent (if alone) or with assistance of one (if they have a carer)' Severity: not stated/unclear Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: >6 weeks	Mortality at end of scheduled follow up (12 months) Physical dependency at end of scheduled follow up (12 months) Activities of daily living at end of scheduled follow up (12 months) Extended activities of daily living at end of scheduled follow up (12 months) Length of hospital stay at end of scheduled follow up (12 months) Caregiver strain index at end of scheduled follow up (12 months)	Setting: United Kingdom Funding: The Stroke Association, Lambeth, Southwark and Lewisham Health Authority, the Special Trustees of St Thomas's Hospital, the Nuffield Provincial Hospitals Trust, Wandsworth Health Gain Fund. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named London 1997 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	discharge planning and post discharge support. People allocated to conventional care continued with their treatment, discharge planning and outpatient care in the normal way. About half of the people who are admitted receive treatment in a stroke unit, with the remainder being treated in general medical or elderly care wards. Outpatient resources available to them included a hospital based stroke clinic, geriatric day hospital, generic domiciliary physiotherapy and speech and language therapy, hospital outpatient physiotherapy and the usual community resources. The maximum level of home care available in the study area to all people was three one hour visits daily by a home help for personal care, meals on wheels and community nurse visits for specific tasks. **Concomitant therapy**: No additional information.			
Santana 2017[38]	**Early supported discharge** (n=95) The EHSD intervention started in the stroke unit, where the patient and informal	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 67.5	Mortality at end of scheduled follow up (6 months) Physical dependency at end of scheduled	Setting: Portugal Funding: This work has been funded by the European Commission [FP7-Homecare 222954].

Study	Intervention and comparison	Population	Outcomes	Comments
	caregiver were met by their assigned EHSD case manager. The case manager was 1 of 2 gerontologists. Community-based multidisciplinary team comprising physiotherapist, occupational therapist, gerontologist (case manager), and psychologist - all staff with previous experience in stroke care but no specialised training in stroke rehabilitation stroke care. Team co-ordinate and deliver care. Care co-ordinated via weekly multidisciplinary meetings. For patients discharged to their homes, the intervention continued directly after discharge to provide a seamless transfer from the hospital to home. Approximately 8 home-based training sessions for a maximum of 1 month. For patients discharged to an inpatient setting, contact with the EHSD team was reinitiated when discharge home was planned. **Usual care** (n=95). Patients in the usual care group were contacted in the stroke unit, introduced to the study, and assigned a case manager. They began their	(NR), 66.5 (NR) N = 190 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: <5 days Length of intervention: >6 weeks	follow up (6 months) Activities of daily living at end of scheduled follow up (6 months) Extended activities of daily living at end of scheduled follow up (6 months) Length of hospital stay at end of scheduled follow up (6 months)	NS was partially supported by FCT – the Portuguese Foundation for Science and Technology PhD [grant number SFRH/BD/69892/2010] This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Aveiro 2016 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	rehabilitation as part of standard care in the stroke unit and then accessed the standard rehabilitation available in the region following discharge They received information about services available in the community, but no further specific input was provided. **Concomitant therapy**: No additional information.			
Suwanwela 2002[41]	**Early supported discharge** (n=52) Discharge on 4th day to home care programme managed by 3-4 Red Cross volunteers team in cooperation with the medical and nursing staff. Visit on day 3 then alternate day visits for 1 week, then visits on week 2, month 1, 3 and 6. Volunteers trained in stroke, simple rehabilitation and detection of complications. During the home visits the volunteer completed a pre-printed worksheet including: check list of stroke and treatment complications, NIH stroke scale, Barthel index, modified Rankin scale and person satisfaction form. The Red Cross volunteers were always able to	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 58.4 (9.6), 59.8 (9.9) N = 102 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: Moderate (or NIHSS 5-14) Modified Rankin Scale: not stated/unclear Number of days of rehabilitation provided per week: <5 days Length of intervention: >6 weeks	Mortality at end of scheduled follow up (6 months) Physical dependency at end of scheduled follow up (6 months) Length of hospital stay at end of scheduled follow up (6 months)	Setting: Thailand Funding: Supported through a grant from the Federal Government. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review Named Bangkok 2002 in the Cochrane review.

Study	Intervention and comparison	Population	Outcomes	Comments
	reach medical advice and emergency assistance by telephone contact to the nursing staff and study neurologists. After each visit, the Red Cross volunteers reported to the nursing staff and discussed the person's condition. **Usual care** (n=50) Managed in neurological or medical department for up to 10 days. Concomitant therapy. **Concomitant therapy**: No additional information.			
Van den Berg 2016[51]	**Early supported discharge** (n=31) 8-week caregiver-mediated training programme with support using a customized exercise app with 37 standardised exercises loaded onto a tablet. The patient and their caregiver were asked to perform a selective set of exercises for 8 weeks, at least 5 times a week for 30 minutes, and had a weekly evaluation session with the physiotherapist. In case discharge occurred earlier than the end date of the intervention period, the program continued at home with ongoing use of the exercise app, tele-rehabilitation services through a	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 65.5 (18.5), 70.1 (12.4) N = 63 Ability to transfer prior to discharge/study (with or without use of aids): Not stated/unclear Severity: not stated/unclear Modified Rankin Scale: not stated/unclear Number of days of rehabilitation provided per week: 5 days Length of intervention: >6 weeks	Mortality at end of scheduled follow up (3 months) Person/participant generic health-related quality of life at end of scheduled follow up (3 months) Carer generic health-related quality of life at end of scheduled follow up (3 months) Activities of daily living at end of scheduled follow up (3 months) Length of hospital stay at end of scheduled follow up (3 months) Caregiver strain index at end of scheduled follow up (3 months) Falls at end of scheduled follow up (3 months)	Setting: Austrailia Funding: The equipment for this study was partially funded by the Commonwealth Department of Health. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review

Study	Intervention and comparison	Population	Outcomes	Comments
	secure videoconferencing app using 3 and 4G (Vidyo) to provide access to the treating therapists, and weekly home visits. The decision to discharge patients from the wards to home was made at the twice weekly multidisciplinary case conferences attended by medical, nursing, and allied health staff and made on the basis of clinical and psychosocial factors. **Usual care** (n=32) Participants allocated to usual rehabilitation care received interdisciplinary rehabilitation following the standards outlined by the Australian clinical guidelines for stroke management. Ten physiotherapists who delivered usual care did not provide the caregiver-mediated training program, and physiotherapists who delivered the caregiver-mediated training program did not provide usual care to participants. **Concomitant therapy**: No additional information.		Readmissions to hospital at end of scheduled follow up (3 months) Psychological distress/mood at end of scheduled follow up (3 months Stroke-specific Patient-Reported Outcome at end of scheduled follow up (3 months	Named Adelaide 2016 in the Cochrane review.
Vloothuis 2019[52]	**Early supported discharge** (n=32) The program consisted of 8	**Adults who have had a first or recurrent stroke** Mean age: 60.53	Mortality at end of scheduled follow up (3 months)	Setting: Holland Funding: ZonMW (grant number

Study	Intervention and comparison	Population	Outcomes	Comments
	weeks of exercise therapy, executed with a caregiver, in addition to usual care following the current guidelines in the Netherlands. The program was composed by a trained physical therapist during weekly sessions. The therapist could choose from 37 standardized exercises, presented in an e-health application ('app'). Patient-caregiver couples were encouraged to contact the coordinating therapist using tele-rehabilitation services like telephone, video conferencing or email in between the weekly exercise sessions. The patients and their caregivers were instructed to perform the exercises at least five times a week for 30 minutes. Patients received 20 hours of caregiver-mediated exercises in addition to usual care during the 8-week intervention period. **Usual care** (n=34) Conventional rehabilitation in a neurological rehabilitation unit with specialist interests in stroke and neurological disability. Controls received multidisciplinary care co-ordinated	N = 66 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: 5 days Length of intervention: >6 weeks	Carer generic health-related quality of life at end of scheduled follow up (3 months) Activities of daily living at end of scheduled follow up (6 months) Length of hospital stay at end of scheduled follow up (6 months) Caregiver strain index at end of scheduled follow up (6 months) Psychological distress/mood at end of scheduled follow up (6 months Stroke-specific Patient-Reported Outcome at end of scheduled follow up (3 months	837001408 and 606300098012) for providing financial support for this project This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review

Study	Intervention and comparison	Population	Outcomes	Comments
	through weekly meetings. Care was either on an acute-care medical/geriatric ward or in a multidisciplinary stroke rehabilitation unit run by specialists in rehabilitation or geriatric medicine. **Concomitant therapy**: No additional information.			
Widen Holmqvist 1998[55] Subsidiary papers: Thorsen 2006[49] Thorsen 2005[48] von Koch 2021[53] Widen Holmqvist 2000[54] Ytterberg 2010[58]	**Early supported discharge** (n=42) Multidisciplinary hospital out-reach early supported discharge team, with special interest in rehabilitation and co-ordinated through weekly meetings. This was a therapist-based service (no nursing input) based in the hospital stroke unit. Pre-discharge home visit carried out with the patient. Intervention provided on a less than daily basis for 3 to 4 months after discharge. Team co-ordinated and delivered care. The frequency of home visits was gradually reduced until the therapist discharged the patient. Two half-hour meetings per week were scheduled for coordination purposes by the home rehabilitation team. **Usual care** (n=41) Patients received conventional	**Adults who have had a first or recurrent stroke** Mean age – intervention, control: 70.8 (7.6), 72.6 (8.9) N = 83 Ability to transfer prior to discharge/study (with or without use of aids): not stated/unclear Severity: not stated/unclear Modified Rankin Scale - intervention, control: not stated/unclear Number of days of rehabilitation provided per week: not stated/unclear Length of intervention: >6 weeks	Mortality at end of scheduled follow up (6 months) Physical dependency at end of scheduled follow up (6 months) Extended activities of daily living at end of scheduled follow up (6 months) Length of hospital stay at end of scheduled follow up (6 months) Falls at end of scheduled follow up (5 years) Readmissions to hospital at end of scheduled follow up (6 months)	Setting: Sweden Funding: This study was supported by the Swedish Medical Research Council (K91–27Ä-09764–02); by grants from The Swedish Society for Multiple Sclerosis (NHR), 1987-Foundation for Stroke Research, The Swedish Stroke Association, Clas Groschinsky's Foundation, National Board of Health and Welfare, and Foundation Solstickan; and by funds from the Karolinska Institute and the Carlos III Institute of Health in Madrid. This study was included in the Cochrane review that this review was based on: Langhorne P, Baylan S. Early supported discharge services for people with acute stroke. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD000443. DOI: 10.1002/14651858.C

Study	Intervention and comparison	Population	Outcomes	Comments
	hospital care involving co-ordinated multidisciplinary stroke unit care in a hospital stroke unit and conventional discharge procedures. **Concomitant therapy**: No additional information.			D000443.pub4. For further information about the data extraction please see the Cochrane review Named Stockholm 1998 in the Cochrane review.

2.1.3 Quality assessment of clinical studies included in the evidence review

2.1.3.1 All studies analysed together

Table 3: Clinical evidence summary: Early supported discharge compared to usual care

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
Mortality at the end of scheduled follow-up	2316 (18 RCTs) follow-up: mean 33 weeks	⊕◯◯◯ Very low[a,b]	RR 1.02 (0.79 to 1.32)	82 per 1,000	**2 more per 1,000** (17 fewer to 26 more)	MID (precision) = RR 0.8-1.25.
Person/participant generic health-related quality of life (EuroQol, 0-100, higher values are better, final value) at end of scheduled follow-up	113 (1 RCT) follow-up: mean 1 years	⊕⊕⊕◯ Moderate[b]	-	The mean person/participant generic health-related quality of life at end of scheduled follow-up was 68.2	MD **1.85 lower** (9.03 lower to 5.33 higher)	MID = 8.6 (0.5 x median baseline SD)
Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final values) at end of scheduled follow-up	432 (3 RCTs) follow-up: mean 5.3 months	⊕⊕◯◯ Low[b,c]	-	The mean person/participant generic health-related quality of life at end of scheduled follow-up was 42.2	MD **4.15 higher** (1.59 higher to 6.71 higher)	MID = 2 (SF-36 physical component established MID)
Person/participant generic health-related quality of life (SF-36 mental component summary, 0-100, higher values are better, final values) at end of scheduled follow-up	432 (3 RCTs) follow-up: mean 5.3 months	⊕◯◯◯ Very low[b,c,d]	-	The mean person/participant generic health-related quality of life at end of scheduled follow-up was 56.3	MD **2.15 lower** (4.66 lower to 0.37 higher)	MID = 3 (SF-36 mental component established MID)
Carer generic health-related	124 (2 RCTs)	⊕⊕◯◯ Low[b,e]	-	-	SMD **0.16 SD lower**	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
quality of life (carer QoL [different scale ranges], higher values are better, final values) at end of scheduled follow-up	follow-up: mean 12 weeks				(0.51 lower to 0.2 higher)	
Physical dependency at the end of scheduled follow-up	2307 (16 RCTs) follow-up: mean 36 weeks	⊕⊕⊕◯ Moderate[f]	RR 0.88 (0.80 to 0.97)	422 per 1,000	**51 fewer per 1,000** (84 fewer to 13 fewer)	MID (precision) = RR 0.8-1.25.
Activities of daily living (Barthel Index, Functional Independence Measure [different scale ranges], higher values are better, final values) at end of scheduled follow-up	1519 (13 RCTs) follow-up: mean 28 weeks	⊕⊕◯◯ Low[g]	-	-	SMD **0.04 SD higher** (0.06 lower to 0.14 higher)	MID = 0.5 SD (SMD)
Extended activities of daily living (Adelaide Activities Profile, Frenchay Activities Index, Nottingham Activities of Daily Living, OARS, Rivermead Activities of Daily Living [different scale ranges], higher values are better, final values) at end of scheduled follow-up	1207 (10 RCTs) follow-up: mean 30 weeks	⊕⊕◯◯ Low[h]	-	-	SMD **0.14 SD higher** (0.03 higher to 0.26 higher)	MID = 0.5 SD (SMD)
Length of hospital stay (days, lower values are better, final values) at end of scheduled follow-up	2360 (18 RCTs) follow-up: mean 32 weeks	⊕⊕◯◯ Low[d]	-	The mean length of hospital stay at end of scheduled follow-up was 32.6	MD **4.98 lower** (7.34 lower to 2.63 lower)	MID = 13.75 (0.5 x median control group SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
Caregiver strain index ([different scale ranges], lower values are better, final values) at end of scheduled follow-up	646 (6 RCTs) follow-up: mean 34 weeks	⊕⊕◯◯ Low[i]	-	-	SMD **0.14 SD higher** (0.02 lower to 0.29 higher)	MID = 0.5 SD (SMD)
Falls at end of scheduled follow-up	164 (2 RCTs) follow-up: mean 2.75 years	⊕◯◯◯ Very low[d,j]	RD 0.05 (-0.06 to 0.16)	175 per 1,000	**50 more per 1,000** (60 fewer to 160 more) [k]	Precision calculated through Optimal Information Size (OIS) due to zero events in some studies. OIS determined power for the sample size = 0.21 (0.8-0.9 = serious, <0.8 = very serious).
Readmissions to hospital at end of scheduled follow-up	783 (7 RCTs) follow-up: mean 31 weeks	⊕⊕⊕◯ Moderate[b]	RR 1.06 (0.84 to 1.34)	253 per 1,000	**15 more per 1,000** (40 fewer to 86 more)	MID (precision) = RR 0.8-1.25.
Psychological distress/mood (General Health Questionnaire, HADS, Montgommery Asberg Depression rating scale, Wakefield depression inventory [different scale ranges], lower values are better, final values) at	573 (6 RCTs) follow-up: mean 37 weeks	⊕⊕◯◯ Low[h]	-	-	SMD **0.07 SD lower** (0.24 lower to 0.09 higher)	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
end of scheduled follow-up						
Psychological distress/mood (HADS depression, 0-42, lower values are better, mean difference) at end of scheduled follow-up	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,l]	-	The mean psychological distress/mood at end of scheduled follow-up was 8.1	MD **2 higher** (0.6 lower to 4.6 higher)	MID = 2.7 (0.5 x median baseline SD)
Psychological distress/mood (HADS anxiety subscale, 0-21, lower values are better, final value) at end of scheduled follow-up	61 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,e]	-	The mean psychological distress/mood at end of scheduled follow-up was 5.07	MD **1.85 lower** (3.86 lower to 0.16 higher)	MID = 1.8 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS composite physical scale, 0-100, higher values are better, final value) at end of scheduled follow-up	61 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 61.4	MD **1.61 higher** (8.49 lower to 11.71 higher)	MID = 8.7 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS mobility, 0-100, higher values are better, mean difference) at end of scheduled follow-up	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 72.5	MD **4 lower** (13.5 lower to 5.5 higher)	MID = 8.5 (0.5 x mean difference SD)
Stroke-specific Patient-Reported Outcome Measures (SIS strength, 0-100, higher values are better, mean difference) at	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled	MD **8.2 higher** (0.8 higher to 15.6 higher)	MID = 7 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
end of scheduled follow-up				follow-up was 74.5		
Stroke-specific Patient-Reported Outcome Measures (SIS hand function, 0-100, higher values are better, mean difference) at end of scheduled follow-up	63 (1 RCT) follow-up: 12 weeks	⊕◯◯◯ Very low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 64.4	MD **2.1 higher** (14.4 lower to 18.6 higher)	MID = 11.6 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS activities of daily living, 0-100, higher values are better, mean difference) at end of scheduled follow-up	63 (1 RCT) follow-up: 12 weeks	⊕◯◯◯ Very low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 77.8	MD **0.2 lower** (8.2 lower to 7.8 higher)	MID = 7.6 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS emotion, 0-100, higher values are better, mean difference) at end of scheduled follow-up	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 81.9	MD **1.4 lower** (7.4 lower to 4.6 higher)	MID = 6.4 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS memory, 0-100, higher values are better, mean difference) at end of scheduled follow-up	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 80.3	MD **11.2 lower** (18.2 lower to 4.2 lower)	MID = 6.5 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS communication,	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end	MD **5.2 lower** (10.7 lower to	MID = 5.3 (0.5 x median

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
0-100, higher values are better, mean difference) at end of scheduled follow-up				of scheduled follow-up was 89.1	0.3 higher)	baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS social participation, 0-100, higher values are better, mean difference) at end of scheduled follow-up	63 (1 RCT) follow-up: 12 weeks	⊕◯◯◯ Very low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 64.4	MD **5.2 higher** (16.8 lower to 27.2 higher)	MID = 11.4 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS recovery, 0-100, higher values are better, mean difference) at end of scheduled follow-up	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 68.7	MD **1.2 lower** (10 lower to 7.6 higher)	MID = 8.2 (0.5 x median baseline SD)

a. Downgraded for heterogeneity due to conflicting number of events in different studies (zero events in one or more studies)

b. Downgraded by 1 increment if the confidence interval crossed one MID or by 2 increments if the confidence interval crossed both MIDs

c. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions and bias due to missing outcome data)

d. Downgraded by 1 or 2 increments because heterogeneity, unexplained by subgroup analysis

e. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias in measurement of the outcome)

f. Downgraded by 1 increment due to outcome indirectness (for including mortality in the outcome rather than only physical dependency)

g. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data, bias in measurement of the outcome, and bias in selection of the reported result)

h. Downgraded by 2 increments as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data, bias in measurement of the outcome, and bias in selection of the reported result)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	

i. Downgraded by 2 increments as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data and bias in measurement of the outcome)

j. Downgraded by 2 increments for imprecision due to zero events and small sample size

k. Absolute effect calculated by risk difference due to zero events in at least one study arm

l. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias arising from the measurement of the outcome)

2.1.3.2 Stratification of outcomes by the coordination and delivery of early supported discharge

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
Mortality at the end of scheduled follow-up - ESD team coordination and delivery	1131 (9 RCTs) follow-up: mean 29 weeks	⊕⊕◯◯ Low[a,b]	RR 0.73 (0.50 to 1.08)	89 per 1,000	**24 fewer per 1,000** (45 fewer to 7 more)	MID (precision) = RR 0.8-1.25.
Mortality at the end of scheduled follow-up - ESD team coordination only	665 (5 RCTs) follow-up: 33 weeks	⊕◯◯◯ Very low[a,b]	RR 0.92 (0.55 to 1.54)	79 per 1,000	**6 fewer per 1,000** (35 fewer to 42 more)	MID (precision) = RR 0.8-1.25.
Mortality at the end of scheduled follow-up - No ESD team	520 (4 RCTs) follow-up: 5.5 months	⊕◯◯◯ Very low[a,b,c]	RR 1.93 (1.16 to 3.20)	72 per 1,000	**67 more per 1,000** (12 more to 159 more)	MID (precision) = RR 0.8-1.25.
Person/participant generic health-related quality of life (EuroQol, 0-100, higher values are better, final value) at end of scheduled follow-up - ESD	113 (1 RCT) follow-up: 12 months	⊕⊕⊕◯ Moderate[b]	-	The mean person/participant generic health-related quality of life at end of scheduled follow-up was 68.21	MD **1.85 lower** (9.03 lower to 5.33 higher)	MID = 8.6 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
team coordination and delivery						
Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final values) at end of scheduled follow-up - ESD team coordination and delivery	181 (2 RCTs) follow-up: 12 weeks	⊕◯◯◯ Very low[b,e]	-	The mean person/participant generic health-related quality of life at end of scheduled follow-up was 39.8	MD **5.38 higher** (2.37 higher to 8.4 higher)	MID = 2 (SF-36 physical component established MID)
Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final values) at end of scheduled follow-up - ESD team coordination only	251 (1 RCT) follow-up: 7 months	⊕◯◯◯ Very low[b,c]	-	The mean person/participant generic health-related quality of life at end of scheduled follow-up was 47	MD **1 higher** (3.83 lower to 5.83 higher)	MID = 2 (SF-36 physical component established MID)
Person/participant generic health-related quality of life (SF-36 mental component summary, 0-100, higher values are better, final values) at end of scheduled follow-up - ESD team coordination and delivery	181 (2 RCTs) follow-up: 12 weeks	⊕◯◯◯ Very low[b,e,f]	-	The mean person/participant generic health-related quality of life at end of scheduled follow-up was 49.5	MD **3.15 lower** (6.2 lower to 0.1 lower)	MID = 3 (SF-36 mental component established MID)
Person/participant generic health-related quality of life (SF-36 mental	251 (1 RCT) follow-up: 7 months	⊕◯◯◯ Very low[b,c]	-	The mean person/participant generic health-related	MD **0** (4.46 lower to 4.46 higher)	MID = 3 (SF-36 mental component

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
component summary, 0-100, higher values are better, final values) at end of scheduled follow-up - ESD team coordination only				quality of life was 70		established MID)
Carer generic health-related quality of life (carer QoL, scale range unclear, higher values are better, final values) at end of scheduled follow-up - ESD team coordination only	61 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,g]	-	-	SMD **0.21 SD lower** (0.71 lower to 0.3 higher)	MID = 0.5 SD (SMD)
Carer generic health-related quality of life (carer QoL, scale range unclear, higher values are better, final values) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,g]	-	-	SMD **0.11 SD lower** (0.6 lower to 0.39 higher)	MID = 0.5 SD (SMD)
Physical dependency at the end of scheduled follow-up - ESD team coordination and delivery	1131 (9 RCTs) follow-up: 8 months	⊕⊕◯◯ Low[b,h]	RR 0.83 (0.73 to 0.94)	461 per 1,000	**78 fewer per 1,000** (124 fewer to 28 fewer)	MID (precision) = RR 0.8-1.25.
Physical dependency at the end of scheduled follow-up - ESD team coordination only	770 (4 RCTs) follow-up: 9 months	⊕◯◯◯ Very low[b,h,i]	RR 0.89 (0.75 to 1.06)	455 per 1,000	**50 fewer per 1,000** (114 fewer to 27 more)	MID (precision) = RR 0.8-1.25.
Physical dependency at the end of scheduled follow-	406 (3 RCTs) follow-up: 6 months	⊕◯◯◯ Very low[b,h,j]	RR 1.09 (0.81 to 1.46)	269 per 1,000	**24 more per 1,000** (51 fewer to 124 more)	MID (precision) = RR 0.8-1.25.

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
up - No ESD team						
Activities of daily living (Barthel Index, Functional Independence Measure [different scale ranges], higher values are better, final values) at end of scheduled follow-up - ESD team coordination and delivery	808 (7 RCTs) follow-up: 8 months	⨁⨁◯◯ Low[k]	-	-	SMD **0.06 SD higher** (0.08 lower to 0.2 higher)	MID = 0.5 SD (SMD)
Activities of daily living (Barthel Index, Functional Independence Measure [different scale ranges], higher values are better, final values) at end of scheduled follow-up - ESD team coordination only	322 (3 RCTs) follow-up: 3 months	⨁⨁◯◯ Low[l]	-	-	SMD **0.01 SD higher** (0.23 lower to 0.24 higher)	MID = 0.5 SD (SMD)
Activities of daily living (Barthel Index, Functional Independence Measure [different scale ranges], higher values are better, final values) at end of scheduled follow-up - No ESD team	389 (3 RCTs) follow-up: 5.3 months	⨁⨁◯◯ Low[m]	-	-	SMD **0.02 SD higher** (0.18 lower to 0.22 higher)	MID = 0.5 SD (SMD)
Extended activities of daily living (Adelaide Activities Profile, Frenchay Activities Index, Nottingham Activities of Daily	885 (8 RCTs) follow-up: 7 months	⨁⨁◯◯ Low[n]	-	-	SMD **0.17 SD higher** (0.04 higher to 0.3 higher)	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
Living, OARS, Rivermead Activities of Daily Living [different scale ranges], higher values are better, final values) at end of scheduled follow-up - ESD team coordination and delivery						
Extended activities of daily living (Adelaide Activities Profile, Frenchay Activities Index, Nottingham Activities of Daily Living, OARS, Rivermead Activities of Daily Living [different scale ranges], higher values are better, final values) at end of scheduled follow-up - ESD team coordination only	322 (2 RCTs) follow-up: 9 months	⨁⨁◯◯ Low[o]	-	-	SMD **0.07 SD higher** (0.15 lower to 0.29 higher)	MID = 0.5 SD (SMD)
Length of hospital stay (days, lower values are better, final values) at end of scheduled follow-up - ESD team coordination and delivery	1120 (9 RCTs)	⨁⨁◯◯ Low[f]	-	The mean length of hospital stay at end of scheduled follow-up was 30.3	MD **5.22 lower** (8.78 lower to 1.67 lower)	MID = 13.1 (0.5 x median control group SD)
Length of hospital stay (days, lower values are better, final values) at end of scheduled follow-up - ESD	971 (6 RCTs) follow-up: 9.5 months	⨁⨁◯◯ Low[b,d]	-	The mean length of hospital stay at end of scheduled follow-up was 44.7	MD **5.95 lower** (10.65 lower to 1.24 lower)	MID = 17.5 (0.5 x control group SDs)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
team coordination only						
Length of hospital stay (days, lower values are better, final values) at end of scheduled follow-up - No ESD team	269 (3 RCTs) follow-up: 4 months	⊕◯◯◯ Very low[b,f,j]	-	The mean length of hospital stay at end of scheduled follow-up was 15.4	MD **3.83 lower** (8.79 lower to 1.13 higher)	MID = 3.95 (0.5 x control group SDs)
Caregiver strain index ([different scale ranges], lower values are better, final values) at end of scheduled follow-up - ESD team coordination and delivery	272 (3 RCTs) follow-up: 10 months	⊕⊕⊕◯ Moderate[d]	-	-	SMD **0.13 SD higher** (0.11 lower to 0.37 higher)	MID = 0.5 SD (SMD)
Caregiver strain index ([different scale ranges], lower values are better, final values) at end of scheduled follow-up - ESD team coordination only	249 (1 RCT) follow-up: 12 months	⊕◯◯◯ Very low[b,o]	-	-	SMD **0.28 SD higher** (0.03 higher to 0.53 higher)	MID = 0.5 SD (SMD)
Caregiver strain index ([different scale ranges], lower values are better, final values) at end of scheduled follow-up - No ESD team	64 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,g]	-	-	SMD **0.38 SD lower** (0.88 lower to 0.11 higher)	MID = 0.5 SD (SMD)
Falls at end of scheduled follow-up - ESD team coordination and delivery	82 (1 RCT) follow-up: 5 years	⊕◯◯◯ Very low[b,p]	RD 0.10 (-0.11 to 0.31)	350 per 1,000	**100 more per 1,000** (110 fewer to 310 more) [q]	Sample size used to determine precision: 75-150 = serious imprecision, <75 = very

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
						serious imprecision
Falls at end of scheduled follow-up - ESD team coordination only (Sample size used to determine precision: 75-150 = serious imprecision, <75 = very serious imprecision) follow-up: 6 months	82 (1 RCT)	⨁◯◯◯ Very low[b,p]	RD 0.00 (-0.05 to 0.05)	0 per 1,000	**0 fewer per 1,000** (50 fewer to 50 more) [q]	Sample size used to determine precision: 75-150 = serious imprecision, <75 = very serious imprecision
Readmissions to hospital at end of scheduled follow-up - ESD team coordination and delivery	720 (6 RCTs) follow-up: 7 months	⨁⨁⨁◯ Moderate[b]	RR 1.08 (0.85 to 1.37)	253 per 1,000	**20 more per 1,000** (38 fewer to 94 more)	MID (precision) = RR 0.8-1.25.
Readmissions to hospital at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 3 months	⨁⨁◯◯ Low[b]	RR 0.90 (0.37 to 2.19)	250 per 1,000	**25 fewer per 1,000** (158 fewer to 298 more)	MID (precision) = RR 0.8-1.25.
Psychological distress/mood (General Health Questionnaire, HADS, Montgommery Asberg Depression rating scale, Wakefield depression inventory [different scale ranges], lower values are better, final values) at end of scheduled follow-up - ESD team coordination and delivery	189 (3 RCTs) follow-up: 9 months	⨁⨁◯◯ Low[r]	-	-	SMD **0.02 SD lower** (0.3 lower to 0.27 higher)	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
Psychological distress/mood (General Health Questionnaire, HADS, Montgommery Asberg Depression rating scale, Wakefield depression inventory [different scale ranges], lower values are better, final values) at end of scheduled follow-up - ESD team coordination only	384 (3 RCTs) follow-up: 6 months	⨁⨁◯◯ Low[o]	-	-	SMD **0.1 SD lower** (0.3 lower to 0.1 higher)	MID = 0.5 SD (SMD)
Psychological distress/mood (HADS depression, 0-42, lower values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⨁⨁◯◯ Low[b,g]	-	The mean psychological distress/mood at end of scheduled follow-up was 8.1	MD **2 higher** (0.6 lower to 4.6 higher)	MID = 2.7 (0.5 x median baseline SD)
Psychological distress/mood (HADS anxiety subscale, 0-21, lower values are better, final value) at end of scheduled follow-up - ESD team coordination only	61 (1 RCT) follow-up: 12 weeks	⨁⨁◯◯ Low[b,g]	-	-	MD **1.85 lower** (3.86 lower to 0.16 higher)	MID = 1.8 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS composite physical scale, 0-100, higher values are better, final value) at	61 (1 RCT) follow-up: 12 weeks	⨁⨁◯◯ Low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 61.4	MD **1.61 higher** (8.49 lower to 11.71 higher)	MID = 8.7 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
end of scheduled follow-up - ESD team coordination only						
Stroke-specific Patient-Reported Outcome Measures (SIS mobility, 0-100, higher values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 72.5	MD **4 lower** (13.5 lower to 5.5 higher)	MID = 8.5 (0.5 x mean difference SD)
Stroke-specific Patient-Reported Outcome Measures (SIS strength, 0-100, higher values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 74.5	MD **8.2 higher** (0.8 higher to 15.6 higher)	MID = 7 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS hand function, 0-100, higher values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⊕◯◯◯ Very low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 64.4	MD **2.1 higher** (14.4 lower to 18.6 higher)	MID = 11.6 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS activities of daily living, 0-100, higher values are better, mean difference) at end of scheduled	63 (1 RCT) follow-up: 12 weeks	⊕◯◯◯ Very low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 77.8	MD **0.2 lower** (8.2 lower to 7.8 higher)	MID = 7.6 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
follow-up - No ESD team						
Stroke-specific Patient-Reported Outcome Measures (SIS emotion, 0-100, higher values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⨁⨁◯◯ Low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 81.9	MD **1.4 higher** (7.4 lower to 4.6 higher)	MID = 6.4 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS memory, 0-100, higher values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⨁⨁◯◯ Low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 80.3	MD **11.2 lower** (18.2 lower to 4.2 lower)	MID = 6.5 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS communication, 0-100, higher values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⨁⨁◯◯ Low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 89.1	MD **5.2 lower** (10.7 lower to 0.3 higher)	MID = 5.3 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (SIS social participation, 0-100, higher values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⨁◯◯◯ Very low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 64.4	MD **5.2 higher** (16.8 lower to 27.2 higher)	MID = 11.4 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
Stroke-specific Patient-Reported Outcome Measures (SIS recovery, 0-100, higher values are better, mean difference) at end of scheduled follow-up - No ESD team	63 (1 RCT) follow-up: 12 weeks	⨁⨁◯◯ Low[b,g]	-	The mean stroke-specific Patient-Reported Outcome Measures at end of scheduled follow-up was 68.7	MD **1.2 lower** (10 lower to 7.6 higher)	MID = 8.2 (0.5 x median baseline SD)

a. Downgraded for heterogeneity due to conflicting number of events in different studies (zero events in one or more studies)

b. Downgraded by 1 increment if the confidence interval crossed one MID or by 2 increments if the confidence interval crossed both MIDs

c. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias arising from the randomisation process, and bias due to missing outcome data)

d. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions, and bias due to missing outcome data)

e. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias arising from deviations from the intended intervention)

f. Downgraded by 1 or 2 increments because heterogeneity, unexplained by subgroup analysis

g. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias in measurement of the outcome)

h. Downgraded by 1 increment due to outcome indirectness (for including mortality in the outcome rather than only physical dependency)

i. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions and bias due to missing outcome data)

j. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions, and bias due to missing outcome data)

k. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data, bias in measurement of the outcome and bias in selection of the reported result)

l. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to deviations from the intended interventions, and bias due to missing outcome data)

m. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias arising from the randomisation process, and bias due to missing outcome data)

n. Downgraded by 2 increments as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process, bias due to deviations from the intended interventions, and bias in measurement of the outcome)

o. Downgraded by 2 increments as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process, and bias due to deviations from the intended interventions)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with placebo	Risk difference with Early supported discharge	
[p] Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias arising from the randomisation process) [q] Absolute effect calculated by risk difference due to zero events in at least one study arm [r] Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to deviations from the intended interventions, bias due to missing outcome data, bias in measurement of the outcome and bias in selection of the reported result)						

2.1.4 Economic evidence

2.1.4.1 Included studies

Five health economic studies comparing early supported discharge to usual care were included in this review.[7, 29, 35, 50, 57] These studies are summarised in the health economic evidence profile below and the health economic evidence tables in Appendix J.

2.1.4.2 Excluded studies

Eight analyses related to this review question were included as part of the economic evidence for the previous guideline but were excluded as they were either published before 2006 or were dependent on unit costs and resource data entirely or predominantly from before 2006. This includes one cost-utility analysis[26] and seven cost-consequence analyses[2, 6, 9, 14, 25, 46, 53] that reported an analysis of costs alongside clinical outcomes from a randomised clinical trial included in the clinical review. These studies are reported in Appendix L.

See also the health economic study selection flow chart in Appendix I.

2.1.5 Summary of included economic evidence

Table 4: Health economic evidence profile: Early supported discharge compared to usual care

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
Rasmussen, 2016[35] (Denmark)	Partially applicable[(a)]	Potentially serious limitations[(b)]	• Within-trial analysis (RCT (n=71) - same paper and primary study[21] were included in the clinical review) • Cost-consequence analysis without any modelled extrapolation (various health outcomes) • Population: Adults hospitalised with post-stroke focal neurological deficits, hospitalised for a minimum of three days with a premorbid mRS 0-3 and ability to live at home. • Comparators: 1. Usual care: inpatient rehabilitation and conventional discharge planning. 2. ESD: Home-based rehabilitation during hospitalisation and for up to four weeks after discharge. Inpatients were transported to their homes, trained at home by the team and then returned to the hospital. • Follow-up: 3-months from stroke onset (150 days follow-up for total average expenditure)	(2-1): Saves £87[(c)]	EQ-5D gain scores ≥3 months (median 2-1): -0.08[(d)] mRS ≥3 months (median, 2−1): -1 (95% CI: NR; p=0.04) BI improvement ≥3 months (median, 2−1): 9 (95% CI: NR; p>0.05)	NA Results suggest when compared to usual care, ESD saves on total costs at five months. A decrease in median utility was reported at 3 months post-intervention, however the EQ-5D improvement for usual care was not statistically significant (p>0.05). Improvements were seen in the degree of disability (mRS) and for activities of daily living (BI)	No sensitivity analyses undertaken.

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
						for ESD compared to usual care at 3 months, however these outcomes were reported as median values.	
Neale, 2020[29] (Australia)	Partially applicable[(e)]	Potentially serious limitations[(f)]	• Within trial analysis (n=41) by Leach et al. (2020)[56] • Cost-consequence analysis without any modelled extrapolation (health outcome: length of stay) • Population: Post-stroke adults with all levels of severity, assessed to be safe for discharge home (either with or without a carer and services) and required intensive rehabilitation from at least two disciplines. • Comparators: 1. Control group (n=13) received standard care via acute admission and inpatient rehabilitation and were followed up with usual community rehabilitation services. 2. 8-week ESD program (n=28) (including an ESD coordinator) where participants received assessment and rehabilitation for up to 5 days per week from	(2-1): Saves £2,896[(g)]	LOS inpatient rehabilitation (mean (SD) per days patient) (2−1): Saves 6 days. (95% CI: NR; p<0.00) LOS Intensive rehabilitation (mean (SD) days per patient) (2−1): 7.6 days[(h)] (95% CI: NR; p<0.00)	NA: ESD group spent fewer days in hospital, but standard care group spent fewer days in intensive rehabilitation and there were cost savings for the ESD group, however these were not statistically significant.	No sensitivity analyses undertaken.

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
			MDT therapists. This group also had access to subsidised taxi transportation, for appointments, and personal care assistance, respite and access to paid carers as required. • Follow up: 8 weeks				
Tistad 2015[50] (Sweden)	Partially applicable[(i)]	Potentially serious limitations[(j)]	• Within-trial analysis using a subgroup of the LAS-1 study by Tham 2012[47]. • Cost-consequence analysis without any modelled extrapolation (health outcome: LOS) • Population: Post-stroke adults discharged from hospital but are still in need of rehabilitation, with a BI score ≥50 and have the ability to transfer without assistance between a chair and a bed at baseline. • Comparators: 1. Usual care (n=110). Conventional rehabilitation services included inpatient rehabilitation, rehabilitation at a specialised day hospital or an outpatient clinic, outpatient rehabilitation at a primary healthcare centre and home-based rehabilitation. 2. ESD (n=40). Patients were retrospectively classified as ESD group if the	(2 -1): Saves £22,33[(k)(l)]	Mean LOS 3 months post-stroke (2-1): Saves 3 days (95% CI= NR; p=0.02) Mean LOS 12 months post-stroke Saves 6 days[(k)] (95% CI= NR; p=0.13)	NA: Total inpatient stay in the first three months after stroke onset was shorter for the ESD group compared to usual care. There was no statistically significant difference between the groups with regards to 12-month LOS outcomes or overall healthcare costs.	No sensitivity analyses undertaken.

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
			interdisciplinary stroke team provided them with rehabilitation in their homes and if the team's first visit occurred before discharge or within the first 7 days after discharge. (Mean of 25 visits over 12 months). • Follow-up: 12 months				
Xu 2018[57] (UK)	Directly applicable	Potentially serious limitations[(m)]	• Time-to-event individual patient simulation model (full details in NGC and SSNAP Technical report[27]) • CUA (health outcome: QALYs) • Population: Adults who have had a recent stroke and were admitted for acute stroke care in England. • Comparators: 1. Extended stroke unit rehabilitation and/or community rehabilitation 2. ESD team with coordination and delivery. ESD team consisted of MDT therapists. (Mean of 25 visits over 12 months). • Time horizon: 1 and 5 years	(2-1): NR £1,600[(n)] saved for each additional patient discharged to ESD at both 1 and 5 years.	(2-1): NR QALY gain of 0.04 at 1 year and 0.14 at 5 years for each additional patient discharged to ESD.	ESD dominates usual care.	Multiple scenario analyses conducted. Both the NHS and social care costs were lower, and QALYs were higher for scenarios with a higher proportion of ESD. Probabilistic sensitivity analyses found the estimated patient-level costs and outcomes at 1- and 5-years post-stroke to be robust. PSA results were also found to be robust for a scenario where

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
							35% of non-ESD discharged patients were redirected to ESD. The scenario where only patients with mRS 0-2 were redirected, significant differences in costs or QALYs as ESD use increased were not observed, which implies that patients with moderate to severe disability gain the most from ESD.
Candio 2022[7] (UK)	Partially applicable[(o)]	Potentially serious limitations[(p)]	• Decision-analytic Markov model with embedded decision tree which determined mRS scores associated with home-based and centre-based rehabilitation at 3 months post-stroke. • Cost-utility analysis (health outcome: QALYs). • Population: Adults (≥20 years old) who survived the acute stroke phase (between 24 hours and two	(2-1): Saves £25[(q)(r)]	(2-1): 0.07 QALYs[(r)]	Home-based rehabilitation dominates centre-based rehabilitation (lower costs and higher QALYs).	Probability Intervention 2 cost effective (£20K): 93% The primary analysis results were based on a societal perspective, which also

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
			weeks from symptoms onset) and were admitted to hospital. • Comparators: 1. Centre-based rehabilitation. Patients would only receive conventional hospital-based care (inpatient and outpatient). 2. Home-based rehabilitation was defined as a package of care whereby a stroke patient would receive physiotherapy, occupational therapy, and speech therapy at their home. • Time horizon: 5 years				suggested that home-based rehabilitation dominates usual care. Therefore, the results of the one-way sensitivity analyses do not assess the level of uncertainty of the intervention's cost-effectiveness for a healthcare perspective.

Abbreviations: BI= Modified Barthel Index (0-100, higher scores are better); CI = 95% confidence interval; EQ-5D= EuroQol 5 dimensions (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); ESD= Early Supported Discharge; incremental cost-effectiveness ratio; LAS-1: life after stroke phase 1; LOS= length of stay; mRS= modified Rankin Scale (0-6, lower values are better); MDT=multi-disciplinary team; NA= not applicable; NGC=National Guideline Centre; PSA= probabilistic sensitivity analysis; QALY= quality-adjusted life years; RCT= randomised controlled trial; SSNAP=Sentinel Stroke National Audit Programme.

(a) Danish setting and 2008 resource use estimates may not reflect UK NHS context. Danish population tariff was used to estimate EQ-5D scores.

(b) Primary clinical and economic data inputs based on a single RCT. 3-month follow-up for clinical outcomes and 150 days for average total expenditure may not be sufficient to capture long-term costs and outcomes of ESD. References for unit costs (including cost year) were not reported and were converted to UK pounds from USD ($) that was converted from Danish krone (DKK), which limits the interpretation of results for UK context. ESD intervention included the cost of transporting inpatients to their homes and back to the hospital, which may overestimate costs as not all ESD services would provide transport for home-training before discharge. No sensitivity analyses were performed on parameters of uncertainty.

(c) 2014 USD ($) converted to UK pounds purchasing power parities[30]. Cost year was assumed to be 2014 based on year of study submission as this was not reported. Intervention costs (including transport) were estimated to be an additional £876 for ESD initially, but cost savings were associated with a reduction in medications and rehabilitation and home care. Study costs were presented in USD, with 1 US$ being equal to 5.41 DKK. Intervention costs and resource use estimates were collected using case report forms by members of the multi-disciplinary team.

(d) Although the mean difference suggests that the usual care group had improved EQ-5D scores compared to ESD, only the change from baseline for the ESD group was statistically significant (p>0.05).

(e) QALYs (and cost per QALY gained) were not presented. Australian healthcare system may not reflect UK NHS context.

(f) Within-trial analysis that applied baseline outcomes and estimates of resource use from single non-randomised study (with a small sample size (n=41)) that was excluded from the clinical review. 8-week follow-up may not be sufficient to capture long-term costs and outcomes of ESD. References for unit costs (including cost year) were not reported which limits interpretation of results for UK context. No sensitivity analyses were performed on parameters of uncertainty.

(g) Total cost of standard care was not significantly more or less expensive (95% CI: NR; p=0.99). 2017 Australian Dollars (AUD) converted UK pounds (£) using 2017 purchasing power parities[30]. Cost year was assumed to be 2017 based on year of study submission as this was not reported. Staff-recorded logs of the frequency and duration of sessions, travel time and non-clinical time were used to estimate intervention costs for the ESD group (£147 per day). Inpatient rehabilitation was reported to cost £477 per day. Resource use was collected retrospectively using 3-month post-stroke medical records on hospital readmissions and complications. Saved days were calculated as the number of days between the date inpatients in both groups were assessed to be safe for early support discharge and the day of discharge from hospital.

(h) ESD group received intensive rehabilitation in the community (ward-based inpatient rehabilitation for standard care group).

(i) QALYs (and cost per QALY gained) were not presented. Swedish healthcare system with 2012 costs and 2006-2007 resource use estimates may not reflect UK NHS context.

(j) Intervention effects were based on single non-randomised observational study excluded from clinical review. Estimates of resource use were based on data from the trial population and not a systematic review. No sensitivity analyses were performed on parameters of uncertainty.

(k) Differences in outcomes between ESD and usual care groups were not statistically significant at one year after stroke onset (p>0.05).

(l) 2012 Swedish Krona converted to UK pounds (£) using 2012 purchasing power parities[30]. Cost components incorporated: Rehabilitation costs in primary, home-based, inpatient and outpatient specialist care settings. Resource use for healthcare services was collected from within the trial sample using the Stockholm County Council's computerised database. Services costs were based on data from the Swedish Case Costing Database (SCCD)[42] and primary care costs were based on figures from Statistics Sweden (SS).[40]

(m) EQ-5D was not collected so QALY gain was estimated using a mapping algorithm. The main treatment effect (Barthel index) was based on observational data (controlling for age, sex, stroke type and stroke severity). One author declared a potential conflict of interest with respect to the research, authorship, and/or publication of this article.

(n) 2014 UK pounds (£). Cost components incorporated: Pre-hospital care, acute care, diagnostics, prescribing, inpatient rehabilitation, community rehabilitation, early supported discharge, primary care, secondary prevention, and stroke recurrence. Social care included nursing home care, formal care at home, supported meals and day services. Health and social care utilisation after stroke were collected from SLSR data. UK national unit costs applied.

(o) 2007-2012 UK resource use estimates may not reflect current NHS context.

(p) EQ-5D was not collected so QALY gain was estimated using a mapping algorithm. Indirectness of treatment effect as mRS scores were adjusted from associated Barthel Index scores before being assigned utility weights. One-way sensitivity analyses were performed for the societal perspective only and so are not available for the ICER of interest presented here.

(q) 2017 UK pounds (£). Health and social care costs have been presented to reflect a UK NHS and PSS perspective to be consistent with NICE reference case; base-case analysis assessed home-based rehabilitation across 32 countries for a societal perspective that included productivity losses and informal care costs. Cost components incorporated: Hospital stay and day cases (inpatient costs), outpatient visits, accident and emergency (A&E) visits and nursing/residential care.

(r) Results from UK-specific analysis presented here only: per patient results were calculated here using UK population of 79,122 eligible stroke patients reported in Appendix II of Candio 2022 supplementary material.[7]

2.1.6 Economic model

This area was not prioritised for new cost-effectiveness analysis

2.1.7 Unit costs

Relevant unit costs are provided below to aid consideration of cost effectiveness.

Table 5: Unit costs of health care professionals who may be involved in providing early supported discharge

Resource	Cost per working hour[a]		Source
	Hospital	Community	
Band 5/6/7 PT, OT, SLT or dietitian	£40-£41[b]/£53/£64	£42/£55/£67	PSSRU 2021[20]
Band 5/6/7 Nurse	£44/£54/£64	£47/£58/£69	
Band 7 psychologist	£64	£67	PSSRU 2021[20], assumed to be the same as dietitian[c]
Band 3 Clinical support worker higher level (physiotherapy)	£33	£32	PSSRU 2021[20], estimated based on agenda for change band 3 salary[d]

Abbreviations: OT= occupational therapist; PT= physiotherapist; SLT= speech and language therapist

(a) Note: Costs per working hour include salary, salary oncosts, overheads (management and other non-care staff costs including administration and estates staff), capital overheads and qualification costs.

(b) Band 5 SLT and Dietitian cost £40 per working hour.

(c) Same assumption was used in the NICE chronic pain guideline[28]

(d) Band 3 PT not reported in PSSRU 2021 so salary was assumed to equal Band 3 Mean annual basic pay per FTE for administration and estates staff, NHS England (PSSRU 2021 p.149[20])

Studies included in the clinical review reported varied resource use (see Table 2 for details) due to:

- Variation in the delivery of therapy sessions: 14 studies assessed interventions that involved an ESD team for the coordination of services (of which, nine were also responsible for the delivery of rehabilitation), while 4 studies did not have a team for the provision or delivery of ESD services.
- Additional equipment required as part of the ESD program such as walking aids to prevent falls, videoconferencing and e-health apps and information materials for carers.
- Some studies would also begin coordination with face-to-face sessions before moving to telephone calls as part of the follow-up. Service coordination involving the use of telephone calls will incur a lower cost per person than in-person appointments.
- Regarding intensity, ESD interventions were on average delivered less than 5 days a week, but the reporting of this information was unclear. The duration of the interventions varied between studies but was in general around 6 weeks, although many did not report any specific information, while others reported that rehabilitation was provided for up to 3-months[8] or for 'as long as required'.[36]
- Staff involved in the delivery of ESD consisted of typical members of a stroke multi-disciplinary rehabilitation team and/or a healthcare professional trained to provide stroke-related care such as nurses, physiotherapists, occupational therapists, and psychologists. However one study specified that no nurses were involved[55], while another study [41] reported that volunteers were trained to deliver simple rehabilitation and detect complications.

- Few studies reported the criteria that made patients eligible for ESD, which could affect resource use as people discharged with higher levels of independence could require less equipment or staff time.

Economic considerations: trade-off between net clinical effects and costs

2.1.8 Evidence statements

Effectiveness/Qualitative

Economic

- Two UK cost-utility models with 5-year time horizons (one directly appliable and one partially applicable) found that ESD dominates usual care (lower costs and higher quality of life). Both studies had potentially serious limitations.
- One cost-consequence analysis found that when compared to usual care, ESD is cost-saving costs at five months (£87 less than usual care). A decrease in median utility was reported at 3 months post-intervention, however the EQ-5D improvement for usual care was not statistically significant ($p>0.05$). Improvements were seen in the degree of disability (mRS) and for activities of daily living (BI) for ESD compared to usual care at 3 months, however these outcomes were reported as median values. This study was assessed as partially applicable with potentially serious limitations.
- Two cost-consequence analyses study found that ESD was cost-saving (£2,896 at 8 weeks and £2,333 less at 12 months, respectively) and reduced hospital length of stay (6 days saved at 8 weeks and 3 days saved at 3 months, respectively) compared to usual care. However, the results of the 8-week analysis reported that length of stay in intensive rehabilitation in the community for the ESD was higher, which meant that the total costs were not statistically different between groups. These analyses were assessed as partially applicable with potentially serious limitations.

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