National Institute for Health and Care Excellence

Final

Stroke rehabilitation in adults (update)

[A3] 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

Disclaimer

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

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

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 All NICE guidance is subject to regular review and may be updated or withdrawn.

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ISBN: 978-1-4731-5446-9

Contents

Appendices

Appendix A – Review protocols

Review protocol for the clinical and cost-effectiveness of early supported discharge after a stroke

ID	Field	Content
0.	PROSPERO registration number	CRD42021254946
1.	Review title	In people after stroke what is the clinical and cost effectiveness of early supported discharge compared with usual care?
2.	Review question	1.1a In people after stroke what is the clinical and cost effectiveness of early supported discharge compared with usual care? 1.1b In people after stroke what factors are associated with effective delivery of early supported discharge care?
3.	Objective	To determine whether early supported discharge improves outcomes for people after a stroke, and what factors may be associated with effective delivery of early supported discharge.
4.	Searches	Key paper: 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 A second Cochrane review (Gonçalves-Bradley DC, Iliffe S, Doll HA, Broad J, Gladman J, Langhorne P, Richards SH, Shepperd S. Early discharge hospital at home. Cochrane Database of Systematic Reviews 2017, Issue 6. Art. No.: CD000356. DOI: 10.1002/14651858.CD000356.pub4.) was identified. This review includes a mixed population and only some of the papers included in the first review. This will be checked for additional references only. The following databases (from inception) will be searched: • Cochrane Central Register of Controlled Trials (CENTRAL) • Cochrane Database of Systematic Reviews (CDSR) • Embase • MEDLINE • Epistemonikas • CINAHL

		• PsychINFO • PEDRO Searches will be restricted by: • English language studies • Human studies • Date limitation: From January 2017 (for quantitative review only) Other searches: • Inclusion lists of systematic reviews The searches may be re-run 6 weeks before the final committee meeting and further studies retrieved for inclusion if relevant. The full search strategies will be published in the final review. Medline search strategy to be quality assured using the PRESS evidence-based checklist (see methods chapter for full details).
5.	Condition or domain being studied	Adults and young people (16 or older) after a stroke
6.	Population	Inclusion: • 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 Exclusion: • Children (age <16 years) • People who have had a transient ischaemic attack
7.	Intervention	Quantitative data • 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 Where studies include a mixture of the above categories studies will be included if at least 80% satisfy the criteria for one category. If <10% of participants are in a different category (for example: 9% receive rehabilitation with an early supported discharge team, 91% receive rehabilitation without an early supported discharge team), this study will be included in the majority category without downgrading for indirectness. If 10-20% are in a different category, this study will be included in the majority category and downgraded for intervention indirectness. Qualitative data Views, opinions and experiences relating to how early supported discharge care should be delivered (including the potential barriers and facilitators)
8.	Comparator	Quantitative data • Usual care Confounding factors (for non-randomised studies only): • Stroke severity • Age • Dependency (measured by Activities of Daily Living) Qualitative data N/A

9.	Types of study to be included	Quantitative data
		• Systematic reviews of RCTs
		• 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)
		
		Published NMAs and IPDs will be considered for inclusion.

		Non-randomised studies will only be included if all of the key confounders have been accounted for in a multivariate analysis. In the absence of multivariate analysis, studies that account for key confounders with univariate analysis or matched groups will be considered. 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.
10.	Other exclusion criteria	• Non-English language studies • Crossover RCTs • Conference abstracts will be excluded as it is expected there will be sufficient full text published studies available. • Intensity of early supported discharge (for example: providing services 7 days a week compared to 5 days a week – this will be considered in a separate question [3.1 intensity of rehabilitation])
11.	Context	People after a stroke. This may include people in a hyperacute (<72 hours), an acute (72 hours – 7 days), subacute (7 days – 6 months) or chronic (>6 months) time horizon.

12.	Primary outcomes (critical outcomes)	All outcomes are considered equally important for decision making and therefore have all been rated as critical:
		
		At time period:
		• End of scheduled follow up
		
		• Mortality (dichotomous outcome)
		• Person/participant generic health-related quality of life (continuous outcomes will be prioritised)
		  ○ EQ-5D
		  ○ SF-6D
		  ○ SF-36
		  ○ SF-12
		  ○ Other utility measures (AQOL, HUI, 15D, QWB)
		• Carer generic health-related quality of life (continuous outcomes will be prioritised)
		  ○ EQ-5D
		  ○ SF-6D

		○ SF-36 ○ SF-12 ○ Other utility measures (AQOL, HUI, 15D, QWB) • Physical dependency (dependent on help for transfers, mobility, washing, dressing or toileting) (dichotomous outcome) • Activities of daily living (continuous outcomes will be prioritised) ○ Barthel Index • 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) ○ Stroke-Specific Quality of Life (SS-QOL) ○ Stroke Impact Scale (SIS) ○ Stroke-specific Sickness Impact Profile (SA-SIP30) ○ Satisfaction with International Classification of Functioning, Disability and Health – Stroke (SATIS-Stroke) ○ Neuro-QOL ○ PROMIS-10 If time-to-event outcomes are reported these will be prioritised over dichotomous outcomes. Themes will be gathered from the evidence identified for this review and not stated prior to this.
14.	Data extraction (selection and coding)	EndNote will be used for reference management, sifting, citations and bibliographies. All references identified by the searches and from other sources will be screened for inclusion. All references identified by the searches and from other sources will be uploaded into EPPI reviewer and de-duplicated. 10% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer.

		The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above. A standardised form will be used to extract data from studies (see Developing NICE guidelines: the manual section 6.4). 10% of all evidence reviews are quality assured by a senior research fellow. This includes checking: • papers were included /excluded appropriately • a sample of the data extractions • correct methods are used to synthesise data • a sample of the risk of bias assessments Disagreements between the review authors over the risk of bias in particular studies will be resolved by discussion, with involvement of a third review author where necessary. Study investigators may be contacted for missing data where time and resources allow. Once saturation is considered to have been reached (all the themes are already covered in the data extraction) data from other included papers will not be extracted or critically appraised, but the paper will still be read to check for any additional themes and will be noted in the included studies. The point at which data saturation is reached will be noted within the review.
15.	Risk of bias (quality) assessment	Risk of bias will be assessed using the appropriate checklist as described in Developing NICE guidelines: the manual. • Systematic reviews: Risk of Bias in Systematic Reviews (ROBIS) • Randomised Controlled Trial: Cochrane RoB (2.0) • Non randomised study, including cohort studies: Cochrane ROBINS-I • Qualitative studies: Critical Appraisal Skills Programme (CASP) qualitative checklist • Mixed methods study: Mixed methods Appraisal Tool (MMAT)
16.	Strategy for data synthesis	• Pairwise meta-analyses will be performed using Cochrane Review Manager (RevMan5). Fixed-effects (Mantel-Haenszel) techniques will be used to calculate risk ratios for the binary outcomes where possible. Continuous outcomes will be analysed using an inverse variance method for pooling weighted mean differences.

		Heterogeneity between the studies in effect measures will be assessed using the I^2 statistic and visually inspected. An I^2 value greater than 50% will be considered indicative of substantial heterogeneity. Sensitivity analyses will be conducted based on pre-specified subgroups using stratified meta-analysis to explore the heterogeneity in effect estimates. If this does not explain the heterogeneity, the results will be presented pooled using random-effects. • GRADEpro will be used to assess the quality of evidence for each outcome, taking into account individual study quality and the meta-analysis results. The 4 main quality elements (risk of bias, indirectness, inconsistency and imprecision) will be appraised for each outcome. Publication bias is tested for when there are more than 5 studies for an outcome. The risk of bias across all available evidence was evaluated for each outcome using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) toolbox' developed by the international GRADE working group http://www.gradeworkinggroup.org/ • Where meta-analysis is not possible, data will be presented and quality assessed individually per outcome. • WinBUGS will be used for network meta-analysis, if possible given the data identified. The synthesis of qualitative data will follow a thematic analysis approach. Information will be synthesised into main review findings. Results will be presented in a detailed narrative and in table format with summary statements of main review findings. GRADE CERQual will be used to synthesise the qualitative data and assess the certainty of evidence for each review finding. The mixed methods synthesis will combine the themes found in the qualitative review with the effectiveness data from quantitative studies. The studies will be matched and presented in a matrix.
17.	Analysis of sub-groups	Quantitative review: Subgroups that will be investigated if heterogeneity is present: Ability to transfer prior to discharge/study (with or without use of aids) • Before study able to transfer independently from bed to chair • Before study able to transfer with assistance of one from bed to chair

<table>
<tr><td></td><td></td><td colspan="3">
Before study able be able to mobilise with assistance of two from bed to chair
Severity (as stated by category or as measured by NIHSS scale):
Mild (or NIHSS 1-5)
Moderate (or NIHSS 5-14)
Severe (or NIHSS 15-24)
Very severe (or NIHSS >25)
Modified Rankin scale
1-2
>2
Number of days of rehabilitation provided per week:
<5 days
5 days
6 days
7 days
Length of intervention
≤6 weeks
>6 weeks
</td></tr>
<tr><td rowspan="8">18.</td><td rowspan="8">Type and method of review</td><td>☐</td><td colspan="2">Intervention</td></tr>
<tr><td>☐</td><td colspan="2">Diagnostic</td></tr>
<tr><td>☐</td><td colspan="2">Prognostic</td></tr>
<tr><td>☐</td><td colspan="2">Qualitative</td></tr>
<tr><td>☐</td><td colspan="2">Epidemiologic</td></tr>
<tr><td>☐</td><td colspan="2">Service Delivery</td></tr>
<tr><td>☒</td><td colspan="2">Other (please specify)
Mixed methods</td></tr>
<tr><td></td><td></td><td colspan="2"></td></tr>
<tr><td>19.</td><td>Language</td><td colspan="3">English</td></tr>
<tr><td>20.</td><td>Country</td><td colspan="3">England</td></tr>
<tr><td>21.</td><td>Anticipated or actual start date</td><td colspan="3">24/02/2021</td></tr>
<tr><td>22.</td><td>Anticipated completion date</td><td colspan="3">14/12/2022</td></tr>
<tr><td rowspan="4">23.</td><td rowspan="4">Stage of review at time of this submission</td><td>Review stage</td><td>Started</td><td>Completed</td></tr>
<tr><td>Preliminary searches</td><td>☐</td><td>☐</td></tr>
<tr><td>Piloting of the study selection process</td><td>☐</td><td>☐</td></tr>
<tr><td>Formal screening of search results</td><td>☐</td><td>☐</td></tr>
</table>

		against eligibility criteria		
		Data extraction	☐	☐
		Risk of bias (quality) assessment	☐	☐
		Data analysis	☐	☐
24.	Named contact	5a. Named contact National Guideline Centre 5b Named contact e-mail StrokeRehabUpdate@nice.nhs.uk 5e Organisational affiliation of the review National Institute for Health and Care Excellence (NICE) and National Guideline Centre		
25.	Review team members	From the National Guideline Centre: Bernard Higgins (Guideline lead) George Wood (Senior systematic reviewer) Madelaine Zucker (Systematic reviewer) Kate Lovibond (Health economics lead) Claire Sloan (Health economist) Joseph Runicles (Information specialist) Nancy Pursey (Senior project manager)		
26.	Funding sources/sponsor	This systematic review is being completed by the National Guideline Centre which receives funding from NICE.		
27.	Conflicts of interest	All guideline committee members and anyone who has direct input into NICE guidelines (including the evidence review team and expert witnesses) must declare any potential conflicts of interest in line with NICE's code of practice for declaring and dealing with conflicts of interest. Any relevant interests, or changes to interests, will also be declared publicly at the start of each guideline committee meeting. Before each meeting, any potential conflicts of interest will be considered by the guideline committee Chair and a senior member of the development team. Any decisions to exclude a person from all or part of a meeting will be documented. Any changes to a member's declaration of interests will be recorded in the minutes of the meeting. Declarations of interests will be published with the final guideline.		
28.	Collaborators	Development of this systematic review will be overseen by an advisory committee who will use the review to inform the development of evidence-based		

		recommendations in line with section 3 of Developing NICE guidelines: the manual. Members of the guideline committee are available on the NICE website: https://www.nice.org.uk/guidance/indevelopment/gid-ng10175	
29.	Other registration details	N/A	
30.	Reference/URL for published protocol	N/A	
31.	Dissemination plans	NICE may use a range of different methods to raise awareness of the guideline. These include standard approaches such as: • notifying registered stakeholders of publication • publicising the guideline through NICE's newsletter and alerts • issuing a press release or briefing as appropriate, posting news articles on the NICE website, using social media channels, and publicising the guideline within NICE.	
32.	Keywords	Adults; Discharge; Early supported discharge; Intervention; Inpatient; Outpatient; Rehabilitation; Stroke	
33.	Details of existing review of same topic by same authors	N/A	
34.	Current review status	☐	Ongoing
		☐	Completed but not published
		☒	Completed and published
		☐	Completed, published and being updated
		☐	Discontinued
35..	Additional information	N/A	
36.	Details of final publication	www.nice.org.uk	

Table 1: Health economic review protocol

Review question	All questions – health economic evidence
Objectives	To identify health economic studies relevant to any of the review questions.
Search criteria	• Populations, interventions and comparators must be as specified in the clinical review protocol above. • Studies must be of a relevant health economic study design (cost–utility analysis, cost-effectiveness analysis, cost–benefit analysis, cost–consequences analysis, comparative cost analysis). • Studies must not be a letter, editorial or commentary, or a review of health economic evaluations. (Recent reviews will be ordered although not reviewed. The bibliographies will be checked for relevant studies, which will then be ordered.) • Unpublished reports will not be considered unless submitted as part of a call for evidence. • Studies must be in English.
Search strategy	A health economic study search will be undertaken using population-specific terms and a health economic study filter – see appendix B below. Databases searched: • Centre for Reviews and Dissemination NHS Economic Evaluations Database (NHS EED) – all years (closed to new records April 2015) • Centre for Reviews and Dissemination Health Technology Assessment database – all years (closed to new records March 2018) • International HTA database (INAHTA) – all years • Medline and Embase – from 2014 (due to NHS EED closure)
Review strategy	Studies not meeting any of the search criteria above will be excluded. Studies published before 2006 (including those included in the previous guideline), abstract-only studies and studies from non-OECD countries or the USA will also be excluded. Each remaining study will be assessed for applicability and methodological limitations using the NICE economic evaluation checklist which can be found in appendix H of Developing NICE guidelines: the manual (2014).[1] Studies published in 2006 or later that were included in the previous guideline will be reassessed for inclusion and may be included or selectively excluded based on their relevance to the questions covered in this update and whether more applicable evidence is also identified. **Inclusion and exclusion criteria** • If a study is rated as both 'Directly applicable' and with 'Minor limitations' then it will be included in the guideline. A health economic evidence table will be completed and it will be included in the health economic evidence profile. • If a study is rated as either 'Not applicable' or with 'Very serious limitations' then it will usually be excluded from the guideline. If it is excluded then a health economic evidence table will not be completed and it will not be included in the health economic evidence profile. • If a study is rated as 'Partially applicable', with 'Potentially serious limitations' or both then there is discretion over whether it should be included. **Where there is discretion** The health economist will make a decision based on the relative applicability and quality of the available evidence for that question, in discussion with the guideline committee if required. The ultimate aim is to include health economic studies that are helpful for decision-making in the context of the guideline and the current NHS

	setting. If several studies are considered of sufficiently high applicability and methodological quality that they could all be included, then the health economist, in discussion with the committee if required, may decide to include only the most applicable studies and to selectively exclude the remaining studies. All studies excluded on the basis of applicability or methodological limitations will be listed with explanation in the excluded health economic studies appendix below. The health economist will be guided by the following hierarchies. *Setting:* • UK NHS (most applicable). • OECD countries with predominantly public health insurance systems (for example, France, Germany, Sweden). • OECD countries with predominantly private health insurance systems (for example, Switzerland). • Studies set in non-OECD countries or in the USA will be excluded before being assessed for applicability and methodological limitations. *Health economic study type:* • Cost–utility analysis (most applicable). • Other type of full economic evaluation (cost–benefit analysis, cost-effectiveness analysis, cost–consequences analysis). • Comparative cost analysis. • Non-comparative cost analyses including cost-of-illness studies will be excluded before being assessed for applicability and methodological limitations. *Year of analysis:* • The more recent the study, the more applicable it will be. • Studies published in 2006 or later (including any such studies included in the previous guideline) but that depend on unit costs and resource data entirely or predominantly from before 2006 will be rated as 'Not applicable'. • Studies published before 2006 (including any such studies included in the previous guideline) will be excluded before being assessed for applicability and methodological limitations. *Quality and relevance of effectiveness data used in the health economic analysis:* • The more closely the clinical effectiveness data used in the health economic analysis match with the outcomes of the studies included in the clinical review the more useful the analysis will be for decision-making in the guideline.

Appendix B – Literature search strategies

B.1 Clinical search literature search strategy

Searches were constructed using a PICO framework where population (P) terms were combined with Intervention (I) and in some cases Comparison (C) terms. Outcomes (O) are rarely used in search strategies as these concepts may not be indexed or described in the title or abstract and are therefore difficult to retrieve. Search filters were applied to the search where appropriate.

Table 2: Database parameters, filters and limits applied

Database	Dates searched	Search filter used
Medline (OVID)	01 January 2017 – 08 January 2023	Randomised controlled trials Systematic review studies Exclusions (animal studies, letters, comments, editorials, case studies/reports) English language
Embase (OVID)	01 January 2017 – 08 January 2023	Randomised controlled trials Systematic review studies Exclusions (animal studies, letters, comments, editorials, case studies/reports, conference abstracts) English language
The Cochrane Library (Wiley)	Cochrane Reviews 2017 to 2023 Issue 1 of 12 CENTRAL 2017 to 2023 Issue 1 of 12	Exclusions (clinical trials, conference abstracts)
Epistemonikos (The Epistemonikos Foundation)	01 January 2017 – 08 January 2023	Exclusions (Cochrane reviews) English language
PsycINFO (OVID)	01 January 2017 – 08 January 2023	Human Exclusions (animal studies, letters, case reports) English language
Current Nursing and Allied Health Literature - CINAHL (EBSCO)	01 January 2017 – 08 January 2023	Human Exclusions (Medline records) English Language

Medline (Ovid) search terms

1.	exp Stroke/
2.	Stroke Rehabilitation/
3.	exp Cerebral Hemorrhage/
4.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
5.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
6.	"brain attack*".ti,ab.
7.	or/1-6
8.	letter/
9.	editorial/
10.	news/
11.	exp historical article/
12.	Anecdotes as Topic/
13.	comment/
14.	case report/
15.	(letter or comment*).ti.
16.	or/8-15
17.	randomized controlled trial/ or random*.ti,ab.
18.	16 not 17
19.	animals/ not humans/
20.	exp Animals, Laboratory/
21.	exp Animal Experimentation/
22.	exp Models, Animal/
23.	exp Rodentia/
24.	(rat or rats or mouse or mice or rodent*).ti.
25.	or/18-24
26.	7 not 25
27.	limit 26 to English language
28.	Patient Discharge/
29.	Progressive Patient Care/
30.	home care services/ or home care services, hospital-based/ or home nursing/
31.	((early or earlier or prompt or accelerate* or acute or subacute or supported) adj5 discharg*).ti,ab,kf.
32.	(reduce* adj5 (duration or length) adj5 (stay or hospital)).ti,ab,kf.
33.	short term ward.ti,ab,kf.
34.	((organi?ed or multidisciplinary) adj5 discharge adj5 team*).ti,ab,kf.
35.	((early or earlier or prompt or accelerate* or supported) adj5 return* adj2 home*).ti,ab,kf.
36.	(hospital* adj3 home*).ti,ab,kf.
37.	hospital rehabilitation unit*.ti,ab,kf.
38.	(rehabilitation adj3 home*).ti,ab,kf.
39.	(intensive adj2 home adj5 (rehabilitation or support*)).ti,ab,kf.
40.	(mobile adj2 team*).ti,ab,kf.
41.	organi?ed home care.ti,ab,kf.

42.	((extended stroke unit adj3 (service* or care)) or ESUS).ti,ab,kf.
43.	((post-discharge or home rehabilitation) adj5 (support* or care)).ti,ab,kf.
44.	((early or earlier or acute or subacute or post-discharge) adj5 (community or domiciliary or primary care or home) adj5 (rehabilitation or support* or care)).ti,ab,kf.
45.	or/28-44
46.	27 and 45
47.	randomized controlled trial.pt.
48.	controlled clinical trial.pt.
49.	randomi#ed.ti,ab.
50.	placebo.ab.
51.	randomly.ti,ab.
52.	Clinical Trials as topic.sh.
53.	trial.ti.
54.	or/47-53
55.	Meta-Analysis/
56.	exp Meta-Analysis as Topic/
57.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
58.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
59.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
60.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
61.	(search* adj4 literature).ab.
62.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
63.	cochrane.jw.
64.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
65.	or/55-64
66.	46 and (54 or 65)

Embase (Ovid) search terms

1.	exp Cerebrovascular accident/
2.	exp Brain infarction/
3.	Stroke Rehabilitation/
4.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
5.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
6.	"brain attack*".ti,ab.
7.	Intracerebral hemorrhage/
8.	or/1-7
9.	letter.pt. or letter/
10.	note.pt.
11.	editorial.pt.
12.	case report/ or case study/
13.	(letter or comment*).ti.
14.	(conference abstract or conference paper).pt.

15.	or/9-14
16.	randomized controlled trial/ or random*.ti,ab.
17.	15 not 16
18.	animal/ not human/
19.	nonhuman/
20.	exp Animal Experiment/
21.	exp Experimental Animal/
22.	animal model/
23.	exp Rodent/
24.	(rat or rats or mouse or mice).ti.
25.	or/17-24
26.	8 not 25
27.	limit 26 to English language
28.	*hospital discharge/
29.	progressive patient care/
30.	*home care/ or *home physiotherapy/ or *home rehabilitation/
31.	home environment/
32.	community based rehabilitation/
33.	((early or earlier or prompt or accelerate* or acute or subacute or supported) adj5 discharg*).ti,ab,kf.
34.	(reduce* adj5 (duration or length) adj5 (stay or hospital)).ti,ab,kf.
35.	short term ward.ti,ab,kf.
36.	((organi?ed or multidisciplinary) adj5 discharge adj5 team*).ti,ab,kf.
37.	((early or earlier or prompt or accelerate* or supported) adj5 return* adj2 home*).ti,ab,kf.
38.	(hospital* adj3 home*).ti,ab,kf.
39.	hospital rehabilitation unit*.ti,ab,kf.
40.	(rehabilitation adj3 home*).ti,ab,kf.
41.	(intensive adj2 home adj5 (rehabilitation or support*)).ti,ab,kf.
42.	(mobile adj2 team*).ti,ab,kf.
43.	organi?ed home care.ti,ab,kf.
44.	((extended stroke unit adj3 (service* or care)) or ESUS).ti,ab,kf.
45.	((post-discharge or home rehabilitation) adj5 (support* or care)).ti,ab,kf.
46.	((early or earlier or acute or subacute or post-discharge) adj5 (community or domiciliary or primary care or home) adj5 (rehabilitation or support* or care)).ti,ab,kf.
47.	or/28-45
48.	27 and 47
49.	random*.ti,ab.
50.	factorial*.ti,ab.
51.	(crossover* or cross over*).ti,ab.
52.	((doubl* or singl*) adj blind*).ti,ab.
53.	(assign* or allocat* or volunteer* or placebo*).ti,ab.
54.	crossover procedure/
55.	single blind procedure/
56.	randomized controlled trial/

57.	double blind procedure/
58.	or/49-57
59.	systematic review/
60.	meta-analysis/
61.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
62.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
63.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
64.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
65.	(search* adj4 literature).ab.
66.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
67.	cochrane.jw.
68.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
69.	or/59-68
70.	48 and (58 or 69)

Cochrane Library (Wiley) search terms

#1.	MeSH descriptor: [Stroke] explode all trees
#2.	MeSH descriptor: [Stroke Rehabilitation] explode all trees
#3.	MeSH descriptor: [Cerebral Hemorrhage] explode all trees
#4.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident"):ti,ab
#5.	((cerebro* or brain or brainstem or cerebral*) near/3 (infarct* or accident*)):ti,ab
#6.	brain attack*:ti,ab
#7.	(or #1-#6)
#8.	conference:pt or (clinicaltrials or trialsearch):so
#9.	#7 not #8
#10.	MeSH descriptor: [Patient Discharge] explode all trees
#11.	MeSH descriptor: [Progressive Patient Care] explode all trees
#12.	MeSH descriptor: [Home Care Services] explode all trees
#13.	MeSH descriptor: [Home Care Services, Hospital-Based] explode all trees
#14.	MeSH descriptor: [Home Nursing] explode all trees
#15.	((early or earlier or prompt or accelerate* or acute or subacute or supported) near/5 discharg*):ti,ab
#16.	(reduce* near/5 (duration or length) near/5 (stay or hospital)):ti,ab
#17.	short term ward:ti,ab
#18.	((organi?ed or multidisciplinary) near/5 discharge near/5 team*):ti,ab
#19.	((early or earlier or prompt or accelerate* or supported) near/5 return* near/2 home*):ti,ab
#20.	(hospital* near/3 home*):ti,ab
#21.	hospital rehabilitation unit*:ti,ab
#22.	(rehabilitation near/3 home*):ti,ab
#23.	(intensive near/2 home near/5 (rehabilitation or support*)):ti,ab
#24.	(mobile near/2 team*):ti,ab
#25.	organi?ed home care:ti,ab

#26.	((extended stroke unit near/3 (service* or care)) or ESUS):ti,ab
#27.	((post-discharge or home rehabilitation) near/5 (support* or care)):ti,ab
#28.	((early or earlier or acute or subacute or post-discharge) near/5 (community or domiciliary or primary care or home) near/5 (rehabilitation or support* or care)):ti,ab
#29.	(or #10-#28)
#30.	#9 and #29

Epistemonikos terms

1.	(title:((title:(Stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack") OR abstract:(Stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack")) OR (title:((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)) OR abstract:((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))) OR abstract:((title:(Stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack") OR abstract:(Stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack")) OR (title:((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)) OR abstract:((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))))
2.	(title:(((early OR earlier OR prompt OR accelerate* OR acute OR subacute OR supported) AND discharg*)) OR abstract:(((early OR earlier OR prompt OR accelerate* OR acute OR subacute OR supported) AND discharg*))) OR (title:((reduce* AND (duration OR length) AND (stay OR hospital))) OR abstract:((reduce* AND (duration OR length) AND (stay OR hospital)))) OR (title:(short term ward) OR abstract:(short term ward)) OR (title:(((organised OR organized OR multidisciplinary) AND discharge AND team*)) OR abstract:(((organised OR organized OR multidisciplinary) AND discharge AND team*))) OR (title:(((early OR earlier OR prompt OR accelerate* OR supported) AND return* AND home*)) OR abstract:(((early OR earlier OR prompt OR accelerate* OR supported) AND return* AND home*))) OR (title:((hospital* AND home*)) OR abstract:((hospital* AND home*))) OR (title:(hospital rehabilitation unit*) OR abstract:(hospital rehabilitation unit*)) OR (title:((rehabilitation AND home*)) OR abstract:((rehabilitation AND home*))) OR (title:((intensive AND home AND (rehabilitation OR support*))) OR abstract:((intensive AND home AND (rehabilitation OR support*)))) OR (title:((mobile AND team*)) OR abstract:((mobile AND team*))) OR (title:(organized home care OR organized home care) OR abstract:(organized home care OR organized home care)) OR (title:(((extended stroke unit AND (service* OR care)) OR ESUS)) OR abstract:(((extended stroke unit AND (service* OR care)) OR ESUS))) OR (title:(((post-discharge OR home rehabilitation) AND (support* OR care))) OR abstract:(((post-discharge OR home rehabilitation) AND (support* OR care)))) OR (title:(((early OR earlier OR acute OR subacute OR post-discharge) AND (community OR domiciliary OR primary care OR home) AND (rehabilitation OR support* OR care))) OR abstract:(((early OR earlier OR acute OR subacute OR post-discharge) AND (community OR domiciliary OR primary care OR home) AND (rehabilitation OR support* OR care))))
3.	1 and 2

PsycINFO search terms

1.	exp Stroke/
2.	exp Cerebral hemorrhage/
3.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
4.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
5.	"brain attack*".ti,ab.
6.	Cerebrovascular accidents/
7.	exp Brain damage/

8.	(brain adj2 injur*).ti.
9.	or/1-8
10.	Letter/
11.	Case report/
12.	exp rodents/
13.	or/10-12
14.	9 not 13
15.	limit 14 to (human and English language)
16.	hospital discharge/
17.	health care services/
18.	home care/
19.	((early or earlier or prompt or accelerate* or acute or subacute or supported) adj5 discharg*).ti,ab.
20.	(reduce* adj5 (duration or length) adj5 (stay or hospital)).ti,ab.
21.	short term ward.ti,ab.
22.	((organi?ed or multidisciplinary) adj5 discharge adj5 team*).ti,ab.
23.	((early or earlier or prompt or accelerate* or supported) adj5 return* adj2 home*).ti,ab.
24.	(hospital* adj3 home*).ti,ab.
25.	hospital rehabilitation unit*.ti,ab.
26.	(rehabilitation adj3 home*).ti,ab.
27.	(intensive adj2 home adj5 (rehabilitation or support*)).ti,ab.
28.	(mobile adj2 team*).ti,ab.
29.	organi?ed home care.ti,ab.
30.	((extended stroke unit adj3 (service* or care)) or ESUS).ti,ab.
31.	((post-discharge or home rehabilitation) adj5 (support* or care)).ti,ab.
32.	((early or earlier or acute or subacute or post-discharge) adj5 (community or domiciliary or primary care or home) adj5 (rehabilitation or support* or care)).ti,ab.
33.	or/16-32
34.	15 and 33

CINAHL search terms

S1.	MW Stroke or MH Cerebral Hemorrhage
S2.	stroke* or cva or poststroke* or apoplexy or "cerebrovascular accident"
S3.	(cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)
S4.	"brain attack*"
S5.	S1 OR S2 OR S3 OR S4
S6.	(MH "Patient Discharge")
S7.	(MH "Progressive Patient Care")
S8.	(MH "Home Health Care")
S9.	(MH "Home Nursing")
S10.	((early or earlier or prompt or accelerate* or acute or subacute or supported) N5 discharg*)
S11.	(reduce* N5 (duration or length) N5 (stay or hospital))
S12.	short term ward
S13.	((organi?ed or multidisciplinary) N5 discharge N5 team*)

S14.	((early or earlier or prompt or accelerate* or supported) N5 return* N2 home*)
S15.	(hospital* N3 home*)
S16.	hospital rehabilitation unit*
S17.	(rehabilitation N3 home*)
S18.	(intensive N2 home N5 (rehabilitation or support*))
S19.	(mobile N2 team*)
S20.	organi?ed home care
S21.	((extended stroke unit N3 (service* or care)) or ESUS)
S22.	((post-discharge or home rehabilitation) N5 (support* or care))
S23.	((early or earlier or acute or subacute or post-discharge) N5 (community or domiciliary or primary care or home) N5 (rehabilitation or support* or care))
S24.	S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 or S20 or S21 or S22 or S23
S25.	S5 and S24

B.2 Qualitative literature search strategy

Additional searches for patient views were run in Medline (OVID), Embase (OVID), CINAHL, Current Nursing and Allied Health Literature (EBSCO) and PsycINFO (OVID). Search filters were applied to the search where appropriate.

Table 3: Database parameters, filters and limits applied

Database	Dates searched	Search filter used
Medline (OVID)	Inception – 08 January 2023	Qualitative studies Exclusions (animal studies, letters, comments, editorials, case studies/reports) English language
Embase (OVID)	Inception – 08 January 2023	Qualitative studies Exclusions (animal studies, letters, comments, editorials, case studies/reports, conference abstracts) English language
PsycINFO (OVID)	Inception – 08 January 2023	Qualitative studies Exclusions (animal studies, letters, case reports) Human English language

Database	Dates searched	Search filter used
Current Nursing and Allied Health Literature - CINAHL (EBSCO)	Inception – 08 January 2023	Qualitative studies Exclusions (Medline records) Human English Language

Medline (Ovid) search terms

1.	exp Stroke/
2.	Stroke Rehabilitation/
3.	exp Cerebral Hemorrhage/
4.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
5.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
6.	"brain attack*".ti,ab.
7.	or/1-6
8.	letter/
9.	editorial/
10.	news/
11.	exp historical article/
12.	Anecdotes as Topic/
13.	comment/
14.	case report/
15.	(letter or comment*).ti.
16.	or/8-15
17.	randomized controlled trial/ or random*.ti,ab.
18.	16 not 17
19.	animals/ not humans/
20.	exp Animals, Laboratory/
21.	exp Animal Experimentation/
22.	exp Models, Animal/
23.	exp Rodentia/
24.	(rat or rats or mouse or mice or rodent*).ti.
25.	or/18-24
26.	7 not 25
27.	limit 26 to English language
28.	Qualitative research/ or Narration/ or exp Interviews as Topic/ or exp "Surveys and Questionnaires"/ or Health care surveys/
29.	(qualitative or interview* or focus group* or theme* or questionnaire* or survey*).ti,ab.
30.	(metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or metathem* or meta-them* or ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic* adj3 analys*) or theoretical sampl* or purposive sampl* or hermeneutic* or heidegger* or husserl* or colaizzi* or van kaam* or van manen* or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*).ti,ab.

31.	or/28-30
32.	27 and 31
33.	"patient acceptance of health care"/ or exp patient satisfaction/ or consumer health information/ or needs assessment/
34.	Patient Education as Topic/ or exp patients/ or exp family/ or caregivers/ or patient preference/ or communication barrier/
35.	((educat* or learn* or support* or teach* or train*) adj3 (service* or information* or material* or virtual* or app or apps or blog* or booklet* or brochure* or dvd* or elearn* or e-learn* or email* or e-mail* or e mail* or facebook or facetime or face time or forum* or handout* or hand-out* or hand out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or online or magazine* or mobile phone* or newsletter* or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or youtube* or manual* or publication* or literature or computer* or interactive or telephone* or phone*)).ti,ab.
36.	((patient* or carer* or client* or user* or consumer* or caregiver* care giver* or famil* or parent* or father* or mother* or spouse* or wife or wives or husband* or next of kin or significant other* or patner* or guardian* or inpatient* or outpatient* or in patient* or out patient* or relative* or sibling* or sister* or brother* or grandparent* or grandfather* or grandmother*) adj3 (belief* or attitud* or priorit* or perception* or preferen* or expectation* or choice* or perspective* or view* or satisfact* or inform* or experience or experiences or opinion* or preference* or focus group* or service* or information* or material* or virtual* or app or apps or blog* or booklet* or brochure* or dvd* or elearn* or e-learn* or email* or e-mail* or e mail* or facebook or facetime or face time or forum* or handout* or hand-out* or hand out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or online or magazine* or mobile phone* or newsletter* or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or youtube* or manual* or publication* or literature or computer* or interactive or telephone* or phone*)).ti,ab.
37.	(information* adj3 (need* or requirement* or support* or seek* or access* or disseminat* or barrier* or service*)).ti,ab.
38.	or/33-37
39.	32 and 38

Embase (Ovid) search terms

1.	exp Cerebrovascular accident/
2.	exp Brain infarction/
3.	Stroke Rehabilitation/
4.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
5.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
6.	"brain attack*".ti,ab.
7.	Intracerebral hemorrhage/
8.	or/1-7
9.	letter.pt. or letter/
10.	note.pt.
11.	editorial.pt.
12.	case report/ or case study/
13.	(letter or comment*).ti.
14.	(conference abstract or conference paper).pt.
15.	or/9-14

16.	randomized controlled trial/ or random*.ti,ab.
17.	15 not 16
18.	animal/ not human/
19.	nonhuman/
20.	exp Animal Experiment/
21.	exp Experimental Animal/
22.	animal model/
23.	exp Rodent/
24.	(rat or rats or mouse or mice).ti.
25.	or/17-24
26.	8 not 25
27.	limit 26 to English language
28.	health survey/ or exp questionnaire/ or exp interview/ or qualitative research/ or narrative/
29.	(qualitative or interview* or focus group* or theme* or questionnaire* or survey*).ti,ab.
30.	(metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or metathem* or meta-them* or ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic* adj3 analys*) or theoretical sampl* or purposive sampl* or hermeneutic* or heidegger* or husserl* or colaizzi* or van kaam* or van manen* or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*).ti,ab.
31.	or/28-30
32.	27 and 31
33.	patient attitude/ or patient preference/ or patient satisfaction/ or consumer attitude/ or needs assessment/
34.	*patient information/ or *consumer health information/ or *family/ or *caregivers/
35.	communication barrier/ or *patient education/
36.	((educat* or learn* or support* or teach* or train*) adj3 (service* or information* or material* or virtual* or app or apps or blog* or booklet* or brochure* or dvd* or elearn* or e-learn* or email* or e-mail* or e mail* or facebook or facetime or face time or forum* or handout* or hand-out* or hand out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or online or magazine* or mobile phone* or newsletter* or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or youtube* or manual* or publication* or literature or computer* or interactive or telephone* or phone*)).ti,ab.
37.	((patient* or carer* or client* or user* or consumer* or caregiver* care giver* or famil* or parent* or father* or mother* or spouse* or wife or wives or husband* or next of kin or significant other* or patner* or guardian* or inpatient* or outpatient* or in patient* or out patient* or relative* or sibling* or sister* or brother* or grandparent* or grandfather* or grandmother*) adj3 (belief* or attitud* or priorit* or perception* or preferen* or expectation* or choice* or perspective* or view* or satisfact* or inform* or experience or experiences or opinion* or preference* or focus group* or service* or information* or material* or virtual*or app or apps or blog* or booklet* or brochure* or dvd* or elearn* or e-learn* or email* or e-mail* or e mail* or facebook or facetime or face time or forum* or handout* or hand-out* or hand out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or online or magazine* or mobile phone* or newsletter* or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or youtube* or manual* or publication* or literature or computer* or interactive or telephone* or phone*)).ti,ab.

38.	(information* adj3 (need* or requirement* or support* or seek* or access* or disseminat* or barrier* or service*)).ti,ab.
39.	or/33-38
40.	32 and 39

PsycINFO search terms

1.	exp Stroke/
2.	exp Cerebral hemorrhage/
3.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
4.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
5.	"brain attack*".ti,ab.
6.	Cerebrovascular accidents/
7.	exp Brain damage/
8.	(brain adj2 injur*).ti.
9.	or/1-8
10.	Letter/
11.	Case report/
12.	exp rodents/
13.	or/10-12
14.	9 not 13
15.	limit 14 to (human and English language)
16.	First posting.ps.
17.	15 and 16
18.	15 or 17
19.	qualitative methods/ or exp interviews/ or exp questionnaires/
20.	(qualitative or interview* or focus group* or theme* or questionnaire* or survey*).ti,ab.
21.	(metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or metathem* or meta-them* or ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic* adj3 analys*) or theoretical sampl* or purposive sampl* or hermeneutic* or heidegger* or husserl* or colaizzi* or van kaam* or van manen* or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*).ti,ab.
22.	or/18-21
23.	18 and 22
24.	exp Caregivers/ or Client Satisfaction/ or Health Information/ or exp Needs Assessment/ or Client Attitudes/ or Client Education/ or communication barriers/
25.	((educat* or learn* or support* or teach* or train*) adj3 (service* or information* or material* or virtual* or app or apps or blog* or booklet* or brochure* or dvd* or elearn* or e-learn* or email* or e-mail* or e mail* or facebook or facetime or face time or forum* or handout* or hand-out* or hand out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or online or magazine* or mobile phone* or newsletter* or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or youtube* or manual* or publication* or literature or computer* or interactive or telephone* or phone*)).ti,ab.
26.	((patient* or carer* or client* or user* or consumer* or caregiver* care giver* or famil* or parent* or father* or mother* or spouse* or wife or wives or husband* or next of kin or significant other* or patner* or guardian* or inpatient* or outpatient* or in patient* or out patient* or relative* or sibling* or sister* or brother* or grandparent* or grandfather* or grandmother*) adj3 (belief* or attitud* or priorit* or perception* or preferen* or

	expectation* or choice* or perspective* or view* or satisfact* or inform* or experience or experiences or opinion* or preference* or focus group* or service* or information* or material* or virtual* or app or apps or blog* or booklet* or brochure* or dvd* or elearn* or e-learn* or email* or e-mail* or e mail* or facebook or facetime or face time or forum* or handout* or hand-out* or hand out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or online or magazine* or mobile phone* or newsletter* or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster? or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or youtube* or manual* or publication* or literature or computer* or interactive or telephone* or phone*)).ti,ab.
27.	or/24-26
28.	23 and 27

CINAHL search terms

S1.	MH Stroke
S2.	MH Stroke rehabilitation
S3.	MH Cerebral Hemorrhage
S4.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident") AND (rehab*)
S5.	((cerebro* or brain or brainstem or cerebral*) n3 (infarct* or accident*))
S6.	"brain attack*"
S7.	S1 OR S2 OR S3 OR S4 OR S5 OR S6
S8.	(MH "Qualitative Studies+")
S9.	(MH "Qualitative Validity+")
S10.	(MH "Interviews+") OR (MH "Focus Groups") OR (MH "Surveys") OR (MH "Questionnaires+")
S11.	(qualitative or interview* or focus group* or theme* or questionnaire* or survey*)
S12.	(metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or metathem* or meta-them* or ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic* adj3 analys*) or theoretical sampl* or purposive sampl* or hermeneutic* or heidegger* or husserl* or colaizzi* or van kaam* or van manen* or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*)
S13.	S8 OR S9 OR S10 OR S11 OR S12
S14.	S7 AND S13
S15.	(client* or patient* or user* or carer* or consumer* or customer* or parent* or famil* or spouse*) AND (attitud* or priorit* or perception* or preferen* or expectation* or choice* or perspective* or view* or satisfact* or inform* or experience or experiences or opinion* or preference* or focus group*)
S16.	(educat* or learn* or support*) AND (service* or information* or material* or virtual* or app or apps or blog* or booklet* or brochure* or dvd* or elearn* or e-learn* or email* or e-mail* or e mail* or facebook or facetime or face time or forum* or handout* or hand-out* or hand out* or helpline* or hotline* or internet* or ipad* or iphone* or leaflet* or online or magazine* or mobile phone* or newsletter* or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster* or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or youtube* or manual* or publication* or literature or computer* or interactive or telephone* or phone*)
S17.	(patient* or carer* or caregiver* or famil* or parent* or father* or mother* or spouse* or wife or wives or husband* or next of kin or significant other* or partner* or guardian* or inpatient* or outpatient* or in patient* or out patient*) AND (service* or information* or material* or virtual*or app or apps or blog* or booklet* or brochure* or dvd* or elearn* or e-learn* or email* or e-mail* or e mail* or facebook or facetime or face time or forum* or handout* or hand-out* or hand out* or helpline* or hotline* or internet* or ipad* or

	iphone* or leaflet* or online or magazine* or mobile phone* or newsletter* or pamphlet* or palm pilot* or personal digital assistant* or pocket pc* or podcast* or poster* or skype* or smartphone* or smart phone* or social media or social network* or sms or text messag* or twitter or tweet* or video* or web* or wiki* or youtube* or manual* or publication* or literature or computer* or interactive or telephone* or phone*)
S18.	S15 OR S16 OR S17
S19.	S14 AND S18

B.3 Health Economics literature search strategy

Health economic evidence was identified by conducting searches using terms for a broad Stroke Rehabilitation population. The following databases were searched: NHS Economic Evaluation Database (NHS EED - this ceased to be updated after 31st March 2015), Health Technology Assessment database (HTA - this ceased to be updated from 31st March 2018) and The International Network of Agencies for Health Technology Assessment (INAHTA). Searches for recent evidence were run on Medline and Embase from 2014 onwards for health economics, and all years for quality-of-life studies. Additional searches were run in CINAHL and PsycInfo looking for health economic evidence.

Table 2: Database parameters, filters and limits applied

Database	Dates searched	Search filters and limits applied
Medline (OVID)	Health Economics 1 January 2014 – 08 January 2023	Health economics studies Quality of life studies Exclusions (animal studies, letters, comments, editorials, case studies/reports,) English language
	Quality of Life 1946 – 08 January 2023	
Embase (OVID)	Health Economics 1 January 2014 – 08 January 2023	Health economics studies Quality of life studies Exclusions (animal studies, letters, comments, editorials, case studies/reports, conference abstracts) English language
	Quality of Life 1974 – 08 January 2023	
NHS Economic Evaluation Database (NHS EED) (Centre for Research and Dissemination - CRD)	Inception –31st March 2015	
Health Technology Assessment Database (HTA) (Centre for Research and Dissemination – CRD)	Inception – 31st March 2018	
The International Network of Agencies for Health Technology Assessment (INAHTA)	Inception - 08 January 2023	English language

Database	Dates searched	Search filters and limits applied
PsycINFO (OVID)	1 January 2014 – 08 January 2023	Health economics studies Exclusions (animal studies, letters, case reports) Human English language
Current Nursing and Allied Health Literature - CINAHL (EBSCO)	1 January 2014 – 08 January 2023	Health economics studies Exclusions (Medline records, animal studies, letters, editorials, comments, theses) Human English language

Medline (Ovid) search terms

1.	exp Stroke/
2.	exp Cerebral Hemorrhage/
3.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
4.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
5.	"brain attack*".ti,ab.
6.	or/1-5
7.	letter/
8.	editorial/
9.	news/
10.	exp historical article/
11.	Anecdotes as Topic/
12.	comment/
13.	case report/
14.	(letter or comment*).ti.
15.	or/7-14
16.	randomized controlled trial/ or random*.ti,ab.
17.	15 not 16
18.	animals/ not humans/
19.	exp Animals, Laboratory/
20.	exp Animal Experimentation/
21.	exp Models, Animal/
22.	exp Rodentia/
23.	(rat or rats or mouse or mice or rodent*).ti.

24.	or/17-23
25.	6 not 24
26.	Economics/
27.	Value of life/
28.	exp "Costs and Cost Analysis"/
29.	exp Economics, Hospital/
30.	exp Economics, Medical/
31.	Economics, Nursing/
32.	Economics, Pharmaceutical/
33.	exp "Fees and Charges"/
34.	exp Budgets/
35.	budget*.ti,ab.
36.	cost*.ti.
37.	(economic* or pharmaco?economic*).ti.
38.	(price* or pricing*).ti,ab.
39.	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
40.	(financ* or fee or fees).ti,ab.
41.	(value adj2 (money or monetary)).ti,ab.
42.	or/26-41
43.	quality-adjusted life years/
44.	sickness impact profile/
45.	(quality adj2 (wellbeing or well being)).ti,ab.
46.	sickness impact profile.ti,ab.
47.	disability adjusted life.ti,ab.
48.	(qal* or qtime* or qwb* or daly*).ti,ab.
49.	(euroqol* or eq5d* or eq 5*).ti,ab.
50.	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
51.	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
52.	(hui or hui1 or hui2 or hui3).ti,ab.
53.	(health* year* equivalent* or hye or hyes).ti,ab.
54.	discrete choice*.ti,ab.
55.	rosser.ti,ab.
56.	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
57.	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
58.	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
59.	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
60.	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
61.	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
62.	or/43-61

63.	25 and 42
64.	25 and 62
65.	limit 63 to English language
66.	limit 64 to English language

Embase (Ovid) search terms

1.	exp Cerebrovascular accident/
2.	exp Brain infarction/
3.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
4.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
5.	"brain attack*".ti,ab.
6.	Intracerebral hemorrhage/
7.	or/1-6
8.	letter.pt. or letter/
9.	note.pt.
10.	editorial.pt.
11.	case report/ or case study/
12.	(letter or comment*).ti.
13.	or/8-12
14.	randomized controlled trial/ or random*.ti,ab.
15.	13 not 14
16.	animal/ not human/
17.	nonhuman/
18.	exp Animal Experiment/
19.	exp Experimental Animal/
20.	animal model/
21.	exp Rodent/
22.	(rat or rats or mouse or mice).ti.
23.	or/15-22
24.	7 not 23
25.	health economics/
26.	exp economic evaluation/
27.	exp health care cost/
28.	exp fee/
29.	budget/
30.	funding/
31.	budget*.ti,ab.
32.	cost*.ti.
33.	(economic* or pharmaco?economic*).ti.
34.	(price* or pricing*).ti,ab.
35.	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.

36.	(financ* or fee or fees).ti,ab.
37.	(value adj2 (money or monetary)).ti,ab.
38.	or/25-37
39.	quality adjusted life year/
40.	"quality of life index"/
41.	short form 12/ or short form 20/ or short form 36/ or short form 8/
42.	sickness impact profile/
43.	(quality adj2 (wellbeing or well being)).ti,ab.
44.	sickness impact profile.ti,ab.
45.	disability adjusted life.ti,ab.
46.	(qal* or qtime* or qwb* or daly*).ti,ab.
47.	(euroqol* or eq5d* or eq 5*).ti,ab.
48.	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
49.	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
50.	(hui or hui1 or hui2 or hui3).ti,ab.
51.	(health* year* equivalent* or hye or hyes).ti,ab.
52.	discrete choice*.ti,ab.
53.	rosser.ti,ab.
54.	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
55.	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
56.	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
57.	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
58.	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
59.	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
60.	or/39-59
61.	limit 24 to English language
62.	38 and 61
63.	60 and 61

NHS EED and HTA (CRD) search terms

#1.	MeSH DESCRIPTOR Stroke EXPLODE ALL TREES
#2.	MeSH DESCRIPTOR Cerebral Hemorrhage EXPLODE ALL TREES
#3.	(stroke* or cva or poststroke* or apoplexy or "cerebrovascular accident")
#4.	(((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)))
#5.	("brain attack*")
#6.	#1 OR #2 OR #3 OR #4 OR #5

INAHTA search terms

1.	(brain attack*) OR (((cerebro* or brain or brainstem or cerebral*) and (infarct* or accident*))) OR ((stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident")) OR ("Cerebral Hemorrhage"[mhe]) OR ("Stroke"[mhe])

CINAHL search terms

1.	MH "Economics+"
2.	MH "Financial Management+"

3.	MH "Financial Support+"
4.	MH "Financing, Organized+"
5.	MH "Business+"
6.	S2 OR S3 or S4 OR S5
7.	S1 not S6
8.	MH "Health Resource Allocation"
9.	MH "Health Resource Utilization"
10.	S8 OR S9
11.	S7 OR S10
12.	(cost or costs or economic* or pharmacoeconomic* or price* or pricing*) OR AB (cost or costs or economic* or pharmacoeconomic* or price* or pricing*)
13.	S11 OR S12
14.	PT editorial
15.	PT letter
16.	PT commentary
17.	S14 or S15 or S16
18.	S13 NOT S17
19.	MH "Animal Studies"
20.	(ZT "doctoral dissertation") or (ZT "masters thesis")
21.	S18 NOT (S19 OR S20)
22.	PY 2014-
23.	S21 AND S22
24.	MW Stroke or MH Cerebral Hemorrhage
25.	stroke* or cva or poststroke* or apoplexy or "cerebrovascular accident"
26.	(cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)
27.	"brain attack*"
28.	S24 OR S25 OR S26 OR S27
29.	S23 AND S28

PsycINFO search terms

1.	exp Stroke/
2.	exp Cerebral hemorrhage/
3.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
4.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
5.	"brain attack*".ti,ab.
6.	Cerebrovascular accidents/
7.	exp Brain damage/
8.	(brain adj2 injur*).ti.
9.	or/1-8
10.	Letter/
11.	Case report/
12.	exp Rodents/

13.	or/10-12
14.	9 not 13
15.	limit 14 to (human and English language)
16.	First posting.ps.
17.	15 and 16
18.	15 or 17
19	"costs and cost analysis"/
20.	"Cost Containment"/
21.	(economic adj2 evaluation$).ti,ab.
22.	(economic adj2 analy$).ti,ab.
23.	(economic adj2 (study or studies)).ti,ab.
24.	(cost adj2 evaluation$).ti,ab.
25.	(cost adj2 analy$).ti,ab.
26.	(cost adj2 (study or studies)).ti,ab.
27.	(cost adj2 effective$).ti,ab.
28.	(cost adj2 benefit$).ti,ab.
29.	(cost adj2 utili$).ti,ab.
30.	(cost adj2 minimi$).ti,ab.
31.	(cost adj2 consequence$).ti,ab.
32.	(cost adj2 comparison$).ti,ab.
33.	(cost adj2 identificat$).ti,ab.
34.	(pharmacoeconomic$ or pharmaco-economic$).ti,ab.
35.	or/19-34
36.	(0003-4819 or 0003-9926 or 0959-8146 or 0098-7484 or 0140-6736 or 0028-4793 or 1469-493X).is.
37.	35 not 36
38.	18 and 37

Appendix C – Quantitative and qualitative evidence study selection

Figure 1: Flow chart of quantitative clinical study selection for the review of early supported discharge

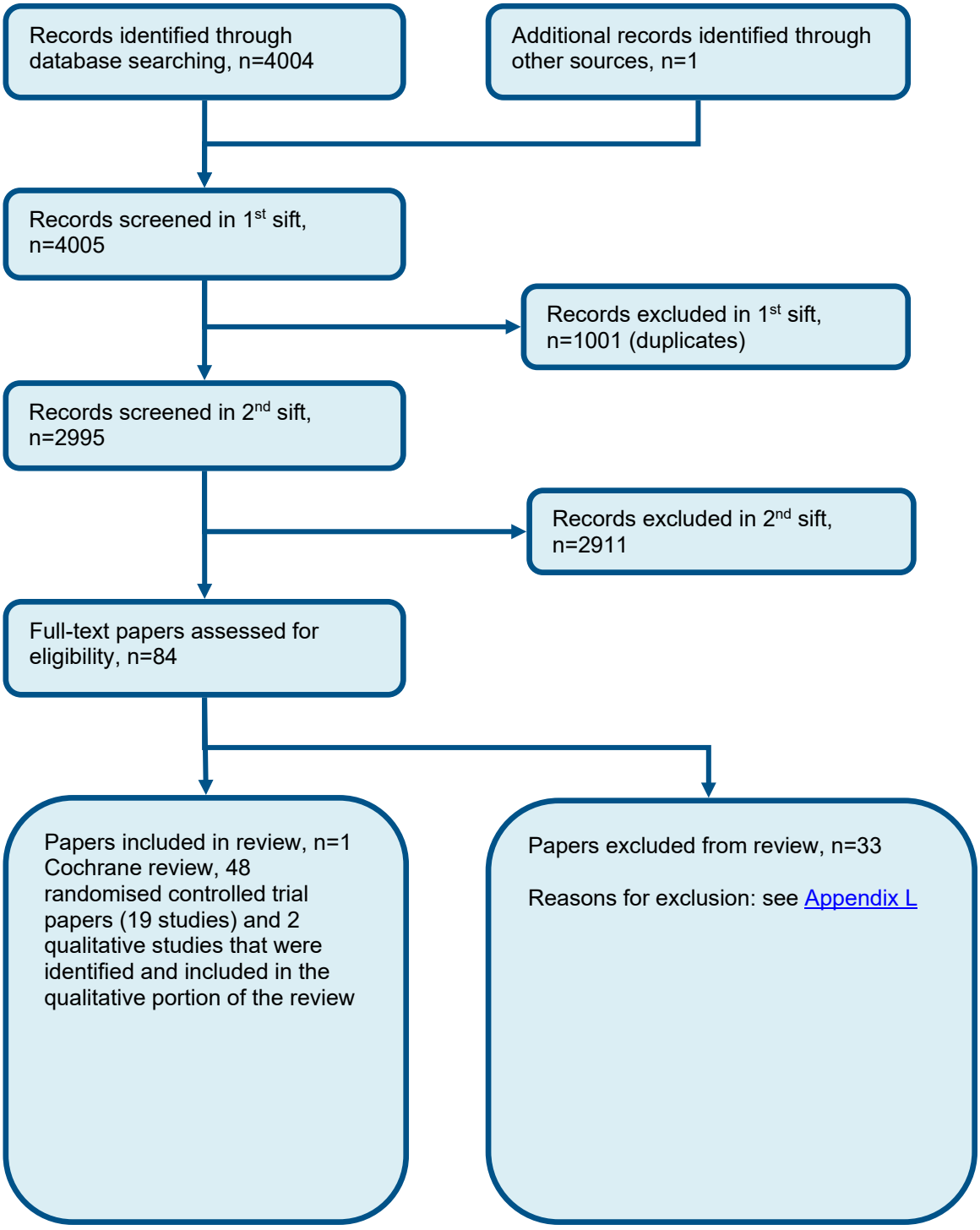
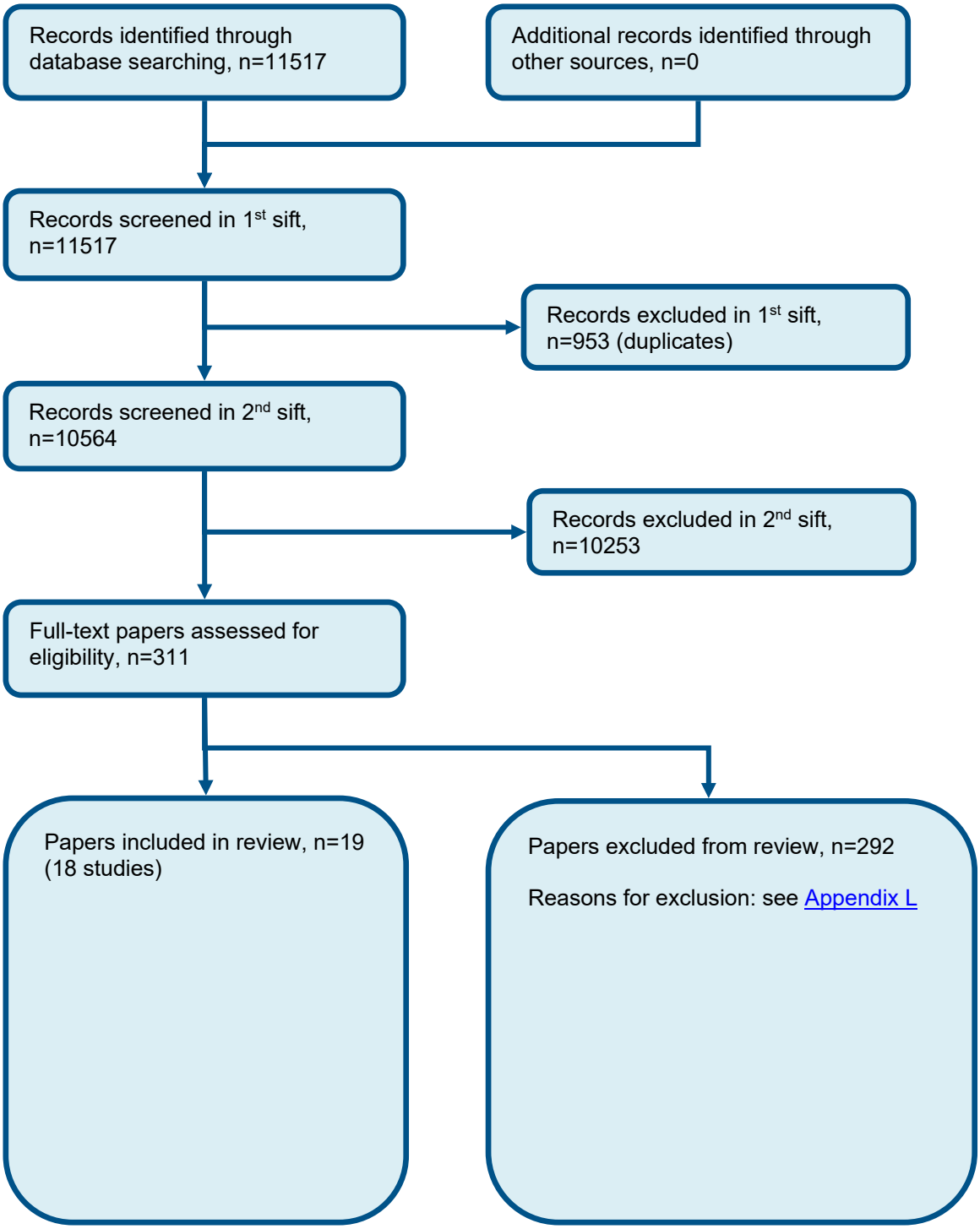


Figure 2: Flow chart of qualitative clinical study selection for the review of early supported discharge



Appendix D – Quantitative evidence

Anderson, 2000

Bibliographic Reference	Anderson, C; Mhurchu, CN; Rubenach, S; Clark, M; Spencer, C; Winsor, A; Home or hospital for stroke Rehabilitation? Results of a randomized controlled trial : II: cost minimization analysis at 6 months; Stroke; 2000; vol. 31 (no. 5); 1032-1037

Study details

Secondary publication of another included study- see primary study for details	Anderson, C, Rubenach, S, Mhurchu, CN et al. (2000) Home or hospital for stroke rehabilitation? results of a randomized controlled trial : I: health outcomes at 6 months. Stroke 31(5): 1024-1031
Other publications associated with this study included in review	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. Other studies associated with this study: Hackett, M, Anderson, C, Vandal, A et al. (2000) One year follow-up of a RCT of accelerated hospital discharge and home-based stroke rehabilitation. Stroke 31(11): 2817-2818 Hackett, ML, Vandal, AC, Anderson, CS et al. (2002) Long-term outcome in stroke patients and caregivers following accelerated hospital discharge and home-based rehabilitation. Stroke 33(2): 643-645

	Mhurchu, CN, Anderson, C, Rubenach, S et al. (2000) Home or hospital for stroke rehabilitation? Results of a randomised controlled trial. Cerebrovascular diseases (Basel, Switzerland) 10 (Suppl 2): 61 Rubenach, S, Anderson, C, Clark, M et al. (1998) Early supportive discharge and rehabilitation trial (ESPRIT) in stroke: preliminary results. Australian and New Zealand journal of medicine 28: 498
Trial name / registration number	Named Adelaide 2000 in the Cochrane review.

Anderson, 2000

Bibliographic Reference	Anderson, C; Rubenach, S; Mhurchu, CN; Clark, M; Spencer, C; Winsor, A; Home or hospital for stroke rehabilitation? results of a randomized controlled trial : I: health outcomes at 6 months; Stroke; 2000; vol. 31 (no. 5); 1024-1031

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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.

	Other studies associated with this study: Anderson, C, Mhurchu, CN, Rubenach, S et al. (2000) Home or hospital for stroke Rehabilitation? Results of a randomized controlled trial : II: cost minimization analysis at 6 months. Stroke 31(5): 1032-1037 Hackett, M, Anderson, C, Vandal, A et al. (2000) One year follow-up of a RCT of accelerated hospital discharge and home-based stroke rehabilitation. Stroke 31(11): 2817-2818 Hackett, ML, Vandal, AC, Anderson, CS et al. (2002) Long-term outcome in stroke patients and caregivers following accelerated hospital discharge and home-based rehabilitation. Stroke 33(2): 643-645 Mhurchu, CN, Anderson, C, Rubenach, S et al. (2000) Home or hospital for stroke rehabilitation? Results of a randomised controlled trial. Cerebrovascular diseases (Basel, Switzerland) 10 (Suppl 2): 61 Rubenach, S, Anderson, C, Clark, M et al. (1998) Early supportive discharge and rehabilitation trial (ESPRIT) in stroke: preliminary results. Australian and New Zealand journal of medicine 28: 498
Trial name / registration number	Named Adelaide 2000 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Sources of funding	Supported through a grant from the Federal Government.
Inclusion criteria	People with stroke and residual disability where: their hospital consultant agreed that they were medically stable and suitable to be discharged early from hospital to a community rehabilitation scheme; had sufficient physical and cognitive function for "active" participation in the rehabilitation scheme; their home environment was suitable for simple modifications; the community rehabilitation team was available to provide care; they had a general practitioner who was willing to provide any necessary medical care; their caregivers (if one was identified) gave consent for participation.
Exclusion criteria	No additional information.
Intervention(s)	Early supported discharge N=42 Early hospital discharge and home-based rehabilitation. 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. Input initially intensive and then tapered off to stop when rehabilitation goals were met. Team had specialist interest in rehabilitation and their activities were co-ordinated through weekly multidisciplinary meetings. Team co-ordinated and delivered care. A co-ordinator role was present which involved development of new interdisciplinary communication systems, close liaison with staff on acute medical and rehabilitation wards to identify potential patients, confirmation of the eligibility of patients, collection of consent and baseline data, setting of each individual patient's rehabilitation goals, organisations of all necessary modifications to patients' homes and coordination input from therapists and other staff. 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. Emphasis was placed on self-learning and adjustment to disability, and structured practice sessions were encouraged between visits. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear 'Needing light/moderate assistance with transfers'
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	≤6 weeks Median duration - ranged from 1 to 19 weeks

Population subgroups	No additional information.
Comparator	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. Concomitant therapy: No additional information.
Number of participants	86
Duration of follow-up	6 months
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - Goals were specific to the individual, the amount of time therapy was provided for was dependent on the person's needs 2a) Clear and fair eligibility criteria - Clear eligibility criteria in the protocol 4b) Changing relationships with their partner - 57% of people had partners and 57% had identified caregivers, which might line up. Also evidences that not all people have partners, when this wasn't mentioned in lots of details in the qualitative work. 5d) Suitability of home/equipment - The suitability of the home was a consideration in the inclusion criteria - the home environmental needed to be suitable for simple modification 8a) Collaborative work between different professions and with the stroke survivor - Involvement of a range of healthcare professionals and social workers. 8b) The need for early supported discharge coordination - A coordinator role was a full-time part of the team. 8c) Who is in the team? Includes a program coordinator (occupational therapist), a consultant in rehabilitation, physiotherapists, occupational therapists, social workers, speech therapists, rehabilitation nurses. Does not appear to

	involve rehabilitation assistants (however, this was conducted in 1997 and is based in Australia so may be context specific). A general practitioner who was willing to provide any medical care was an inclusion criteria. 10b) Early supported discharge bridging the gap between inpatient and community services - Less people who had early supported discharge used community services at 6 months (however, not by much and is around the same proportion of people in each study arm - this showed that the majority of people in both arms ended up receiving community service input).

Study arms

Early supported discharge (N = 42)
Early hospital discharge and home-based rehabilitation. 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. Input initially intensive and then tapered off to stop when rehabilitation goals were met. Team had specialist interest in rehabilitation and their activities were co-ordinated through weekly multidisciplinary meetings. Team co-ordinated and delivered care. A co-ordinator role was present which involved development of new interdisciplinary communication systems, close liaison with staff on acute medical and rehabilitation wards to identify potential patients, confirmation of the eligibility of patients, collection of consent and baseline data, setting of each individual patient's rehabilitation goals, organisations of all necessary modifications to patients' homes and coordination input from therapists and other staff. 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. Emphasis was placed on self-learning and adjustment to disability, and structured practice sessions were encouraged between visits. Concomitant therapy: No additional information.

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. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	**Early supported discharge (N = 42)**	**Usual care (N = 44)**
% Female Sample size	n = 16 ; % = 38	n = 22 ; % = 50
Mean age (SD) (years) Mean (SD)	72 (11)	71 (11)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NA ; % = NA	n = NA ; % = NA
Previous stroke Sample size	n = 9 ; % = 21	*empty data*
History of myocardial infarction Sample size	n = 10 ; % = 24	n = 14
History of cardiac failure Sample size	n = 6 ; % = 14	n = 4 ; % = 9

Characteristic	Early supported discharge (N = 42)	Usual care (N = 44)
History of hypertension Sample size	n = 29 ; % = 69	n = 19 ; % = 43
History of diabetes mellitus Sample size	n = 11 ; % = 26	n = 7 ; % = 16
Current symptomatic arthritis Sample size	n = 7 ; % = 17	n = 7 ; % = 16
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Modified Rankin scale Mean (SD)	NR (NR)	NR (NR)
Partnered Sample size	n = 24 ; % = 57	n = 26 ; % = 59
Lives alone Sample size	n = 17 ; % = 40	n = 19 ; % = 43
Identified caregiver Sample size	n = 24 ; % = 57	n = 25 ; % = 57

Characteristic	Early supported discharge (N = 42)	Usual care (N = 44)
Stroke - deficits at randomisation Sample size	n = NA ; % = NA	n = NA ; % = NA
Abnormal language Sample size	n = 8 ; % = 19	n = 10 ; % = 23
Abnormal speech Sample size	n = 12 ; % = 29	n = 14 ; % = 32
Abnormal swallow Sample size	n = 6 ; % = 14	n = 8 ; % = 18
Visual field loss Sample size	n = 11 ; % = 26	n = 5 ; % = 11
Ataxia/imbalance Sample size	n = 5 ; % = 12	n = 11 ; % = 25
Arm or leg paresis Sample size	n = 39 ; % = 92	n = 35 ; % = 80

Outcomes

Study timepoints

- Baseline
- 6 month (End of scheduled follow up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 42	Usual care, Baseline, N = 44	Usual care, 6 month, N = 44
Mortality No of events	n = 0 ; % = 0	n = 2 ; % = 5	n = 0 ; % = 0	n = 0 ; % = 0
Physical dependency (death or dependency) Reported in the Cochrane review. Is used for physical dependency but will be downgraded for indirectness. No of events	n = NR ; % = NR	n = 13 ; % = 31	n = NR ; % = NR	n = 16 ; % = 36
Falls No of events	n = NA ; % = NA	n = 5 ; % = 12	n = NA ; % = NA	n = 7 ; % = 16
Readmissions to hospital Taken from the Cochrane review No of events	n = NA ; % = NA	n = 15 ; % = 36	n = NA ; % = NA	n = 11 ; % = 25

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better
Falls - Polarity - Lower values are better
Readmissions to hospital - Polarity - Lower values are better

Continuous outcomes

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 42	Usual care, Baseline, N = 44	Usual care, 6 month, N = 44
Person/participant generic health-related quality of life (SF-36) Scale range: 0-100. Final values. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
SF-36 physical component score Mean (SD)	NR (NR)	47.4 (10)	NR (NR)	41.6 (10.6)
SF-36 mental component score Mean (SD)	NR (NR)	46.7 (11.3)	NR (NR)	52.3 (7.8)
Activities of daily living (barthel index) Taken from Cochrane review. Scale range: 0-100. Final values. Mean (SD)	NR (NR)	96 (9)	NR (NR)	98 (10)
Extended activities of daily living (Adelaide Activities Profile - Domestic chores) Provided by Cochrane review. Scale range: 0-50. Final values. Mean (SD)	NR (NR)	39.7 (32.5)	NR (NR)	36.4 (37.8)
Length of hospital stay (length of initial hospital stay) (days) Mean (SD)	NA (NA)	20.9 (20.55)	NA (NA)	36 (24.04)

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 42	Usual care, Baseline, N = 44	Usual care, 6 month, N = 44
Caregiver strain index Scale range: 0-1. Final values. Mean (SD)	NR (NR)	0.2 (0.4)	NR (NR)	0.2 (0.4)
Psychological distress/mood (General Health Questionnaire) Scale range: 0-10. Final values. Mean (SD)	NR (NR)	80.5 (17.3)	NR (NR)	82.6 (13.6)

Person/participant generic health-related quality of life (SF-36) - Polarity - Higher values are better
Activities of daily living (barthel index) - Polarity - Higher values are better
Extended activities of daily living (Adelaide Activities Profile - Domestic chores) - Polarity - Higher values are better
Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better
Caregiver strain index - Polarity - Lower values are better
Psychological distress/mood (General Health Questionnaire) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome includes death or dependency - not just dependency)*

Dichotomousoutcomes-Falls-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Readmissionstohospital-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36physicalcomponentscore-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36mentalcomponentscore-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Extendedactivitiesofdailyliving(AdelaideActivitiesProfile-Domesticchores)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Caregiverstrainindex-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Psychologicaldistress/mood(GeneralHealthQuestionnaire)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low *(Quote "... contact by telephone for the allocation sequence which was computer generated")*

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Askim, 2004

Bibliographic Reference	Askim, T; Rohweder, G; Lydersen, S; Indredavik, B; Evaluation of an extended stroke unit service with early supported discharge for patients living in a rural community. A randomized controlled trial; Clinical rehabilitation; 2004; vol. 18 (no. 3); 238-248

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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.
Trial name / registration number	Named Trondheim 2004 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Study dates	
Sources of funding	No additional information.
Inclusion criteria	People who lived within 30-90 minutes driving distance from the hospital; diagnosis of an acute stroke according to the World Health Organisation definition of stroke; Scandinavian Stroke Scale score greater than 2 points and less than 58 points; living at home before the stroke; inclusion within 72 hours after admission to the stroke unit and within seven days after the onset of symptoms; able and willing to provide informed consent.
Recruitment / selection of participants	
Intervention(s)	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. Team co-ordinated care which was largely delivered by other agencies. Primary care provider assisted with co-ordination of discharge home for patients living further than 45

	minute driving distance from the hospital. 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). The need for further rehabilitation was defined in a telephone conversation with the mobile team. On the day of discharge, a meeting with organised with the person, their family, the physician and the mobile stroke team member to define the plans for further follow-up care. For people with extensive deficits after a stroke who needed help and support 24 hours a day, plans for further inpatient rehabilitation in a rehabilitation clinic were made following the protocol of the already existing extended service. During the first four weeks after discharge the mobile team acted as a safety net, and kept in contact both by telephone and at least one other home visit. The period of close follow-up by the mobile team terminated with an outpatient consultation for people living 30-45 minutes radius from the hospital. A consultation was conducted in the person's home for people living further than this. When a group of people were identified within the same community, the mobile team invited them and their families to a local meeting. The aim of this meeting was to give general information about acute and chronic issues of stroke care, as well as to give the people an opportunity to share their experiences. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	> 2 Mean 3.7/3.5.
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear

Subgroup 5 - Length of intervention	Not stated/unclear
Population subgroups	No additional information.
Comparator	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.
Number of participants	62
Duration of follow-up	52 weeks
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - The final day of discharge was decided collaboratively by everyone involved. Goals were agreed before discharge. 2a) Clear and fair eligibility criteria - Broadly clear inclusion criteria 8b) The need for early supported discharge coordination - No formal coordinator role in this package. The primary care provided was involved in the coordination. 8c) Who is in the team? - Physiotherapist, nurse, occupational therapist, physician. No mention of a social worker or rehabilitation assistants.
Additional comments	

Study arms

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. Team co-ordinated care which was largely delivered by other agencies. Primary care provider assisted with co-ordination of discharge home for patients living further than 45 minute driving distance from the hospital. 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). The need for further rehabilitation was defined in a telephone conversation with the mobile team. On the day of discharge, a meeting with organised with the person, their family, the physician and the mobile stroke team member to define the plans for further follow-up care. For people with extensive deficits after a stroke who needed help and support 24 hours a day, plans for further inpatient rehabilitation in a rehabilitation clinic were made following the protocol of the already existing extended service. During the first four weeks after discharge the mobile team acted as a safety net, and kept in contact both by telephone and at least one other home visit. The period of close follow-up by the mobile team terminated with an outpatient consultation for people living 30-45 minutes radius from the hospital. A consultation was conducted in the person's home for people living further than this. When a group of people were identified within the same community, the mobile team invited them and their families to a local meeting. The aim of this meeting was to give general information about acute and chronic issues of stroke care, as well as to give the people an opportunity to share their experiences. Concomitant therapy: No additional information.

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.

Characteristics

Arm-level characteristics

Characteristic	Early supported discharge (N = 31)	Usual care (N = 31)
% Female Sample size	n = 15 ; % = 48	n = 14 ; % = 45
Mean age (SD) (years) Mean (SD)	76.9 (NR)	76.3 (NR)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NA ; % = NA	n = NA ; % = NA
Previous transient ischaemic attack Sample size	n = 6 ; % = 19.4	n = 2 ; % = 6.5
Previous stroke Sample size	n = 2 ; % = 6.5	n = 1 ; % = 3.2
Myocardial infarction Sample size	n = 5 ; % = 16.1	n = 7 ; % = 22.6
Atrial fibrillation Sample size	n = 3 ; % = 9.7	n = 8 ; % = 25.8

Characteristic	Early supported discharge (N = 31)	Usual care (N = 31)
Hypertension Sample size	n = 3 ; % = 9.7	n = 10 ; % = 32.3
Diabetes Sample size	n = 1 ; % = 3.2	n = 5 ; % = 16.1
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Modified Rankin scale Mean (SD)	3.7 (NR)	3.5 (NR)

Outcomes

Study timepoints

- Baseline
- 52 week (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 31	Early supported discharge, 52 week, N = 31	Usual care, Baseline, N = 31	Usual care, 52 week, N = 31
Mortality Reported in Cochrane review No of events	n = 0 ; % = 0	n = 8 ; % = 31	n = 0 ; % = 0	n = 5 ; % = 31
Physical dependency (death or dependency) Reported in Cochrane review. Will be downgraded for indirectness for included an death in the outcome. No of events	n = NA ; % = NA	n = 19 ; % = 31	n = NA ; % = NA	n = 15 ; % = 31

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 31	Early supported discharge, 52 week, N = 23	Usual care, Baseline, N = 31	Usual care, 52 week, N = 25
Activities of daily living (barthel index) Reported in Cochrane review. Scale range: 0-100. Final values. Mean (SD)	57.7 (NR)	71.7 (34.7)	54 (NR)	79 (28.7)

Activities of daily living (barthel index) - Polarity - Higher values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 31	Early supported discharge, 52 week, N = 31	Usual care, Baseline, N = 31	Usual care, 52 week, N = 31
Length of hospital stay (length of initial hospital stay) (days) Reported in Cochrane review. Mean (SD)	NA (NA)	23.5 (30.5)	NA (NA)	30.5 (44.8)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t52

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t52

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - reports death and dependence instead of just dependence)*

Continuousoutcomes(1)-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t52

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t52

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Bautz-Holter, 2000

Bibliographic Reference	Bautz-Holter, E; Sveen, U; Bruun Wyller, T; Rygh, J; Early supported discharge of patients with acute stroke. A randomised controlled trial; Cerebrovascular diseases (Basel, Switzerland); 2000; vol. 10 (no. Suppl 2); 61

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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. Other studies associated with this study: Bautz-Holter, E, Sveen, U, Rygh, J et al. (2002) Early supported discharge of patients with acute stroke: a randomized controlled trial. Disability and rehabilitation 24(7): 348-355
Trial name / registration number	Named Oslo 2000 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Sources of funding	No additional information.
Inclusion criteria	People with acute stroke (onset less than six days prior to hospitalisation); home-dwelling, not severely disabled prior to stroke (Oxford Handicap Scale score 0-3); no other medical condition likely to preclude rehabilitation; medically stable with a Barthel ADL Index score between 5 and 19 at 72 hours after stroke.
Exclusion criteria	People with subarachnoid haemorrhage and people considered unable to consent owing to mental or communication problems.
Intervention(s)	Early supported discharge N=42

	Multidisciplinary team, experienced in stroke rehabilitation (nurse, physiotherapist, occupational therapist) visited patient in hospital, prepared discharge and co-ordinated rehabilitation. Rehabilitation at home provided by both the team and community services. Input as long as required. The early supported discharge team patients were assessed by a hospital-based multidisciplinary project team consisting of a nurse, an occupational therapist and a physiotherapist. One of the three team members served as the primary contract for the patients and their relatives throughout the study period. 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 organised in 11 different local areas. Staff caring for this group were encouraged to establish a multidisciplinary team for each stroke patient and they were offered support and supervision from the project team whenever needed. Four weeks after discharge, they were seen at the outpatient clinic. They were offered the opportunity to make new contact with the outpatient clinic if they wished to or to be readmitted to hospital whenever needed. 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. The unit was a multidisciplinary team (doctor, nurse, occupational therapist, physiotherapist, speech therapist and social worker). The staff had regular meetings and based their work on an individual rehabilitation scheme, implying a common strategy for achieving the goals, taking into consideration the wishes of the stroke patient. Both study groups had access to the same kind and amount of rehabilitation services during their hospital stay. In principle, the same community rehabilitation services were available. The rehabilitative measures were able to be continued as long as considered necessary in both rehabilitation groups.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear

Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	Not stated/unclear
Population subgroups	No additional information.
Comparator	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. The unit was a multidisciplinary team (doctor, nurse, occupational therapist, physiotherapist, speech therapist and social worker). The staff had regular meetings and based their work on an individual rehabilitation scheme, implying a common strategy for achieving the goals, taking into consideration the wishes of the stroke patient. Both study groups had access to the same kind and amount of rehabilitation services during their hospital stay. In principle, the same community rehabilitation services were available. The rehabilitative measures were able to be continued as long as considered necessary in both rehabilitation groups.
Number of participants	82
Duration of follow-up	6 months
Elements of the study relating to qualitative themes	1) Person-centred care - Care was provided for as long as the person needed 2a) Clear and fair eligibility criteria - Inclusion criteria of study: home-dwelling, not severely disabled prior to stroke (Oxford Handicap Scale score 0-3), no other medical condition likely to preclude rehabilitation, medically stable with a Barthel ADL

	Index score between 5 and 19 at 72 hours after stroke. Not people with subarachnoid haemorrhage and people considered unable to consent owing to mental or communication problems. 8c) Who is in the team? - Physiotherapist, occupational therapist, nurse. Social workers were available on the stroke ward. No reference to rehabilitation assistants.

Study arms

Early supported discharge (N = 42)
Multidisciplinary team, experienced in stroke rehabilitation (nurse, physiotherapist, occupational therapist) visited patient in hospital, prepared discharge and co-ordinated rehabilitation. Rehabilitation at home provided by both the team and community services. Input as long as required. The early supported discharge team patients were assessed by a hospital-based multidisciplinary project team consisting of a nurse, an occupational therapist and a physiotherapist. One of the three team members served as the primary contract for the patients and their relatives throughout the study period. 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 organised in 11 different local areas. Staff caring for this group were encouraged to establish a multidisciplinary team for each stroke patient and they were offered support and supervision from the project team whenever needed. Four weeks after discharge, they were seen at the outpatient clinic. They were offered the opportunity to make new contact with the outpatient clinic if they wished to or to be readmitted to hospital whenever needed. 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. The unit was a multidisciplinary team (doctor, nurse, occupational therapist, physiotherapist, speech therapist and social worker). The staff had regular meetings and based their work on an individual rehabilitation scheme, implying a common strategy for achieving the goals, taking into consideration the wishes of the stroke patient. Both study groups had access to the same kind and amount of rehabilitation services during their hospital stay. In principle, the same community rehabilitation services were available. The rehabilitative measures were able to be continued as long as considered necessary in both rehabilitation groups.

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. The unit was a multidisciplinary team (doctor, nurse, occupational therapist, physiotherapist, speech therapist and social worker). The staff had regular meetings and based their work on an individual rehabilitation scheme, implying a common strategy for achieving the goals, taking into consideration the wishes of the stroke patient. Both study groups had access to the same kind and amount of rehabilitation services during their hospital stay. In principle, the same community rehabilitation services were available. The rehabilitative measures were able to be continued as long as considered necessary in both rehabilitation groups.

Characteristics

Arm-level characteristics

Characteristic	Early supported discharge (N = 42)	Usual care (N = 40)
% Female Sample size	n = 21 ; % = 50	n = 24 ; % = 60
Mean age (SD) (years) Median (IQR)	79.5 (69 to 84)	78 (74 to 82)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Early supported discharge (N = 42)	Usual care (N = 40)
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Modified Rankin scale Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 6 month (End of scheduled follow up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 42	Usual care, Baseline, N = 40	Usual care, 6 month, N = 40
Mortality Reported in the Cochrane review. No of events	n = 0 ; % = 0	n = 2 ; % = 5	n = 0 ; % = 0	n = 4 ; % = 10
Physical dependency (death or dependency) Reported in the Cochrane review. Will be downgraded for indirectness as the outcome includes death in it.	n = NA ; % = NA	n = 16 ; % = 38	n = NA ; % = NA	n = 17 ; % = 43

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 42	Usual care, Baseline, N = 40	Usual care, 6 month, N = 40
No of events				
Falls "There were no reported accidents or dangerous situations after discharge in any of the groups." No of events	n = NA ; % = NA	n = 0 ; % = 0	n = NA ; % = NA	n = 0 ; % = 0

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better
Falls - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 42	Usual care, Baseline, N = 40	Usual care, 6 month, N = 40
Length of hospital stay (length of initial hospital stay) (days) Reported in the Cochrane review. Final values. Mean (SD)	NA (NA)	26.4 (17.33)	NA (NA)	33.8 (21.83)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 34	Usual care, Baseline, N = 40	Usual care, 6 month, N = 31
Extended activities of daily living (Nottingham extended activities of daily	NR (NR)	35.35 (13.46)	NR (NR)	35.81 (16.51)

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 34	Usual care, Baseline, N = 40	Usual care, 6 month, N = 31
living) Reported in the Cochrane review. Scale range: 0-66. Final values. Mean (SD)				

Extended activities of daily living (Nottingham extended activities of daily living) - Polarity - Higher values are better

Continuous outcomes (3)

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 6 month, N = 33	Usual care, Baseline, N = 40	Usual care, 6 month, N = 31
Psychological distress/mood (Montgommery Asberg Depression rating scale) Reported in the Cochrane review. Scale range: 0-6. Final values. Mean (SD)	NR (NR)	2.73 (3.18)	NR (NR)	3.42 (3.47)

Psychological distress/mood (Montgommery Asberg Depression rating scale) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - Outcome includes dependency and death when this outcome should only include physical dependency)*

Dichotomousoutcomes-Falls-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low

Section	Question	Answer
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Extendedactivitiesofdailyliving(Nottinghamextendedactivitiesofdailyliving)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(3)-Psychologicaldistress/mood(MontgommeryAsbergDepressionratingscale)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Bautz-Holter, 2002

Bibliographic Reference	Bautz-Holter, E; Sveen, U; Rygh, J; Rodgers, H; Wyller, TB; Early supported discharge of patients with acute stroke: a randomized controlled trial; Disability and rehabilitation; 2002; vol. 24 (no. 7); 348-355

Study details

Secondary publication of another included study- see primary study for details	Bautz-Holter, E, Sveen, U, Bruun Wyller, T et al. (2000) Early supported discharge of patients with acute stroke. A randomised controlled trial. Cerebrovascular diseases (Basel, Switzerland) 10 (Suppl 2): 61
Other publications associated with this study included in review	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.
Trial name / registration number	Named Oslo 2000 in the Cochrane review.

Beech, 1999

Bibliographic Reference	Beech, R; Rudd, AG; Tilling, K; Wolfe, CDA; Economic consequences of early inpatient discharge to community-based rehabilitation for stroke in an inner-London teaching hospital; Stroke; 1999; vol. 30 (no. 4); 729-735

Study details

Secondary publication of another included study- see primary study for details	Rudd, AG, Wolfe, CD, Tilling, K et al. (1997) Randomised controlled trial to evaluate early discharge scheme for patients with stroke. BMJ (Clinical research ed.) 315(7115): 1039-1044
Other publications associated with this study included in review	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.
Trial name / registration number	Named London 1997 in the Cochrane review.

Dey P, Woodman M, 2001

Bibliographic Reference Dey P, Woodman M GA; Home team trial (North Manchester General and Stepping Hill Hospitals); 2001

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with	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.:

this study included in review	CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review.
Trial name / registration number	Named Manchester 2001 in the Cochrane review.
Intervention(s)	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. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	Not stated/unclear

Population subgroups	No additional information. As not able to examine the original study it is difficult to gain information about subgroups.
Comparator	Usual care N=11 Conventional discharge planning by mobile stroke team or hospital stroke unit. Concomitant therapy: No additional information.
Number of participants	23
Duration of follow-up	12 months
Indirectness	No additional information.
Elements of the study relating to qualitative themes	8b) The need for early supported discharge coordination - Nurse-led program. 8c) Who is in the team? - Nursing, physiotherapy, occupational therapy, speech and language therapy. Nurse-led.

Study arms

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. Concomitant therapy: No additional information.

Usual care (N = 11)
Conventional discharge planning by mobile stroke team or hospital stroke unit. Concomitant therapy: No additional information.

Characteristics

Study-level characteristics

Characteristic	Study (N = 23)
% Female Sample size	n = 5 ; % = 23
Mean age (SD) Mean (SD)	66 (9)

Arm-level characteristics

Characteristic	Early supported discharge (N = 12)	Usual care (N = 11)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Modified Rankin scale Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 12 month (End of scheduled follow up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 12	Early supported discharge, 12 month, N = 12	Usual care, Baseline, N = 11	Usual care, 12 month, N = 11
Mortality Reported in Cochrane review No of events	n = 0 ; % = 0	n = 1 ; % = 8	n = 0 ; % = 0	n = 2 ; % = 18
Physical dependency (death or dependency) Reported in Cochrane review. Will be downgraded for indirectness due to outcome including mortality in it. No of events	n = NA ; % = NA	n = 5 ; % = 42	n = NA ; % = NA	n = 7 ; % = 64

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 12	Early supported discharge, 12 month, N = 9	Usual care, Baseline, N = 11	Usual care, 12 month, N = 8
Activities of daily living (barthel index) Reported in Cochrane review. Scale range: Unclear. Unclear whether final value or change score - assumed as final value. Mean (SD)	NR (NR)	17 (4)	NA (NA)	15 (7)
Extended activities of daily living (Nottingham extended activities of daily living score) Reported in Cochrane review. Scale range: Unclear. Unclear whether final value or change score - assumed as final value. Mean (SD)	NR (NR)	12 (6)	NR (NR)	9 (6)

Activities of daily living (barthel index) - Polarity - Higher values are better
Extended activities of daily living (Nottingham extended activities of daily living score) - Polarity - Higher values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 12	Early supported discharge, 12 month, N = 10	Usual care, Baseline, N = 11	Usual care, 12 month, N = 11
Length of hospital stay (length of initial hospital stay) (days) Reported in Cochrane review. Mean (SD)	NA (NA)	39.8 (35.78)	NA (NA)	46.09 (41.17)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Continuous outcomes (3)

Outcome	Early supported discharge, Baseline, N = 12	Early supported discharge, 12 month, N = 8	Usual care, Baseline, N = 11	Usual care, 12 month, N = 8
Psychological distress/mood (HADS) Reported in Cochrane review. Scale range: Unclear. Unclear whether final value or change score - assumed as final value. Mean (SD)	NR (NR)	15 (5)	NR (NR)	12 (5)

Psychological distress/mood (HADS) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Some concerns
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Some concerns
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - Outcome includes death as well as physical dependency)*

Continuousoutcomes(1)-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Some concerns
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Extendedactivitiesofdailyliving(Nottinghamextendedactivitiesofdailylivingscore)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Some concerns
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Some concerns
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(3)-Psychologicaldistress/mood(HADS)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Some concerns
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Some concerns
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Donnelly, 2004

Bibliographic Reference	Donnelly, M; Power, M; Russell, M; Fullerton, K; Randomized controlled trial of an early discharge rehabilitation service: the Belfast Community Stroke Trial; Stroke; 2004; vol. 35 (no. 1); 127-133

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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.
Trial name / registration number	Named Belfast 2004 in the Cochrane review.
Study type	Randomised controlled trial (RCT)

Inclusion criteria	Experienced a stroke during the 4 weeks preceding admission; had the potential to benefit from further rehabilitation; was not a resident in a nursing or residential home; had no preexisting physical or mental disability that was judged to make further rehabilitation inappropriate.
Exclusion criteria	No additional information.
Intervention(s)	Early supported discharge N=59 Community rehabilitation in-reach team with specialist interest in rehabilitation. Team consisted of physiotherapy, occupational therapy, speech and language therapy, support staff and medical input. Work was co-ordinated through weekly team meetings. Planning often included pre-discharge home visit. Team co-ordinated and delivered care. The community-based multidisciplinary stroke team service consisted of a team comprising 0.33 coordinator, 1 occupational therapist, 1.5 physiotherapists, 1 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. Multidisciplinary meetings were held to discuss the assessment of patients and progress toward rehabilitation goals that had been set jointly between therapists and each person and their closest relative. 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. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of	<5 days

rehabilitation provided per week	
Subgroup 5 - Length of intervention	Not stated/unclear
Population subgroups	No additional information.
Comparator	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. Occasional day hospital follow-up. 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. Concomitant therapy: No additional information.
Number of participants	113
Duration of follow-up	12 months
Indirectness	No additional information
Elements of the study relating to qualitative themes	2a) Clear and fair eligibility criteria - study inclusion criteria 5d) Suitability of home/equipment - The home was assessed and equipment had to be available before discharge. 8b) The need for early supported discharge coordination - Part time coordinator role

	8c) Who is in the team? - A coordinator, occupational therapist, physiotherapists, speech and language therapist and rehabilitation assistant. No reference to a social worker.
Additional comments	

Study arms

Early supported discharge (N = 59)
Community rehabilitation in-reach team with specialist interest in rehabilitation. Team consisted of physiotherapy, occupational therapy, speech and language therapy, support staff and medical input. Work was co-ordinated through weekly team meetings. Planning often included pre-discharge home visit. Team co-ordinated and delivered care. The community-based multidisciplinary stroke team service consisted of a team comprising 0.33 coordinator, 1 occupational therapist, 1.5 physiotherapists, 1 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. Multidisciplinary meetings were held to discuss the assessment of patients and progress toward rehabilitation goals that had been set jointly between therapists and each person and their closest relative. 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. Concomitant therapy: No additional information.

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. Occasional day hospital follow-up. 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. Concomitant therapy: No additional information.

Characteristics

Study-level characteristics

Characteristic	Study (N = 113)
% Female Sample size	n = 64 ; % = 57
Mean age (SD) (years) Mean (SD)	75 (8.2)

Arm-level characteristics

Characteristic	Early supported discharge (N = 59)	Usual care (N = 54)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Modified Rankin scale Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 12 month (End of scheduled follow up)

Dichotomous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 59	Early supported discharge, 12 month, N = 59	Usual care, Baseline, N = 54	Usual care, 12 month, N = 54
Mortality Reported in Cochrane review. No of events	n = 0 ; % = 0	n = 1 ; % = 2	n = 0 ; % = 0	n = 3 ; % = 6
Physical dependence (death or dependency) Reported in the Cochrane review. Will be downgraded for indirectness due to reporting death included in the outcome. No of events	n = NA ; % = NA	n = 29 ; % = 49	n = NA ; % = NA	n = 32 ; % = 59

Mortality - Polarity - Lower values are better
Physical dependence (death or dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 59	Early supported discharge, 12 month, N = 59	Usual care, Baseline, N = 54	Usual care, 12 month, N = 54
Person/participant generic health-related quality of life (EuroQol) Scale range: 0-100. Final values. Mean (SD)	60.48 (18)	66.36 (18.45)	59.17 (16.15)	68.21 (20.31)
Activities of daily living (barthel index) Scale range: 0-20. Final values. Mean (SD)	14.14 (3.38)	17.98 (3.1)	13.89 (3.93)	17.15 (3.81)
Extended activities of daily living (Nottingham Activities of Daily Living) Scale range: 0-21. Final values. Mean (SD)	4.95 (5.39)	12 (6.34)	5.77 (4.79)	10.43 (5.92)
Length of hospital stay (length of initial hospital stay) (days) Reported in Cochrane review. Mean (SD)	NA (NA)	41.9 (28.25)	NA (NA)	49.5 (46.95)

Person/participant generic health-related quality of life (EuroQol) - Polarity - Higher values are better
Activities of daily living (barthel index) - Polarity - Higher values are better
Extended activities of daily living (Nottingham Activities of Daily Living) - Polarity - Higher values are better
Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 27	Early supported discharge, 12 month, N = 27	Usual care, Baseline, N = 25	Usual care, 12 month, N = 25
Carer Strain Index Scale range: 0-13. Final values. Mean (SD)	5.07 (3.1)	5.92 (2.86)	6.55 (3.67)	6 (4.23)

Carer Strain Index - Polarity - Lower values are better
Carer outcomes

Dichotomous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 59	Early supported discharge, 12 month, N = 21	Usual care, Baseline, N = 54	Usual care, 12 month, N = 22
readmission to hospital Reported in the Cochrane review No of events	n = NA ; % = NA	n = 6 ; % = 29	n = NA ; % = NA	n = 6 ; % = 27

readmission to hospital - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes(1)-Mortality-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes(1)-Physicaldependence(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - Due to including mortality in the outcome as well as physical dependence)*

Continuousoutcomes(1)-Person/participantgenerichealth-relatedqualityoflife(EuroQol)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Extendedactivitiesofdailyliving(NottinghamActivitiesofDailyLiving)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-CarerStrainIndex-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes(2)-readmissiontohospital-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Fjaeroft, 2011

Bibliographic Reference	Fjaeroft, H; Rohweder, G; Indredavik, B; Stroke unit care combined with early supported discharge improves 5-year outcome; Stroke; 2011; vol. 42; 1707-1711

Study details

Secondary publication of another included study- see primary study for details	Indredavik, B, Fjaertoft, H, Ekeberg, G et al. (2000) Benefit of an extended stroke unit service with early supported discharge: a randomized, controlled trial. Stroke 31(12): 2989-2994
Other publications associated with this study included in review	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.

	Other studies associated with this study: Fjaertoft, H, Indredavik, B, Ekeberg, G et al. (2000) Extended stroke unit service with early supported discharge co-ordinated by a stroke team improves outcome for stroke patients. Proceedings of the consensus conference on stroke treatment and service delivery, 7-8 november 2000, UK, edinburgh: royal college of physicians of edinburgh: 49abstpb33 Fjaertoft, H, Indredavik, B, Johnsen, R et al. (2004) Acute stroke unit care combined with early supported discharge. Long-term effects on quality of life. A randomized controlled trial. Clinical rehabilitation 18(5): 580-586 Fjaertoft, H; Indredavik, B; Lydersen, S (2003) Stroke unit care combined with early supported discharge. Long term follow-up of a randomized controlled trial. Proceedings of the 12th nordic meeting on cerebrovascular diseases, 17-20 september 2003, norway, oslo: 16 (Abst. O-004) Fjaertoft, H, Indredavik, B, Magnussen, J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular diseases (Basel, Switzerland) 19(6): 376-383
Trial name / registration number	Named Trondheim 2000 in the Cochrane review.

Fjaertoft, 2000

Bibliographic Reference	Fjaertoft, H; Indredavik, B; Ekeberg, G; Loge, AD; Morch, B; Extended stroke unit service with early supported discharge co-ordinated by a stroke team improves outcome for stroke patients; Proceedings of the consensus conference on stroke treatment and service delivery, 7-8 november 2000, UK, edinburgh: royal college of physicians of edinburgh; 2000; 49abstpb33

Study details

Secondary publication of another included study- see primary study for details	Indredavik, B, Fjaertoft, H, Ekeberg, G et al. (2000) Benefit of an extended stroke unit service with early supported discharge: a randomized, controlled trial. Stroke 31(12): 2989-2994
Other publications associated with this study included in review	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. Other studies associated with this study: Fjaeroft, H; Rohweder, G; Indredavik, B (2011) Stroke unit care combined with early supported discharge improves 5-year outcome. Stroke 42: 1707-1711 Fjaertoft, H, Indredavik, B, Johnsen, R et al. (2004) Acute stroke unit care combined with early supported discharge. Long-term effects on quality of life. A randomized controlled trial. Clinical rehabilitation 18(5): 580-586 Fjaertoft, H; Indredavik, B; Lydersen, S (2003) Stroke unit care combined with early supported discharge. Long term follow-up of a randomized controlled trial. Proceedings of the 12th nordic meeting on cerebrovascular diseases, 17-20 september 2003, norway, oslo: 16 (Abst. O-004) Fjaertoft, H, Indredavik, B, Magnussen, J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular diseases (Basel, Switzerland) 19(6): 376-383
Trial name / registration number	Named Trondheim 2000 in the Cochrane review.

Fjaertoft, 2004

Bibliographic Reference	Fjaertoft, H; Indredavik, B; Johnsen, R; Lydersen, S; Acute stroke unit care combined with early supported discharge. Long-term effects on quality of life. A randomized controlled trial; Clinical rehabilitation; 2004; vol. 18 (no. 5); 580-586

Study details

Secondary publication of another included study- see primary study for details	Indredavik, B, Fjaertoft, H, Ekeberg, G et al. (2000) Benefit of an extended stroke unit service with early supported discharge: a randomized, controlled trial. Stroke 31(12): 2989-2994
Other publications associated with this study included in review	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. Other studies associated with this study: Fjaeroft, H; Rohweder, G; Indredavik, B (2011) Stroke unit care combined with early supported discharge improves 5-year outcome. Stroke 42: 1707-1711 Fjaertoft, H, Indredavik, B, Ekeberg, G et al. (2000) Extended stroke unit service with early supported discharge co-ordinated by a stroke team improves outcome for stroke patients. Proceedings of the consensus conference on stroke treatment and service delivery, 7-8 november 2000, UK, edinburgh: royal college of physicians of edinburgh: 49abstpb33

	Fjaertoft, H; Indredavik, B; Lydersen, S (2003) Stroke unit care combined with early supported discharge. Long term follow-up of a randomized controlled trial. Proceedings of the 12th nordic meeting on cerebrovascular diseases, 17-20 september 2003, norway, oslo: 16 (Abst. O-004) Fjaertoft, H, Indredavik, B, Magnussen, J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular diseases (Basel, Switzerland) 19(6): 376-383
Trial name / registration number	Named Trondheim 2000 in the Cochrane review.

Fjaertoft, 2003

Bibliographic Reference	Fjaertoft, H; Indredavik, B; Lydersen, S; Stroke unit care combined with early supported discharge. Long term follow-up of a randomized controlled trial; Proceedings of the 12th nordic meeting on cerebrovascular diseases, 17-20 september 2003, norway, oslo; 2003; 16 (Abst. O-004)

Study details

Secondary publication of another included study- see primary study for details	Indredavik, B, Fjaertoft, H, Ekeberg, G et al. (2000) Benefit of an extended stroke unit service with early supported discharge: a randomized, controlled trial. Stroke 31(12): 2989-2994
Other publications associated with this study included in review	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. Other studies associated with this study: Fjaeroft, H; Rohweder, G; Indredavik, B (2011) Stroke unit care combined with early supported discharge improves 5-year outcome. Stroke 42: 1707-1711 Fjaertoft, H, Indredavik, B, Ekeberg, G et al. (2000) Extended stroke unit service with early supported discharge co-ordinated by a stroke team improves outcome for stroke patients. Proceedings of the consensus conference on stroke treatment and service delivery, 7-8 november 2000, UK, edinburgh: royal college of physicians of edinburgh: 49abstpb33 Fjaertoft, H, Indredavik, B, Johnsen, R et al. (2004) Acute stroke unit care combined with early supported discharge. Long-term effects on quality of life. A randomized controlled trial. Clinical rehabilitation 18(5): 580-586 Fjaertoft, H, Indredavik, B, Magnussen, J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular diseases (Basel, Switzerland) 19(6): 376-383
Trial name / registration number	Named Trondheim 2000 in the Cochrane review.

Fjaertoft, 2005

Bibliographic Reference	Fjaertoft, H; Indredavik, B; Magnussen, J; Johnsen, R; Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial; Cerebrovascular diseases (Basel, Switzerland); 2005; vol. 19 (no. 6); 376-383

Study details

Secondary publication of another included study- see primary study for details	Indredavik, B, Fjaertoft, H, Ekeberg, G et al. (2000) Benefit of an extended stroke unit service with early supported discharge: a randomized, controlled trial. Stroke 31(12): 2989-2994
Other publications associated with this study included in review	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. Other studies associated with this study: Fjaeroft, H; Rohweder, G; Indredavik, B (2011) Stroke unit care combined with early supported discharge improves 5-year outcome. Stroke 42: 1707-1711 Fjaertoft, H, Indredavik, B, Ekeberg, G et al. (2000) Extended stroke unit service with early supported discharge co-ordinated by a stroke team improves outcome for stroke patients. Proceedings of the consensus conference on stroke treatment and service delivery, 7-8 november 2000, UK, edinburgh: royal college of physicians of edinburgh: 49abstpb33 Fjaertoft, H, Indredavik, B, Johnsen, R et al. (2004) Acute stroke unit care combined with early supported discharge. Long-term effects on quality of life. A randomized controlled trial. Clinical rehabilitation 18(5): 580-586 Fjaertoft, H; Indredavik, B; Lydersen, S (2003) Stroke unit care combined with early supported discharge. Long term follow-up of a randomized controlled trial. Proceedings of the 12th nordic meeting on cerebrovascular diseases, 17-20 september 2003, norway, oslo: 16 (Abst. O-004)

Trial name / registration number	Named Trondheim 2000 in the Cochrane review.

Gjelsvik, 2013

Bibliographic Reference	Gjelsvik, BEB; Smedal, T; Hofstad, H; Eide, GE; Skouen, JS; Frisk, B; Balance and walking outcome after stroke rehabilitation - a randomised controlled trial comparing two early discharge models with treatment as usual; Cerebrovascular diseases (Basel, Switzerland); 2013; vol. 35 (no. suppl3); 95

Study details

Secondary publication of another included study- see primary study for details	Hofstad, H, Gjelsvik, BE, Næss, H et al. (2014) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual. BMC neurology 14: 239
Other publications associated with this study included in review	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. Other studies associated with this study:

	Gjelsvik, BEB, Smedal, T, Hofstad, H et al. (2013) Balance and walking outcome after stroke rehabilitation - a randomised controlled trial comparing two early discharge models with treatment as usual. Cerebrovascular diseases (Basel, Switzerland) 35(suppl3): 95 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2013) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): a randomized controlled trial comparing rehabilitation in a day unit or in the patients' homes with conventional treatment. International journal of stroke 8(7): 582-587 Hofstad, H, Gjelsvik, BE, Næss, H et al. (2014) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual. BMC neurology 14: 239 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2012) ESD Stroke Bergen - an RCT comparing two different schemes of early supported discharge after stroke with ordinary treatment: results from 3 months follow-up. Neurorehabilitation and neural repair 26(6): 748 Taule, T; Skouen, JS; Raheim, M (2013) Life changed existentially. A qualitative study of experiences 6 months post stroke. Cerebrovascular diseases (Basel, Switzerland) 35suppl3: 764 Taule, T, Strand, LI, Assmus, J et al. (2015) Ability in daily activities after early supported discharge models of stroke rehabilitation. Scandinavian journal of occupational therapy 22(5): 355-365 Taule, Tina, Strand, Liv Inger, Skouen, Jan Sture et al. (2015) Striving for a life worth living: stroke survivors' experiences of home rehabilitation. Scandinavian journal of caring sciences 29(4): 651-61
Trial name / registration number	Named Bergen 2014 in the Cochrane review.

Hackett, 2000

Bibliographic Reference	Hackett, M; Anderson, C; Vandal, A; Rubenach, S; One year follow-up of a RCT of accelerated hospital discharge and home-based stroke rehabilitation; Stroke; 2000; vol. 31 (no. 11); 2817-2818

Study details

Secondary publication of another included study- see primary study for details	Anderson, C, Rubenach, S, Mhurchu, CN et al. (2000) Home or hospital for stroke rehabilitation? results of a randomized controlled trial : I: health outcomes at 6 months. Stroke 31(5): 1024-1031
Other publications associated with this study included in review	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. Other studies associated with this study: Anderson, C, Mhurchu, CN, Rubenach, S et al. (2000) Home or hospital for stroke Rehabilitation? Results of a randomized controlled trial : II: cost minimization analysis at 6 months. Stroke 31(5): 1032-1037 Hackett, ML, Vandal, AC, Anderson, CS et al. (2002) Long-term outcome in stroke patients and caregivers following accelerated hospital discharge and home-based rehabilitation. Stroke 33(2): 643-645 Mhurchu, CN, Anderson, C, Rubenach, S et al. (2000) Home or hospital for stroke rehabilitation? Results of a randomised controlled trial. Cerebrovascular diseases (Basel, Switzerland) 10 (Suppl 2): 61 Rubenach, S, Anderson, C, Clark, M et al. (1998) Early supportive discharge and rehabilitation trial (ESPRIT) in stroke: preliminary results. Australian and New Zealand journal of medicine 28: 498

Trial name / registration number	Named Adelaide 2000 in the Cochrane review.

Hackett, 2002

Bibliographic Reference	Hackett, ML; Vandal, AC; Anderson, CS; Rubenach, SE; Long-term outcome in stroke patients and caregivers following accelerated hospital discharge and home-based rehabilitation; Stroke; 2002; vol. 33 (no. 2); 643-645

Study details

Secondary publication of another included study- see primary study for details	Anderson, C, Rubenach, S, Mhurchu, CN et al. (2000) Home or hospital for stroke rehabilitation? results of a randomized controlled trial : I: health outcomes at 6 months. Stroke 31(5): 1024-1031
Other publications associated with this study included in review	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. Other studies associated with this study: Anderson, C, Mhurchu, CN, Rubenach, S et al. (2000) Home or hospital for stroke Rehabilitation? Results of a randomized controlled trial : II: cost minimization analysis at 6 months. Stroke 31(5): 1032-1037

	Hackett, M, Anderson, C, Vandal, A et al. (2000) One year follow-up of a RCT of accelerated hospital discharge and home-based stroke rehabilitation. Stroke 31(11): 2817-2818 Mhurchu, CN, Anderson, C, Rubenach, S et al. (2000) Home or hospital for stroke rehabilitation? Results of a randomised controlled trial. Cerebrovascular diseases (Basel, Switzerland) 10 (Suppl 2): 61 Rubenach, S, Anderson, C, Clark, M et al. (1998) Early supportive discharge and rehabilitation trial (ESPRIT) in stroke: preliminary results. Australian and New Zealand journal of medicine 28: 498
Trial name / registration number	Named Adelaide 2000 in the Cochrane review.

Hofstad, 2014

Bibliographic Reference	Hofstad, H; Gjelsvik, BE; Næss, H; Eide, GE; Skouen, JS; Early supported discharge after stroke in Bergen (ESD Stroke Bergen): three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual; BMC neurology; 2014; vol. 14; 239

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with	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.:

this study included in review	CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review. Other studies associated with this study: Gjelsvik, BEB, Smedal, T, Hofstad, H et al. (2013) Balance and walking outcome after stroke rehabilitation - a randomised controlled trial comparing two early discharge models with treatment as usual. Cerebrovascular diseases (Basel, Switzerland) 35(suppl3): 95 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2013) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): a randomized controlled trial comparing rehabilitation in a day unit or in the patients' homes with conventional treatment. International journal of stroke 8(7): 582-587 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2012) ESD Stroke Bergen - an RCT comparing two different schemes of early supported discharge after stroke with ordinary treatment: results from 3 months follow-up. Neurorehabilitation and neural repair 26(6): 748 Taule, T; Skouen, JS; Raheim, M (2013) Life changed existentially. A qualitative study of experiences 6 months post stroke. Cerebrovascular diseases (Basel, Switzerland) 35suppl3: 764 Taule, T, Strand, LI, Assmus, J et al. (2015) Ability in daily activities after early supported discharge models of stroke rehabilitation. Scandinavian journal of occupational therapy 22(5): 355-365 Taule, Tina, Strand, Liv Inger, Skouen, Jan Sture et al. (2015) Striving for a life worth living: stroke survivors' experiences of home rehabilitation. Scandinavian journal of caring sciences 29(4): 651-61
Trial name / registration number	Named Bergen 2014 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Study location	Noway

Sources of 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
Inclusion criteria	Living at home in the Municipality of Bergen prior to having a stroke; stroke within the previous seven days; being admitted to the stroke unit within the previous five days; a National Institutes of Health Stroke Scale score of 2-26; NIHSS score <2 but modified Rankin Scale score at least 2; awake; able to agree to participate in the study by signing an informed consent, either themselves or by their relatives.
Exclusion criteria	Serious psychiatric disorders; alcohol or substance abuse; other serious conditions of importance to the cerebral disorder or subsequent rehabilitation process; poor knowledge of the Norwegian language.
Intervention(s)	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 team was particularly important in the discharge process and co-operated closely with the municipal health care in the planning and implementation of further treatment after discharge. The two ESD arms differed by the location of treatment: - ESD 1 group received their treatment in a community day unit; whereas - ESD 2 group patients stayed in their homes with home visits from the community health team The patients in the two ESD arms were discharged to their homes as soon as possible. Patients in need of a longer in-patient treatment period than offered by the stroke unit were discharged to a municipal institution or rehabilitation department for a period before going home. All patients in the ESD arms were offered rehabilitative treatment by a multi-disciplinary community health team, consisting of a nurse, a physiotherapist, and an occupational therapist. 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. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study	Not stated/unclear

(with or without use of aids)	
Subgroup 2 - Severity	Mild (or NIHSS 1-5) Median 3 (IQR 4).
Subgroup 3 - Modified Rankin scale	> 2 Mean (SD) = 2.59 (1.22).
Subgroup 4 - Number of days of rehabilitation provided per week	5 days
Subgroup 5 - Length of intervention	≤6 weeks 5 weeks
Comparator	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 '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.
Number of participants	306
Duration of follow-up	6 months
Indirectness	No additional information.

Elements of the study relating to qualitative themes	1) Person-centred care - More protocolised. People were offered care for 5 weeks with a maximum of 4 hours of treatment per day, that most people did not do due to tiredness, low capacity, lack of motivation, or being only minimally neurological affected and therefore not needing therapy. 2a) Clear and fair eligibility criteria - See inclusion criteria. 8b) The need for early supported discharge coordination - Coordination achieved through the ambulatory team, no named coordinator. 8c) Who is in the team? - A nurse, a physiotherapist and an occupational therapist 10a) Providing therapy for as long as needed - Therapy was provided for up to 5 weeks with the amount of therapy per day being dependent on the person.

Study arms

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 team was particularly important in the discharge process and co-operated closely with the municipal health care in the planning and implementation of further treatment after discharge. The two ESD arms differed by the location of treatment: - ESD 1 group received their treatment in a community day unit; whereas - ESD 2 group patients stayed in their homes with home visits from the community health team The patients in the two ESD arms were discharged to their homes as soon as possible. Patients in need of a longer in-patient treatment period than offered by the stroke unit were discharged to a municipal institution or rehabilitation department for a period before going home. All patients in the ESD arms were offered rehabilitative treatment by a multi-disciplinary community health team, consisting of a nurse, a physiotherapist, and an occupational therapist. 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. Concomitant therapy: No additional information.

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 '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.

Characteristics

Arm-level characteristics

Characteristic	Early supported discharge (N = 207)	Usual care (N = 99)
% Female Sample size	n = 90 ; % = 44	n = 47 ; % = 48
Mean age (SD) (years) Range	27 to 92	32 to 98
Mean age (SD) (years) Mean (SD)	71.31 (NR)	74.19 (NR)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Early supported discharge (N = 207)	Usual care (N = 99)
Severity NIHSS IQR	4	4
Severity NIHSS Median	2	2
Modified Rankin scale Mean (SD)	2.56 (1.22)	2.66 (1.23)

Outcomes

Study timepoints

- Baseline
- 6 month (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 207	Early supported discharge, 6 month, N = 207	Usual care, Baseline, N = 99	Usual care, 6 month, N = 99
Physical dependency (death or dependency) Reported in the Cochrane review. Will be included in this outcome but downgraded for indirectness.	n = NA ; % = NA	n = 73 ; % = 35	n = NA ; % = NA	n = 37 ; % = 37

Outcome	Early supported discharge, Baseline, N = 207	Early supported discharge, 6 month, N = 207	Usual care, Baseline, N = 99	Usual care, 6 month, N = 99
No of events				

Physical dependency (death or dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 207	Early supported discharge, 6 month, N = 153	Usual care, Baseline, N = 99	Usual care, 6 month, N = 60
Activities of daily living (barthel index) Reported in Cochrane review, however the two early supported discharge arms were separated and are recombined in this outcome. Scale range: 0-100. Final values. Mean (SD)	NR (NR)	100 (8.6)	NR (NR)	100 (10.7)

Activities of daily living (barthel index) - Polarity - Higher values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 207	Early supported discharge, 6 month, N = 207	Usual care, Baseline, N = 99	Usual care, 6 month, N = 99
Length of hospital stay (length of initial hospital stay) (days) Reported in Cochrane review, however the two early supported discharge arms were separated and are recombined in this outcome. Mean (SD)	NA (NA)	36.7 (49.4)	NA (NA)	42.2 (39.9)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - due to the outcome*

Section	Question	Answer
		including death and dependency when the outcome should include only dependency)

Continuousoutcomes(1)-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Hofstad, 2012

Bibliographic Reference	Hofstad, H; Naess, H; Moe-Nilssen, R; Skouen, JS; ESD Stroke Bergen - an RCT comparing two different schemes of early supported discharge after stroke with ordinary treatment: results from 3 months follow-up; Neurorehabilitation and neural repair; 2012; vol. 26 (no. 6); 748

Study details

Secondary publication of another included study- see primary study for details	Hofstad, H, Gjelsvik, BE, Næss, H et al. (2014) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual. BMC neurology 14: 239
Other publications associated with this study included in review	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. Other studies associated with this study: Gjelsvik, BEB, Smedal, T, Hofstad, H et al. (2013) Balance and walking outcome after stroke rehabilitation - a randomised controlled trial comparing two early discharge models with treatment as usual. Cerebrovascular diseases (Basel, Switzerland) 35(suppl3): 95 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2013) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): a randomized controlled trial comparing rehabilitation in a day unit or in the patients' homes with conventional treatment. International journal of stroke 8(7): 582-587 Taule, T; Skouen, JS; Raheim, M (2013) Life changed existentially. A qualitative study of experiences 6 months post stroke. Cerebrovascular diseases (Basel, Switzerland) 35suppl3: 764 Taule, T, Strand, LI, Assmus, J et al. (2015) Ability in daily activities after early supported discharge models of stroke rehabilitation. Scandinavian journal of occupational therapy 22(5): 355-365 Taule, Tina, Strand, Liv Inger, Skouen, Jan Sture et al. (2015) Striving for a life worth living: stroke survivors' experiences of home rehabilitation. Scandinavian journal of caring sciences 29(4): 651-61

Trial name / registration number	Named Bergen 2014 in the Cochrane review.

Hofstad, 2013

Bibliographic Reference	Hofstad, H; Naess, H; Moe-Nilssen, R; Skouen, JS; Early supported discharge after stroke in Bergen (ESD Stroke Bergen): a randomized controlled trial comparing rehabilitation in a day unit or in the patients' homes with conventional treatment; International journal of stroke; 2013; vol. 8 (no. 7); 582-587

Study details

Secondary publication of another included study- see primary study for details	Hofstad, H, Gjelsvik, BE, Næss, H et al. (2014) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual. BMC neurology 14: 239
Other publications associated with this study included in review	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. Other studies associated with this study:

	Gjelsvik, BEB, Smedal, T, Hofstad, H et al. (2013) Balance and walking outcome after stroke rehabilitation - a randomised controlled trial comparing two early discharge models with treatment as usual. Cerebrovascular diseases (Basel, Switzerland) 35(suppl3): 95 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2012) ESD Stroke Bergen - an RCT comparing two different schemes of early supported discharge after stroke with ordinary treatment: results from 3 months follow-up. Neurorehabilitation and neural repair 26(6): 748 Taule, T; Skouen, JS; Raheim, M (2013) Life changed existentially. A qualitative study of experiences 6 months post stroke. Cerebrovascular diseases (Basel, Switzerland) 35suppl3: 764 Taule, T, Strand, LI, Assmus, J et al. (2015) Ability in daily activities after early supported discharge models of stroke rehabilitation. Scandinavian journal of occupational therapy 22(5): 355-365 Taule, Tina, Strand, Liv Inger, Skouen, Jan Sture et al. (2015) Striving for a life worth living: stroke survivors' experiences of home rehabilitation. Scandinavian journal of caring sciences 29(4): 651-61
Trial name / registration number	Named Bergen 2014 in the Cochrane review.

Indredavik, 2000

Bibliographic Reference	Indredavik, B; Fjaertoft, H; Ekeberg, G; Løge, AD; Mørch, B; Benefit of an extended stroke unit service with early supported discharge: a randomized, controlled trial; Stroke; 2000; vol. 31 (no. 12); 2989-2994

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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. Other studies associated with this study: Fjaeroft, H; Rohweder, G; Indredavik, B (2011) Stroke unit care combined with early supported discharge improves 5-year outcome. Stroke 42: 1707-1711 Fjaertoft, H, Indredavik, B, Ekeberg, G et al. (2000) Extended stroke unit service with early supported discharge co-ordinated by a stroke team improves outcome for stroke patients. Proceedings of the consensus conference on stroke treatment and service delivery, 7-8 november 2000, UK, edinburgh: royal college of physicians of edinburgh: 49abstpb33 Fjaertoft, H, Indredavik, B, Johnsen, R et al. (2004) Acute stroke unit care combined with early supported discharge. Long-term effects on quality of life. A randomized controlled trial. Clinical rehabilitation 18(5): 580-586 Fjaertoft, H; Indredavik, B; Lydersen, S (2003) Stroke unit care combined with early supported discharge. Long term follow-up of a randomized controlled trial. Proceedings of the 12th nordic meeting on cerebrovascular diseases, 17-20 september 2003, norway, oslo: 16 (Abst. O-004) Fjaertoft, H, Indredavik, B, Magnussen, J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular diseases (Basel, Switzerland) 19(6): 376-383

Trial name / registration number	Named Trondheim 2000 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Inclusion criteria	Signs and symptoms of acute stroke from the city of Trondheim, Norway, who were admitted to the stroke unit; signs and symptoms of an acute stroke according to the World Health Organisation definition of stroke; Scandinavian Stroke Scale score between 2 and 57 points; living at home before the stroke; included within 72 hours after admission to the stroke unit and within 7 days after the onset of symptoms; lack of participation in other trials; provision of informed consent.
Exclusion criteria	No additional information.
Intervention(s)	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 mobile team was based in the stroke unit but was designed to cooperate with the primary healthcare system and to offer support during the first period after discharge. A member of the team collected basic information about the person and their medical condition, comorbidity, the situation at home before the stroke and existing support from family, friends and eventually the healthcare system. Together with the staff in the stroke unit, a preliminary evaluation of the needs of the patient during the recovery phase was stable. The person, the family if possible, and representatives from the primary healthcare system and the mobile stroke team participated. During the visit, a plan for further follow-up for necessary nursing, support and rehabilitation was made. Furthermore, the different tasks necessary for the follow-up program were delegated to dedicated members of the service system. The mobile stroke team was responsible for coordination of the different agencies and activities. The team tried to establish a service and support system that allowed the patient to live at home as soon as possible after the stroke and to continue necessary training and rehabilitation at home, in a day clinic, or by a combination of those two alternatives. In most cases the primary role of the team was coordination, but for some patients with more extensive needs, the team also offered training and support at home in addition to service from other agencies. However, most of the service and support was offered by trained staff in the community healthcare system, which played an important role in the support system. On the day of discharge, a dedicated discharge meeting was organised in which all plans were again checked, and the person and family were informed in detail about further plans for treatment, rehabilitation, support, help and follow-up. For people with very extensive deficits after the stroke who needed continuous help and support 24 hours a day, a plan for further inpatient rehabilitation in a rehabilitation clinic were made in close cooperation between the mobile team, the stroke unit and the rehabilitation clinics. Similar to the case for people who were discharged directly to home, early discharge and further treatment/rehabilitation while the patient stayed at home were

	emphasised. Hence, the stay in rehabilitation clinics was kept as short as possible. 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. The physician who had treated the patient during the acute stage in the hospital (ie, the stroke unit), a member of the mobile team, the person and eventually the family participated during this outpatient consultation. An evaluation and summary of the period from stroke onset through the acute stage to the establishment at home were made. During this evaluation the patient and the family were invited to present their view about plans that did not work, plans and goals that had to be changed, and needs, hopes and worries they had for the future. An evaluation of the treatment program for secondary prophylaxis was also made, and improvements and changes were introduced if necessary. A final report was sent to the family physician with advice for further follow-up. The home nursing personnel and therapists or other members of the primary healthcare system, when indicated, were also informed about the present condition of the patient, the treatment and rehabilitation thus far, and further plans. After care by the outpatient clinic 1 month after discharge, the primary healthcare system was responsible for all further follow-up but could immediately contact members of the stroke team if problems occurred that were difficult to solve by the primary healthcare system alone. Three months after discharge, the person and their families were invited to a meeting for a larger group of stroke patients. There they were generally informed about stroke and the problems and possibilities for stroke victims. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	> 2
Subgroup 4 - Number of days of	Not stated/unclear

rehabilitation provided per week	
Subgroup 5 - Length of intervention	>6 weeks
Population subgroups	No additional information.
Comparator	Usual care N=160 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.
Number of participants	320
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - The person was involved in the process from the start. 2a) Clear and fair eligibility criteria - See inclusion criteria. 4b) Changing relationships with their partner - Family member involvement was emphasised in this study. 8b) The need for early supported discharge coordination - The team coordinated the process 8c) Who is in the team? - A nurse, a physiotherapist, an occupational therapist and the part-time services of a physician.
Additional comments	

Study arms

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 mobile team was based in the stroke unit but was designed to cooperate with the primary healthcare system and to offer support during the first period after discharge. A member of the team collected basic information about the person and their medical condition, comorbidity, the situation at home before the stroke and existing support from family, friends and eventually the healthcare system. Together with the staff in the stroke unit, a preliminary evaluation of the needs of the patient during the recovery phase was stable. The person, the family if possible, and representatives from the primary healthcare system and the mobile stroke team participated. During the visit, a plan for further follow-up for necessary nursing, support and rehabilitation was made. Furthermore, the different tasks necessary for the follow-up program were delegated to dedicated members of the service system. The mobile stroke team was responsible for coordination of the different agencies and activities. The team tried to establish a service and support system that allowed the patient to live at home as soon as possible after the stroke and to continue necessary training and rehabilitation at home, in a day clinic, or by a combination of those two alternatives. In most cases the primary role of the team was coordination, but for some patients with more extensive needs, the team also offered training and support at home in addition to service from other agencies. However, most of the service and support was offered by trained staff in the community healthcare system, which played an important role in the support system. On the day of discharge, a dedicated discharge meeting was organised in which all plans were again checked, and the person and family were informed in detail about further plans for treatment, rehabilitation, support, help and follow-up. For people with very extensive deficits after the stroke who needed continuous help and support 24 hours a day, a plan for further inpatient rehabilitation in a rehabilitation clinic were made in close cooperation between the mobile team, the stroke unit and the rehabilitation clinics. Similar to the case for people who were discharged directly to home, early discharge and further treatment/rehabilitation while the patient stayed at home were emphasised. Hence, the stay in rehabilitation clinics was kept as short as possible. 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. The physician who had treated the patient during the acute stage in the hospital (ie, the stroke unit), a member of the mobile team, the person and eventually the family participated during this outpatient consultation. An evaluation and summary of the period from stroke onset through the acute stage to the establishment at home were made. During this evaluation the patient and the family were invited to present their view about plans that did not work, plans and goals that had to be changed, and needs, hopes and worries they had for the future. An evaluation of the treatment program for secondary prophylaxis was also made, and improvements and changes were

introduced if necessary. A final report was sent to the family physician with advice for further follow-up. The home nursing personnel and therapists or other members of the primary healthcare system, when indicated, were also informed about the present condition of the patient, the treatment and rehabilitation thus far, and further plans. After care by the outpatient clinic 1 month after discharge, the primary healthcare system was responsible for all further follow-up but could immediately contact members of the stroke team if problems occurred that were difficult to solve by the primary healthcare system alone. Three months after discharge, the person and their families were invited to a meeting for a larger group of stroke patients. There they were generally informed about stroke and the problems and possibilities for stroke victims. Concomitant therapy: No additional information.

Usual care (N = 160)
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.

Characteristics

Arm-level characteristics

Characteristic	**Early supported discharge (N = 160)**	**Usual care (N = 160)**
% Female Sample size	n = 74 ; % = 46	n = 90 ; % = 56
Mean age (SD) (years) Mean (SD)	74 (NR)	73.8 (NR)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NA ; % = NA	n = NA ; % = NA

Characteristic	Early supported discharge (N = 160)	Usual care (N = 160)
Previous transient ischaemic attack Sample size	n = 21 ; % = 13	n = 22 ; % = 14
Previous stroke Sample size	n = 19 ; % = 12	n = 26 ; % = 16
Hypertension Sample size	n = 53 ; % = 33	n = 56 ; % = 35
Myocardial infarction Sample size	n = 30 ; % = 19	n = 26 ; % = 16
Atrial fibrillation Sample size	n = 27 ; % = 17	n = 24 ; % = 15
Diabetes Sample size	n = 24 ; % = 15	n = 19 ; % = 12
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Mean (SD)	NR (NR)	NR (NR)
Modified Rankin scale Mean (SD)	3.3 (NR)	3.4 (NR)

Outcomes

Study timepoints

- Baseline
- 12 month (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 160	Early supported discharge, 12 month, N = 160	Usual care, Baseline, N = 160	Usual care, 12 month, N = 160
Mortality Reported in the Cochrane review. No of events	n = 0 ; % = 0	n = 13 ; % = 8	n = 0 ; % = 0	n = 15 ; % = 9
Physical dependency (death and dependency) Reported in the Cochrane review. Will be downgraded for indirectness as the outcome includes mortality as well as dependency. No of events	n = NA ; % = NA	n = 64 ; % = 40	n = NA ; % = NA	n = 81 ; % = 51

Mortality - Polarity - Lower values are better
Physical dependency (death and dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 160	Early supported discharge, 12 month, N = 133	Usual care, Baseline, N = 160	Usual care, 12 month, N = 124
Extended activities of daily living (Frenchay Activity Index) Reported in the Cochrane review. Scale range: 0-45. Final values. Mean (SD)	NR (NR)	32.2 (11.1)	NR (NR)	31.1 (11.1)

Extended activities of daily living (Frenchay Activity Index) - Polarity - Higher values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 160	Early supported discharge, 12 month, N = 134	Usual care, Baseline, N = 160	Usual care, 12 month, N = 125
Psychological distress/mood (Montgomery-Asberg Depression Scale?) Reported in the Cochrane review. Scale range: Unclear. Final values. Mean (SD)	NA (NA)	5.52 (5.83)	NA (NA)	5.82 (6.34)

Psychological distress/mood (Montgomery-Asberg Depression Scale?) - Polarity - Lower values are better

Continuous outcomes (3)

Outcome	Early supported discharge, Baseline, N = 128	Early supported discharge, 12 month, N = 128	Usual care, Baseline, N = 121	Usual care, 12 month, N = 121
Carer Strain Index Reported in the Cochrane review. Scale range: 0-26. Final values.	NR (NR)	23.39 (2.7)	NR (NR)	22.58 (3.12)

Outcome	Early supported discharge, Baseline, N = 128	Early supported discharge, 12 month, N = 128	Usual care, Baseline, N = 121	Usual care, 12 month, N = 121
Mean (SD)				

Carer Strain Index - Polarity - Lower values are better
Carer outcomes

Continuous outcomes (4)

Outcome	Early supported discharge, Baseline, N = 160	Early supported discharge, 12 month, N = 160	Usual care, Baseline, N = 160	Usual care, 12 month, N = 160
Length of hospital stay (length of initial hospital stay) (days) Reported in the Cochrane review. Mean (SD)	NA (NA)	18.6 (30)	NA (NA)	31.1 (30)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathanddependency)-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low

Section	Question	Answer
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - includes death in the outcome instead of just physical dependency)*

Continuousoutcomes(1)-Extendedactivitiesofdailyliving(FrenchayActivityIndex)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low

Section	Question	Answer
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Psychologicaldistress/mood(Montgomery-AsbergDepressionScale?)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(3)-CarerStrainIndex-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(4)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Kjaer, 2009

Bibliographic Reference	Kjaer, P; Skerris, A; Ostergaard, A; Skou, C; Christoffersen, J; Seest, LS; Multidisciplinary hometraining of stroke patients. A randomised control intervention; Gentofte Hospital Report; 2009

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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. Other studies associated with this study: Rasmussen, R.S., Ostergaard, A., Kjaer, P. et al. (2016) Stroke rehabilitation at home before and after discharge reduced disability and improved quality of life: a randomised controlled trial. Clinical rehabilitation 30(3): 225-236
Trial name / registration number	Named Copenhagen 2009 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Inclusion criteria	Acute stroke patients at least 18 years of age; premorbid Modified Rankin Score of 0-3; premorbid ability to live in own home; patients hospitalised in our stroke unit for more than three days with focal neurological deficits; patients or caretakers providing informed consent.
Exclusion criteria	If they were terminal; premobidly unable to understand or speak the Danish language; previously included in this investigation; living in or discharged to nursing homes; unable to take care of themselves in their own home with or without assistance; relocated to other hospital departments after being admitted to the stroke unit; unable to participate in home-based rehabilitation; had severe memory impairments causing them to fail to understand and act upon instructions; or a baseline modified Barthel-100 ADL Index score of 91 or better.

Recruitment / selection of participants	
Intervention(s)	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. Prior to home-based training a physician evaluated each intervention inpatient to secure that the inpatient was able and fit to participate. As soon as an inpatient was able to train at home, representatives of the team drove the inpatient home one to three times per week, where physician exercises and activities of daily living were performed before the inpatient was returned to the hospital. For each inpatient, home training was based upon the inpatient's needs and rehabilitation goals. The nurse participated in the home training if nursing intervention was needed. During the first home visit, the team assessed if it was realistic for an inpatient to be directly discharged to the home after further training. The inpatient's physical and cognitive abilities were observed and assessed in conjunction with the inpatient's usual surroundings, and needs for aids and housing changes were considered. Subsequently, temporary aids were provided from the hospital and installed by the team. The following home training was focused on the inpatient's problems in performing relevant activities of daily living. At home, inpatients were tested and trained in difficult activities with or without assistive devices. For example, inpatients were trained in transfers in their own beds and in personal hygiene in their own bathrooms. Relatives were offered to participate in the inpatient's rehabilitation and training. During the home visits, the patient's needs for functional training and for municipal services were constantly evaluated. Prior to a person's discharge, team members participated in conferences together with municipality health care professionals to ensure that patients would be able to live safely at home. after being discharged to their homes, intervention patients were given written plans for training sessions, received help to perform activities of daily living and continued rehabilitation training at home one to five days per week by the multidisciplinary team. Individual training sessions focused on the patient's occupational problems and were performed either mono- or multi-disciplinary, but with an ongoing multidisciplinary evaluation of the rehabilitation program. The training was tailored to the individual person's goals and targets, both in terms of content and scope, and could take place at home or in public spaces; for example as traffic training, use of public transportation or shopping. These ongoing therapeutic interventions were continued for up to four weeks according to the ability and needs of the person. At least once in the home training period a follow-up visit by the team's nurse was done giving advice and information to the person and/or relatives about subjects like stroke sequelae, lifestyle (smoking, alcohol, diet, hypertension and more), medication, fatigue, dperession, incontinence, etc. The nurse helped people contacting their general practitioner to facilitate follow-up and control visits when needed. About three weeks after hospital discharge, and before the end of home training course, the multidisciplinary team's therapists made a rehabilitation plan for the patient in order to inform the

	municipality health care professionals of ongoing and future goals. Furthermore, the patient was offered to have one of the multidisciplinary team's therapists participating in the first outpatient training in the municipality to facilitate the transition. Thus, four weeks after hospital discharge, patients still in need of rehabilitation were provided treatments after standard community guidelines. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	> 2
Subgroup 4 - Number of days of rehabilitation provided per week	<5 days
Subgroup 5 - Length of intervention	≤6 weeks
Population subgroups	No additional information.
Comparator	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 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.
Number of participants	71
Duration of follow-up	3 months (continuous outcomes), 5 months (dichotomous outcomes)
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - The training is tailored to the individual person's goals and targets. The amount of therapy depends on the needs of the person. 2a) Clear and fair eligibility criteria - See inclusion criteria. 5d) Suitability of home/equipment - The person's activities in the house and the needs for aids and housing changes were considered. 7c) Lack of training for carers - The stroke survivor received training for how they would work at home. Partners were also offered to be involved in the training. 8c) Who is in the team? - A nurse, physiotherapists, occupational therapists and physicians.

Study arms

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. Prior to home-based training a physician evaluated each intervention inpatient to secure that the inpatient was able and fit to participate. As soon as an inpatient was able to train at home, representatives of the team drove the inpatient home one to three times per week, where physician exercises and activities of daily living were performed before the inpatient was returned to the hospital. For each inpatient, home training was based upon the inpatient's needs and rehabilitation goals. The nurse participated in the home training if nursing intervention was needed. During the first home visit, the team assessed if it was realistic for an inpatient to be directly discharged to the home after further training. The inpatient's physical and cognitive abilities were observed and assessed in conjunction with the inpatient's usual surroundings, and needs for aids and housing changes were considered. Subsequently, temporary aids were provided from the hospital and installed by the team. The following home training was focused on the inpatient's problems in performing relevant activities of daily living. At home, inpatients were tested and trained in difficult activities with or without assistive devices. For example, inpatients were trained in transfers in their own beds and in personal hygiene in their own bathrooms. Relatives were offered to participate in the inpatient's rehabilitation and training. During the home visits, the patient's needs for functional training and for municipal services were constantly evaluated. Prior to a person's discharge, team members participated in conferences together with municipality health care professionals to ensure that patients would be able to live safely at home. after being discharged to their homes, intervention patients were given written plans for training sessions, received help to perform activities of daily living and continued rehabilitation training at home one to five days per week by the multidisciplinary team. Individual training sessions focused on the patient's occupational problems and were performed either mono- or multi-disciplinary, but with an ongoing multidisciplinary evaluation of the rehabilitation program. The training was tailored to the individual person's goals and targets, both in terms of content and scope, and could take place at home or in public spaces; for example as traffic training, use of public transportation or shopping. These ongoing therapeutic interventions were continued for up to four weeks according to the ability and needs of the person. At least once in the home training period a follow-up visit by the team's nurse was done giving advice and information to the person and/or relatives about subjects like stroke sequelae, lifestyle (smoking, alcohol, diet, hypertension and more), medication, fatigue, dperession, incontinence, etc. The nurse helped people contacting their general practitioner to facilitate follow-up and control visits when needed. About three weeks after hospital discharge, and before the end of home training course, the multidisciplinary team's therapists made a rehabilitation plan for the patient in order to inform the municipality health care professionals of ongoing and future goals. Furthermore, the patient was offered to have one of the multidisciplinary team's therapists participating in

the first outpatient training in the municipality to facilitate the transition. Thus, four weeks after hospital discharge, patients still in need of rehabilitation were provided treatments after standard community guidelines. Concomitant therapy: No additional information.

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 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.

Characteristics

Arm-level characteristics

Characteristic	**Early supported discharge (N = 38)**	**Usual care (N = 33)**
% Female Sample size	n = 22 ; % = 58	n = 19 ; % = 58
Mean age (SD) (years) Median (IQR)	78 (72 to 84)	79 (71 to 85)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR

Characteristic	Early supported discharge (N = 38)	Usual care (N = 33)
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Mean (SD)	NR (NR)	NR (NR)
Modified Rankin scale Median (IQR)	4 (4 to 4)	4 (4 to 4)

Outcomes

Study timepoints

- Baseline
- 3 month (End of scheduled follow-up for continuous outcomes)
- 5 month (End of scheduled follow-up for dichotomous outcomes)

Dichotomous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 3 month, N = 50	Early supported discharge, 5 month, N = 50	Usual care, Baseline, N = 50	Usual care, 3 month, N = 50	Usual care, 5 month, N = 50
Mortality Reported in the Cochrane review No of events	n = 0 ; % = 0	n = NA ; % = NA	n = 0 ; % = 50	n = 0 ; % = 0	n = NA ; % = NA	n = 3 ; % = 6

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 3 month, N = 50	Early supported discharge, 5 month, N = 50	Usual care, Baseline, N = 50	Usual care, 3 month, N = 50	Usual care, 5 month, N = 50
Physical dependency (death or dependency) Reported in the Cochrane review. Will be downgraded for indirectness due to including death in the outcome rather than just physical dependency. No of events	n = NA ; % = NA	n = NA ; % = NA	n = 17 ; % = 34	n = NA ; % = NA	n = NA ; % = NA	n = 25 ; % = 50

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better
Number of participants gathered from the Cochrane review, which included non-published data

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 3 month, N = 43	Early supported discharge, 5 month, N = 43	Usual care, Baseline, N = 50	Usual care, 3 month, N = 44	Usual care, 5 month, N = 44
Activities of daily living (barthel index) Reported in the Cochrane review. Scale range: unclear. Final values. Mean (SD)	NA (NA)	19.5 (5)	NA (NA)	NA (NA)	19 (3)	NA (NA)

Activities of daily living (barthel index) - Polarity - Higher values are better
Number of participants gathered from the Cochrane review, which included non-published data

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 3 month, N = 50	Early supported discharge, 5 month, N = 50	Usual care, Baseline, N = 50	Usual care, 3 month, N = 50	Usual care, 5 month, N = 50
Length of hospital stay (length of initial hospital stay) (days) Reported in the Cochrane review. Mean (SD)	NA (NA)	NA (NA)	16.5 (10)	NA (NA)	NA (NA)	15 (16)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better
Number of participants gathered from the Cochrane review, which included non-published data

Dichotomous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 3 month, N = 43	Early supported discharge, 5 month, N = 43	Usual care, Baseline, N = 50	Usual care, 3 month, N = 44	Usual care, 5 month, N = 44
Readmission to hospital Reported in the Cochrane review. No of events	n = NA ; % = NA	n = NA ; % = NA	n = 12 ; % = 28	n = NA ; % = NA	n = NA ; % = NA	n = 13 ; % = 30

Readmission to hospital - Polarity - Lower values are better
Number of participants gathered from the Cochrane review, which included non-published data

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes(1)-Mortality-NoOfEvents-Early supported discharge-Usual care-t5

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes(1)-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t5

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - outcome includes death as well as physical dependency)*

Continuousoutcomes(1)-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t5

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes(2)-Readmissiontohospital-NoOfEvents-Early supported discharge-Usual care-t5

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Mayo, 1998

Bibliographic Reference	Mayo, N; Wood-Dauphinee, S; Tamblyn, R; Cote, R; Gayton, D; Carlton, J; Buttery, J; There's no place like home: a trial of early discharge and intensive home rehabilitation post stroke; Cerebrovascular diseases (Basel, Switzerland); 1998; vol. 8 (no. Suppl 4); 94

Study details

Secondary publication of another included study- see primary study for details	Mayo, NE, Wood-Dauphinee, S, Côté, R et al. (2000) There's no place like home : an evaluation of early supported discharge for stroke. Stroke 31(5): 1016-1023
Other publications associated with this study included in review	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. Other studies associated with this study: Teng, J, Mayo, NE, Latimer, E et al. (2003) Costs and caregiver consequences of early supported discharge for stroke patients. Stroke 34(2): 528-536
Trial name / registration number	Named Montreal 2000 in the Cochrane review.

Mayo, 2000

Bibliographic Reference	Mayo, NE; Wood-Dauphinee, S; Côté, R; Gayton, D; Carlton, J; Buttery, J; Tamblyn, R; There's no place like home : an evaluation of early supported discharge for stroke; Stroke; 2000; vol. 31 (no. 5); 1016-1023

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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. Other studies associated with this study: Mayo, N, Wood-Dauphinee, S, Tamblyn, R et al. (1998) There's no place like home: a trial of early discharge and intensive home rehabilitation post stroke. Cerebrovascular diseases (Basel, Switzerland) 8 (Suppl 4): 94 Teng, J, Mayo, NE, Latimer, E et al. (2003) Costs and caregiver consequences of early supported discharge for stroke patients. Stroke 34(2): 528-536
Trial name / registration number	Named Montreal 2000 in the Cochrane review.
Study type	Randomised controlled trial (RCT)

Inclusion criteria	Acute stroke; persistent motor deficits after stroke; who had caregivers willing and able to provide live-in care for the person over a 4-week period after discharge from hospital.
Exclusion criteria	People who, by 28 days after stroke, still required the assistance of more than 1 person to walk; were people with cognitive impairment (>5 errors on the Short Portable Mental Status Questionnaire); with important coexisting conditions that affected their ability to function independently (eg, dialysis requirement, paraplegia).
Recruitment / selection of participants	
Intervention(s)	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. Team co-ordinated and delivered care. The home intervention consisted of prompt discharge from hospital with the immediate provision of follow-up services by a multidisciplinary team offering nursing, physical therapy, occupational therapy, speech therapy and dietary consultation. The duration of the intervention was 4 weeks for all participants. Medical follow-up was arranged at discharge and was not a direct part of the intervention, although project nurses were easily able to contact treating physicians when the need arose. Intervention, which was individualised to the person's needs, was coordinated by the team member who had the most contact with the person; this was usually the nurse or the physical therapist. Rehabilitation care was provided at 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. People were not scheduled to have >1 active treatment session per day, although a nursing visit was sometimes scheduled on the same day as therapy. Arrangements for further care after intervention was also made as needed. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study	Before study able to transfer with assistance of one from bed to chair People were excluded if they required the assistance of more than one person to walk

(with or without use of aids)	
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	≤6 weeks 4 weeks
Population subgroups	No additional information.
Comparator	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 themselves paid (rehabilitation services are covered by the government only if offered through a designated hospital or community center). Concomitant therapy: No additional information.
Number of participants	114

Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - The intervention was individualised to the person's needs 2a) Clear and fair eligibility criteria - See inclusion criteria 4b) Changing relationship with their partner - Required a caregiver for inclusion 8b) The need for early supported discharge coordination - Coordinated by the team 8c) Who is in the team? - Nursing, physical therapy, occupational therapy, speech therapy and dietary consultation. Treating physician available if they need it.

Study arms

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. Team co-ordinated and delivered care. The home intervention consisted of prompt discharge from hospital with the immediate provision of follow-up services by a multidisciplinary team offering nursing, physical therapy, occupational therapy, speech therapy and dietary consultation. The duration of the intervention was 4 weeks for all participants. Medical follow-up was arranged at discharge and was not a direct part of the intervention, although project nurses were easily able to contact treating physicians when the need arose. Intervention, which was indiviualised to the person's needs, was coordinated by the team member who had the most contact with the person; this was usually the nurse or the physical therapist. Rehabilitation care was provided at 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. People were not scheduled to have >1 active treatment session per day, although a nursing visit was sometimes scheduled on the same day as therapy. Arrangements for further care after intervention was also made as needed. Concomitant therapy: No additional information.

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 themselves paid (rehabilitation services are covered by the government only if offered through a designated hospital or community center). Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	**Early supported discharge (N = 58)**	**Usual care (N = 56)**
% Female Sample size	n = 21 ; % = 36.2	n = 16 ; % = 28.6
Mean age (SD) (years) Mean (SD)	70.3 (12.7)	69.6 (12.7)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Early supported discharge (N = 58)	Usual care (N = 56)
Sample size		
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Modified Rankin scale Mean (SD)	NR (NR)	NR (NR)

Outcomes

Study timepoints

- Baseline
- 3 month (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 58	Early supported discharge, 3 month, N = 58	Usual care, Baseline, N = 56	Usual care, 3 month, N = 56
Mortality Reported in the Cochrane review. No of events	n = 0 ; % = 0	n = 2 ; % = 3	n = 0 ; % = 0	n = 0 ; % = 0
Physical dependency (death or dependency) Reported in the Cochrane review. Will be downgraded for	n = NA ; % = NA	n = 17 ; % = 29	n = NA ; % = NA	n = 24 ; % = 43

Outcome	Early supported discharge, Baseline, N = 58	Early supported discharge, 3 month, N = 58	Usual care, Baseline, N = 56	Usual care, 3 month, N = 56
indirectness due to including mortality in the outcome rather than just dependency. No of events				

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 56	Early supported discharge, 3 month, N = 51	Usual care, Baseline, N = 47	Usual care, 3 month, N = 44
Person/participant generic health-related quality of life (SF-36) Scale range: 0-100. Final values. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
SF-36 physical health Mean (SD)	39.5 (9.6)	42.9 (10.1)	37.2 (8.4)	37.9 (10.6)
SF-36 Mental Health Mean (SD)	45.8 (*empty data*)	46.5 (11.7)	45.7 (12.3)	46.7 (10.8)

Person/participant generic health-related quality of life (SF-36) - Polarity - Higher values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 58	Early supported discharge, 3 month, N = 48	Usual care, Baseline, N = 56	Usual care, 3 month, N = 43
Activities of daily living (barthel index) Reported in the Cochrane review. Scale range: 0-100. Final values. Mean (SD)	84.6 (14.4)	97.1 (6.9)	82.7 (13.9)	95.1 (10.6)

Activities of daily living (barthel index) - Polarity - Higher values are better

Continuous outcomes (3)

Outcome	Early supported discharge, Baseline, N = 58	Early supported discharge, 3 month, N = 51	Usual care, Baseline, N = 56	Usual care, 3 month, N = 44
Extended activities of daily living (OARS) Reported in the Cochrane review. Scale range: 0-14. Final values. Mean (SD)	NR (NR)	11 (3.5)	NR (NR)	9.5 (3.9)

Extended activities of daily living (OARS) - Polarity - Higher values are better

Continuous outcomes (4)

Outcome	Early supported discharge, Baseline, N = 58	Early supported discharge, 3 month, N = 58	Usual care, Baseline, N = 56	Usual care, 3 month, N = 56
Length of hospital stay (length of initial hospital stay) Mean (SD)	NA (NA)	9.8 (5.3)	NA (NA)	12 (7.07)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - Includes death and dependency when the outcome is asking about dependency only)*

Continuousoutcomes(1)-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36physicalhealth-MeanSD-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36MentalHealth-MeanSD-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(3)-Extendedactivitiesofdailyliving(OARS)-MeanSD-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(4)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

McNamee, 1998

Bibliographic Reference	McNamee, P; Christensen, J; Soutter, J; Rodgers, H; Craig, N; Pearson, P; Bond, J; Cost analysis of early supported hospital discharge for stroke; Age and ageing; 1998; vol. 27 (no. 3); 345-351

Study details

Secondary publication of another included study- see primary study for details	Rodgers, H, Soutter, J, Kaiser, W et al. (1997) Early supported hospital discharge following acute stroke: pilot study results. Clinical rehabilitation 11(4): 280-287
Other publications associated with this study included in review	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. Other studies associated with this study: Soutter, J, Rodgers, H, Pearson, P et al. (1998) Qualitatively: why an early supported discharge service for stroke patients?. Clinical rehabilitation 12: 165
Trial name / registration number	Named Newcastle 1997 in the Cochrane review.

Mhurchu, 2000

Bibliographic Reference	Mhurchu, CN; Anderson, C; Rubenach, S; Clark, M; Spencer, C; Home or hospital for stroke rehabilitation? Results of a randomised controlled trial; Cerebrovascular diseases (Basel, Switzerland); 2000; vol. 10 (no. Suppl 2); 61

Study details

Secondary publication of another included study- see primary study for details	Anderson, C, Rubenach, S, Mhurchu, CN et al. (2000) Home or hospital for stroke rehabilitation? results of a randomized controlled trial : I: health outcomes at 6 months. Stroke 31(5): 1024-1031
Other publications associated with this study included in review	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. Other studies associated with this study: Anderson, C, Mhurchu, CN, Rubenach, S et al. (2000) Home or hospital for stroke Rehabilitation? Results of a randomized controlled trial : II: cost minimization analysis at 6 months. Stroke 31(5): 1032-1037 Hackett, M, Anderson, C, Vandal, A et al. (2000) One year follow-up of a RCT of accelerated hospital discharge and home-based stroke rehabilitation. Stroke 31(11): 2817-2818 Hackett, ML, Vandal, AC, Anderson, CS et al. (2002) Long-term outcome in stroke patients and caregivers following accelerated hospital discharge and home-based rehabilitation. Stroke 33(2): 643-645 Rubenach, S, Anderson, C, Clark, M et al. (1998) Early supportive discharge and rehabilitation trial (ESPRIT) in stroke: preliminary results. Australian and New Zealand journal of medicine 28: 498
Trial name / registration number	Named Adelaide 2000 in the Cochrane review.

Pandian, 2015

Bibliographic Reference	Pandian, JD; Felix, C; Kaur, P; Sharma, D; Julia, L; Toor, G; Arora, R; Gandhi, DB; Verma, SJ; Anderson, CS; et, al.; FAmily-Led RehabiliTaTion aftEr Stroke in INDia: the ATTEND pilot study; International journal of stroke; 2015; vol. 10 (no. 4); 609-614

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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.
Trial name / registration number	Named ATTEND pilot 2015 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Study location	India
Sources of funding	
Inclusion criteria	At least 18 years of age with residual disability (defined as requiring help from another person for everyday activities); within 1 month of a clinically definite acute stroke of any pathological type except subarachnoid haemorrhage.
Exclusion criteria	Assessed as being at a high probability of death within the next 6 months; were unable to identify a suitable family-nominated caregiver for training and subsequent delivery of care.
Intervention(s)	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 evidence-based intervention package included: 1. information on stroke recovery trajectory, risk, identification and management of low mood, and the importance of repeated practice of task-specific activities; 2. joint goal setting with patient, nominated family caregiver, and therapist (reviewed with the therapist as patient progresses and new goals set); 3. positioning, transfers, and mobility; 4. task-orientated training (particularly walking, upper-limb, and self-care tasks); and 5. discharge planning The local team developed a culturally appropriate, simple, pictorial 'manual' covering key exercises relevant to ADL. In addition to the manual, training exercises were also chosen from the website http://www.physiotherapyexercises.com or as determined best for the patient by the therapist, all adhering to the intervention 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. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear

Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	Not stated/unclear
Population subgroups	No additional information.
Comparator	Usual care N=54 Patients were free to access rehabilitation services provided on an in or outpatient basis after discharge from hospital but caregivers were not provided with trial-specific training. Concomitant therapy: No additional information.
Number of participants	104
Duration of follow-up	6 months
Indirectness	No additional information.
Elements of the study relating to qualitative themes	2a) Clear and fair eligibility criteria - See inclusion criteria.

	4b) Changing relationships with their partner - The intervention is teaching the carer to provide rehabilitation, and so this is a large element. 7c) Lack of training for carers - The intervention is about training the carer 7d) Limited support for carers - The intervention leads to the healthcare professionals providing more care to carers 8c) Who is in the team? - The input includes physiotherapy and the carer

Study arms

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 evidence-based intervention package included: 1. information on stroke recovery trajectory, risk, identification and management of low mood, and the importance of repeated practice of task-specific activities; 2. joint goal setting with patient, nominated family caregiver, and therapist (reviewed with the therapist as patient progresses and new goals set); 3. positioning, transfers, and mobility; 4. task-orientated training (particularly walking, upper-limb, and self-care tasks); and 5. discharge planning The local team developed a culturally appropriate, simple, pictorial 'manual' covering key exercises relevant to ADL. In addition to the manual, training exercises were also chosen from the website http://www.physiotherapyexercises.com or as determined best for the patient by the therapist, all adhering to the intervention 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. Concomitant therapy: No additional information.

Usual care (N = 54)
Patients were free to access rehabilitation services provided on an in or outpatient basis after discharge from hospital but caregivers were not provided with trial-specific training. Concomitant therapy: No additional information.

Characteristics

Study-level characteristics

Characteristic	**Study (N = 104)**
% Female Sample size	n = 43 ; % = 41
Mean age (SD) (years) Mean (SD)	60 (13)
Ethnicity Sample size	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR
Modified Rankin scale Sample size	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 6 month (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 6 month, N = 50	Usual care, Baseline, N = 54	Usual care, 6 month, N = 54
Mortality Reported in the Cochrane review. No of events	n = 0 ; % = 0	n = 13 ; % = 26	n = 0 ; % = 0	n = 7 ; % = 13
Physical dependency (death or dependency) Reported in the Cochrane review. Will be downgraded for indirectness due to including mortality in the outcome instead of just physical dependency. No of events	n = NA ; % = NA	n = 25 ; % = 50	n = NA ; % = NA	n = 30 ; % = 56

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 6 month, N = 34	Usual care, Baseline, N = 54	Usual care, 6 month, N = 41
Activities of daily living (barthel index) Reported in the Cochrane review. Scale range unclear. Final values.	NR (NR)	18 (3.4)	NR (NR)	16.5 (8.8)

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 6 month, N = 34	Usual care, Baseline, N = 54	Usual care, 6 month, N = 41
Mean (SD)				

Activities of daily living (barthel index) - Polarity - Lower values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 50	Early supported discharge, 6 month, N = 50	Usual care, Baseline, N = 54	Usual care, 6 month, N = 54
Length of hospital stay (length of initial hospital stay) (day) Reported in the Cochrane review. Mean (SD)	NA (NA)	10 (7.1)	NA (NA)	11.5 (7.9)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low

Section	Question	Answer
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low

Section	Question	Answer
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - Includes mortality in the outcome instead of just being physical dependency)*

Continuousoutcomes(1)-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Rafsten, 2019

Bibliographic Reference	Rafsten, Lena; Danielsson, Anna; Nordin, Asa; Bjorkdahl, Ann; Lundgren-Nilsson, Asa; Larsson, Maria E H; Sunnerhagen, Katharina S; Gothenburg Very Early Supported Discharge study (GOTVED): a randomised controlled trial investigating anxiety and overall disability in the first year after stroke.; BMC neurology; 2019; vol. 19 (no. 1); 277

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	Rafsten, Lena; Danielsson, Anna; Sunnerhagen, Katharina S (2020) Self-perceived postural balance correlates with postural balance and anxiety during the first year after stroke: a part of the randomized controlled GOTVED study. BMC neurology 20(1): 410
Trial name / registration number	NCT01622205
Study type	Randomised controlled trial (RCT)
Study location	Sweden (Gothenburg).
Study setting	Initially inpatient to home-based (early supported discharge).
Study dates	September 2011 to April 2016.
Sources of 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.

Inclusion criteria	Ischaemic or haemorrhagic stroke confirmed according to World Health Organisation criteria; age 18 years or older; residence within 30 minutes by car of the stroke unit; a National Institute of Health Stroke Scale (NIHSS) score of 0-16 points, which corresponds to mild-to-moderate stroke; a Barthel Index score of 50 points or more on day 2; a Montreal Cognitive Assessment index of 26 points or less if Barthel Index = 100.
Exclusion criteria	People with a life expectancy <1 year (e.g., with severe malignancy) or who could neither speak nor communicate in Swedish prior to stroke.
Recruitment / selection of participants	People from a stroke unit at the Sahlgrenska University Hospital were consecutively included in the study.
Intervention(s)	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. To plan the rehabilitation, the person was asked to formulate their goals at a goal-setting meeting prior to discharge, and after that, an individual rehabilitation programme was designed. Common goals were to be able to go out and buy food, take care of the laundry, travel by bus or tram, and manage the bills. 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. In addition to training, the intervention also included tips on various activities to learn how to handle and adapt to different everyday activities and situations. If needed, the person could be referred to the outpatient rehabilitation team who would carry on the rehabilitation when discharged from the very early supported discharge. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Mild (or NIHSS 1-5)

	Mild to moderate (and early severe) (0-16) allowed in the study. Median value 3 (1-5).
Subgroup 3 - Modified Rankin scale	Mixed Median 2 (IQR 2-3)
Subgroup 4 - Number of days of rehabilitation provided per week	<5 days Assumed from the number of contacts with professionals that can be had.
Subgroup 5 - Length of intervention	≤6 weeks 4 weeks
Population subgroups	No additional information.
Comparator	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 outpatient rehabilitation. Concomitant therapy: No additional information.
Number of participants	140
Duration of follow-up	12 months
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - Based on goal setting that is individual to the person. The number of visits are dependent on the person's needs. There is a maximal duration for care, but if people require more care they can be seen as outpatients.

	2a) Clear and fair eligibility criteria - See inclusion criteria. 8b) The need for early supported discharge coordination - No mention of coordination. 8c) Who is in the team? - Physiotherapist, occupational therapist, stroke nurse.
Additional comments	No additional information. Appears to be available case analysis.

Study arms

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. To plan the rehabilitation, the person was asked to formulate their goals at a goal-setting meeting prior to discharge, and after that, an individual rehabilitation programme was designed. Common goals were to be able to go out and buy food, take care of the laundry, travel by bus or tram, and manage the bills. 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. In addition to training, the intervention also included tips on various activities to learn how to handle and adapt to different everyday activities and situations. If needed, the person could be referred to the outpatient rehabilitation team who would carry on the rehabilitation when discharged from the very early supported discharge. Concomitant therapy: No additional information.

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 outpatient rehabilitation. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Early supported discharge (N = 69)	Usual care (N = 71)
% Female Sample size	n = 27 ; % = 39	n = 27 ; % = 38
Mean age (SD) (years) Mean (SD)	75 (11)	73 (12)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Median (IQR)	3 (1 to 5)	2 (1 to 5)
Modified Rankin scale Median (IQR)	2 (2 to 3)	2 (2 to 3)

Outcomes

Study timepoints

- Baseline
- 12 month (End of scheduled follow-up)

Dichotomous outcome

Outcome	Early supported discharge, Baseline, N = 69	Early supported discharge, 12 month, N = 69	Usual care, Baseline, N = 71	Usual care, 12 month, N = 71
Mortality From PRISMA diagram - 1 in each group No of events	n = NA ; % = NA	n = 1 ; % = 2	n = NA ; % = NA	n = 1 ; % = 1

Mortality - Polarity - Lower values are better

Continuous outcome

Outcome	Early supported discharge, Baseline, N = 69	Early supported discharge, 12 month, N = 69	Usual care, Baseline, N = 71	Usual care, 12 month, N = 71
Length of hospital stay (day) Mean (SD)	NA (NA)	11.8 (6.7)	NA (NA)	13.8 (8.4)

Length of hospital stay - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcome-Mortality-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcome-Lengthofhospitalstay-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Rafsten, 2020

Bibliographic Reference	Rafsten, Lena; Danielsson, Anna; Sunnerhagen, Katharina S; Self-perceived postural balance correlates with postural balance and anxiety during the first year after stroke: a part of the randomized controlled GOTVED study.; BMC neurology; 2020; vol. 20 (no. 1); 410

Study details

Secondary publication of another included study- see primary study for details	Rafsten, Lena, Danielsson, Anna, Nordin, Asa et al. (2019) Gothenburg Very Early Supported Discharge study (GOTVED): a randomised controlled trial investigating anxiety and overall disability in the first year after stroke. BMC neurology 19(1): 277

Other publications associated with this study included in review	No additional information.

Rasmussen, 2016

Bibliographic Reference	Rasmussen, R.S.; Ostergaard, A.; Kjaer, P.; Skerris, A.; Skou, C.; Christoffersen, J.; Seest, L.S.; Poulsen, M.B.; Ronholt, F.; Overgaard, K.; Stroke rehabilitation at home before and after discharge reduced disability and improved quality of life: a randomised controlled trial; Clinical rehabilitation; 2016; vol. 30 (no. 3); 225-236

Study details

Secondary publication of another included study- see primary study for details	Kjaer, P, Skerris, A, Ostergaard, A et al. (2009) Multidisciplinary hometraining of stroke patients. A randomised control intervention. Gentofte Hospital Report
Other publications associated with this study included in review	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. Other studies associated with this study:

	Rasmussen, R.S., Ostergaard, A., Kjaer, P. et al. (2016) Stroke rehabilitation at home before and after discharge reduced disability and improved quality of life: a randomised controlled trial. Clinical rehabilitation 30(3): 225-236
Trial name / registration number	Named Copenhagen 2009 in the Cochrane review.

Rodgers, 1997

Bibliographic Reference	Rodgers, H; Soutter, J; Kaiser, W; Pearson, P; Dobson, R; Skilbeck, C; Bond, J; Early supported hospital discharge following acute stroke: pilot study results; Clinical rehabilitation; 1997; vol. 11 (no. 4); 280-287

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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. Other studies associated with this study:

	McNamee, P, Christensen, J, Soutter, J et al. (1998) Cost analysis of early supported hospital discharge for stroke. Age and ageing 27(3): 345-351 Soutter, J, Rodgers, H, Pearson, P et al. (1998) Qualitatively: why an early supported discharge service for stroke patients?. Clinical rehabilitation 12: 165
Trial name / registration number	Named Newcastle 1997 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Sources of funding	Funded by National CVD & Stroke R & D Programme, and by Newcastle Health Authority Primary Care Development Fund.
Inclusion criteria	Their home address was in Newcastle; they were not living in residential or nursing home care prior to the incident stroke; they were not severely handicapped prior to the incident stroke (Oxford Handicap Scale 0-3); medically stable with a Barthel Activities of Daily Living Index between 5 and 19 at the 72 hours post stroke.
Exclusion criteria	Other condition likely to preclude rehabilitation.
Recruitment / selection of participants	
Intervention(s)	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. The structure of the team was a pragmatic decision, based upon the anticipated workload, the available resources and views of the leaders of local services. The team consisted of a service coordinator (a job share between an occupational therapist and physiotherapist); 1.25 whole time equivalent (wte) senior occupational therapists; 0.75 wte senior physiotherapist; 0.5 wte speech and language therapist; 0.5 wte social worker; 0.3 wte occupational therapy technician; 1.0 wte secretary. Nursing posts were not established as the district nursing service preferred that nursing care for stroke patients was provided by the primary care team. Postdischarge medical care was provided by the person's general practitioner with support as required from a consultant with an interest in stroke medicine. Home care services, when required, were provided to people randomised to early supported discharge by Newcastle City Health Trust. Home

	care workers were given specific training in the needs and care of stroke patients. Prior to implementing the new service there was an opportunity for the Stroke Discharge Team to develop methods of interdisciplinary working and communication systems with patients and carers, within the team and with other professionals in health and social services. These included weekly interdisciplinary team meetings; a key worker approach; multiprofessional case notes; a patient-held record which remained with the person and to which the person and carer were encouraged to contribute; information sheets for the person and their family; review meetings involving the person and carers in their own homes. The team aimed to establish a relationship with referred stroke survivors and their families early during their hospital stay and members liaised closely with ward and rehabilitation staff, attended ward multidisciplinary meetings, and on occasion carried out joint assessments. In partnership with the person and carer, and the ward and community staff, the team attempted to plan and provide a smooth organised discharge and to identify continuing rehabilitation and social needs. Home visits were carried out by a member of the team without the person. This allowed carers an opportunity to express concerns and worries away from the clinical setting. On the day of discharge a member of the team brought the person home, providing encouragement and support at what was a stressful time for many people and carers. In addition, this was an opportunity to reassure the person and carer that plans for rehabilitation and social support were in place. The stroke discharge rehabilitation service was available five days per week but the home care component of the service was available 24 hours per day and seven days per week if required. There was no time limit as to how long members of the team continued to be involved with individual people. Carers as a whole felt able to take continued responsibility for the rehabilitation after some time. There was a small group of people who required continued social support which was provided through social services. The stroke discharge service was withdrawn gradually and a contact name and number was provided to people in case of subsequent queries or problems. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear

Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	7 days Up to 7 days per week
Subgroup 5 - Length of intervention	Other As long as required
Population subgroups	No additional information.
Comparator	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 additional information.
Number of participants	92
Duration of follow-up	12 months
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - Care was provided for as long as the person needed. Care planning was agreed with the person. Collaborative process. 2a) Clear and fair eligibility criteria - See inclusion criteria.

	4b) Changing relationship with their partner - Carer involvement is emphasised throughout and ultimately the carer was expected to take over at the end of the process. 5d) Suitability of home/equipment - A home visit is taken to address concerns 7b) Not involved in decision making - Steps taken to include the person and the carer in the decision making processes 7d) Limited support for carers - Additional support was added in to discuss carer concerns while at a home visit 8f) Access to professionals when you need them - Professionals available 24 hours a day, 7 days a week 10a) Providing therapy for as long as it is needed - Therapy is provided for as long as necessary 10b) Early supported discharge bridging the gap between inpatient and community services - Some parts of the package were delivered by community care, whiles others were by the ESD team and so helps with transition of care.
Additional comments	No additional information.

Study arms

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. The structure of the team was a pragmatic decision, based upon the anticipated workload, the available resources and views of the leaders of local services. The team consisted of a service coordinator (a job share between an occupational therapist and physiotherapist); 1.25 whole time equivalent (wte) senior occupational therapists; 0.75 wte senior physiotherapist; 0.5 wte speech and language therapist; 0.5 wte social worker; 0.3 wte occupational therapy technician; 1.0 wte secretary. Nursing posts were not established as the district nursing service preferred that nursing care for stroke patients was provided by the primary care team. Postdischarge medical care was provided by the person's general practitioner with support as required from a consultant with an interest in stroke medicine.

Home care services, when required, were provided to people randomised to early supported discharge by Newcastle City Health Trust. Home care workers were given specific training in the needs and care of stroke patients. Prior to implementing the new service there was an opportunity for the Stroke Discharge Team to develop methods of interdisciplinary working and communication systems with patients and carers, within the team and with other professionals in health and social services. These included weekly interdisciplinary team meetings; a key worker approach; multiprofessional case notes; a patient-held record which remained with the person and to which the person and carer were encouraged to contribute; information sheets for the person and their family; review meetings involving the person and carers in their own homes. The team aimed to establish a relationship with referred stroke survivors and their families early during their hospital stay and members liaised closely with ward and rehabilitation staff, attended ward multidisciplinary meetings, and on occasion carried out joint assessments. In partnership with the person and carer, and the ward and community staff, the team attempted to plan and provide a smooth organised discharge and to identify continuing rehabilitation and social needs. Home visits were carried out by a member of the team without the person. This allowed carers an opportunity to express concerns and worries away from the clinical setting. On the day of discharge a member of the team brought the person home, providing encouragement and support at what was a stressful time for many people and carers. In addition, this was an opportunity to reassure the person and carer that plans for rehabilitation and social support were in place. The stroke discharge rehabilitation service was available five days per week but the home care component of the service was available 24 hours per day and seven days per week if required. There was no time limit as to how long members of the team continued to be involved with individual people. Carers as a whole felt able to take continued responsibility for the rehabilitation after some time. There was a small group of people who required continued social support which was provided through social services. The stroke discharge service was withdrawn gradually and a contact name and number was provided to people in case of subsequent queries or problems. Concomitant therapy: No additional information.

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 additional information.

Characteristics

Arm-level characteristics

Characteristic	Early supported discharge (N = 46)	Usual care (N = 46)
% Female Sample size	n = 20 ; % = 43	n = 22 ; % = 48
Mean age (SD) (years) Median (IQR)	73 (47 to 93)	73 (44 to 91)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR	n = NR ; % = NR
Modified Rankin scale Mean (SD)	NR (NR)	NR (NR)

Outcomes

Study timepoints

- Baseline
- 12 month (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 46	Early supported discharge, 12 month, N = 46	Usual care, Baseline, N = 46	Usual care, 12 month, N = 46
Mortality Reported in the Cochrane review. No of events	n = NA ; % = NA	n = 2 ; % = 4	n = NA ; % = NA	n = 4 ; % = 9
Physical dependency (death or dependency) Reported in the Cochrane review. Will be downgraded for indirectness due to including death as well as physical dependency. No of events	n = NA ; % = NA	n = 22 ; % = 48	n = NA ; % = NA	n = 28 ; % = 61
Readmission to hospital Reported in the Cochrane review. No of events	n = NA ; % = NA	n = 5 ; % = 11	n = NA ; % = NA	n = 5 ; % = 11

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better
Readmission to hospital - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 46	Early supported discharge, 12 month, N = 45	Usual care, Baseline, N = 46	Usual care, 12 month, N = 42
Extended activities of daily living (Nottingham extended activities of daily living) Reported in the Cochrane review. Scale range: unclear. Final values. Mean (SD)	NR (NR)	10 (13)	NR (NR)	7 (15)
Psychological distress/mood (Wakefield depression inventory) Reported in the Cochrane review. Scale range: Unclear. Final values. Mean (SD)	NR (NR)	3 (2.9)	NR (NR)	3 (2.9)

Extended activities of daily living (Nottingham extended activities of daily living) - Polarity - Higher values are better
Psychological distress/mood (Wakefield depression inventory) - Polarity - Lower values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 46	Early supported discharge, 12 month, N = 44	Usual care, Baseline, N = 46	Usual care, 12 month, N = 42
Length of hospital stay (length of initial hospital stay) (days) Reported in the Cochrane review. Mean (SD)	NA (NA)	21.6 (24.59)	NA (NA)	33.8 (35.22)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Continuousoutcomes(1)-Extendedactivitiesofdailyliving(Nottinghamextendedactivitiesofdailyliving)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Readmissiontohospital-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low

Section	Question	Answer
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - Downgraded for including death and dependency rather than just dependency)*

Continuousoutcomes(1)-Psychologicaldistress/mood(Wakefielddepressioninventory)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Rønning, 1998

Bibliographic Reference	Rønning, OM; Guldvog, B; Outcome of subacute stroke rehabilitation: a randomized controlled trial; Stroke; 1998; vol. 29 (no. 4); 779-784

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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.
Trial name / registration number	Named Akershus 1998 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Sources of funding	Supported by grants from the National Association for Heart and Vascular Diseases.
Inclusion criteria	Acute stroke patients 60 years of age or older; a Scandinavian Stroke Scale score between 12 and 52; conscious on admission; could cooperate in the rehabilitation program (scored at least 4 points on the subject orientation section of the Scandinavian Stroke Scale). People with recurrent strokes and malignant diseases not in the terminal stages were included.
Exclusion criteria	People who were comatose or somnolent on admission (even if they showed improvement in consciousness during the first few days after hospitalisation); people admitted from nursing homes.
Intervention(s)	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. There was thorough communication between the hospital and the primary health care provider before transfer of the person to the community. For stroke survivors with speech disorders, the speech therapist in the hospital obtained information about follow-up in the community. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	Not stated/unclear

Population subgroups	No additional information.
Comparator	Usual care N=127 Control patients received conventional inpatient rehabilitation in a 6-bed bay of a rehabilitation unit. 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.
Number of participants	251
Duration of follow-up	7 months.
Indirectness	No additional information.
Elements of the study relating to qualitative themes	8b) The need for early supported discharge coordination - No information about coordination. 8c) Who is in the team? - Physiotherapist, speech therapist and nurse
Additional comments	No additional information.

Study arms

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. There was thorough communication between the hospital and the primary health care provider before transfer of the person to the community. For stroke survivors with speech disorders, the speech therapist in the hospital obtained information about follow-up in the community. Concomitant therapy: No additional information.

Usual care (N = 127)
Control patients received conventional inpatient rehabilitation in a 6-bed bay of a rehabilitation unit. 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.

Characteristics

Arm-level characteristics

Characteristic	**Early supported discharge (N = 124)**	**Usual care (N = 127)**
% Female Sample size	n = 60 ; % = 48.4	n = 60 ; % = 47.2
Mean age (SD) (years) Mean (SD)	76.5 (6.4)	75.5 (6.7)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NA ; % = NA	n = NA ; % = NA
Previous stroke	n = 30 ; % = 23.6	n = 30 ; % = 24.2

Characteristic	Early supported discharge (N = 124)	Usual care (N = 127)
Sample size		
Heart infarction Sample size	n = 17 ; % = 13.4	n = 29 ; % = 23.4
Atrial fibrillation Sample size	n = 18 ; % = 14.2	n = 20 ; % = 16.1
Hypertension Sample size	n = 53 ; % = 41.7	n = 63 ; % = 50.8
Diabetes Sample size	n = 19 ; % = 15	n = 15 ; % = 12.1
Malignancy Sample size	n = 15 ; % = 11.8	n = 8 ; % = 6.5
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Mean (SD)	NR (NR)	NR (NR)
Modified Rankin scale Mean (SD)	NR (NR)	NR (NR)

Outcomes

Study timepoints

- Baseline
- 7 month (End of scheduled follow-up)

Dichotomous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 124	Early supported discharge, 7 month, N = 124	Usual care, Baseline, N = 127	Usual care, 7 month, N = 127
Mortality Reported in the Cochrane review. No of events	n = NA ; % = NA	n = 20 ; % = 16	n = NA ; % = NA	n = 12 ; % = 10

Mortality - Polarity - Lower values are better

Continuous outcomes

Outcome	Early supported discharge, Baseline, N = 124	Early supported discharge, 7 month, N = 124	Usual care, Baseline, N = 127	Usual care, 7 month, N = 127
Person/participant generic health-related quality of life (SF-36) Scale range: 0-100. Final values. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
SF-36 physical health summary Mean (SD)	NR (NR)	48 (19)	NR (NR)	47 (20)
SF-36 mental health summary	NR (NR)	70 (17)	NR (NR)	70 (19)

Outcome	Early supported discharge, Baseline, N = 124	Early supported discharge, 7 month, N = 124	Usual care, Baseline, N = 127	Usual care, 7 month, N = 127
Mean (SD)				
Activities of daily living (barthel index) Reported in the Cochrane review. Scale range: 0-100. Final values. Mean (SD)	NR (NR)	95 (20)	NR (NR)	95 (20)

Person/participant generic health-related quality of life (SF-36) - Polarity - Higher values are better
Activities of daily living (barthel index) - Polarity - Higher values are better

Dichotomous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 124	Early supported discharge, 7 month, N = 92	Usual care, Baseline, N = 127	Usual care, 7 month, N = 108
Physical dependency (death or dependency) Taken from the study (rather than the combined outcome in the Cochrane review). Defined as Barthel Index <75. No of events	n = NA ; % = NA	n = 23 ; % = 25	n = NA ; % = NA	n = 16 ; % = 15

Physical dependency (death or dependency) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes(1)-Mortality-NoOfEvents-Early supported discharge-Usual care-t7

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36physicalhealthsummary-MeanSD-Early supported discharge-Usual care-t7

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36mentalhealthsummary-MeanSD-Early supported discharge-Usual care-t7

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low

Section	Question	Answer
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t7

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes(2)-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t7

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - includes*

Section	Question	Answer
		mortality instead of just physical dependency)

Rubenach, 1998

Bibliographic Reference	Rubenach, S; Anderson, C; Clark, M; Russell, M; Spencer, CM; Winsor, A; Early supportive discharge and rehabilitation trial (ESPRIT) in stroke: preliminary results; Australian and New Zealand journal of medicine; 1998; vol. 28; 498

Study details

Secondary publication of another included study- see primary study for details	Anderson, C, Rubenach, S, Mhurchu, CN et al. (2000) Home or hospital for stroke rehabilitation? results of a randomized controlled trial : I: health outcomes at 6 months. Stroke 31(5): 1024-1031
Other publications associated with this study included in review	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. Other studies associated with this study: Anderson, C, Mhurchu, CN, Rubenach, S et al. (2000) Home or hospital for stroke Rehabilitation? Results of a randomized controlled trial : II: cost minimization analysis at 6 months. Stroke 31(5): 1032-1037

	Hackett, M, Anderson, C, Vandal, A et al. (2000) One year follow-up of a RCT of accelerated hospital discharge and home-based stroke rehabilitation. Stroke 31(11): 2817-2818 Hackett, ML, Vandal, AC, Anderson, CS et al. (2002) Long-term outcome in stroke patients and caregivers following accelerated hospital discharge and home-based rehabilitation. Stroke 33(2): 643-645 Mhurchu, CN, Anderson, C, Rubenach, S et al. (2000) Home or hospital for stroke rehabilitation? Results of a randomised controlled trial. Cerebrovascular diseases (Basel, Switzerland) 10 (Suppl 2): 61
Trial name / registration number	Named Adelaide 2000 in the Cochrane review.

Rudd, 1997

Bibliographic Reference	Rudd, AG; Wolfe, CD; Tilling, K; Beech, R; Randomised controlled trial to evaluate early discharge scheme for patients with stroke; BMJ (Clinical research ed.); 1997; vol. 315 (no. 7115); 1039-1044

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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. Other studies associated with this study: Beech, R, Rudd, AG, Tilling, K et al. (1999) Economic consequences of early inpatient discharge to community-based rehabilitation for stroke in an inner-London teaching hospital. Stroke 30(4): 729-735
Trial name / registration number	Named London 1997 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Sources of 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.
Inclusion criteria	People fulfilling the World Health Organisation's definition of stroke; if people lived alone they needed to be able to perform functional independent transfer, and if they lived with a willing carer they needed to be able to perform transfer with assistance.
Exclusion criteria	If they lived too far away for the team to visit.
Intervention(s)	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. People remained in hospital until the required package of social services care could be organised and any home adaptations undertaken. A store of commodes, high chairs and toiler frames were kept by the team to expedite discharge. The people were assessed for rehabilitation needs before discharge in conjunction with the hospital based therapists to set initial objectives and to ensure continuity of care. After discharge, people were given a planned course of domiciliary physiotherapy, occupational therapy and speech therapy, with visits as frequently as considered appropriate (maximum one daily visit from each therapist). Each person had an individual care plan which was reviewed at a weekly team meeting.

	People received care from the team for a maximum of three months. On discharge people were referred to conventional services when appropriate. All other services apart from therapy were described for the conventional group. There was no augmentation of social services resources. The community therapy team comprised a senior physiotherapist grade 1 with neurological training, a senior occupational therapist grade 1, a half time speech and language therapist with adult neurological training and a full time therapy aide. A consultant physician coordinated the team and chaired the weekly clinical meeting. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Mixed Either independent (if alone) or with assistance of one (if they have a carer)
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	>6 weeks
Population subgroups	No additional information.

Comparator	Usual care N=164 These patients received conventional care (less than 50% managed in co-ordinated multidisciplinary stroke units) with conventional discharge planning and post discharge support. People allocated to conventional care continued with their treatment, discharge planning and outpatient care in the normal way. Stroke care at both hospitals is similar and well coordinated. 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 therapy.
Number of participants	331
Duration of follow-up	12 months.
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - Everyone had a personalised care plan. Care was provided for as long as required. 2a) Clear and fair eligibility - See inclusion criteria. 4b) Changing relationships with their partner - Partners became carers in some cases. However, it allowed partners to not want to be carers and alternative approaches in that scenario. 5d) Suitability of home/equipment - Suitability was assessed early and people were not discharged until equipment was available. 8b) The need for early supported discharge coordination - Coordination by a consultant physician.

	8c) Who is in the team? - Senior physiotherapist grade 1 with neurological training, a senior occupational therapist grade 1, a half time speech and language therapist with adult neurological training, a full time therapy aide, a consultant physician. 10a) Providing therapy for as long as it is needed - Therapy was provided for up to 1 month.
Additional comments	No additional information.

Study arms

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. Peeple remained in hospital until the required package of social services care could be organised and any home adaptations undertaken. A store of commodes, high chairs and toiler frames were kept by the team to expedite discharge. The people were assessed for rehabilitation needs before discharge in conjunction with the hospital based therapists to set initial objectives and to ensure continuity of care. After discharge, people were given a planned course of domiciliary physiotherapy, occupational therapy and speech therapy, with visits as frequently as considered appropriate (maximum one daily visit from each therapist). Each person had an individual care plan which was reviewed at a weekly team meeting. People received care from the team for a maximum of three months. On discharge people were referred to conventional services when appropriate. All other services apart from therapy were described for the conventional group. There was no augmentation of social services resources. The community therapy team comprised a senior physiotherapist grade 1 with neurological training, a senior occupational therapist grade 1, a half time speech and language therapist with adult neurological training and a full time therapy aide. A consultant physician coordinated the team and chaired the weekly clinical meeting.
Concomitant therapy: No additional information.

Usual care (N = 164)
These patients received conventional care (less than 50% managed in co-ordinated multidisciplinary stroke units) with conventional discharge planning and post discharge support. People allocated to conventional care continued with their treatment, discharge planning and outpatient care in the normal way. Stroke care at both hospitals is similar and well coordinated. 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 therapy.

Characteristics

Arm-level characteristics

Characteristic	Early supported discharge (N = 167)	Usual care (N = 164)
% Female Sample size	n = 75 ; % = 45	n = 71 ; % = 43
Mean age (SD) (years) Mean (SD)	70 (11)	72 (12)
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA
White Sample size	n = 124 ; % = 74	n = 122 ; % = 74
Black Caribbean Sample size	n = 26 ; % = 16	n = 28 ; % = 17
Black African Sample size	n = 10 ; % = 6	n = 4 ; % = 2

Characteristic	Early supported discharge (N = 167)	Usual care (N = 164)
Other Sample size	n = 7 ; % = 4	n = 10 ; % = 6
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Modified Rankin scale Sample size	n = NR ; % = NR	n = NR ; % = NR
Living conditions before stroke Sample size	n = NA ; % = NA	n = NA ; % = NA
Living alone Sample size	n = 51 ; % = 31	n = 62 ; % = 38
Living with another person Sample size	n = 104 ; % = 62	n = 87 ; % = 53
Institution/other Sample size	n = 12 ; % = 8	n = 15 ; % = 9

Characteristic	Early supported discharge (N = 167)	Usual care (N = 164)
Dysphasia Sample size	n = 68 ; % = 42	n = 57 ; % = 35
Incontinence Sample size	n = 47 ; % = 29	n = 46 ; % = 29

Outcomes

Study timepoints

- Baseline
- 1 year (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 167	Early supported discharge, 1 year, N = 167	Usual care, Baseline, N = 164	Usual care, 1 year, N = 164
Mortality Reported in the Cochrane review. No of events	n = NA ; % = NA	n = 26 ; % = 16	n = NA ; % = NA	n = 34 ; % = 21
Physical dependency (death or dependency) Reported in the Cochrane review. Shall be downgraded for indirectness for including mortality and dependency.	n = NA ; % = NA	n = 105 ; % = 63	n = NA ; % = NA	n = 109 ; % = 67

Outcome	Early supported discharge, Baseline, N = 167	Early supported discharge, 1 year, N = 167	Usual care, Baseline, N = 164	Usual care, 1 year, N = 164
No of events				
Readmission to hospital Reported in the Cochrane review. No of events	n = NA ; % = NA	n = 44 ; % = 26	n = NA ; % = NA	n = 42 ; % = 26

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better
Readmission to hospital - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 167	Early supported discharge, 1 year, N = 136	Usual care, Baseline, N = 164	Usual care, 1 year, N = 126
Activities of daily living (barthel index) Scale range: 0-20. Final values. Mean (SD)	15 (4)	16 (4)	15 (4)	16 (4)
Extended activities of daily living (Rivermead activities of daily living) Scale range: unclear. Final values. Mean (SD)	NR (NR)	27 (12)	NR (NR)	27 (11)

Activities of daily living (barthel index) - Polarity - Higher values are better
Extended activities of daily living (Rivermead activities of daily living) - Polarity - Higher values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 136	Early supported discharge, 1 year, N = 75	Usual care, Baseline, N = 126	Usual care, 1 year, N = 59
Caregiver strain index Scale range: 0-13. Final values. Mean (SD)	NR (NR)	5 (4)	NR (NR)	4 (3)

Caregiver strain index - Polarity - Lower values are better
Carer outcomes

Continuous outcomes (3)

Outcome	Early supported discharge, Baseline, N = 167	Early supported discharge, 1 year, N = 165	Usual care, Baseline, N = 164	Usual care, 1 year, N = 163
Length of hospital stay (length of initial hospital stay) (days) Reported in the Cochrane review. Mean (SD)	NA (NA)	32.8 (33.05)	NA (NA)	41.3 (40.09)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t1

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t1

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - downgraded due to including death and dependency, rather than just physical dependency)*

Dichotomousoutcomes-Readmissiontohospital-NoOfEvents-Early supported discharge-Usual care-t1

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Activitiesofdailyliving(barthelindex)-MeanSD-Early supported discharge-Usual care-t1

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Extendedactivitiesofdailyliving(Rivermeadactivitiesofdailyliving)-MeanSD-Early supported discharge-Usual care-t1

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Caregiverstrainindex-MeanSD-Early supported discharge-Usual care-t1

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(3)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t1

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Santana, 2017

Bibliographic Reference	Santana, Silvina; Rente, Jose; Neves, Conceicao; Redondo, Patricia; Szczygiel, Nina; Larsen, Torben; Jepsen, Birgitte; Langhorne, Peter; Early home-supported discharge for patients with stroke in Portugal: a randomised controlled trial.; Clinical rehabilitation; 2017; vol. 31 (no. 2); 197-206

Study details

Secondary publication of another included study- see primary study for details	No additional information.

Other publications associated with this study included in review	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.
Trial name / registration number	Named Aveiro 2016 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Sources of funding	The European Commission (FP7-Homecare 222954). NS was partially supported by FCT - the Portuguese Foundation for Science and Technology PhD (grant number SFRH/BD/69892/2010).
Inclusion criteria	People after stroke aged between 25 and 85 years admitted to the stroke unit who had some residual disability in the form of an initial Functional Independence Measure of up to 100; no significant previous neurological disability; who resided within the district of Aveiro.
Exclusion criteria	Major speech and language problems preventing participation in the study; major psychological illness or dementia (such as psychotic disorders and Alzheimer's disease); other severe comorbidity; pregnancy; transfer to another acute care hospital for more than five days.
Intervention(s)	Early supported discharge N=95 The intervention started in the stroke unit. The team co-ordinator at the hospital identified potential patients for the study. After obtaining the informed consent, the patient would be randomised and the case manager contacted to schedule a visit to the patient. 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. Team are co-ordinated via weekly multidisciplinary meetings. The EHSD intervention started in the stroke unit, where the patient and informal caregiver were met by their assigned EHSD case manager. The assigned case manager was 1 of 2 gerontologists who were included to help negotiate the fragmented nature of the Portuguese health and social care systems. Input from the EHSD team of therapists (2 physiotherapists, 2 occupational therapists, and a psychologist) was selected according to the needs of a particular patient. For patients discharged to their homes, the intervention continued directly after discharge to provide a seamless transfer from the hospital to home (individual rehabilitation plan, provision of aids and modifications, providing information and tailored training to the patient and family). Rehabilitation was focused on daily activities valued by the patient. Caregivers were trained and made aware of the ability of the patient and were encouraged to follow their progress. The EHSD team worked with patients to provide approximately 8 home-based training sessions for a maximum of 1 month. For patients

	discharged to an inpatient rehabilitation setting, contact with the EHSD team was reinitiated when discharge home was planned. For those patients discharged home while waiting for a place in a rehabilitation unit, the team provided rehabilitation at home to prevent loss of rehabilitation capability. The case manager met the person in the stroke unit and scheduled a meeting with the main carer. The case manager was also responsible for the administration of the early supported discharge team, providing back office help for the therapists and the stroke survivors. For people discharged to their homes, the intervention continued directly after discharge to provide a seamless transfer from the hospital to home. This included an individual rehabilitation plan with provision of aids and modifications at home, where economically feasible. For people discharged to an inpatient rehabilitation plan with provision of aids and modifications at home, where economically feasible. For people discharged to an inpatient rehabilitation setting for further inpatient rehabilitation, contact with the team was reinitiated when discharge home was planned. Each early supported discharge team intervention was planned taking into consideration the particular person's needs and expectations. The team worked with people to provide approximately eight home-based training sessions for a maximum of one month. In the group, people received education on healthy behaviours and information about stroke, its consequences, how to best participate in rehabilitation and how to find help within their communities. The team provided information and training tailored to the person's needs; the mix of physiotherapy, occupational therapy and psychology sessions was also adapted to the specific condition of each person. Rehabilitation was focused on daily activities valued by the person in their usual context. This was done in order to improve adherence, transfer of effort and adaptation to daily life. The content could include personally meaningful activities (e.g. 'to pain my nails again', 'to ride my bike again'), personal care, outdoor walking, shopping or leisure activities. Caregivers were trained and made aware of the competencies and ability of the person and were encouraged to follow their progress. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear

Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	<5 days
Subgroup 5 - Length of intervention	>6 weeks
Population subgroups	No additional information.
Comparator	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 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.
Number of participants	190
Duration of follow-up	6 months
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - The information provided was based on the needs of the person. Care was provided for a set period of time.

	2a) Clear and fair eligibility criteria - See inclusion criteria. 4b) Changing relationships with their partner - Carers were involved in the conversations for this intervention. 7c) Lack of training for carers - Carers were involved in the training for this intervention. 8b) The need for early supported discharge coordination - Coordination from two gerontologists 8c) Who is in the team? - A physiotherapist, occupational therapist, gerontologist (case manager), and psychologist. 10a) Providing therapy for as long as it is needed - Provided over 8 weeks

Study arms

Early supported discharge (N = 95)
The intervention started in the stroke unit. The team co-ordinator at the hospital identified potential patients for the study. After obtaining the informed consent, the patient would be randomised and the case manager contacted to schedule a visit to the patient. 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. Team are co-ordinated via weekly multidisciplinary meetings. The EHSD intervention started in the stroke unit, where the patient and informal caregiver were met by their assigned EHSD case manager. The assigned case manager was 1 of 2 gerontologists who were included to help negotiate the fragmented nature of the Portuguese health and social care systems. Input from the EHSD team of therapists (2 physiotherapists, 2 occupational therapists, and a psychologist) was selected according to the needs of a particular patient. For patients discharged to their homes, the intervention continued directly after discharge to provide a seamless transfer from the hospital to home (individual rehabilitation plan, provision of aids and modifications, providing information and tailored training to the patient and family). Rehabilitation was focused on daily activities valued by the patient. Caregivers were trained and made aware of the ability of the patient and were encouraged to follow their progress. The EHSD team worked with patients to provide approximately 8 home-based training sessions for a maximum of 1 month. For patients discharged to an inpatient rehabilitation setting, contact with the EHSD team was reinitiated when discharge home was planned. For those patients discharged home while waiting for a place in a rehabilitation unit, the team provided rehabilitation at home to prevent loss of rehabilitation capability. The case manager met the person in the stroke unit and scheduled a meeting with the main carer. The case manager was

also responsible for the administration of the early supported discharge team, providing back office help for the therapists and the stroke survivors. For people discharged to their homes, the intervention continued directly after discharge to provide a seamless transfer from the hospital to home. This included an individual rehabilitation plan with provision of aids and modifications at home, where economically feasible. For people discharged to an inpatient rehabilitation plan with provision of aids and modifications at home, where economically feasible. For people discharged to an inpatient rehabilitation setting for further inpatient rehabilitation, contact with the team was reinitiated when discharge home was planned. Each early supported discharge team intervention was planned taking into consideration the particular person's needs and expectations. The team worked with people to provide approximately eight home-based training sessions for a maximum of one month. In the group, people received education on healthy behaviours and information about stroke, its consequences, how to best participate in rehabilitation and how to find help within their communities. The team provided information and training tailored to the person's needs; the mix of physiotherapy, occupational therapy and psychology sessions was also adapted to the specific condition of each person. Rehabilitation was focused on daily activities valued by the person in their usual context. This was done in order to improve adherence, transfer of effort and adaptation to daily life. The content could include personally meaningful activities (e.g. 'to pain my nails again', 'to ride my bike again'), personal care, outdoor walking, shopping or leisure activities. Caregivers were trained and made aware of the competencies and ability of the person and were encouraged to follow their progress. Concomitant therapy: No additional information.

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 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.

Characteristics

Arm-level characteristics

Characteristic	Early supported discharge (N = 95)	Usual care (N = 95)
% Female	n = 48 ; % = 51	n = 41 ; % = 43

Characteristic	Early supported discharge (N = 95)	Usual care (N = 95)
Sample size		
Mean age (SD) (years) Range	40 to 84	35 to 84
Mean age (SD) (years) Mean (SD)	67.5 (NR)	66.5 (NR)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Modified Rankin scale Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline

- 6 month (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 95	Early supported discharge, 6 month, N = 95	Usual care, Baseline, N = 95	Usual care, 6 month, N = 95
Mortality Reported in the Cochrane review. No of events	n = 0 ; % = 0	n = 2 ; % = 2	n = 0 ; % = 0	n = 1 ; % = 1
Physical dependency (death or dependency) Reported in the Cochrane review. Will be downgraded for indirectness due to the outcome including mortality instead of just physical dependency. No of events	n = NA ; % = NA	n = 2 ; % = 2	n = NA ; % = NA	n = 5 ; % = 5

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 92	Early supported discharge, 6 month, N = 74	Usual care, Baseline, N = 93	Usual care, 6 month, N = 78
Activities of daily living (functional independence measure) Reported in the Cochrane review. Scale range: 18-126. Final values. Mean (SD)	69 (21.3)	107.4 (19.9)	70.5 (18.7)	106.6 (25.5)

Activities of daily living (functional independence measure) - Polarity - Higher values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 91	Early supported discharge, 6 month, N = 73	Usual care, Baseline, N = 93	Usual care, 6 month, N = 74
Extended activities of daily living (Frenchay Activities Index) Included in the Cochrane review. Scale range: Unclear. Final values. Mean (SD)	43.4 (19.1)	34.6 (17.6)	42.9 (17)	32.2 (11.4)

Extended activities of daily living (Frenchay Activities Index) - Polarity - Lower values are better

Continuous outcomes (3)

Outcome	Early supported discharge, Baseline, N = 95	Early supported discharge, 6 month, N = 95	Usual care, Baseline, N = 95	Usual care, 6 month, N = 95
Length of hospital stay (length of initial hospital stay) (days) Reported in the Cochrane review. Mean (SD)	NA (NA)	9.8 (5.3)	NA (NA)	10 (5.3)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - due to the outcome including death and physical dependency, rather than just dependency)*

Continuousoutcomes(1)-Activitiesofdailyliving(functionalindependencemeasure)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Extendedactivitiesofdailyliving(FrenchayActivitiesIndex)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Some concerns
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(3)-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Soutter, 1998

Bibliographic Reference	Soutter, J; Rodgers, H; Pearson, P; Kaiser, W; Skilbeck, C; Bond, J; Qualitatively: why an early supported discharge service for stroke patients?; Clinical rehabilitation; 1998; vol. 12; 165

Study details

Secondary publication of another included study- see primary study for details	Rodgers, H, Soutter, J, Kaiser, W et al. (1997) Early supported hospital discharge following acute stroke: pilot study results. Clinical rehabilitation 11(4): 280-287
Other publications associated with this study included in review	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. Other studies associated with this study: McNamee, P, Christensen, J, Soutter, J et al. (1998) Cost analysis of early supported hospital discharge for stroke. Age and ageing 27(3): 345-351
Trial name / registration number	Named Newcastle 1997 in the Cochrane review.

Suwanwela, 2002

Bibliographic Reference	Suwanwela, NC; Phanthumchinda, K; Limtongkul, S; Suvanprakorn, P; Comparison of short (3-day) hospitalization followed by home care treatment and conventional (10-day) hospitalization for acute ischemic stroke; Cerebrovascular diseases (Basel, Switzerland); 2002; vol. 13 (no. 4); 267-271

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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.
Trial name / registration number	Named Bangkok 2002 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Sources of funding	Supported by the Research program, Faculty of Medicine, Chulalongkorn University.
Inclusion criteria	Aged between 18 and 80; ischaemic stroke diagnosed by emergency brain CT scan.
Exclusion criteria	People with alteration of consciousness; NIHSS more than 20; large infarct by clinical and CT scan; people who had a known embolic source such as cardiogenic embolism or significant carotid stenosis; people with a moderate degree of aphasia.
Intervention(s)	Early supported discharge N=52 Discharge on 4th day to home care programme managed by 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. Volunteers reported back to nursing staff. To ensure a friendly environment and a close relationship between the stroke survivor, their relatives and the Red Cross volunteer, the first volunteer visit to the person was started during admission. The same group of volunteers, usually consisting of 3-4 people, subsequently followed each person at home. During the home visits the volunteer completed a preprinted worksheet including: check list of stroke and treatment complications, NIH stroke scale, Barthel index, modified Rankin scale and person satisfaction form. During the home visit, the Red Cross volunteers were always able to 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. Concomitant therapy: No additional information.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Moderate (or NIHSS 5-14)
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	<5 days
Subgroup 5 - Length of intervention	>6 weeks
Population subgroups	No additional information.

Comparator	Usual care N=50 Managed in neurological or medical department for up to 10 days. Concomitant therapy: No additional information.
Number of participants	102
Duration of follow-up	6 months
Indirectness	No additional information.
Elements of the study relating to qualitative themes	1) Person-centred care - Appears to be a fixed program rather than person-specific 2a) Clear and fair eligibility criteria - See inclusion criteria. 8c) Who is in the team? - Volunteers from the Red Cross, supported by nursing staff and physicians. 10a) Providing therapy for as long as it is needed - Appears to be a fixed program rather than person-specific
Additional comments	No additional information.

Study arms

Early supported discharge (N = 52)
Discharge on 4th day to home care programme managed by 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. Volunteers reported back to nursing staff. To ensure a friendly environment and a close relationship between the stroke survivor, their relatives and the Red Cross volunteer, the first volunteer visit to the person was started during admission. The same group of volunteers, usually consisting of 3-4 people, subsequently followed each person at home. During

the home visits the volunteer completed a preprinted worksheet including: check list of stroke and treatment complications, NIH stroke scale, Barthel index, modified Rankin scale and person satisfaction form. During the home visit, the Red Cross volunteers were always able to 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. Concomitant therapy: No additional information.

Usual care (N = 50)
Managed in neurological or medical department for up to 10 days. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	**Early supported discharge (N = 52)**	**Usual care (N = 50)**
% Female Sample size	n = 21 ; % = 40	n = 28 ; % = 56
Mean age (SD) (years) Mean (SD)	58.4 (9.6)	59.8 (9.9)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NA ; % = NA	n = NA ; % = NA
Hypertension	n = 32 ; % = 62	n = 29 ; % = 58

Characteristic	Early supported discharge (N = 52)	Usual care (N = 50)
Sample size		
Diabetes mellitus Sample size	n = 15 ; % = 29	n = 10 ; % = 20
Ischaemic heart disease Sample size	n = 4 ; % = 8	n = 2 ; % = 4
Old cardiovascular disease Sample size	n = 3 ; % = 6	n = 3 ; % = 6
Dyslipidaemia Sample size	n = 12 ; % = 23	n = 9 ; % = 18
Smoking Sample size	n = 17 ; % = 33	n = 12 ; % = 24
Alcohol consumption Sample size	n = 6 ; % = 12	n = 4 ; % = 8
Ability to transfer prior to discharge/study Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Mean (SD)	6.03 (3.6)	6.18 (3.4)
Modified Rankin scale Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 6 month (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 52	Early supported discharge, 6 month, N = 52	Usual care, Baseline, N = 50	Usual care, 6 month, N = 50
Mortality Reported in the Cochrane review. No of events	n = 0 ; % = 0	n = 1 ; % = 2	n = 0 ; % = 0	n = 0 ; % = 0
Physical dependency (death or dependency) Reported in the Cochrane review. Will be downgraded for indirectness due to including mortality as well as physical dependency. No of events	n = NA ; % = NA	n = 9 ; % = 17	n = NA ; % = NA	n = 11 ; % = 22

Mortality - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better

Continuous outcome

Outcome	Early supported discharge, Baseline, N = 52	Early supported discharge, 6 month, N = 52	Usual care, Baseline, N = 50	Usual care, 6 month, N = 50
Length of hospital stay (length of initial hospital stay) (days) Reported in the Cochrane review. Mean (SD)	NA (NA)	3 (3)	NA (NA)	10 (5)

Length of hospital stay (length of initial hospital stay) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcome-Lengthofhospitalstay(lengthofinitialhospitalstay)-MeanSD-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t6

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Some concerns
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - downgraded for including mortality in the outcome rather than only physical dependency)*

Taule, 2013

Bibliographic Reference	Taule, T; Skouen, JS; Raheim, M; Life changed existentially. A qualitative study of experiences 6 months post stroke; Cerebrovascular diseases (Basel, Switzerland); 2013; vol. 35suppl3; 764

Study details

Secondary publication of another included study- see primary study for details	Hofstad, H, Gjelsvik, BE, Næss, H et al. (2014) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual. BMC neurology 14: 239
Other publications associated with this study included in review	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. Other studies associated with this study: Gjelsvik, BEB, Smedal, T, Hofstad, H et al. (2013) Balance and walking outcome after stroke rehabilitation - a randomised controlled trial comparing two early discharge models with treatment as usual. Cerebrovascular diseases (Basel, Switzerland) 35(suppl3): 95 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2013) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): a randomized controlled trial comparing rehabilitation in a day unit or in the patients' homes with conventional treatment. International journal of stroke 8(7): 582-587

	Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2012) ESD Stroke Bergen - an RCT comparing two different schemes of early supported discharge after stroke with ordinary treatment: results from 3 months follow-up. Neurorehabilitation and neural repair 26(6): 748 Taule, T, Strand, LI, Assmus, J et al. (2015) Ability in daily activities after early supported discharge models of stroke rehabilitation. Scandinavian journal of occupational therapy 22(5): 355-365 Taule, Tina, Strand, Liv Inger, Skouen, Jan Sture et al. (2015) Striving for a life worth living: stroke survivors' experiences of home rehabilitation. Scandinavian journal of caring sciences 29(4): 651-61
Trial name / registration number	Named Bergen 2014 in the Cochrane review.

Taule, 2015

Bibliographic Reference	Taule, T; Strand, LI; Assmus, J; Skouen, JS; Ability in daily activities after early supported discharge models of stroke rehabilitation; Scandinavian journal of occupational therapy; 2015; vol. 22 (no. 5); 355-365

Study details

Secondary publication of another included study- see primary study for details	Hofstad, H, Gjelsvik, BE, Næss, H et al. (2014) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual. BMC neurology 14: 239
Other publications associated with	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.:

this study included in review	CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review. Other studies associated with this study: Gjelsvik, BEB, Smedal, T, Hofstad, H et al. (2013) Balance and walking outcome after stroke rehabilitation - a randomised controlled trial comparing two early discharge models with treatment as usual. Cerebrovascular diseases (Basel, Switzerland) 35(suppl3): 95 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2013) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): a randomized controlled trial comparing rehabilitation in a day unit or in the patients' homes with conventional treatment. International journal of stroke 8(7): 582-587 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2012) ESD Stroke Bergen - an RCT comparing two different schemes of early supported discharge after stroke with ordinary treatment: results from 3 months follow-up. Neurorehabilitation and neural repair 26(6): 748 Taule, T; Skouen, JS; Raheim, M (2013) Life changed existentially. A qualitative study of experiences 6 months post stroke. Cerebrovascular diseases (Basel, Switzerland) 35suppl3: 764 Taule, Tina, Strand, Liv Inger, Skouen, Jan Sture et al. (2015) Striving for a life worth living: stroke survivors' experiences of home rehabilitation. Scandinavian journal of caring sciences 29(4): 651-61
Trial name / registration number	Named Bergen 2014 in the Cochrane review.

Taule, 2015

Bibliographic Reference	Taule, Tina; Strand, Liv Inger; Skouen, Jan Sture; Raheim, Malfrid; Striving for a life worth living: stroke survivors' experiences of home rehabilitation.; Scandinavian journal of caring sciences; 2015; vol. 29 (no. 4); 651-61

Study details

Secondary publication of another included study- see primary study for details	Hofstad, H, Gjelsvik, BE, Næss, H et al. (2014) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): three and six months results of a randomised controlled trial comparing two early supported discharge schemes with treatment as usual. BMC neurology 14: 239
Other publications associated with this study included in review	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. Other studies associated with this study: Gjelsvik, BEB, Smedal, T, Hofstad, H et al. (2013) Balance and walking outcome after stroke rehabilitation - a randomised controlled trial comparing two early discharge models with treatment as usual. Cerebrovascular diseases (Basel, Switzerland) 35(suppl3): 95 Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2013) Early supported discharge after stroke in Bergen (ESD Stroke Bergen): a randomized controlled trial comparing rehabilitation in a day unit or in the patients' homes with conventional treatment. International journal of stroke 8(7): 582-587

	Hofstad, H, Naess, H, Moe-Nilssen, R et al. (2012) ESD Stroke Bergen - an RCT comparing two different schemes of early supported discharge after stroke with ordinary treatment: results from 3 months follow-up. Neurorehabilitation and neural repair 26(6): 748 Taule, T; Skouen, JS; Raheim, M (2013) Life changed existentially. A qualitative study of experiences 6 months post stroke. Cerebrovascular diseases (Basel, Switzerland) 35suppl3: 764 Taule, T, Strand, LI, Assmus, J et al. (2015) Ability in daily activities after early supported discharge models of stroke rehabilitation. Scandinavian journal of occupational therapy 22(5): 355-365
Trial name / registration number	Named Bergen 2014 in the Cochrane review.

Teng, 2003

Bibliographic Reference	Teng, J; Mayo, NE; Latimer, E; Hanley, J; Wood-Dauphinee, S; Côté, R; Scott, S; Costs and caregiver consequences of early supported discharge for stroke patients; Stroke; 2003; vol. 34 (no. 2); 528-536

Study details

Secondary publication of another included study- see primary study for details	Mayo, NE, Wood-Dauphinee, S, Côté, R et al. (2000) There's no place like home : an evaluation of early supported discharge for stroke. Stroke 31(5): 1016-1023
Other publications associated with	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.:

this study included in review	CD000443. DOI: 10.1002/14651858.CD000443.pub4. For further information about the data extraction please see the Cochrane review. Other studies associated with this study: Mayo, N, Wood-Dauphinee, S, Tamblyn, R et al. (1998) There's no place like home: a trial of early discharge and intensive home rehabilitation post stroke. Cerebrovascular diseases (Basel, Switzerland) 8 (Suppl 4): 94
Trial name / registration number	Named Montreal 2000 in the Cochrane review.

Thorsén, 2005

Bibliographic Reference	Thorsén, AM; Holmqvist, LW; de Pedro-Cuesta, J; von Koch, L; A randomized controlled trial of early supported discharge and continued rehabilitation at home after stroke: five-year follow-up of patient outcome; Stroke; a journal of cerebral circulation; 2005; vol. 36 (no. 2); 297-303

Study details

Secondary publication of another included study- see primary study for details	Widen Holmqvist, L, von Koch, L, Kostulas, V et al. (1998) A randomised controlled trial of rehabilitation at home after stroke in southwest Stockholm. Stroke 29: 591-597

Other publications associated with this study included in review	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. Other studies associated with this study: Thorsen, A-M; Widen Holmqvist, L; von Koch, L (2006) Early Supported Discharge and Continued Rehabilitation at Home After Stroke: 5-Year Follow-up of Resource Use. Journal of stroke and cerebrovascular diseases 15(4): 139-143 von Koch, L, de Pedro-Cuesta, J, Kostulas, V et al. (2001) Randomized controlled trial of rehabilitation at home after stroke: one-year follow-up of patient outcome, resource use and cost. Cerebrovascular diseases (Basel, Switzerland) 12(2): 131-138 Widen Holmqvist, L; von Koch, L; de Pedro-Cuesta, J (2000) Use of health care, impact on family caregivers and patient satisfaction of rehabilitation at home after stroke in southwest Sweden. Scandinavian journal of rehabilitation medicine 32: 173-179 Ytterberg, C, Thorsén, AM, Liljedahl, M et al. (2010) Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the neurological sciences 294(12): 86-88
Trial name / registration number	Named Stockholm 1998 in the Cochrane review.
Study location	Sweden, Stockholm
Study setting	During the study period, residents in the Huddinge Hospital catchment area with suspected transient ischemic attack or acute stroke were admitted to the Emergency Department at Huddinge Hospital and, in general, transferred that same day or the following day to the stroke unit at the Department of Neurology.
Study dates	The patients in this study were recruited during the period from September 1993 through March 1996

Sources of 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.
Inclusion criteria	**Inclusion criteria** Acute stroke Independence in feeding and continence according to Katz index of ADL14 Mini-Mental State Examination score16 of >23 Impaired motor capacity according to the Lindmark scale17 18 and/or Dysphasia according to the Reinvang Aphasia Test19 Exclusion criteria Discharged before 5 days of hospitalization Progressive stroke Subdural hematoma Subarachnoid hemorrhage Clinical sign of massive perceptual deficit Renal, heart, or respiratory failure Nonstroke epilepsy

	Alcoholism Psychiatric disease Other comorbidity likely to shorten length of life dramatically
Recruitment / selection of participants	83 patients recruited from the neurology department of a city hospital. The patients in this study were recruited during the period from September 1993 through March 1996, from the group of patients who, according to the Katz ADL index (grades A-E),14 were continent and independent in feeding 1 week after a first or recurrent acute stroke and had an expected average hospitalization time of 4 weeks in routine care.
Intervention(s)	Two physical therapists, two occupational therapists, and one speech therapist associated with the stroke unit formed the team of the home rehabilitation outreach service. A social worker was attached to the team on a consulting basis. One of the therapists was assigned as a case manager for the patient, which implied that she coped with a wider domain of function than is currently in vogue and that she constituted the link between hospital and outpatient care. In each case, the case manager was responsible for coordination of the discharge procedure, most of the at-home therapy, coordination between therapists in the home rehabilitation team, and contact with the neurologist responsible. A program approximately 3 to 4 months in duration was tailored for each patient. The frequency of therapy contacts for the patients receiving rehabilitation at home was decided by the providing therapist in consultation with the patient and his or her family. 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. If continued rehabilitation was required after such a period, the patient was referred to routine outpatient rehabilitation. The intervention strategy was based on prior experience. The home rehabilitation program emphasized a task- and context-oriented approach, which implies that the patient performs guided, supervised, or self-directed activities in a functional and familiar context. The choice of activities was based on patients' personal interests, and adherence to structured training between therapy sessions was promoted. The spouse, when available, was encouraged to be an active participant in the rehabilitation process. Individual counseling, which focused on education, applying information learned in practical situations, and solving problems occurring in the home, was offered to the spouse if needed. The duration and type of therapy were recorded in a protocol by the therapists. Patients were asked to keep diaries between therapy sessions on time and type of training.
Subgroup 1 - Ability to transfer prior to discharge/study	Not stated/unclear

(with or without use of aids)	
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	>6 weeks
Population subgroups	NR
Comparator	The control group consisted of the stroke patients who received routine rehabilitation service. All patients in this group were also admitted to the Department of Neurology. If required (and after evaluation by specialists from geriatric or rehabilitation clinics) the patients were transferred for continued inpatient rehabilitation and/or day care. In this context, routine rehabilitation denotes a heterogeneous set of interventions ranging from the best established in the hospital, day care, and/or outpatient care, to others introduced during the study period, such as daily afferent sensory stimulation by low-frequency transcutaneous electrical nerve stimulation and home-based rehabilitation initiated by the Department of Geriatrics.
Number of participants	83
Duration of follow-up	5 years
Indirectness	NR

Elements of the study relating to qualitative themes	**referral criteria** **Who is in the team? Staff requirements**
Additional comments	

Study arms

Early supported discharge (N = 30)
Multidisciplinary hospital out-reach early supported discharge team, with special inter-est 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

usual care (N = 24)
Patients received conventional hospital care involving co- ordinated multidisciplinary stroke unit care in a hospital stroke unit and conventional discharge procedures

Characteristics

Study-level characteristics

Characteristic	**Study (N = 54)**
Ethnicity Nominal	NR

Characteristic	Study (N = 54)
Ability to transfer prior to discharge/study Nominal	NR
Severity Range	NR to NR
Modified Rankin scale Nominal	NR

Arm-level characteristics

Characteristic	Early supported discharge (N = 30)	usual care (N = 24)
% Female Nominal	50	41.7
Mean age (SD) Mean (SD)	71 (NR)	71 (NR)
Comorbidities Nominal	NR	NR
Stroke Nominal	6	1
TIA	8	1

Characteristic	Early supported discharge (N = 30)	usual care (N = 24)
Nominal		
Ischemic heart disease Nominal	14	10
cardiac insfficiency Nominal	6	3
Hypertension Nominal	16	9
Diabetes Nominal	7	1
MSK Nominal	7	5
Respiratory disorder Nominal	4	2
CT abnormal on admission Nominal	22	10

Thorsen, 2006

Bibliographic Reference	Thorsen, A-M; Widen Holmqvist, L; von Koch, L; Early Supported Discharge and Continued Rehabilitation at Home After Stroke: 5-Year Follow-up of Resource Use; Journal of stroke and cerebrovascular diseases; 2006; vol. 15 (no. 4); 139-143

Study details

Secondary publication of another included study- see primary study for details	Widen Holmqvist, L, von Koch, L, Kostulas, V et al. (1998) A randomised controlled trial of rehabilitation at home after stroke in southwest Stockholm. Stroke 29: 591-597
Other publications associated with this study included in review	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. Other studies associated with this study: Thorsén, AM, Holmqvist, LW, de Pedro-Cuesta, J et al. (2005) A randomized controlled trial of early supported discharge and continued rehabilitation at home after stroke: five-year follow-up of patient outcome. Stroke; a journal of cerebral circulation 36(2): 297-303 von Koch, L, de Pedro-Cuesta, J, Kostulas, V et al. (2001) Randomized controlled trial of rehabilitation at home after stroke: one-year follow-up of patient outcome, resource use and cost. Cerebrovascular diseases (Basel, Switzerland) 12(2): 131-138

	Widen Holmqvist, L; von Koch, L; de Pedro-Cuesta, J (2000) Use of health care, impact on family caregivers and patient satisfaction of rehabilitation at home after stroke in southwest Sweden. Scandinavian journal of rehabilitation medicine 32: 173-179 Ytterberg, C, Thorsén, AM, Liljedahl, M et al. (2010) Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the neurological sciences 294(12): 86-88
Trial name / registration number	Named Stockholm 1998 in the Cochrane review.

van den Berg, 2016

Bibliographic Reference	van den Berg, Maayken; Crotty, Maria Prof; Liu, Enwu; Killington, Maggie; Kwakkel, Gert Prof; van Wegen, Erwin; Early Supported Discharge by Caregiver-Mediated Exercises and e-Health Support After Stroke: A Proof-of-Concept Trial.; Stroke; 2016; vol. 47 (no. 7); 1885-92

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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.

Trial name / registration number	Named Adelaide 2016 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Study location	Adelaide, Australia
Study setting	2 hospitals and a rehabilitation unit
Study dates	July 2013-June 2014
Sources of funding	The equipment for this study was partially funded by the Commonwealth Department of Health.
Inclusion criteria	Patients were eligible if they were able to understand English; still in the early rehabilitation phase (24 hours to 3 months post stroke); able to appoint a caregiver who was willing to participate in the program; able to follow instructions; experienced mobility problems because of stroke (Functional Ambulation Category score<5); had sufficient cognition to take part (defined as a Mini Mental State Examination score >23 points); and did not have depression (Hospital Anxiety and Depression Scale score <11). Caregivers (partner, family member, or volunteer) were eligible if they were able to understand English; agreed to provide support to the patient; did not have significant symptoms of depression (Hospital Anxiety and Depression Scale score <11); and were physically able to perform the exercises with the patient. Five months into the trial, inclusion criteria were adjusted because it was felt that potential patients were excluded because of too restrictive inclusion criteria. The Mini Mental State Examination cut off score was lowered to 18 points (proxy consent was sought when necessary). In addition, the Hospital Anxiety and Depression Scale was removed as a screening tool. A significant proportion of individuals first approached experienced anxiety in response to the acute medical situation, and this appeared to be restricting the inclusion of participants who were keen, willing, and able to safely engage in the trial.
Exclusion criteria	Patient and caregivers reporting serious disabling comorbidity, which might interfere with participation, were excluded.
Recruitment / selection of participants	Patients were recruited from the stroke units of 2 hospitals and the rehabilitation unit of another hospital, all in metropolitan Adelaide, Australia. Stroke was defined according to the WHO criteria.

Intervention(s)	8-week caregiver-mediated training programme with support using a customized exercise app loaded onto a tablet. while in hospital, the patient and carer were provided with an iPad which was loaded with the CME application with 37 standardized exercises aimed to improve gait and gait-related mobility, such as standing, turning, or making transfers. 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 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 their homes 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. Research clinicians did not attend these meetings. Additionally, participants in the intervention group wore an activity monitor the Fitbit Zip (Fitbit, Inc, San Francisco, CA) for the 8-week intervention period. The Fitbit is a portable lightweight clip-on activity monitor with the size of USB pendrive that monitors physical activity, and it was used to motivate participants to increase physical activity through real-time feedback. Data were not collected for the purpose of analysis.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	5 days
Subgroup 5 - Length of intervention	>6 weeks

Comparator	Participants allocated to usual rehabilitation care received interdisciplinary rehabilitation following the standards outlined by the Australian clinical guidelines for stroke management (addressing mobility impairment, dysphagia or communication difficulties, upper limb activity, sensorimotor impairment, activities of daily living, cognition, etc).10 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.
Duration of follow-up	12 weeks
Elements of the study relating to qualitative themes	**Referral - Clear and fair eligibility** - strict inclusion criteria - 'Five months into the trial, inclusion criteria were adjusted because it was felt that potential patients were excluded because of too restrictive inclusion criteria. The Mini Mental State Examination cut off score was lowered to 18 points (proxy consent was sought when necessary). In addition, the Hospital Anxiety and Depression Scale was removed as a screening tool. A significant proportion of individuals first approached experienced anxiety in response to the acute medical situation, and this appeared to be restricting the inclusion of participants who were keen, willing, and able to safely engage in the trial.' **Team work: Early supported discharge team and collaboration with the stroke survivor and carers - who is in the team -** The decision to discharge patients from the wards to their homes 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. **Family member to carer: increased responsibility - from family member to carer -** Our work suggests that it is important to already involve caregivers in the inpatient phase, but that the intervention takes some time to impact caregiver's outcomes. Galvin et al previously found favorable effects of family-mediated exercises on functional outcome in stroke patients and on perceived strain by caregivers. Both patients and caregivers showed physical and psychological benefits as a result of the program. Other work has suggested that the involvement of family members and caregivers in rehabilitation can reduce fears that caregivers may have about their ability to cope at home. Increased pleasure, mood, and self-esteem have also been reported in a previous trial examining dyadic exercise for people with dementia living at home, suggesting that the impact of structured patient–carer interactions extends beyond patient benefits alone.

Study arms

Caregiver-mediated exercises (N = 31)
8-week caregiver-mediated training programme with support using a customized exercise app loaded onto a tablet. while in hospital, the patient and carer were provided with an iPad which was loaded with the CME application with 37 standardized exercises aimed to improve gait and gait-related mobility, such as standing, turning, or making transfers. 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 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 their homes 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. Research clinicians did not attend these meetings. Additionally, participants in the intervention group wore an activity monitor the Fitbit Zip (Fitbit, Inc, San Francisco, CA) for the 8-week intervention period. The Fitbit is a portable lightweight clip-on activity monitor with the size of USB pendrive that monitors physical activity, and it was used to motivate participants to increase physical activity through real-time feedback. Data were not collected for the purpose of analysis.

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 (addressing mobility impairment, dysphagia or communication difficulties, upper limb activity, sensorimotor impairment, activities of daily living, cognition, etc).10 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.

Characteristics

Study-level characteristics

Characteristic	Study (N = 63)
Ethnicity	NR

Characteristic	Study (N = 63)
Nominal	
Comorbidities Nominal	NR
Ability to transfer prior to discharge/study Nominal	NR
Severity Nominal	NR
Modified Rankin scale Nominal	NR

Arm-level characteristics

Characteristic	Caregiver-mediated exercises (N = 31)	usual care (N = 32)
% Female Nominal	38.7	34.4
Mean age (SD) Mean (SD)	65.5 (18.5)	70.1 (12.4)
living arrangement % Nominal	NR	NR

Characteristic	Caregiver-mediated exercises (N = 31)	usual care (N = 32)
Alone Nominal	13.3	18.8
with partner/spouse only Nominal	66.7	59.4
with partner/spouse and others Nominal	10	15.6
with child only Nominal	3.3	6.3
with parents Nominal	3.3	0
with siblings Nominal	3.3	0

Outcomes

Study timepoints

- Baseline
- 12 week

Continuous outcomes (1)

Outcome	Caregiver-mediated exercises, Baseline, N = 31	Caregiver-mediated exercises, 12 week, N = 31	usual care, Baseline, N = 32	usual care, 12 week, N = 32
Length of hospital stay Reported in the Cochrane review. Mean (SD)	NR (NR)	25.6 (26.1)	NR (NR)	24.7 (28.7)
Activities of daily living (barthel index) Reported in the Cochrane review. Scale range unclear. Final values. Mean (SD)	NR (NR)	84.8 (18.5)	NR (NR)	87.3 (17.9)

Activities of daily living (barthel index) - Polarity - Higher values are better

Dichotomous outcomes

Outcome	Caregiver-mediated exercises, Baseline, N = 31	Caregiver-mediated exercises, 12 week, N = 31	usual care, Baseline, N = 32	usual care, 12 week, N = 32
Readmissions to hospital in 1 year No of events	n = NA ; % = NA	n = 7 ; % = 23	n = NA ; % = NA	n = 8 ; % = 25
Mortality Reported in the Cochrane review. No of events	n = 0 ; % = 0	n = 2 ; % = 6	n = 0 ; % = 0	n = 0 ; % = 0

Mortality - Polarity - Lower values are better

Continuous outcomes (2)

Outcome	Caregiver-mediated exercises vs usual care, Baseline, N2 = 32, N1 = 31	Caregiver-mediated exercises vs usual care, 12 week, N2 = 32, N1 = 31
carer QOL unclear scale Mean (95% CI)	0 (NR to NR)	-0.2 (-1.1 to -0.07)
Psychological distress/mood - patient (HADS depression) 0-42 Mean (95% CI)	0.6 (-2.3 to 3.5)	0.2 (-2.7 to 3.2)
Psychological distress/mood - carer (HADS depression) 0-42 Mean (95% CI)	0 (-2.5 to 2.5)	2 (-0.6 to 4.6)
SIS - mobility 0-100 Mean (95% CI)	1.6 (-7.7 to 10.8)	-4 (-13.5 to 5.5)
SIS - Strength 0-100 Mean (95% CI)	-1.3 (-8.5 to 5.9)	8.2 (0.8 to 15.5)
SIS - hand function Mean (95% CI)	-0.3 (-12.3 to 11.7)	2.1 (-14.4 to 10.2)

Outcome	Caregiver-mediated exercises vs usual care, Baseline, N2 = 32, N1 = 31	Caregiver-mediated exercises vs usual care, 12 week, N2 = 32, N1 = 31
SIS - activities of daily living 0-100 Mean (95% CI)	0.7 (-7.2 to 8.6)	-0.2 (-8.2 to 7.9)
SIS - Emotion 0-100 Mean (95% CI)	-1.1 (-7 to 4.7)	-1.4 (-7.4 to 4.6)
SIS - Memory 0-100 Mean (95% CI)	4.9 (-1.9 to 11.7)	-11.2 (-18.2 to -4.3)
SIS - Communication 0-100 Mean (95% CI)	2.3 (-3 to 7.7)	-5.2 (-10.7 to 0.3)
SIS - social participation 0-100 Mean (95% CI)	1.6 (-10.1 to 13.3)	5.2 (-16.8 to 17.2)
SIS - recovery 0-100 Mean (95% CI)	1.2 (-7.4 to 9.8)	-1.2 (-10 to 7.6)

Psychological distress/mood - patient (HADS depression) - Polarity - Lower values are better
Psychological distress/mood - carer (HADS depression) - Polarity - Lower values are better
SIS - mobility - Polarity - Higher values are better
SIS - Strength - Polarity - Higher values are better

SIS - hand function - Polarity - Higher values are better
SIS - activities of daily living - Polarity - Higher values are better
SIS - Emotion - Polarity - Higher values are better
SIS - Memory - Polarity - Higher values are better
SIS - Communication - Polarity - Higher values are better
SIS - social participation - Polarity - Higher values are better
SIS - recovery - Polarity - Higher values are better

Continuous outcomes (3)

Outcome	Caregiver-mediated exercises, Baseline, N = 31	Caregiver-mediated exercises, 12 week, N = 31	usual care, Baseline, N = 33	usual care, 12 week, N = 33
Caregiver strain index Reported in the Cochrane review. Scale range: 0-13. Final values. Mean (SD)	NR (NR)	7.6 (2.8)	NR (NR)	8.7 (2.9)

Caregiver strain index - Polarity - Lower values are better
Carer outcomes

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Continuousoutcomes-carerQOL-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-SIS-Memory-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-SIS-Emotion-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-SIS-activitiesofdailyliving-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-SIS-handfunction-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-SIS-Strength-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-SIS-mobility-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Psychologicaldistress/mood-carer(HADSdepression)-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Psychologicaldistress/mood-patient(HADSdepression)-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-SIS-Communication-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-SIS-recovery-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Readmissionstohospitalin1year-NoOfEvents-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Mortality-NoOfEvents-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Activitiesofdailyliving(barthelindex)-MeanSD-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(3)-CarerStrainIndex-MeanSD-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(1)-Lengthofhospitalstay-MeanSD-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-SIS-socialparticipation-MeanNineFivePercentCI-Caregiver-mediated exercises-usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low

Section	Question	Answer
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(Due to subjective self reported outcome and unblinded pts)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(Due to bias in the measurement of the outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Vloothuis, 2019

Bibliographic Reference	Vloothuis, Judith D M; Mulder, Marijn; Nijland, Rinske H M; Goedhart, Quirine S; Konijnenbelt, Manin; Mulder, Henry; Hertogh, Cees M P M; van Tulder, Maurits; van Wegen, Erwin E H; Kwakkel, Gert; Caregiver-mediated exercises with e-health support for early supported discharge after stroke (CARE4STROKE): A randomized controlled trial.; PloS one; 2019; vol. 14 (no. 4); e0214241

Study details

Secondary publication of another included study- see primary study for details	NR

Other publications associated with this study included in review	NR
Trial name / registration number	CARE4STROKE
Study location	Amsterdam
Study setting	Stroke units, rehabilitation centers and nursing homes.
Study dates	NR
Sources of funding	ZonMW (grant number 837001408 and 606300098012) for providing financial support for this project.
Inclusion criteria	Patients were eligible if they (1) had a stroke according the WHO definition [18]; (2) had lived independently before the stroke; (3) were planned to be discharged home; (4) were able to follow instructions (MMSE score > 18 points) (5) had a Functional Ambulation Score (FAC) < 5 and (6) were willing and able to appoint a caregiver who wanted to participate in the program (with a maximum of two caregivers). A caregiver was defined as someone close to the patient who was willing and able to do exercises together with the patient, for example a partner, family member or friend. This caregiver was not a professional and was not paid for his/her efforts. Patients were asked to appoint one or two preferred caregivers, thereafter inclusion criteria for the caregivers were checked. These inclusion criteria for the caregiver were: (1) being medically stable and (2) being physically able to perform the exercises together with the patient. Inclusion criteria for both patients and caregivers were (1) aged 18 years or older; (2) written informed consent; (3) ability to understand Dutch or English (at a sufficient level to understand instructions); (4) sufficiently motivated to participate in the caregiver-mediated exercise program; and (5) a score of <11 on the ‘depression’ domain of the Hospital Anxiety and Depression Scale (HADS).
Exclusion criteria	An exclusion criterion for both patients and caregivers was a serious comorbidity that interfered with mobility training, for example a severe cardiopulmonary illness or a disabling orthopedic comorbidity of the lower extremity. To finally determine the suitability of patients and caregivers, an intake exercise session with a trained physical therapist was scheduled prior to inclusion. During this session the therapist judged if the patient-caregiver couple was able to exercise adequately and safely together. A short checklist, evaluating these criteria, was used by the physical therapist.

Recruitment / selection of participants	Patients were recruited in the participating hospitals (N = 4), rehabilitation centers (N = 2) and geriatric rehabilitation departments of nursing homes (N = 7). All patients admitted were screened by participating physiotherapists and physicians. When patient and caregiver seemed to be eligible, they received a participant information letter explaining the study and the consequences of participating. During a subsequent session with one of the research assistants (MM and QG), the research assistant checked the following in- and exclusion criteria and obtained informed consent.
Intervention(s)	The program consisted of 8 weeks of exercise therapy, executed with a caregiver, in addition to usual care following the current guidelines in the Netherlands. The exercise program was composed by a trained physical therapist during weekly sessions. The therapist could choose from 37 standardized exercises aimed at improving mobility, presented in an e-health application (‘app’). For each patient, exercises were combined into a patient-tailored, progressive training regimen, related to the patient goals. Patient-caregiver couples were encouraged to contact the coordinating therapist using tele-rehabilitation services like telephone, video conferencing or email when appropriate in between the weekly exercise sessions. The patients and their caregivers were instructed to perform the selected set of exercises at least five times a week for 30 minutes. This meant that patients received 20 hours of caregiver-mediated exercises in addition to usual care during the 8-week intervention period. When the patient’s discharge date fell before the anticipated end date of the CARE4STROKE intervention, the program was continued at home. All physical therapists were thoroughly trained in a training course, prior to delivering the CARE4STROKE program.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	5 days

Subgroup 5 - Length of intervention	>6 weeks
Population subgroups	
Comparator	The participants in the control group received usual care according to the guidelines for physical therapy for patients with stroke of the Royal Dutch Society for Physical Therapy (KNGF). Therapy sessions are designed according to patient goals. Therefore, there were no restrictions with respect to content, time or duration of the physical therapy. Task and context specificity are important aspects of physical therapy after stroke. With that, in current guidelines, exercises are recommended to improve functional outcomes such as standing balance, physical condition, and walking competence.
Number of participants	66
Duration of follow-up	8 and 12 weeks
Indirectness	NR
Elements of the study relating to qualitative themes	**Family member to caregiver** - 'A significant difference in favor of the intervention group was observed, in terms of decreased patient anxiety and caregiver depression. These significant treatment effects might be explained by the significant difference in exercise time with a caregiver. In contrast to exercise therapy supported by health professionals or exercising alone, practicing together with a partner, family member or friend seems to have a positive effect on psychosocial functioning of both patients and caregivers. The incidence of anxiety in stroke patients and depression in their caregivers is significantly higher than in healthy age-matched controls. In addition, depressive as well as anxiety symptoms are predictors of lower quality of life of patients, and of long-term burden and emotional problems of caregivers. [30] So, interventions that target anxiety and depression symptoms are important.' **The need for psychological support**

	Referral - Clear and fair eligibility criteria
Additional comments	NR

Study arms

CARE4STROKE (N = 32)
8-week caregiver-mediated exercise program with e-health support after stroke (CARE4STROKE) in addition to usual care with the aim to improve functional outcome and to facilitate early supported discharge by increasing the intensity of task specific training. CARE4STROKE programme, CME therapy and e-health support are combined to promote a smoother transition from the inpatient setting to the home environment, with active rehabilitation continuing in the community. C4S prescribes an additional exercise dose of 1,200 min and may be a promising novel and effective method to augment the pallet of therapeutic options for stroke rehabilitation.

Usual care (N = 34)
The participants in the control group received usual care according to the guidelines for physical therapy for patients with stroke of the Royal Dutch Society for Physical Therapy (KNGF). Therapy sessions are designed according to patient goals. Therefore, there were no restrictions with respect to content, time or duration of the physical therapy. Task and context specificity are important aspects of physical therapy after stroke. With that, in current guidelines, exercises are recommended to improve functional outcomes such as standing balance, physical condition, and walking competence.

Characteristics

Study-level characteristics

Characteristic	Study (N = 66)
Ethnicity Nominal	NR
Comorbidities Nominal	NR
Ability to transfer prior to discharge/study Nominal	NR
Severity Nominal	NR

Arm-level characteristics

Characteristic	CARE4STROKE (N = 32)	Usual care (N = 34)
% Female Nominal	34.4	41.2
Mean age (SD) Mean (SD)	60.53 (14.82)	59.26 (15.01)
Modified Rankin scale Nominal	NR	NR

Characteristic	CARE4STROKE (N = 32)	Usual care (N = 34)
Modified Rankin scale Mean (SD)	3.78 (0.61)	3.68 (0.77)
Functional ambulation catergory Median (IQR)	2 (0 to 3)	1.5 (0 to 3)
caregiver relation Nominal	NR	NR
Partner Nominal	62.5	55.9
Child Nominal	21.9	20.6
Friend Nominal	3.1	2.9
Parent Nominal	3.1	5.9
Sibling Nominal	6.3	11.8
Volunteer Nominal	0	2.9

Characteristic	CARE4STROKE (N = 32)	Usual care (N = 34)
other family member Nominal	3.1	0

Outcomes

Study timepoints

- Baseline
- 12 week

Continuous outcomes

Outcome	CARE4STROKE, Baseline, N = 32	CARE4STROKE, 12 week, N = 32	Usual care, Baseline, N = 34	Usual care, 12 week, N = 29
Carer quality of life scale (unclear scale) 0-14 (FU intervention N= 29, control N= 23) Mean (SD)	11.69 (1.75)	10.52 (2.03)	12 (1.87)	10.96 (2.16)
Activities of daily living (barthel index) 0-20 Mean (SD)	13.22 (3.97)	17.63 (3.49)	13.18 (3.96)	16.89 (3.47)
Length of stay (days) Mean (SD)	0 (0)	117 (50)	0 (0)	117 (54)

Outcome	CARE4STROKE, Baseline, N = 32	CARE4STROKE, 12 week, N = 32	Usual care, Baseline, N = 34	Usual care, 12 week, N = 29
Carer Strain Index final values 0-13 (FU intervention N = 29, control N = 23) Mean (SD)	5.42 (2.66)	5.72 (3.14)	4.53 (2.11)	5.35 (2.95)
Psychological distress/mood (HADS depression) final value 0-21 Mean (SD)	4.22 (2.67)	3.69 (3.7)	4.65 (3.41)	4.52 (3.66)
Psychological distress/mood (HADS anxiety) final value 0-21 Mean (SD)	5.38 (3.6)	3.22 (3.05)	5.35 (3.57)	5.07 (4.7)
Stroke impact scale (composite physical scale) 0-100 Mean (SD)	45.68 (15.28)	63.03 (19.28)	42.86 (17.57)	61.42 (20.82)

Activities of daily living (barthel index) - Polarity - Higher values are better
Length of stay - Polarity - Lower values are better
Carer Strain Index final values - Polarity - Lower values are better
Psychological distress/mood (HADS depression) final value - Polarity - Lower values are better
Psychological distress/mood (HADS anxiety) final value - Polarity - Lower values are better
Stroke impact scale (composite physical scale) - Polarity - Higher values are better

Dichotomous outcomes

Outcome	CARE4STROKE, Baseline, N = 32	CARE4STROKE, 12 week, N = 32	Usual care, Baseline, N = 34	Usual care, 12 week, N = 29
Mortality No of events	n = 0 ; % = 0	n = 0 ; % = 0	n = 0 ; % = 0	n = 1 ; % = 3.4

Mortality - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Continuousoutcomes-Carerqualityoflifescale(unclearscale)-MeanSD-CARE4STROKE-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(due to unblinded participants and subjective outcome)*

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(due to bias in the measurement of the reported outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-CarerStrainIndexfinalvalues-MeanSD-CARE4STROKE-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(due to unblinded participants and subjective outcome)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns *(due to bias in the measurement of the reported outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Psychologicaldistress/mood(HADSdepression)finalvalue-MeanSD-CARE4STROKE-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(due to unblinded participants and subjective outcome)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(due to bias in the measurement of the reported outcome)*

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Psychologicaldistress/mood(HADSanxiety)finalvalue-MeanSD-CARE4STROKE-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(due to unblinded participants and subjective outcome)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(due to bias in the measurement of the reported outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Strokeimpactscale(compositephysicalscale)-MeanSD-CARE4STROKE-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Some concerns *(due to unblinded participants and subjective outcome)*
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns *(due to bias in the measurement of the reported outcome)*
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Activitiesofdailyliving(barthelindex)-MeanSD-CARE4STROKE-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low

Section	Question	Answer
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Mortality-NoOfEvents-CARE4STROKE-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low

Section	Question	Answer
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Lengthofstay-MeanSD-CARE4STROKE-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Low
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Directly applicable

von Koch, 2001

Bibliographic Reference	von Koch, L; de Pedro-Cuesta, J; Kostulas, V; Almazán, J; Widén Holmqvist, L; Randomized controlled trial of rehabilitation at home after stroke: one-year follow-up of patient outcome, resource use and cost; Cerebrovascular diseases (Basel, Switzerland); 2001; vol. 12 (no. 2); 131-138

Study details

Secondary publication of another included study- see primary study for details	Widen Holmqvist, L, von Koch, L, Kostulas, V et al. (1998) A randomised controlled trial of rehabilitation at home after stroke in southwest Stockholm. Stroke 29: 591-597
Other publications associated with this study included in review	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. Other studies associated with this study: Thorsen, A-M; Widen Holmqvist, L; von Koch, L (2006) Early Supported Discharge and Continued Rehabilitation at Home After Stroke: 5-Year Follow-up of Resource Use. Journal of stroke and cerebrovascular diseases 15(4): 139-143 Thorsén, AM, Holmqvist, LW, de Pedro-Cuesta, J et al. (2005) A randomized controlled trial of early supported discharge and continued rehabilitation at home after stroke: five-year follow-up of patient outcome. Stroke; a journal of cerebral circulation 36(2): 297-303

	von Koch, L, de Pedro-Cuesta, J, Kostulas, V et al. (2001) Randomized controlled trial of rehabilitation at home after stroke: one-year follow-up of patient outcome, resource use and cost. Cerebrovascular diseases (Basel, Switzerland) 12(2): 131-138 Widen Holmqvist, L; von Koch, L; de Pedro-Cuesta, J (2000) Use of health care, impact on family caregivers and patient satisfaction of rehabilitation at home after stroke in southwest Sweden. Scandinavian journal of rehabilitation medicine 32: 173-179 Ytterberg, C, Thorsén, AM, Liljedahl, M et al. (2010) Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the neurological sciences 294(12): 86-88
Trial name / registration number	Named Stockholm 1998 in the Cochrane review.
Study setting	Stockholm, Sweden
Inclusion criteria	**Inclusion criteria** Acute stroke Independence in feeding and continence according to Katz index of ADL14 Mini-Mental State Examination score16 of >23 Impaired motor capacity according to the Lindmark scale17 18 and/or Dysphasia according to the Reinvang Aphasia Test19 Exclusion criteria Discharged before 5 days of hospitalization

	Progressive stroke Subdural hematoma Subarachnoid hemorrhage Clinical sign of massive perceptual deficit Renal, heart, or respiratory failure Nonstroke epilepsy Alcoholism Psychiatric disease Other comorbidity likely to shorten length of life dramatically
Exclusion criteria	NR
Recruitment / selection of participants	
Intervention(s)	Two physical therapists, two occupational therapists, and one speech therapist associated with the stroke unit formed the team of the home rehabilitation outreach service. A social worker was attached to the team on a consulting basis. One of the therapists was assigned as a case manager for the patient, which implied that she coped with a wider domain of function than is currently in vogue and that she constituted the link between hospital and outpatient care. In each case, the case manager was responsible for coordination of the discharge procedure, most of the at-home therapy, coordination between therapists in the home rehabilitation team, and contact with the neurologist responsible. A program approximately 3 to 4 months in duration was tailored for each patient. The frequency of therapy contacts for the patients receiving rehabilitation at home was decided by the providing therapist in consultation with the patient and his or her family. 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. If continued rehabilitation was required after such a period, the patient was referred to routine outpatient rehabilitation. The intervention strategy was based on prior experience. The home rehabilitation program emphasized a task- and context-oriented approach, which implies that the patient performs guided, supervised, or self-directed activities in a functional and familiar context. The choice of activities was based on patients' personal interests, and adherence to structured training between therapy sessions was promoted. The spouse, when available, was encouraged to be an active participant in the rehabilitation process. Individual counseling, which focused on education, applying information learned in practical situations, and solving problems occurring in the home, was offered to the spouse if needed. The duration and type of therapy were recorded in a protocol by the therapists. Patients were asked to keep diaries between therapy sessions on time and type of training.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Not stated/unclear
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear
Subgroup 5 - Length of intervention	>6 weeks
Population subgroups	NR

Comparator	The control group consisted of the stroke patients who received routine rehabilitation service. All patients in this group were also admitted to the Department of Neurology. If required (and after evaluation by specialists from geriatric or rehabilitation clinics) the patients were transferred for continued inpatient rehabilitation and/or day care. In this context, routine rehabilitation denotes a heterogeneous set of interventions ranging from the best established in the hospital, day care, and/or outpatient care, to others introduced during the study period, such as daily afferent sensory stimulation by low-frequency transcutaneous electrical nerve stimulation and home-based rehabilitation initiated by the Department of Geriatrics.
Number of participants	83
Duration of follow-up	3, 6 and 12 months
Indirectness	NR
Elements of the study relating to qualitative themes	**Who is in the team? Staff requirements -** outreach team of occupational, physical and speech and language therapists.
Additional comments	NR

Study arms

Early supported discharge (N = 42)
Multidisciplinary hospital out-reach early supported discharge team, with special inter-est 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

Usual care (N = 41)
Patients received conventional hospital care involving co- ordinated multidisciplinary stroke unit care in a hospital stroke unit and conventional discharge procedures

Outcomes

Study timepoints
- Baseline
- 12 month

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 12 month, N = 42	Usual care, Baseline, N = 41	Usual care, 12 month, N = 41

Widen Holmqvist, 2000

Bibliographic Reference	Widen Holmqvist, L; von Koch, L; de Pedro-Cuesta, J; Use of health care, impact on family caregivers and patient satisfaction of rehabilitation at home after stroke in southwest Sweden; Scandinavian journal of rehabilitation medicine; 2000; vol. 32; 173-179

Study details

Secondary publication of	Widen Holmqvist, L, von Koch, L, Kostulas, V et al. (1998) A randomised controlled trial of rehabilitation at home after stroke in southwest Stockholm. Stroke 29: 591-597

another included study- see primary study for details	
Other publications associated with this study included in review	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. Other studies associated with this study: Thorsen, A-M; Widen Holmqvist, L; von Koch, L (2006) Early Supported Discharge and Continued Rehabilitation at Home After Stroke: 5-Year Follow-up of Resource Use. Journal of stroke and cerebrovascular diseases 15(4): 139-143 Thorsén, AM, Holmqvist, LW, de Pedro-Cuesta, J et al. (2005) A randomized controlled trial of early supported discharge and continued rehabilitation at home after stroke: five-year follow-up of patient outcome. Stroke; a journal of cerebral circulation 36(2): 297-303 von Koch, L, de Pedro-Cuesta, J, Kostulas, V et al. (2001) Randomized controlled trial of rehabilitation at home after stroke: one-year follow-up of patient outcome, resource use and cost. Cerebrovascular diseases (Basel, Switzerland) 12(2): 131-138 Ytterberg, C, Thorsén, AM, Liljedahl, M et al. (2010) Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the neurological sciences 294(12): 86-88
Trial name / registration number	Named Stockholm 1998 in the Cochrane review.

Widen Holmqvist, 1998

Bibliographic Reference	Widen Holmqvist, L; von Koch, L; Kostulas, V; Holm, M; Widsell, G; Tegler, H; A randomised controlled trial of rehabilitation at home after stroke in southwest Stockholm; Stroke; 1998; vol. 29; 591-597

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	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. Other studies associated with this study: Thorsen, A-M; Widen Holmqvist, L; von Koch, L (2006) Early Supported Discharge and Continued Rehabilitation at Home After Stroke: 5-Year Follow-up of Resource Use. Journal of stroke and cerebrovascular diseases 15(4): 139-143 Thorsén, AM, Holmqvist, LW, de Pedro-Cuesta, J et al. (2005) A randomized controlled trial of early supported discharge and continued rehabilitation at home after stroke: five-year follow-up of patient outcome. Stroke; a journal of cerebral circulation 36(2): 297-303 von Koch, L, de Pedro-Cuesta, J, Kostulas, V et al. (2001) Randomized controlled trial of rehabilitation at home after stroke: one-year follow-up of patient outcome, resource use and cost. Cerebrovascular diseases (Basel, Switzerland) 12(2): 131-138

	Widen Holmqvist, L; von Koch, L; de Pedro-Cuesta, J (2000) Use of health care, impact on family caregivers and patient satisfaction of rehabilitation at home after stroke in southwest Sweden. Scandinavian journal of rehabilitation medicine 32: 173-179 Ytterberg, C, Thorsén, AM, Liljedahl, M et al. (2010) Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the neurological sciences 294(12): 86-88
Trial name / registration number	Named Stockholm 1998 in the Cochrane review.
Study type	Randomised controlled trial (RCT)
Study location	Stockholm, sweden
Study setting	During the study period, residents in the Huddinge Hospital catchment area with suspected transient ischemic attack or acute stroke were admitted to the Emergency Department at Huddinge Hospital and, in general, transferred that same day or the following day to the stroke unit at the Department of Neurology.
Study dates	The patients in this study were recruited during the period from September 1993 through March 1996
Sources of 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.
Inclusion criteria	**Inclusion criteria** Acute stroke Independence in feeding and continence according to Katz index of ADL14 Mini-Mental State Examination score16 of >23 Impaired motor capacity according to the Lindmark scale17 18 and/or

	Dysphasia according to the Reinvang Aphasia Test19 Exclusion criteria Discharged before 5 days of hospitalization Progressive stroke Subdural hematoma Subarachnoid hemorrhage Clinical sign of massive perceptual deficit Renal, heart, or respiratory failure Nonstroke epilepsy Alcoholism Psychiatric disease Other comorbidity likely to shorten length of life dramatically
Exclusion criteria	NR
Recruitment / selection of participants	The patients in this study were recruited during the period from September 1993 through March 1996, from the group of patients who, according to the Katz ADL index (grades A-E),14 were continent and independent in feeding 1 week after a first or recurrent acute stroke and had an expected average hospitalization time of 4 weeks in routine care.
Intervention(s)	Two physical therapists, two occupational therapists, and one speech therapist associated with the stroke unit formed the team of the home rehabilitation outreach service. A social worker was attached to the team on a consulting basis. One of the therapists was assigned as a case manager for the patient, which implied that she coped with a wider domain of function than is currently in vogue and that she constituted the link between hospital and outpatient care. In each case, the case manager was responsible for coordination of the discharge procedure, most of the at-home therapy, coordination

	between therapists in the home rehabilitation team, and contact with the neurologist responsible. A program approximately 3 to 4 months in duration was tailored for each patient. The frequency of therapy contacts for the patients receiving rehabilitation at home was decided by the providing therapist in consultation with the patient and his or her family. 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. If continued rehabilitation was required after such a period, the patient was referred to routine outpatient rehabilitation. The intervention strategy was based on prior experience. The home rehabilitation program emphasized a task- and context-oriented approach, which implies that the patient performs guided, supervised, or self-directed activities in a functional and familiar context. The choice of activities was based on patients' personal interests, and adherence to structured training between therapy sessions was promoted. The spouse, when available, was encouraged to be an active participant in the rehabilitation process. Individual counseling, which focused on education, applying information learned in practical situations, and solving problems occurring in the home, was offered to the spouse if needed. The duration and type of therapy were recorded in a protocol by the therapists. Patients were asked to keep diaries between therapy sessions on time and type of training.
Subgroup 1 - Ability to transfer prior to discharge/study (with or without use of aids)	Mixed
Subgroup 2 - Severity	Not stated/unclear
Subgroup 3 - Modified Rankin scale	Not stated/unclear
Subgroup 4 - Number of days of rehabilitation provided per week	Not stated/unclear

Subgroup 5 - Length of intervention	>6 weeks
Population subgroups	NR
Comparator	The control group consisted of the stroke patients who received routine rehabilitation service. All patients in this group were also admitted to the Department of Neurology. If required (and after evaluation by specialists from geriatric or rehabilitation clinics) the patients were transferred for continued inpatient rehabilitation and/or day care. In this context, routine rehabilitation denotes a heterogeneous set of interventions ranging from the best established in the hospital, day care, and/or outpatient care, to others introduced during the study period, such as daily afferent sensory stimulation by low-frequency transcutaneous electrical nerve stimulation and home-based rehabilitation initiated by the Department of Geriatrics.
Number of participants	83
Duration of follow-up	3 months, 6 months and 12 months
Indirectness	NR
Elements of the study relating to qualitative themes	**Who is in the team? Staff requirements** **Providing therapy for as long as it is needed** **Referral - Clear and fair eligibility**
Additional comments	NR

Study arms

Early supported discharge (N = 42)
multidisciplinary hospital out-reach early supported discharge team, with special inter-est in rehabilitation and co-ordinated through weekly meetings. This was a therapist-based service (nonursing 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-ordinatedand delivered care

Usual care (N = 41)
patients received conventional hospital care involving co- ordinated multidisciplinarystroke unit care in a hospital stroke unit and conventional discharge procedures

Characteristics

Study-level characteristics

Characteristic	**Study (N = 81)**
Ethnicity Nominal	NR
Comorbidities Nominal	NR
Ability to transfer prior to discharge/study Nominal	NR
Severity Nominal	NR

Characteristic	Study (N = 81)
Modified Rankin scale Nominal	NR

Arm-level characteristics

Characteristic	Early supported discharge (N = 42)	Usual care (N = 41)
% Female No of events	n = 19 ; % = 46.4	n = 18 ; % = 45
Mean age (SD) Mean (SD)	70.8 (7.6)	72.6 (8.9)
living with spouse Nominal	30	26
able to walk 10m with/without aid Nominal	33	33

Outcomes

Study timepoints

- Baseline
- 3 month
- 12 month
- 5 year

Dichotomous outcomes

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 3 month, N = 42	Early supported discharge, 12 month, N = 42	Early supported discharge, 5 year, N = 30	Usual care, Baseline, N = 41	Usual care, 3 month, N = 40	Usual care, 12 month, N = 40	Usual care, 5 year, N = 23
Mortality Reported in the Cochrane review. No of events	n = 0 ; % = 0	n = 1 ; % = 2	n = 1 ; % = 2	n = NR ; % = NR	n = 0 ; % = 0	n = 3 ; % = 8	n = 3 ; % = 8	n = NR ; % = NR
Falls No of events	n = NA ; % = NA	n = 10 ; % = 24	n = NR ; % = NR	n = 19 ; % = 63	n = NA ; % = NA	n = 6 ; % = 15	n = NR ; % = NR	n = 14 ; % = 61
Physical dependency (death or dependency) Reported in the Cochrane review. Will be downgraded due to including physical dependency and mortality rather than just physical dependency. No of events	n = NA ; % = NA	n = 9 ; % = 22	n = 9 ; % = 22	n = NR ; % = NR	n = NA ; % = NA	n = 12 ; % = 29	n = 12 ; % = 29	n = NR ; % = NR

Mortality - Polarity - Lower values are better
Falls - Polarity - Lower values are better
Physical dependency (death or dependency) - Polarity - Lower values are better

Continuous outcomes (1)

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 3 month, N = 42	Early supported discharge, 12 month, N = NR	Early supported discharge, 5 year, N = NR	Usual care, Baseline, N = 40	Usual care, 3 month, N = 40	Usual care, 12 month, N = NR	Usual care, 5 year, N = NR
Length of hospital stay (days) Mean (SD)	NA (NA)	13.6 (6.93)	NR (NR)	*empty data*	NA (NA)	29.2 (26.28)	NR (*empty data*)	NR (NR)

Length of hospital stay - Polarity - Lower values are better

Continuous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 3 month, N = 40	Early supported discharge, 12 month, N = NR	Early supported discharge, 5 year, N = NR	Usual care, Baseline, N = 41	Usual care, 3 month, N = 38	Usual care, 12 month, N = NR	Usual care, 5 year, N = NR
Extended activities of daily living (Frenchay Activities Index) Reported in the Cochrane review. Scale range: Unclear. Final values. Mean (SD)	NR (NR)	24 (6)	NR (NR)	NR (NR)	NR (NR)	21.5 (8)	NR (NR)	NR (NR)

Extended activities of daily living (Frenchay Activities Index) - Polarity - Higher values are better

Dichotomous outcomes (2)

Outcome	Early supported discharge, Baseline, N = 42	Early supported discharge, 3 month, N = 41	Early supported discharge, 12 month, N = NR	Early supported discharge, 5 year, N = NR	Usual care, Baseline, N = 41	Usual care, 3 month, N = 40	Usual care, 12 month, N = NR	Usual care, 5 year, N = NR
Readmission to hospital Reported in the Cochrane review. No of events	n = NA ; % = NA	n = 16 ; % = 39	n = NR ; % = NR	n = NR ; % = NR	n = NA ; % = NA	n = 14 ; % = 35	n = NR ; % = NR	n = NR ; % = NR

Readmission to hospital - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Normal RCT

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low

Section	Question	Answer
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Falls-NoOfEvents-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Physicaldependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - outcome*

Section	Question	Answer
		included mortality as well as physical dependency)

Continuousoutcomes(1)-Lengthofhospitalstay-MeanSD-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes(2)-Extendedactivitiesofdailyliving(FrenchayActivitiesIndex)-MeanSD-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes(2)-Readmissiontohospital-NoOfEvents-Early supported discharge-Usual care-t3

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Mortality-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low

Section	Question	Answer
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Falls-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-PhysicalIdependency(deathordependency)-NoOfEvents-Early supported discharge-Usual care-t12

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Falls-NoOfEvents-Early supported discharge-Usual care-t5

Section	Question	Answer
Domain 1: Bias arising from the randomisation process	Risk of bias judgement for the randomisation process	Some concerns
Domain 2a: Risk of bias due to deviations from the intended interventions (effect of assignment to intervention)	Risk of bias for deviations from the intended interventions (effect of assignment to intervention)	Low

Section	Question	Answer
Domain 2b: Risk of bias due to deviations from the intended interventions (effect of adhering to intervention)	Risk of bias judgement for deviations from the intended interventions (effect of adhering to intervention)	Low
Domain 3. Bias due to missing outcome data	Risk-of-bias judgement for missing outcome data	Low
Domain 4. Bias in measurement of the outcome	Risk-of-bias judgement for measurement of the outcome	Low
Domain 5. Bias in selection of the reported result	Risk-of-bias judgement for selection of the reported result	Low
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Directly applicable

Ytterberg, 2010

Bibliographic Reference	Ytterberg, C; Thorsén, AM; Liljedahl, M; Holmqvist, LW; von Koch, L; Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation; Journal of the neurological sciences; 2010; vol. 294 (no. 12); 86-88

Study details

Secondary publication of another included study- see primary study for details	Widen Holmqvist, L, von Koch, L, Kostulas, V et al. (1998) A randomised controlled trial of rehabilitation at home after stroke in southwest Stockholm. Stroke 29: 591-597

Other publications associated with this study included in review	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. Other studies associated with this study: Thorsen, A-M; Widen Holmqvist, L; von Koch, L (2006) Early Supported Discharge and Continued Rehabilitation at Home After Stroke: 5-Year Follow-up of Resource Use. Journal of stroke and cerebrovascular diseases 15(4): 139-143 Thorsén, AM, Holmqvist, LW, de Pedro-Cuesta, J et al. (2005) A randomized controlled trial of early supported discharge and continued rehabilitation at home after stroke: five-year follow-up of patient outcome. Stroke; a journal of cerebral circulation 36(2): 297-303 von Koch, L, de Pedro-Cuesta, J, Kostulas, V et al. (2001) Randomized controlled trial of rehabilitation at home after stroke: one-year follow-up of patient outcome, resource use and cost. Cerebrovascular diseases (Basel, Switzerland) 12(2): 131-138 Widen Holmqvist, L; von Koch, L; de Pedro-Cuesta, J (2000) Use of health care, impact on family caregivers and patient satisfaction of rehabilitation at home after stroke in southwest Sweden. Scandinavian journal of rehabilitation medicine 32: 173-179
Trial name / registration number	Named Stockholm 1998 in the Cochrane review.

Appendix E – Qualitative evidence

Chouliara, 2014

Bibliographic Reference	Chouliara, N.; Fisher, R. J.; Kerr, M.; Walker, M. F.; Implementing evidence-based stroke Early Supported Discharge services: a qualitative study of challenges, facilitators and impact; Clinical Rehabilitation; 2014; vol. 28 (no. 4); 370-7

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To explore the perspectives of healthcare professionals and commissioners working with a stroke Early Supported Discharge service in relation to: (1) the factors that facilitate or impede the implementation of the service, and (2) the impact of the service.
Population	Healthcare professionals N=35 Practitioners, managers and commissioners from two Early Supported Discharge services. Participant characteristics: Type of professional: Commissioners = 6, Service Management = 6, Early Supported Discharge Team Lead = 3, Early Supported Discharge Team Member = 8, Stroke Physician = 2, Acute Stroke Unit Staff = 7, Rehab Stroke Unit Staff = 3. No additional information.

Setting	Two Early Supported Discharge services in Nottinghamshire, one urban/city, one urban/town> semi-rural. Site A: Urban/city. Team composition: Multi-disciplinary, specialist (stroke physician, physiotherapist, occupational therapy, speech and language therapist, stroke nurse, mental health nurse, social worker, assistant practitioner, rehabilitation support worker, administrative support). Patient caseload: 16. Days and hours of operation: 7 days per week, 8.00am - 6.00pm. Intensity of intervention: 1-2 intervention episodes per day. Timescale: Up to 6 weeks. Main referring acute hospital: Hospital with a hyperacute stroke unit and associated stroke specialist rehabilitation wards. Access from other referring hospitals? No. Existence of community stroke team to which people can be referred? Yes - jointly managed community stroke team that exists alongside the ESD team. Site B: Urban/town> semi-rural. Team composition: Multi-disciplinary, specialist (stroke physician, physiotherapist, occupational therapist, speech and language therapist, stroke nurse, clinical psychologist, rehabilitation support worker, administrative support). Patient caseload: 16. Days and hours of operation: 7 days per week, 8.00 am - 6.00 pm. Intensity of intervention: 1-2 intervention episodes per day. Timescale: Up to 6 weeks. Main referring acute hospital: Hospital with acute stroke unit only. Access from other referring hospitals: Yes - community hospital with stroke specialist rehabilitation ward. Existence of community stroke team to which patients can be referred? No.
Study design	Cross-sectional qualitative study using semi-structured interviews. The study sample was drawn from two Early Supported Discharge services. The services were selected based on the fact that they were informed by an evidence-based service specification documentation. At the time of the study both service were in their first year of operation and were delivering the service at around full capacity. Both teams used specific eligibility criteria for acceptance of patients into the service including: Barthel Index at least 14/20; transfer independently or with assistance of one (+/- equipment); sufficiently medically fit to be managed at home; identified achievable rehabilitation goals. Purposive sampling was used to identify a group of key stakeholders involved with the two services: clinical practitioners delivering the intervention, managerial staff, people involved in commissioning and hospital staff referring into the service. The initial contact with each site was made through the existing local stroke research network. Each interviewee recommended other potential participants until a comprehensive list of healthcare professionals and commissioners was built. With line manager permission information sheets were provided and informed consent. Face to face semi-structured interviews were conducted by either one of two researchers and lasted approximately 45 minutes. Questions were not fixed but needed to cover the following topics: respondents' involvement with the service, factors facilitating or impeding the implementation of the service, perceived impact and suggestions for improvement. Interviews were audio recorded, transcribed verbatim and anonymised.

Methods and analysis	Data were analysed by two researchers using a thematic analysis approach. The transcribed text was initially coded to the following broad categories: facilitators, challenges and impact. Data within each category were then summarised into themes following a procedure described by Braun and Clarke. Key themes included issues that were frequently raised by participants. Interviews from each site were analysed separately but the results were then compared to identify similarities and differences. To minimise researcher bias, data were analysed independently by two researchers. Differences in coding and interpretation were discussed and new insights allowed refining of the thematic network. A qualitative data analysis software package was used to organise the data electronically.
Findings	**Facilitators** *Adaptability of the intervention to healthcare context* The eligibility criteria were described as clear enough to permit the identification of appropriate cases without being too restrictive, attaining a balance between flexibility and specificity ('I think the criteria are good because they are not too defined or too loose; I think there are very few inappropriate people that come through' Stroke Physician, 1). However, most stressed the need to adapt certain components of the intervention to respond to the local healthcare context and the variation that characterises the stroke population ('No two stroke cases are ever going to be the same; our systems need to be reflective of that' Commissioning, 23). To determine eligibility, the Site A team evaluated the severity of disability but the safety of the home environment and the identification of specific rehabilitation goals were set as a priority. The Site B team allowed the length of intervention to be extended further than six weeks to compensate for the lack of stroke specialist community rehabilitation services in the region. Alternatively, the intervention could last only a few weeks to benefit milder spectrum patients. This flexible approach was endorsed by three respondents in Site A who argued that 'sticking to the magic six week timeframe' could unnecessarily prolong the service and delay new admissions ('There is some reluctance to discharge someone even if they have achieved their goals...people may need us for a few days' Service Management 5). *The support of rehabilitation assistants* The contribution of rehabilitation assistants (carried out by either assistant practitioners or support workers) in promoting the sustainability of the service was discussed by the majority of respondents. Their role involved: a) delivering rehabilitation treatment plans, set by qualified therapists, b) updating therapists on patients' progress, c) completing outcome

assessments. In Site A, assistant practitioners were more autonomous than support workers, being able to progress rehabilitation goals or take over the care of less complex patients. According to eight respondents, assigning rehabilitation assistants to deliver the repetitive everyday exercises allowed the highly skilled staff to focus on the more specialist elements of rehabilitation ('It's about being able to break down the role and make sure that the right skilled person is doing the right part of the intervention' ESD Team Lead, 3). People agreed that the development of strong links with other services was critical to the success of early supported discharge. The Site B team reported that their close working relationship with the acute service had facilitated the identification of appropriate patients ('We've really endeavoured to build up a good relationship with the different organisations and I think the better that is, the better the team runs because you are getting referrals and good understanding' ESD Team Lead, 29).

Collaborative links with other services

Key factors enabling a successful collaboration between services were identified. Participation in meetings and common training events was seen as an effective way of developing and sustaining communication channels. It was also suggested that working arrangements, such as staff rotations across services, promoted a better understanding of each team's role, permitted the exchange of skills and knowledge and gave service users a sense of continuity long the pathway ('We could have some rotational element between staff so you can really share that sort of approach and the learning'. ESD Team Lead, 3).

Challenges

Lack of clarity regarding the referral decision making process

Hospital staff were perceived as occasionally reluctant to hand over patients to the Early Supported Discharge service as discussed by four team members in Site A. This could result in an unnecessarily prolonged in-hospital stay. Hospital staff attributed their scepticism to knowledge gaps regarding the content and the outcomes of Early Supported Discharge as well as the actual referral decision-making process. The need for more information around these issues, particularly in the first year of the service operating, was emphasised by seven respondents ('Just getting a bit more understanding of what the

content is so that we can decide the Early Supported Discharge is in the best interests of the patient' Acute Stroke Unit Staff, 8). Another area of uncertainty related to the optimal time for deciding on patients' suitability for Early Supported Discharge. In Site A, opinions varied with two respondents arguing that discussions with Early Supported Discharge services should be made 'the minute patients arrive in the acute unit'. Four others argued that the first two weeks after stroke is a very early stage for such decisions as 'A lot of recovery will be happening while patients are still on the acute'. In practice, the Site A team reportedly adopted a flexible approach, allowing for staff clinical expertise and experience to inform decision making.

Fragmented stroke care pathway

Four commissioners underlined the need to clarify the position of Early Supported Discharge in the context of the stroke pathway ('To be honest I am bit foggy about where Early Supported Discharge sits alongside intermediate care and re-enablement and how these are married up' Commissioning, 23). The process of securing social care input was presented by 11 respondents as 'one of the biggest stumbling blocks' to patients' timely discharged, offsetting the effect of Early Supported Discharge. Most team members in Site A reported that the inclusion of a social worker in the team mitigated the problem. On the contrary, the Site B team stopped providing the service after delays were observed in the discharge of patients waiting for care packages ('Patients were bottlenecking up at the other end because their care packages wouldn't be ready; at eight weeks we'd still got these patients'. Service Management, 18). Another issue that was stressed by seven respondents from both sites was the lack of specialist community services that could respond to the complex needs of more disabled patients. Respondents identified a gap in the pathway that led to the Early Supported Discharge service admitting more dependent patients ('Sometimes they think we are social care and we are not...we have done things above and beyond what we are expected to do' ESD Team Member, 10). In Site B, the team viewed the lack of a community stroke service as one of the biggest challenges to their work. Patients with ongoing needs would have to be referred to generic rehabilitation settings ('Patients who need more intensity than an outpatient programme could provide or those for whom home environment is more suitable, fall into a black hole at the moment'. ESD Team Lead, 29).

Duplication of assessments across services

Eight interviewees also talked about the unnecessary duplication of assessments across services and stressed the need to improve data-sharing practices between hospital and Early Supported Discharge teams. It was envisioned that a further integration of the pathway would involve the establishment of joint performance monitoring systems.

Impact

Intensive, stroke-specific and patient-centred intervention

The majority of Early Supported Discharge members from both sites described their service as successful in reducing the length of hospital stay without comprising the intensity of rehabilitation input ('Patients are able to come out of the hospital sooner which is what they prefer, and they are able to continue specialist rehabilitation in their own environment...so they can have some of their normal life going on and have their family involved'. ESD Team Lead, 3).

Reduction of in-hospital stay

The role of Early Supported Discharge in 'bridging a big part of the gap in community-based rehabilitation' formed a major theme in the interviews of Site B team. In Site A, five interviewees emphasised the contribution of the service in improving collaboration between the acute and community stroke services ('Transfer between the services has improved and works in a much more seamless way'. Service Management, 4).

Smoother transition from hospital to home

Ninteen respondents described the provision of specialist stroke care as critical for the successful rehabilitation of stroke patients in the community, maximising their recovery potential and facilitating the continuity of care across services. It was seen as a key component of the service, defining its identity and role. As commented by an interviewee, 'Having the

	knowledge to deal with stroke patients is what sets the service aside from other community services' Acute Stroke Unit Staff, 16). According to 11 respondents, the home-based model of rehabilitation offered therapists an ecologically valid appraisal of patients' difficulties and, therefore, allowed tailoring the intervention to patients' needs and priorities ('It is less about a body in a bed that needs a bit of fixing; to me, it feels more of a holistic service; just being in peoples' houses, seeing what problems they actually have and adapting the service around that' ESD Team Member, 30). Emotional issues could be addressed in a timely manner during the Early Supported Discharge according to seven respondents who observed that emotional and cognitive difficulties may not be fully expressed before hospital discharge ('Even people that have minimal physical impairments can be really anxious because their whole life has changed'. ESD Team Lead 29). It was acknowledged, however, that fully tackling these issues within the brief timeframe of Early Supported Discharge service can be extremely challenging. Three commissioners requested greater evidence as to whether Early Supported Discharge is 'the most efficient and effective way of providing rehabilitation and helping patients make the best of their recovery' (Commissioner, 34). They argued that the current economic climate stresses the need for a more rigorous evaluation of the services' outcomes. It was suggested that the mechanisms though which the Early Supported Discharge outcomes are communicated should be further improved ('we need more info on the outcomes of the intervention ...they need to demonstrate what they can offer ...to sell themselves really' (Acute Stroke Unit Staff, 16).
Limitations and applicability of evidence	Limitations: The study did not permit statistical generalisation of the findings. Applicability of evidence: Generally applicable. United Kingdom based setting, but only one part of the United Kingdom. However, including an urban and a more rural setting.

Study arms

Healthcare professionals (N = 35)
Practitioners, managers and commissioners from two Early Supported Discharge services. Participant characteristics: Type of professional: Commissioners = 6, Service Management = 6, Early Supported Discharge Team Lead = 3, Early Supported Discharge Team Member = 8, Stroke Physician = 2, Acute Stroke Unit Staff = 7, Rehab Stroke Unit Staff = 3. No additional information.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Cobley, 2013

Bibliographic Reference	Cobley, C. S.; Fisher, R. J.; Chouliara, N.; Kerr, M.; Walker, M. F.; A qualitative study exploring patients' and carers' experiences of Early Supported Discharge services after stroke; Clinical Rehabilitation; 2013; vol. 27 (no. 8); 750-7

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with	No additional information.

this study included in review	
Aim	To investigate patients' and carers' experiences of Early Supported Discharge services and inform future Early Supported Discharge service development and provision.
Population	Stroke patients N=27 People with a confirmed diagnosis of stroke who were assessed as requiring rehabilitation. Fulfilling the inclusion criteria: Barthel Index at least 14/20; within 14 days of stroke onset; transfer independently or with assistance of one; identified rehabilitation goals; their hospital consultant agreed they were medically stable. Both people who received and did not receive early supported discharge care (for example: living outside of the geographical boundaries) were recruited. Participant characteristics: 69.85 (13.42) years. Carers N=15 Carers of stroke survivors who were referred to an Early Supported Discharge service Participant characteristics: Mean age (SD): 72.79 (14.10) years. Male:Female = 2:13.
Setting	Two stroke units in the Nottinghamshire region in the United Kingdom.
Study design	Interviews. The duration of interviews ranged from 30 to 45 minutes. The interviewed were guided by a semi-structured interview framework, giving respondents a high degree of control over the conversation. Although each interview covered the same broad topics, new topics introduced by the interviewee were discussed in detail as they arose. All interviews were conducted in the patients' usual place of residence within one and six months of hospital discharge allowing participants to reliably comment on the services they were or had received. Interviews continued until data saturation was reached within

	each group. Interviews were audio recorded and transcribed verbatim with all personal identifiers removed. A qualitative data analysis software package (QSR NVivo 9) was used to organize the data efficiently and systematically.
Methods and analysis	Data from each group of interviews were analysed separately. A thematic analysis approach was followed to identify and report patterns (themes) within the data. Identifications of themes proceeded inductively, whereby datasets were read and codes were assigned to text segments that conveyed interesting information in relation to the research question. Through a qualitative constant comparison process, pieces of data (i.e. interviews, statements or a theme) were continuously compared in order to identify similarities and differences. Relevant codes were grouped into subthemes and were them summarized to form main themes. The themes that emerged from each group of interviews were compared and contrasted, resulting in the identification of themes that were common across both groups and themes that were only informed by the responses of participants receiving Early Supported Discharge services. These two groups of themes are reported separately. Cases disconfirming the core themes were examined and reported. A second researcher reviewed the interview transcripts and checked the relevance of each theme. Differences in research perspective were discussed and agreement was reached.
Findings	**Early Supported Discharge specific themes** *Satisfaction with rehabilitation exercises* Almost all interviewees reported feeling satisfied with the various exercises they had been taught and left to complete, enabling optimal functional recovery. People frequently commented on the benefits of receiving therapeutic sessions both within and outside the home environment. *Home as a better arena for rehabilitation* There was a consensus of preference among participants for returning to their home environment as soon as possible. Commonly, the home environment was described as a more private and individualised arena for rehabilitation. Rehabilitation in the home environment was seen to be more cost-effective and less demanding. Furthermore, the home environment was perceived to be more focused toward rehabilitation outcomes.

Time not being a carer

Respite time for the carer formed a core theme in the responses of carers who reported that the therapeutic sessions between patient and the Early Supported Discharge team enabled them to engage in their own activities. On the contrary, two carers described feeling housebound as the team were 'not with the patient long enough' to enable sufficient respite time for the carer.

Speed of response

The majority of patients reported feeling positively surprised with the seamless transition between hospital and home setting, with the first Early Supported Discharge home visit being made within 24 hours of hospital discharge. However, one reported having to wait several days for the Early Supported Discharge team to make their initial visit.

Intensity of therapy

The intensity of rehabilitation provided, of up to four visits per day, seven days per week for a duration of six weeks was received very positively by virtually every respondent. Participants talked about how the consistency and regularity of visits provided a sense of security during such a life-changing transitional period.

Satisfaction with provision and delivery of equipment

For patient safety purposes, the Early Supported Discharge teams complete an access visit to ensure all the necessary equipment is in place for the patient prior to hospital discharge. There was a general consensus among participants that the

equipment provided was useful and delivered in a timely manner. Nethertheless, one person found the equipment unsuitable and one was disappointed at being promised aids that never materialized.

Disjointed transition between Early Supported Discharge and future services

Following Early Supported Discharge, if needed, people were referred onto appropriate community services for on-going support and rehabilitation. However, some felt that the six-week cut off was 'abrupt' and not 'continuous enough'. Furthermore, some transferred to further services did not feel that this transition was always well managed.

Common themes in both cohorts of interviews

Limited support in dealing with carer strain

Carers are left feeling exhausted and physically strained. In addition, carers reported having to undertake tasks previously the responsibility of a partner. Most carers described suffering a reduction in time for leisure and social activities that, in turn, limited their opportunities for much needed social support. Not only had they had to respond to new roles and responsibilities in caring for the stroke survivor, but also to adapt to a new relationship with their spouse. Many respondents indicated that they felt thrown into the caring role without receiving enough support from the community stroke teams. They stressed the need for services to consider and address carer issues.

Lack of education and training of carers

	Several carers reported being poorly informed regarding the extent of support available after discharge. The training of carers in how best to physically support the patient was described as inadequate. carers also highlighted their difficulty in coping with the stroke patients' emotional and psychological needs. *Inadequate provision and delivery of information* In several interviews, both patients and carers expressed their concerns about their limited understanding of stroke and its causes, secondary preventative measures and lifestyle changes. Both patients and carers spoke of the difficulties they had encountered in accessing information concerning welfare benefits, carer allowance, statutory and informal support. Many participants felt that the information was delivered in an inappropriate format. Participants expressed their disappointment about having to wait lengthy periods before receiving some information. Many respondants described the information provided as failing to address their own needs and issues of concern.
Limitations and applicability of evidence	Limitations: None discussed. In looking at the study, you could argue that bias may be present in people who did not receive an early supported discharge service package in reporting general issues with discharge if unsatisfied with their previous lack of care received. Applicability of evidence: Applicable as from a United Kingdom population. Not completely relevant to a question on intensity, but very relevant to the topic of early supported discharge.

Study arms

Stroke patients (N = 27)
People with a confirmed diagnosis of stroke who were assessed as requiring rehabilitation

Carers (N = 15)
Carers of stroke survivors who were referred to an Early Supported Discharge service

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Collins, 2016

Bibliographic Reference	Collins, Gillian; Breen, Ciara; Walsh, Thomas; McGrath, Margaret; An exploration of the experience of early supported discharge from the perspective of stroke survivors; International Journal of Therapy & Rehabilitation; 2016; vol. 23 (no. 5); 207-214

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with	No additional information.

this study included in review	
Aim	To explore the experience of early supported discharge from the perspective of stroke survivors in Ireland.
Population	Stroke survivors N=4 People who were recruited through the stroke early supported discharge service at a large teaching hospital in the West of Ireland. Adults who had experiences of early supported discharge and were willing to participate in interviews with the researcher. Participant characteristics: Male:Female = 2:2. Mean age (range): 70 (61-81) years. Level of impairment post-stroke = 3 mild, 1 moderate. Living alone: 2. Living with husband: 1. Living with son and daughter-in-law and their children: 1.
Setting	Early supported discharge service linked to a large teaching hospital in the West of Ireland.
Study design	The first author conducted interviews with each participant. Interviews were conducted in participants' homes and lasted between 45-90 minutes. The research ethics committee at the host institution granted ethical approval for the study. All participants were provided with a detailed study information sheet and signed an informed consent form prior to participation in the interviews. The focus of each interview was to gather detailed accounts of participants' experiences of early supported discharge and to capture how participants made sense of that experience. To establish trust and rapport between the researcher and the participant, the interview schedule began with the least focused and least sensitive questions such as 'Tell me about your experiences of early supported discharge' and 'Can you describe the process of becoming involved in early supported discharge?' As rapport and trust were established the interviewer asked more detailed and more sensitive questions, such as 'How do you feel about having rehabilitation in your home?'. An inductive approach was adopted throughout the interview and the interviewer followed participants' through their accounts of early supported discharge. This allowed the interviewer to collect detailed information that led to a richer more insightful sense of how the participant thought about early supported discharge. With the consent of participants, all interviews were audio recorded and transcribed verbatim.
Methods and analysis	Interpretative phenomenological analysis. Each interview was initially analysed individually. This led to the identification of multiple themes. Where themes appeared in at least half of the other transcripts they were classified as recurrent themes. This enabled the researcher to promote an idiographic perspective while at the same time balancing convergence and divergence within the sample. Extracts from the interview texts are presented. Further credibility checks included

	assessment of the principal analyst's coding by the last author through analysis of original interview transcripts. Where disagreements in interpretation occurred, this was resolved through discussion and by returning to the original data.
Findings	**Getting out and getting on** The way in which participants' understood early supported discharge as symbolising their ability to overcome the impact of stroke on their daily lives. Participants reported a strong desire to 'get out' of the hospital environment and to 'get on' with their life. At the same time, participants sometimes struggled to imagine how they might return to their everyday life following their stroke, and so their future lives were fraught with uncertainties and anxieties. To address these uncertainties, participants adopted an attitude of determination and spoke about the need to 'get on' with life in spite of experiencing stroke-related disability and loss. *'Getting out'* Participants appeared to experience the transition from the hospital to the home environment as a significant step in their rehabilitation journey. 'And then you find yourself home here, and even if you haven't had a stroke, even if you've just gone in for an appendix, coming from hospital is a huge psychological step for everybody, and particularly older people, you know?'. This challenge of leaving the relative safety of the hospital environment was also acknowledged by Noreen, who noted that the hospital environment was a place of safety where her health and rehabilitation needs could be adequately met by staff: 'You feel very safe, very secure in the hospital'. Participation in the early supported discharge programme appeared to prompt participants to think about how they might return to their homes. Participants were uncertain about how they would adapt to life post stroke and this uncertainty led to feelings of anxiety about returning to their home environment. 'Before I actually came out of the hospital, before coming home, I panicked slightly, and I thought going through my mind, how am I going to get around with the walker? How am I going to get to the cooker? Will it fit? You know, all the little things, I'm going through the house in my mind you know that kind of way, and I panicked for a few hours "I'll never manage, what am I going to do?"'. This recollection of feeling panicked before going home contrasts sharply with the person's experience of security and safety while in the hospital, and led to mixed feelings regarding the possibility of early discharge. Regardless of the anxieties that participants experienced they nonetheless described a persistent yearning to 'get out' of the hospital environment and return to their own homes. Another person reflected, "Was glad to get home - to tell you the truth, I was glad to get out of the hospital."

Determination to 'get on' with life

Participants highlighted the importance of their own attitude and approach to rehabilitation. They suggested that by adopting a positive attitude they were able to maximise the impact of their rehabilitation programme. One person described an inner strength, which meant that she was able to handle difficulties and setbacks during the rehabilitation process, but acknowledged that not all people who have experience stroke are able to adopt such a positive stance: 'I think an awful lot of it has to do with the patient. The type of patient that you have. You either have somebody who's helpless and no strong enough to face it...but...if you can make yourself, do it! You have to make yourself; same as you have to make yourself get up and walk.' Another participant reported similar experiences, and again appeared to suggest that only certain types of people would benefit from early supported discharge, 'It suited me, it might not suit some people, but it definitely suited me because I wanted to get out of hospital and look after myself, basically.' This suggests that the success of early supported discharge was reliant on their own determination to 'get on' with life post stroke. However, not all of the participants necessarily agreed with this sentiment and for one, the 'getting on' with life was clearly linked to 'getting out' of hospital rather than to an individual trait: 'There's that attitude in a lot of people that once they're home, they'll begin to really do things. I think that if people were at home with the kind of support that I had, I get the feeling that they would have been mobile much, much quicker.'

Home - A place of familiarity

The early supported discharge service enabled participants to receive rehabilitation in their home environment and in this familiar environment participants appeared to be empowered to direct the therapy process to an extent that would not have been possible within the hospital setting. The familiarity of the home environment engendered feelings of safety and security among the participants. Home is a place of familiarity and comfort: 'You know the environment, you know every step of the place.'. The home environment also supported participants to return to pre stroke occupations and routines that contributed to a sense of normality: 'When you're at home, daft things like making a cup of tea, watching a bit of telly, watching your neighbours come in...It all lifts you.' Furthermore, participants experienced a feeling that the rehabilitation service they received as a part of the early supported discharge programme was tailored to their needs in a way that would not have been possible in the hospital. This ensured that rehabilitation sessions took into account participants' unique

circumstances: 'Walking up and down the gym in the hospital is great but it's not walking to the different levels of my floor in my home'. And maximised its relevance to their daily lives: 'In my own quarters ... was spot on.'

Understanding and misunderstandings

The superordinate theme of understandings and misunderstandings describes the anxieties and confusions that participants experienced during the process of early supported discharge. The initial decision to participate in the early supported discharge programme was taken during a time of immense change in participants' lives. So while participants understood that they would 'get out', they may not have fully understood the processes involved in early supported discharge.

What exactly is early supported discharge?

All participants consented to engage in early supported discharge and were satisfied with this decision. However, most of the participants had limited knowledge or understanding of early supported discharge. 'To be quite honest with you, I don't know how to describe it...they [staff in hospital] told me I'd get home; they told me about this ... then just in a couple of days I got home here.' 'I'm not sure exactly ... the physio came out and gave me exercises ... and the OT helped me with the thing in the bathroom to get into the bath, and the little trolley for wheeling meals ... so that was the input from the early supported discharge'. Despite having limited knowledge of the early supported discharge service, participants appreciated that the rehabilitation they received from the early supported discharge staff was different to the services they received while in hospital. Participants frequently referred to the personalised service that was provided by the early supported discharge programme and commented on the extent to which the programme appeared to be focused on their individual needs. One person noted in the hospital environment, rehabilitation appears to be driven by the needs of the organisation, 'When things are happening in the hospital it's all about the hospital. It's about the environment in the hospital.' Whereas reflecting on their experiences of early supported discharge, 'It [early supported discharge] works very well. You've got somebody sitting with you in the room that can answer every one of your questions about what's going on.' Another person had a similar perspective, 'At home, with their coming here, I felt I was an individual, it was especially for me ... that kind of feeling it wasn't like I was a number in the hospital, I was somebody, I was at home and somebody was coming to help me.'

	From stranger to friend? Participants described a changing relationship with the healthcare professionals who worked in the early supported discharge service. Initially, these professionals were seen as strangers and this lack of familiarity appeared to provoke a certain level of anxiety among the participants. 'Don't want strangers in and don't want them finding out stuff about me ... privacy would have been a big thing.' However, as the rehabilitation process progressed, these 'strangers' became more familiar and appeared to quickly assume a status as knowledgeable friends whose visits were eagerly anticipated and valued: 'Well, the OT came out and the physio came out and there was a bit of company for me when they came.' 'They were such nice girls, I looked forward to the camaraderie we had; we had great chats and craic.' However, the friendship that developed between the participants and their health care professionals was a temporary one that was bounded by the clinical needs of participants and the availability of the early supported discharge service. 'We became friends, they were my friends while they were here'. Not all of the participants were as prosaic about the ending of the friendship and a number of them noted that when they were discharged from the service, they missed the social aspect of their rehabilitation: 'I missed them when they were finished'. 'I looked forward to the camaraderie we had I missed them after it [early supported discharge] finished.'
Limitations and applicability of evidence	Limitations: Very small sample size. The study was conducted in a city in the west of Ireland, where early supported discharge is a newly established service. Therefore, the findings may be specific to this context and the issues may not represent the totality of all stroke survivors' experiences. There may be other important aspects that are not accounted for. The interviews were carried out between two weeks and three months post discharge from the service. Capturing the information so soon after early supported discharge helped to capture immediate impressions, but follow-up interviews may have captured a more nuanced understanding of the experience of this type of rehabilitation in the context of ongoing life post stroke. Perspectives of stroke survivors' families and carers were not included in the study.

	Applicability of the evidence: Relevant healthcare system to the United Kingdom. Directly about early supported discharge.

Study arms

Stroke survivors (N = 4)
People who were recruited through the stroke early supported discharge service at a large teaching hospital in the West of Ireland. Adults who had experiences of early supported discharge and were willing to participate in interviews with the researcher. Participant characteristics: Male:Female = 2:2. Mean age (range): 70 (61-81) years. Level of impairment post-stroke = 3 mild, 1 moderate. Living alone: 2. Living with husband: 1. Living with son and daughter-in-law and their children: 1.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Ellis-Hill, 2009

Bibliographic Reference	Ellis-Hill, C.; Robison, J.; Wiles, R.; McPherson, K.; Hyndman, D.; Ashburn, A.; Going home to get on with life: patients and carers experiences of being discharged from hospital following a stroke; Disability & Rehabilitation; 2009; vol. 31 (no. 2); 61-72

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To develop the understanding of what constitutes a 'good' and 'poor' experience in relation to the transition from hospital to home following a stroke.
Population	Stroke survivors N=20 All people admitted to the acute stroke ward in the District General Hospital with a diagnosis of stroke according to the World Health Organisation definition were included. People with severe communication and cognitive impairments were not included. People with stroke who were nearing discharge were approached consecutively. The first five who agreed to take part were recruited. Examination of the characteristics revealed diversity in relation to the criteria as anticipated and in length of hospital stay, so the decision was taken to recruit more. Twenty-one people were approached to take part in the study and of there, 20 decided to take part; one agreeing and then changing her mind. Participant characteristics: Male:female = 12:8. Mean age (range) = 70 (53-85) years. Living alone at the time of the stroke = 10. With a spouse = 10. Discharged from acute stroke unit with no further support = 2, with community referral (for day hospital or community physiotherapy) = 2, with community support team for 6 weeks = 3, with social care services care package = 0. Discharged from stroke rehab unit with community referral = 6, with community support team for 6 weeks = 2, with social services care package = 1. Discharged from other hospital ward with no further support = 1, with community referral = 1. Discharged from intermediate care with no further support = 1, with social services care package = 1.

	Carers/family members N=13 The carers of stroke survivors who were recruited to the study. Participant characteristics: Spouses = 10, daughters = 3.
Setting	People who were discharged from a range of different inpatient services with a range of different packages of support in the United Kingdom (country unclear from the writing, however appears most likely to be the United Kingdom).
Study design	Semi-structured interviews focused on the person following the stroke. Participants were asked to talk about the effects of the stroke for them, their priorities for recovery and their views about therapy and services. The interviews were audio-taped with the participant's permission. Following the interview, field notes were completed by the researcher. The audiotapes were transcribed in full with interviewer and participant contributions. Notations indicated lengthy silences and expression of emotions including laughter and tearfulness.
Methods and analysis	The QSR NVivo software package was used to assist in the process of data indexing. Framework analysis was used to analyse the data systematically. Initially each transcript was analysed separately. This involved close reading of each transcript line by line, identifying and coding issues related to the research question. Three members of the research team independently coded a small number of transcripts and then discussed their analysis together. This enabled personal influences to be made explicit and taken into account to enhance trustworthiness. JR charted relevant demographic and contextual information alongside summaries of participant's accounts of events associated with discharge from hospital to home. This ensured that all relevant data from the transcripts were captured, were easily accessible to the team members and taken into account during the analysis. This contributed to the audit trail. Each transcript was then checked by the researcher to explore similarities and differences within these themes across all of the participants in the sample.
Findings	**Continuity in recovery versus loss of momentum** A key concept was the idea of momentum and continuing recovery. Participants varied in the degree to which they spoke about this sense of momentum but the theme featured at some level in the accounts of most of the participants, often conveying a sense of how services either helped or hindered this momentum or sense of recovery. It is interesting to note that the focus of out study was the experience of movement in the physical, literal sense and participants did describe physical abilities in movement yet a key wider aspect was momentum or moving on/getting on with their lives in the broadest sense. At the time of interview, soon after discharge from hospital, many respondents talked of their aspirations for a 'return to normal'. Participants conveyed a sense of momentum by referring to changes that they had observed

between different points in time and indicated how they [and healthcare professionals] felt about the improvement in return of localised sensation or movement, of function or the resumption of a particular activity. For example, Mr Watts, aged 68, discharged home from the Acute Stroke Unit after a hospital stay of 14 days said, "Well the arm is more or less right again. The leg is still not proper but it's a hell of a lot better than it was - to start with I couldn't use it at all, you know, I was just sort of dragging it along and holding on to things."

At discharge people spoke of expectations that this recovery would continue. As Mr Wilson, aged 80, discharged from the Stroke Rehabilitation Unit after a hospital stay of 67 days said: "Things like that I'm aiming for; to try and do a lot of the jobs that I used to do - you know what I mean? I mean if I feel like I want to do a bit of do-it-yourself well why not? If I recover enough I'll do it...". However, there was some uncertainty about timescales and what it would take to achieve this recovery. As Mrs Davenport at 82 and discharged from the Acute Stroke Unit after 17 days said: "But, you know, you can't rush it. Time has got to sort it out hasn't it? Which it has. So if I get some physio, or help um I'm sure eventually, I mean to say maybe not 100% because something perhaps is dead...". It appeared that those for whom momentum was particularly significant included those who had specific life goals that they wanted to achieve and/or activities they wished to resume in the future which depend on a specific physical ability. Those who had experienced a positive working relationship with physiotherapists in the hospital setting spoke of the physiotherapists' role in helping them maintain momentum and get on with their lives. These aspects will be discussed in more detail below.

In the following extract, Mr Wilson described how physiotherapy helped him to recover sufficient mobility during his time in hospital to conduct himself at home with a degree of independence consistent with preserving his sense of identity as an active and self-reliant older man: "Yes, well they concentrated on me being able to walk round the house. I said 'Look I want to walk through my own front door; I don't want to go in a wheelchair.' So they concentrated on me walking - not a massive distance, ten metres I think was the farthest they got. And they concentrated very, very strongly on up and down stairs which I said I was determined to do. I wasn't going to have a bed downstairs or anything like that, no way. Which, thank God, I can manage very well now ... Oh yes I wanted to be independent, definitely." On discharge he was referred to the day hospital for further physiotherapy and was pleasantly surprised to receive his first appointment within a week. In this following extract he conveys his sense of continuing improvement in mobility during the three weeks since his discharge and his appreciation of the physiotherapy: "I: So the legs are the first priority? R: Yes, to get me walking better ... I walked round the Close here the other day which is not a massive distance but it's a fair distance. I mean when I came out of hospital three weeks ago the farthest I'd walked was the length of the ward so I've obviously improved a lot. No, they are a

great help and all trying hard." He also made it clear that he recognised his own role in maintaining the momentum when asked about time limits he said: "They haven't said anything but obviously it's not going to go on forever because it's ... once they get me fairly mobile and satisfactory then you go on from there on your own, wouldn't you? It's up to you ... I've got both the energy and the enthusiasm because I know the answers in my hands. Alright it's 70% physio but it's going to be at least 30% me. I've got to do it. Yes."

These extracts indicate that the feeling of being able to maintain a sense of momentum appeared to relate both to the service received and also the personal response of the participant. Those who felt the momentum had been maintained included those who had experienced a good relationship with a member of staff in hospital which was maintained by immediate referral/support to community services. However, there were a number of examples where people felt they had lost momentum. Several respondents highlighted the difficulties inherent in making the transition from the familiar hospital environment. For example Mrs King, who was aged 60 and had been discharged from the Stroke Rehabilitation Unit after a hospital stay of 94 days, said: "I don't think I've really made very much [progress] since I came out of hospital a week ago. I mean I was actually shocked when I got home, how sort of doddery I was, because I'd been walking all down the corridors at the hospital by myself, you know, and walking on the ward by myself, but it's a bit difficult when you've got furniture and you're only doing very short walks, you know ...". This quote highlights the difficulties for people, as the deficit or impairment has not changed but the meaning of the impairment in their everyday life is brought into sharp relief. In hospital the environment was designed to be as patient friendly as possible. Personal progress and momentum was judged against this situation or standard. On coming home the familiar environment becomes unfamiliar and presents many obstacles and so the sense of momentum built up in hospital was seen to be challenged and reduced. This was highlighted by a quote from Mrs King's husband who said: "It think in hospital it tends to be a way of life that you live for a long time and then you are coming out to another way of life."

Keen to resume her successful career and an active busy life, Mrs King found it hard to come to terms with the slow pace of her recovery. Other participants conveyed disappointment about the stalling of recovery and voiced fears about the consequences of losing momentum in recovery. For example Mr Spencer (aged 74, discharged from the stroke rehabilitation unit after a total hospital stay of 76 days) said when asked if his arm was getting any better: "No, I got a fair amount of mobility back into it and I can raise it [demonstrating raising his arm] but that was hard work and it seems that, no matter how hard I work now, it doesn't get any better ... You've got to will yourself to do these things and you've got to have someone to encourage you to do them, because left to your own devices it's very easy to, to um, what I call mope ... Yes,

the thought is, at the back of your mind all the time 'Am I going to degenerate any more?' and I must stop this, but it's very difficult." For some, they felt that losing momentum was a consequence of delays and discontinuity of therapy. Mr Barlow, aged 53, was discharged home after a hospital stay of 30 days, just the last three of which had been spent in the SRU. He had been content with the prompt discharge from the SRU with a referral for community physiotherapy; however he expressed frustration that two weeks after discharge he was still waiting for his first appointment: "But since then, nobody has bothered to ring at all, which is a bit annoying because when you first come out I think that's the time when you really need the physio. You need to keep it going, you know ...".

One or two people who were not continuing with physiotherapy following discharge were happy with this situation. Ms Williams, aged 56, and living alone but well supported by friends and her sister, was discharged from the SRU after a hospital stay of 56 days, concluded that further physiotherapy couldn't have been warranted as it had not been suggested by her physiotherapist: "I: Yes ... Are you still seeing a physio not that you've come home? R: No, no. That's why I say I practice my walking, because I still feel the more I do, the easier it will be ... I'm sure they'd come round or refer me to somebody that could help but I don't think there is." Ms Williams felt that she was progressing and maintaining her momentum by carrying out her usual daily tasks rather than needing specific physiotherapy exercises. Her trust that healthcare professionals would provide services for her if her condition warranted it probably contributed to this view. A number of service factors appeared to affect this sense of momentum during and following discharge.

Being supported versus being abandoned

Positive experiences of being supported were described by people who had developed a sense of partnership in the hospital setting. They had developed a sense of trust and felt guided by the professionals. This gave them confidence that they were doing the best that they could to maintain their momentum and recovery. People felt supported when there was a sense of preparation for their return home and physiotherapy was seen to be focusing on what they wanted to be able to do at home. Ms Pringle, aged 85, who was discharged home to her first floor flat after 59 days in hospital and a further 38 days in a Social Services rehabilitation unit, said: "They tried steps because they knew I was coming home to steps ..." A sense of support and partnership was also achieved through occupational therapy assessments in hospital or during home visits, as described by Mrs Simpson, aged 71, discharged from the acute stroke unit after nine days: "The occupational therapist took me into the OT kitchen and she said 'Now I want you to make me a cup of coffee' ... I did that without a single spill or anything; so, yes, I knew I was ready to come home." Provision of aids and equipment was seen as very helpful by some

participants, for example, Mrs King said: "You know they were just seeing about what I needed, you know, stools and ... You know that's been absolutely brilliant - they've given me two perching stools, a trolley to wheel in here and they've made the settee up high, so that was really good."

When a positive relationship with healthcare professionals was established during the hospital stay and maintained through the provision of immediate follow-up services in the community, the perception of a positive trusting relationship continued. People who felt supported by services were those who felt that the services supported their continuity in recovery. Four participants [and their wives in two cases] described very positive experiences of support from a local Community Assessment and Rehabilitation Team [CART] who accompanied the patient home on discharge and could visit daily up to a maximum of six weeks providing support tailored to the individual need. Participants appreciated having easy access to a wide range of expertise in the multi-disciplinary team and the reassurance this provided. This is summed up by Mr Cartwright, aged 69, who was discharged from the acute stroke unit after a hospital stay of 14 days. When asked what had helped most since his stroke he responded: "Oh the CART team, for coming here and helping like they have. I mean there's always somebody there to talk to and relate to." The different aspects of the positive experience are related in more detail in passages spoken by his wife: "If he'd wanted them to, they would have come longer in the mornings to see him downstairs and get dressed and washed and so on, but of course he didn't need them to, so they thought he'd done really well for that. So then the next thing was to stay to get him mobile, to go for a walk, and show him how to hold himself, you know, posture, and to pick his feet up rather than shuffle."

The passage highlights her appreciation of the flexible approach of the team, the sense of encouragement derived from professionals giving feedback about recovery and working to a plan to maintain progress based on an appreciation of her life situation. In a further passage she conveys how much she valued having someone at the end of the phone in those early days when, as a carer, she was having to make difficult decisions. She spoke about how her husband had lost a crown from his tooth and said: "I had to sort of decide what to do and we actually got a taxi and went over to the dentist. Um, but I was able to ring [the team] and just check that it was alright to do it whereas if he'd just been discharged I wouldn't really have felt that I could ring such a busy ward." The feeling of being supported was maintained for other people by less intensive levels of support. These included people referred to the day hospital or for community physiotherapy where appointments had come through soon after discharge so that a sense of continuity was maintained. In contrast people described feeling abandoned and unsupported when they were discharged suddenly or sooner than they had been expecting. This is illustrated in the following extract from the husband of Mrs Davenport who said: "I was very surprised

when I picked up the phone and there's this answer: 'This is the physiotherapist at [ASU], you wife is ready to collect. Would you come and collect her?' ... When she came out she had a green bag with her belongings in and when I looked at it later there were just three envelopes addressed to the district nurse and the doctors and I had no means of taking it then 'cos my daughter-in-law had gone back and I didn't want to leave her on her own ... So, I wasn't able to contact them, it being Saturday or Sunday, until Monday and they knew nothing about it at the GP surgery. They said they normally get a fax which they hadn't had."

People also spoke of a sense of feeling unsupported in situations where they knew services were available but, they could not access them. Mr Kent, aged 68, valued supported from CART when first discharged after a hospital stay of 71 days but following readmission to hospital and subsequent discharge he and his wife found that CART couldn't accept the second referral and he felt very let down. "C: Yes [laughing] yes. We just felt we were abandoned to start with and then I got a phone call saying that CART wouldn't be able to bring us home so it meant I had to dash round trying to find somebody ... We had to get a taxi home which was all a bit hectic wasn't it at the time? ... We felt we was just pushed out by the front door and left there on our own ... We haven't had any follow up from outpatients yet." Also, Mr Watts, aged 68, discharged home from the Acute Stroke Unit after a hospital stay of 14 days, reported not getting the service he was expecting due to the day of his discharge. Discharge was planned for a Friday but he was told that the CART team could not supply a member of the team to accompany him home and conduct necessary assessments until the following Monday. Because he chose to let his son take him home on the Friday and look after him over the weekend he reported being told that they could not agree to take his case on from the Monday: "So I thought: 'I don't think much of them', you know ... And they said well he either waits there until Monday when we pick him up or we just sort of wash our hands of him and we don't give him nothing."

Some people also spoke about their discharge being linked with the hospital needing beds so, although not directly blaming staff, felt that they were discharged for pragmatic rather than clinical reasons. for example, Mr Barlow said: "Yes. I mean, with hindsight, it would obviously have been better for me to stay in C[place] because I would have had access to getting physio every day, but I realise that they need the beds. I'm not saying they were trying to get rid of me, they weren't..." Individual circumstances also appeared to make a difference to the level of support which was perceived to have been provided. It appeared that those who reported feeling supported were often those who lived on their own. It is interesting to hypothesize that this may be due to a combination of factors such as service providers ensuring that everything is in place to ensure that the person was safe alone in their home; only having one key person to liaise with about the discharge and

also the independent spirit of many people living alone who are used to problem solving for themselves and having to manage themselves. As Mr Austin, a single man of 68 who was discharged from the Stroke Rehabilitation Unit after a hospital stay of 82 days, said: "... if I had a wife or a partner or whatever sitting there I wouldn't be doing half as much as I do now. I wouldn't go out there and make a cup of tea and I wouldn't be making the bed, so that could be helping in a way." Also, the majority of those living alone had developed a network of social support from either their sons, daughters or neighbours and had friends if they had no close family. For example, as Mrs Greenway, aged 70, discharged after a hospital stay of 60 days said: "I really am blessed: I've got four really good children. I wonder how people manage without their children. I really do."

In comparison the situation may be more difficult for those who are living as a couple. Healthcare professionals, family and friends may assume that there will be somebody to 'keep an eye' on them and messages and information may not always get to the right person. Additionally, their partner may rely on the spouse more than usual, and the spouse may not have the confidence or knowledge needed to support their partner.

Being in the picture versus being in the dark

A key aspect of the experience for people during discharge was either feeling that they knew what was going on or feeling that they were left in the dark. There were many aspects which people felt that they needed to know about or be kept informed about, relating to the stroke itself, recovery and also service delivery. Those who described a positive discharge where they felt supported often felt that they knew as much as they wanted or had access to somebody who could clarify things for them, as described by Mrs Cartwright previously. However, discharge was a more challenging experience when people had queries or felt that they were left in the dark. People often felt in the dark about how to manage their physical recovery. People felt that the advice they had been given by therapists could be interpreted in many different ways. Mrs King spoke about how tired she had been since she got home. Her husband reported that the therapists when visiting the home had stressed that she mustn't 'overdo it'. She then commented: "R: But actually nobody told me that before I came out of hospital and nobody told me that I could only walk for five minutes. I mean I actually thought that I could get out and walk. I thought I'd be alright ... I thought I could walk a lot further, but nobody said to me sit ... Well they did say 'Don't overdo it' but, you know, what's anybody's sort of thought on 'Don't overdo it?' You don't know do you? C: You don't know until you find out. R: Yes. But I've found out now and I have got to take it easy." People were very worried about doing it wrong and making their situation worse as described by Mr Barlow: "... So I've got to try and sort of do things for myself, but

the problem with that is , you know, it's like when I was doing the walking and stuff, you don't know if you're doing anything wrong or if you're doing wrong exercises to try and correct what you've got wrong."

The situation was made worse for those who were being kept in the dark in another way. They had been discharged from hospital, were waiting for community services to start and had no idea when this may take place or what they could do to hasten the delivery. This was particularly experienced as an added pressure by carers and is described here by Mrs Spencer as 'hovering'. "Yes. At the moment we're sort of hovering. We don't know whether ... I keep saying to him 'Do a few more exercises', but then he says 'I'm in terrible pain' and I then I feel, well, am I doing the right thing keeping on about it?" This state of 'not knowing' was very distressing for people as can be seen in the following quote from the wife of Mr Cox, who was aged 69 and was discharged from Stroke Rehabilitation Unit after a total hospital stay of 75 days. She had been trying to find out when physiotherapy would take place, "'Cos I said, you' know, 'it's been over a week now' and I feel it's really bad that he's had nothing, professionaly, only what I've been doing at home, nothing professionally, and I think it should be ongoing because he's very positive about the future and, um, you know, this is not helping." The reasons why some people required services and others did not were not entirely clear. There are logical systems in place within the NHS for the provision of services but these were not always apparent to the participants or the researchers.

People were also in the dark about their own condition and were left with many unanswered questions. This affected people's experience in the degree to which they felt that they knew enough about their condition to overcome the limitations and get on with their lives. Common questions asked were: 'Why did I have the stroke?' and 'Will I have another one?'. For some people this lack of knowledge led to living a life affected by uncertainty. This was highlighted by Mr Watson, aged 72 discharged from the acute stroke unit after three days, when he was asked what had the greatest effect on him. "R: Er...the uncertainty. Even now I'm not sure whether one should expect another stroke or whether you should accept that it's behind you and it's unlikely to happen again ... The biggest problem is not knowing what the future holds. Other than that I can cope with the ... ah, 'cope' [seeming to pass comment on his choice of word as ironic] with the little things that are evidence from the stroke. I'd be quite happy to copy with those little things for the rest of my life, but it's the uncertainty of what might happen in the future. I: Yes. Have the doctors talked to you about ... about that?" R: No they haven't. I haven't asked. Perhaps that's the reason they haven't mentioned it. Perhaps they feel that I'm quite lucid and comfortable with it but I do feel a little bit uncertain." Many of the aspects identified in this study may not be apparent to healthcare professionals and perhaps, as highlighted by Mr Watson, this is why people do not feel they can ask the questions for which they would like answers.

Limitations and applicability of evidence	Limitations: The findings need to be seen within the framework of the larger quantitative longitudinal study from which the participants were recruited which focuses on an exploration of mobility change following stroke over several years. Within that study mobility is defined broadly ranging from impairment through to participation. Within the present study they asked about mobility in terms of a person's experiences of their physical and life changes and exploring what services were perceived by them to have helped or hindered them. The context was based on discharge for this was when the data was collected. People with severe communication difficulties or who were confused could not take part as they did not have the expertise to work with them. However, people with mild communication difficulties or confusion were included as their carers could assist within the interviews. Applicability of evidence: Only some people may have had early supported discharge and so some of the data may not be applicable. United Kingdom setting so directly applicable to that regard.

Study arms

Stroke survivors (N = 20)
All people admitted to the acute stroke ward in the District General Hospital with a diagnosis of stroke according to the World Health Organisation definition were included. People with severe communication and cognitive impairments were not included. People with stroke who were nearing discharge were approached consecutively. The first five who agreed to take part were recruited. Examination of the characteristics revealed diversity in relation to the criteria as anticipated and in length of hospital stay, so the decision was taken to recruit more. Twenty-one people were approached to take part in the study and of there, 20 decided to take part; one agreeing and then changing her mind. Participant characteristics: Male:female = 12:8. Mean age (range) = 70 (53-85) years. Living alone at the time of the stroke = 10. With a spouse = 10. Discharged from acute stroke unit with no further support = 2, with community referral (for day hospital or community physiotherapy) = 2, with community support team for 6 weeks = 3, with social care services care package = 0.

Discharged from stroke rehab unit with community referral = 6, with community support team for 6 weeks = 2, with social services care package = 1. Discharged from other hospital ward with no further support = 1, with community referral = 1. Discharged from intermediate care with no further support = 1, with social services care package = 1.

Carers/family members (N = 13)
The carers of stroke survivors who were recruited to the study. Participant characteristics: Spouses = 10, daughters = 3.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Fisher, 2013

Bibliographic Reference	Fisher, R. J.; Walker, M. F.; Golton, I.; Jenkinson, D.; The implementation of evidence-based rehabilitation services for stroke survivors living in the community: the results of a Delphi consensus process; Clinical Rehabilitation; 2013; vol. 27 (no. 8); 741-9

Study details

Secondary publication of another included study- see primary study for details	No additional information.

Other publications associated with this study included in review	No additional information.
Aim	To establish the core components of evidence-based community stroke services by using a modified Delphi consensus approach and building on a recently published Early Supported Discharge consensus document.
Population	Healthcare professionals N=25 10 academics, 15 stroke service leads or commissioners. Panel members were selected according to agreed criteria: the individuals' knowledge of national stroke policy, their perceived ability to respond to statements from a national perspective, their field of expertise or knowledge of research literature and leadership experience within stroke care. 10 panelists worked in a hospital setting, 8 in the community and 8 at a University with a mixed geographical representation: East Midlands (nine), South West/Coast (five), London (four), Yorkshire (three), West Midlands (two), Glasgow (two) and Northumberland (one). Participant characteristics: No additional information. Stroke survivors N=1 1 stroke survivor who participated in the panel. Participant characteristics: No additional information.
Setting	United Kingdom, 10 pannelists worked in a hospital setting, 8 in the community and 8 at a University with a mixed geographical representation: East Midlands (nine), South West/Coast (five), London (four), Yorkshire (three), West Midlands (two), Glasgow (two) and Northumberland (one).

Study design	Delphi approach with a purposive sample of 26 UK-based expert panellists. A core team of nine people, including two academic researchers, a community stroke team lead and members of the NHS Stroke Improvement Programme agreed the framework and score for the consensus activity. Core team members conducted a literature review to identify and select research literature documents (systematic reviews or randomised controlled trials) or clinical guidelines and policy documents that were deemed suitable for generating statements about the implementation of community stroke services. Statements were generated from these. Each statement was discussed at length and final wording agreed by all core team members over three dedicated meetings.
Methods and analysis	A consensus panel of 26 people, separate from the core team, were assembled using purposive sampling. 25 agreed to take part with just one person suggesting a more appropriate representative. The decision to limit the panellist number to 26 was based on the authors' experience of pragmatic use of the modified Delphi approach (and the number of statements that had been generated), in addition to the core teams' knowledge of the combined expertise of the selected panel members. The panel members were asked to indicate their level of agreement with each statement, with the option to make comments via free text as appropriate. Panellists were asked to adopt a national and aspiration perspective when responding to statements, rather than focusing on the current state of local services with which they may work. Consensus of agreement was determined by over 70% (19 pannelists or more) giving 'Strongly agree' or 'Agree' responses (combined score); similarly consensus was also reached if over 70% of people disagreed and gave 'Disagree' or 'Strongly disagree' responses. All statements for which consensus had not been reached in round 1 were circulated again in round 2 and panellists were given the opportunity to review their level of agreement in light of the group response. In round 3, six of the statements for which consensus was not reached were reworded based on the comments. Following round 3, final consensus levels for each statement and the median response were calculated. Free text comments from all rounds of the modified Delphi process were analysed qualitatively. Consensus headings allowed a top-down structure to be imposed on the data. An iterative form of content analysis involved organising the free text into themes based on the frequency and relevance to consensus headings, which were then subject to further review and analysis.
Findings	**Organisation of community stroke services**

The panelists agreed that there is a need for an integrated pathway of stroke care following discharge from hospital and that relies on strategic leadership and a dedicated network of service representation across health, social care, voluntary and third sectors. Those responsible for procuring and commissioning community stroke services should be active participants.

Stroke specialist care beyond hospital

Consensus was not reached on some of the statements relating to what defines a community stroke rehabilitation team as stroke specialists. A statement was split into two parts, so that the issues concerning the treatment of stroke patients could be dealt with separately from the experience and knowledge of staff. Whereas panelists reached consensus on the fact that a stroke specialist team should predominantly treat and have experience and knowledge of people with stroke, whether they should treat stroke patients exclusively, remains undecided. Two people argued that they should be dedicated to the care of stroke patients, while seven believed that a neurological rehabilitation team offering stroke care as a specialty, would be equally appropriate. There was concern that it might not be viable to implement a team that just supports stroke patients, even if it was ideal.

Decision making about pathways of care according to need

Panelists agreed on the need for distinct stroke care pathways based on stroke severity, highlighting the need for measurement of stroke severity before transfer from hospital. Consensus was reached on the fact that stroke survivors not eligible for Early Supported Discharge, but that have ongoing rehabilitation needs, should be referred to a community stroke rehabilitation service when transferred from hospital. It was agreed that severe stroke survivors, not eligible for Early Supported Discharge owing to complex stroke-related needs, require rehabilitation in hospital and should only be transferred into the community when they can be supported at their place of residence.

Provision of information

Panelists agreed that an information strategy should be produced that clearly described the pathway for provision of information and support to all stroke patients and their carers following transfer from hospital. Four felt it would be better to define who the provider of this information and support services should be, while four others thought that an interdisciplinary approach was required.

Community stroke rehabilitation team: intervention

The intensity and duration of therapy was debated. Seven people questioned the need to specify intervention length, particularly as this was perceived to be "contrary to the concept of individual need". Therefore, the statement was changed to allow for this flexibility. Nine panelists expressed concern about a reference to 45 minutes of therapy in an initial version of the statement, arguing it was practically difficult to set time limits on rehabilitation duration. It was apparent from eight panelist responses that they recognised a clear distinction between an Early Supported Discharge and a community stroke rehabilitation team, with Early Supported Discharge being associated with a higher intensity of intervention ("Early Supported Discharge should be separate from a community stroke team or the team becomes blurred and will not meet the different needs of patients"). Five other panelists suggested a more flexible approach motivated by a concern that conceptualising these services as separate entities would compromise a fully integrated pathway of care ("I run an Early Supported Discharge/Community Neurorehabilitation team which is completely integrated - the patient would see no distinction between the two 'models' apart from intensity of treatment which reduces naturally in line with patient need/goals". Although it was agreed that people should receive individualised training, consensus was not reached as to whether support (including provision of information) should be provided by stroke specialist rehabilitation services. Seven pointed out the benefits of other sources of support.

Community stroke rehabilitation team: model of team

Although panelists reached consensus on guideline whole time equivalent figures for staff members of a community stroke rehabilitation team. Five panelists argued that some of the figures quoted were too low, particularly in regards to rehabilitation assistants ("Rehab assistants are extremely useful flexible team members and should feature more".) This also relates to the lack of consensus around the staffing level of a social worker, despite agreement that this discipline

should feature in the team. Lack of a clear distinction between Early Supported Discharge and community stroke teams for some panel members was also apparent in comments around the model of team ("If Early Supported Discharge were offered as part of the team's work, the complement of staff would need to rise significantly from the suggested whole time equivalent above in order to manage the intensity required by Early Supported Discharge patients.") One panelist suggested that "community stroke rehabilitation teams should be staffed appropriately post careful demand and capacity calculations".

Community stroke rehabilitation team: access and transfer of care

The reference to the need for identification of clear goals for rehabilitation in order for stroke survivors to access services stimulated a number of comments from panelists. Nine panelists expressed concern that patients not able to participate in goal setting may be deprived of stroke specialist rehabilitation. It was felt that "Goals may not be particularly clear initially due to psychological, communication or cognitive factors." Also that advice on seating, transfers and feeding may not relate to clear goals but to adjustments to disability. Four panelists recognised the importance of goal setting as a means to determine access and discharge from the service and the need to avoid advocating "unlimited and unfettered access" in order to assist with service planning. Two panelists drew attention to the type of intervention the team offers and the desire to offer both rehabilitation and longer-term disability management.

Community stroke rehabilitation team: performance indicators

Panelists agreed that teams should standardize outcome measures, including measures of degree of dependency, general health, mood evaluation, activities of daily living and goal attainment. It was also agreed that teams should monitor carer health status, quality of life and mood.

From healthcare to reintegration

	Comments from seven panellists reflected a reluctance of community stroke services to hand over responsibility to other services, although panelists agreed with a need for the planned withdrawal of stroke specialist rehabilitation. It was highlighted that the General Practitioner or community doctor might not at present recognise their stroke-related responsibilities and should have support from stroke consultants and the opportunity for joint training in stroke.
Limitations and applicability of evidence	Limitations: The inclusion of just one stroke survivor and no carers. However, they felt this was compensated by the chosen stroke survivor's knowledge and experience of stroke and national role in stroke service development. They acknowledge the results may have been different with an alternative panel composition. They did not directly explore funding of services. Applicability of evidence: UK based setting.

Study arms

Healthcare professionals (N = 25)
10 academics, 15 stroke service leads or commissioners. Panel members were selected according to agreed criteria: the individuals' knowledge of national stroke policy, their perceived ability to respond to statements from a national perspective, their field of expertise or knowledge of research literature and leadership experience within stroke care. 10 panelists worked in a hospital setting, 8 in the community and 8 at a University with a mixed geographical representation: East Midlands (nine), South West/Coast (five), London (four), Yorkshire (three), West Midlands (two), Glasgow (two) and Northumberland (one).

Stroke survivors (N = 1)
1 stroke survivor who participated in the panel.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Hitch, 2020

Bibliographic Reference	Hitch, D.; Leech, K.; Neale, S.; Malcolm, A.; Evaluating the implementation of an early supported discharge (ESD) program for stroke survivors: A mixed methods longitudinal case study; PLoS ONE [Electronic Resource]; 2020; vol. 15 (no. 6); e0235055

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To describe staff perceptions of the trial of an early supported discharge model of care for stroke survivors at a large metropolitan public hospital in Australia.

Population	Healthcare professionals N=23 Two groups: staff who referred patients for early supported discharge and staff involved in the planning, implementation or delivery of early supported discharge during the trial. All health service staff meeting these criteria were invited to participate in each time point, and could participate in all, some or none of the data collection. Participants included medical, speech therapists, neuropsychologists, occupational therapists, physiotherapists, nursing and administrators. 7 participants were interviewed, while 16 participated in focus groups. In addition, qualitative elements from surveys were used, including at time 0: 20 delivering staff, 26 referrers; at time 1: 14 delivering staff, 18 referrers; at time 2: 14 delivering staff, 19 referrers.
Setting	A public health organisation located in a major Australian city. The organisation delivered acute tertiary, subacute, specialist ambulatory and community-based services to a community of approximately 800,000 people. Service locations including three acute hospital campuses, a day hospital and a transition care program, and the health workforce numbers approximately 6,500 staff. Prior to 2017, this organisation did not offer early supported discharge to stroke survivors with a lot of people facing significant delays before receiving Community Based Rehabilitation following discharge, and were only eligible for once weekly physiotherapy during post-acute care for up to 30 days while waiting.
Study design	A mixed methods case design (only the qualitative component is considered for this review, as per the protocol). The study design was informed by the Consolidated Framework for Implementation Research (CFIR). This describes constructs identified from previous research as influential on effective knowledge translation. The framework supports analysis of the relationships between constructs and implementation outcomes. All domains were addressed during the collection of data. Two data collection approach were used, mixed methods surveys and qualitative semi-structured interviews and/or focus groups. Surveys were undertaken with both Referrers and Delivering Staff at three time points, while focus groups and interviews were conducted with Delivering Staff only at the final time point.
Methods and analysis	Qualitative survey data, and from interviews and focus groups, was analysed using a priori thematic analysis, with the CFIR constructors as codes. a codebook was developed from the definitions for each domain and construct and including illustrative examples from the transcripts. Two researchers independently assigned an interpreted meaning to each passage, on a line-by-line basis, for 25% of the transcripts. Very few instances of divergence existed (3.23% of total codes), and these were resolved via discussion between the researchers. A single researcher then assigned interpreted meanings

	to passages in all other transcripts. Two other researchers independently reviewed these codes against the code book, and again low rates of divergence were found and resolved by consensus. Key relationships between the CFIR domains and constructs were also analysed at the conclusion of qualitative analysis. The code co-occurrence function of the Dedoose platform was used to describe relationships between these concepts, which assigns frequencies to codes assigned to overlapping excepts. These relationships were then displayed in a network group with constructs related to at least 3 other constructs identified as being key to staff experience. All data sources for each CFIR domain and construct were then integrated in the final, mixed methods analysis. Within each construct, instances of consonance and dissonance between the data sources were described, and finally synthesised at the domain level.
Findings	**Characteristics of the individual** Participants perceived their personal characteristics and attributes in relation to ESD fairly positively throughout the trial. Greater improvements in overall perceptions occur in both groups during phase 1, however increases in overall knowledge occurred during different phases for each participant group. Staff generally perceived ESD as closely aligned to their personal and professional beliefs about best practice and early intervention. Providing rehabilitation at home was also identified as a key aspect of ESD, which enabled meaningful goal setting and client centred practice. However, ESD implementation was both congruent with, and challenging to, their existing rehabilitation practice knowledge. Referrers noted that Grade 1 staff required increased support in Phase 1 to develop self-efficacy, while staff noted ESD knowledge was not consistently developed for staff members joining the organisation mid-trial. A key tension identified was the belief that offering early supported discharge to the trials' treatment group provided those patients with an unfair advantage. An unintended consequence of these beliefs was an emphasis on the shortcomings of standard practices, which remained in place for most patients. Diverse beliefs around the time commitment required by ESD were also evident, with consistent (but not universal) claims of increased workload made throughout this study. Staff reported generally positive organisational perceptions, which supported a sense of commitment, enthusiasm and pride specifically associated with the ESD trial. **Intervention characteristics**

Participants also maintained generally positive perceptions about ESD itself. A mixed profile of changes was found, with some constructs experiencing only moderately fluctuations and others changing more markedly in specific phases. Decreases in some constructs (such as number of steps, degree of difference and cost) represent positive responses, as these are constructs were less is better. Participants were generally well aware of the origin of ESD and its supporting evidence, which was perceived to provide support for good patient and service outcomes. ESD was unequivocally perceived to have more advantages than other stroke rehabilitation programs (as indicated by the perceived disparity between ESD and standard practices). These advantages were perceived to come at no cost or disadvantage to patients, fulfilling both their and the service's needs.

Perceived adaptability of ESD was identified both within the intervention, and as a function of the deployment of available resources (an Inner Setting construct). Perceptions of the duration and scope of ESD also became more positive, with duration influenced at times by staff attempting to meet their commitment to client centred practice. Perceptions of scope increased perceptions about complexity were expressed in a relative sense, in relation to other interventions and systems. While quantitative data indicated decreased costs perceived over time, some participants expressed cynicism about the implementation of ESD as a primarily cost cutting measure within their qualitative responses. The trial funding did not include additional staffing, and so participants had supported its implementation within their usual duties, leading some to question if identified cost savings were 'real'.

Outer setting

The most prevalent construct identified was patient needs and resources, which was expressed from two perspectives - the general needs of patients at this organisation, and the specific needs of patients and carers in the early stages of stroke recovery. Staff discussed the impact of poverty, disadvantage and migration experiences within the local community on ESD, nothing that the model of care supports the use of interpreters via advance booking of appointments. Participants also highlighted that stroke survivors were not the only patient group which could potentially have their needs met through ESD models of care. A major patient need met by ESD was returning home, which was perceived to be the optimal recovery environment. Staff reported that both patients and carers shared this perception, reacting positively to the prospect of ESD when initially approached. However, participants expressed concerns about ESD's ability to meet family needs in early recovery, particularly as patients are returning home with higher levels of dependence. A possible response suggested by

staff was extending the ESD model beyond patients to support family and carers, who were acknowledged as key stakeholders.

Inner setting

Perceptions relating to the Inner Setting domain were mixed. Staff generally perceived ESD as aligning closely with organisational norms and values, particularly around the provision of best care and an organisational commitment to innovation. Perceptions of an innovative culture may also relate to the overall implementation climate; however, other aspects of this construct (goals and feedback, learning climate, organisational incentives and reward) had very limited presence in the data. The relative priority of ESD within the organisation was understood by staff to interact with competing priorities, however they perceived a strong tension for change. Referrers reported more negative perceptions of ESD's impact on workload than staff, however qualitative responses indicated this was expected and was "manageable given good planning and organisation". ESD was not initially perceived as compatible with the CBR context, with several participants describing feeling forced to choose between models of care rather than adopting a hybrid approach. These concerns manifested themselves in changed to long held practices, which were particularly challenging for some of the smaller professions and non-clinical staff. While these changes were perceived as a positive opportunity to work in new ways by some, others found they challenged beliefs around the core business of CBR.

Process

Overall, perceptions of the implementation process remained steady for both referrers and staff over time. As expected, planning was not a strong theme in the data. However, some staff reflected on the value of reviewing organisational data, workforce consultations and benchmarking against other services to inform the trial process. Attempts were also made to anticipate potential process and workflow issues, and differing perceptions between stakeholders, although this proved to be difficult without precedents and prior experience. High levels of staff investment were consistently identified as important by participants, and additional investment provided by management and informal ESD leaders (such as team leaders, managers, the steering committee, nurse unit managers and nurse practitioners) was also recognised within the CBR service. This solid engagement was attributed both to the perceived alignment between ESD and best care, and workforce perceptions of being able to meaningfully influence implementation. While opinion leaders and external change agents were not discussed in this data, the ESD co-ordinator was consistently identified as a key champion. Perceptions of her role were

	universally positive, with accessibility, excellent clinical knowledge, face-to-face attendance of team meetings, an ability to work across service boundaries and a single point of contact and coordination highlighted as key factors contributing to its success. The intensive nature of ESD continuously challenged its execution over time, with the ability to retain flexibility perceived as crucial by participants. The early stages of ESD execution were experienced as uncertain by some, however there was a sense the workforce could abide with it and understood uncertainty was a necessary part of the implementation process. By T2, most participants expressed considerable satisfaction and confidence with the ESD trial at this organisation. Despite the challenges identified at previous time points, ESD was now perceived as "business as usual and so we sort of know how it works and know what's happening". However, not all staff were completely comfortable with ESD by this point, indicating six months was not sufficient time for everyone to fully adapt to the new intervention. By the trials conclusion, participants generally believed they had enough evidence to support its ongoing sustainability.
Limitations and applicability of evidence	Limitations: The main limitation was that it was a single health service and a relatively small geographic area and so may not be generalisable to other health services. The adoption of CFIR lead to limitations of the framework (including its scope, number of constructs and previously mentioned comments on the construct of complexity) were present. Applicability of evidence: To this question limited applicable themes. Setting is appropriate, but the study does not seem to answer the question.

Study arms

Healthcare professionals (N = 23)
Two groups: staff who referred patients for early supported discharge and staff involved in the planning, implementation or delivery of early supported discharge during the trial. All health service staff meeting these criteria were invited to participate in each time point,

and could participate in all, some or none of the data collection. Participants included medical, speech therapists, neuropsychologists, occupational therapists, physiotherapists, nursing and administrators.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Kjaerhauge Christiansen, 2020

Bibliographic Reference	Kjaerhauge Christiansen, L.; Rasmussen, A. M.; Mouritzen, H. S.; Ostervig Buus, A. A.; Gronkjaer, M.; Quickly home again: patients' experiences of early discharge after minor stroke; Scandinavian Journal of Caring Sciences; 2020; vol. 05; 05

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To explore how people with minor stroke experience the transitional period from the hospital through the first 2-4 weeks after an accelerated care pathway with discharge within 72 hours after stroke onset.

Population	Stroke survivors N=11 People with minor stroke experience in the transitional period from hospital through the first 2-4 weeks after an accelerated care pathway with discharge within 72 weeks after stroke onset. Inclusion criteria were first-time stroke, discharge within 72 hours from admission and people with minor stroke (mRS 0-2). Exclusion criteria were: people with dementia and/or severe aphasia and people who were cared for by the interviewers who worked as experienced nurses at the stroke unit. Participant characteristics: Mean age = 62 years. Female:male = 6:5. Mean length of admission = 2 days. mRS at discharge range = 0-2, median 0-1. Working = 6. Retired = 5.
Setting	People at home who were discharged within 72 hours of admission in Denmark. People were recruited from a highly specialised acute stroke unit in a Danish university hospital after stroke was diagnosed.
Study design	Descriptive, qualitative design with semi-structured interviews and based on a phenomenological hermeneutic approach. The interviews took place in the informants' own homes or in a conference room away from the stroke unit. The interviews were conducted in Danish 2-4 weeks after discharge in order to avoid recall bias. The interviews were audio-taped and transcribed. An observer participated to capture the nonverbal communication. An interview guide with open-ended questions was developed to ensure stringency. Examples from the interview guide include: Can you tell me about the day you had your stroke? Can you tell me about coming home? How is your everyday life now compared to before you had your stroke? What do you think about your situation now? The initial question concerned how the patient had experienced hospitalisation followed by the study focus on their experienced of the transition to everyday life. These questions were followed by probing questions in order to validate the patient's statements. At the end of the interview, the informants were given the opportunity to talk about feelings and thoughts that the interview might have raised. In addition, the informants were offered the possibility of calling the interviewers afterwards.
Methods and analysis	The analysis was based on Kvale and Binkmann's meaning condensation and hermeneutic meaning interpretation. First, the transcripts were read several times in order to detect the units of meaning. These were then condensed into central unit themes that were grouped into categories and sub-categories across the transcriptions. Subsequently, the themes were interpreted in relation to the informants' understanding and to common knowledge from existing research. The meaning condensation of the transcriptions were carried out independently by each author and later discussed by the entire team until consensus of the findings was achieved.
Findings	**Shocked, yet grateful**

The stroke survivors' reaction to having had a stroke led to various feelings of ambivalence. They found themselves being grateful for being mildly affected yet feeling stricken by the stroke. Even though they had minor impairments, people were in shock after having had a stroke. A person with slight dysphasia and problems with fine motor control of right hands fingers said: "It just can't be right, really. There's nothing wrong with me. I've never ever been in hospital in my life. I was a bit surprised that I had a stroke. I hadn't thought about that. (4, male 75 years). For people who had not previously been seriously ill, being hospitalised was an encounter with an unknown world. The symptoms of stroke occurred suddenly and without warning, which the people experienced as having the rug pulled out from under them. Several people were shocked because they had not considered themselves being at risk of having a stroke and had not previously been ill. For some, the shock resulted in them being confronted with the fragility of life. "It really is one of the worst side effects. A sense of being invulnerable that has been severely struck. So, you can call it a wake-up call or memento mori." (8, male 71 years).

Having a stroke was a life-changing event, and for some it was a reminder of death that the people had not previously experienced. In contrast to the feeling of shock and vulnerability, the people also expressed that they had escaped with fewer symptoms compared with other people with stroke. The people did not consider the physical symptoms as the worst side-effects. Rather, the cognitive symptoms such as sound sensitivity, decreased concentration and fatigue worried them. At the same time, they were grateful that they were not as affected by the stroke as other people they saw during hospitalisation. One person described this as "the angels had protected me" (1, female 74 years). It took time for the people to adapt to the shock and it took some time before they came to acknowledge that they had had a stroke. People reported that this realisation did not occur immediately after discharge, but in the first few weeks when they resumed their everyday activities. "If I'm being completely honest, then I think I first realised it [the stroke] when someone I normally never talk to brought me flowers. I think it was at that time I started to realise that it probably wasn't just something ..." (11, female 49 years). In this way, the reaction by other people acted as a catalyst for making the person realise the seriousness of having had a stroke.

Everyday life is changed

The period after being discharged was a contrast to hospitalisation. The people experienced hospitalisation and discharge as well-planned where they felt they were in safe hands. Despite this, the transition to everyday life was experienced as a radical change in relation to everyday life they knew before the stroke. A person having problems with her balance said: "It's not like that it's over, I pretend like nothing has happened and do what I usually do. It's like upsetting an applecart. You

must pick up yourself and your cart before you carry on. You must adjust it and yourself." (1, female 74 years). In their encounter with everyday life, the people realised that their routines had to change. The everyday life and structure that existed before the stroke was 'completely smashed to pieces' (7, female 59 years). Therefore, the people attempted to find a new everyday life with the issues they struggled with due to the stroke. They tested themselves and tested their limits in relation to what they could cope with. 'I need to show that I'm able to get going again. I'm still useful' (2, male 58 year). For people who were working, their job helped them to maintain their feeling of identity, which made them prioritise work over other activities. People with a driving prohibition after stroke had their sense of identity challenged too. The people became either dependent on others or were forced to consider other ways of transporting themselves. Not being able to sit behind the wheel and instead being relegated to the passenger seat was experienced as a demotion. In encountering everyday life, fatigue to differing degrees was the symptom that affected people the most. Although people at discharge were informed about the risk of fatigue, the degree and extent came as a surprise. "I guess I felt prepared enough because they [healthcare staff] had said that I could expect some fatigue, but I wasn't prepared for how it turned out ... they hadn't said that." (1). Fatigue was another kind of tiredness that they had not experienced before. The people differentiated between physical and mental fatigue. Mental fatigue was predominantly restricted to the transition back to everday life and was particularly caused by participating in social and work-related activities. This made the people withdraw from social situations or needing less demanding work tasks. The people associated mental fatigue with the cognitive symptoms they experienced, such as concentration difficulties, problems being present, lacking perspective and memory problems. A female described the problem, "I usually have a good memory (...) and I am good at managing things. Actually, I only had to unload the dishwasher and there were absolutely too many things to handle." (10, female 51 years). The people struggled with the symptoms such as fatigue because they were invisible to the world around them. 'No one can see that I'm ill ... and in principal I don't feel ill. I think that is what's difficult.' (10, female 51 years). As such, everyday life was affected although they only had a few physical symptoms. This resulted in some people returned to work too soon or were being hospitalised again because they pushed themselves too hard. The people seemed to need a period with fewer demands; however, they found it difficult to justify this to themselves and others, for instance by taking sick leave for a period. Therefore, the people sought clear support for returning to their everyday life and advise in relation to taking sick leave.

Managing uncertainty

For some of the people, the period after discharge was marked by uncertainty. All people were discharged with individualised written information. Despite this, they lacked health professionals to support them and address unresolved questions. When the people received support from a health professional, it helped to take weight off their shoulders. "My doctor, when I called her, because there wasn't anyone who was really taking care of me. ... When she said 'Oh, it's been

difficult for you, hasn't it? Have you thought about your work? I think, with my experience of this, you shouldn't work before you had come to see me'. Wow, then I could just feel (exhales), well it was wonderful." (5, female 57 years). The feeling of uncertainty disappeared for this person because the general practitioner shared the decision-making for the further planning of the care pathway. In contrast, other people experienced that they lacked answers to their questions from their general practitioner, which caused the people to feel alone with their problems. Similarly, uncertainty arose when the hospital's plans at discharge were not followed, for instance if an outpatient scan was not ordered. Uncertainty made the people question their ability to cope with their own situation. Some received support from family and friends to call the municipality or hospital in order to get answers to unresolved questions. Despite support from relatives, the people searched for a professional partner to provide expert knowledge and feedback. The people experienced uncertainty because they found it difficult to interpret the body's signals. A female with sensory disturbance elaborates: 'It is only because I had a stroke and it starts prickling, I wonder if it's that [a new stroke]? If I hadn't had the stroke, then I would have [ed: ignored it]...' (7, female 59 years). When a change in symptoms or new symptoms appeared, it caused uncertainty and nervousness. The people negotiated with themselves about whether they should react when they experienced symptoms. They lacked knowledge and experience about having a stroke, and therefore, they constructed their own explanations of the signals they registered in their body. In this way, the people needed to become familiar with their bodies again. In encountering their surroundings, the people experienced how the care from relatives was perceived as both a resource and a source of uncertainty. A female describes how some of her friends and relatives acted inconsiderate, "People who aren't considerate and say, 'Oh, since you weren't home when I came to see you, I thought ... [you were in hospital again] because you often get 2-3 strokes in a row' ... Really [is that necessary ...], then I came to think should I read about this [the risk] somewhere? This made me feel really tired, really, really tired." (5, female 57 years). The people reported that they needed extra energy in order to deal with the care and reactions from friends and relatives. Some chose to stay at home and did not attend social arrangements in order to avoid being confronted with questions. In contrast, others did not allow the concerns of those around them to affect them. In this way, the care from others was seen as a double-edged sword that on the one hand was a support and on the other hand could reinforce the patients' own feeling of uncertainty.

How to regain daily life

The transition from hospitalisation to everyday life after being discharged was a time for the people to process what it meant having had a minor stroke. They had to find a way to hope with the fact that life in the transition period had to be lived in a different way. The fear of having a new stroke or not returning to the previous level of function was handled in different ways, "If I live otherwise healthily, well and I think about things, then I've done what I can. If I get a stroke again, well I can't do so much about that." (10, female 51 years). For some people, it was important to act on risk factors what were tangible

	and manageable and to accept the uncertainty of having a new stroke. For other people, it was crucial that the diagnosis was finalised and that the cause of the stroke had been found in order to return to everyday life. However, a common finding was that the stroke diagnosis caused the people to reflect on their prioritised in life. A female described how her coping strategies had changed after having a stroke, "That's ok, I still get up on my feet, I don't cry but I do not hurry on. Now I sit down and do the things I like to do." (7, female 59 years). For some people, the reflections meant a change of priorities in relation to their work and private life. For example, they started to think about the future, their own death and the impact it could have on their family. In this way, existential thoughts arose and their life was reviewed in which patients focused on what made sense in their lives. For this person, it was necessary to hold on to the present in order to be able to find new paths in life later. "It is really the feeling of being in a bubble. The roads are kind of closed for a while, and I am here in my roundabout. I must figure out how to make new roads out of that roundabout. That's what I became aware of. Is there a future? I know there is, of course. I just need to find the way." (1, female 74 years). During the interviews, when the people talked about their hospitalisation, it started a reflection that seemed to be part of processing having had a stroke. However, the speed at which the people moved on in life after their stroke varied. An important part of the process was looking at their own options. The people were motivated to change habits and gain new knowledge as a way of preventing a new stroke. "I don't like waking up the way I did that night [of the stroke]. I don't want to experience that again, so now I bring fruit with me to work instead of nothing. I just hope it leads to a result [preventing a new stroke] in the long run (laughs)." (3, male 47 years). The people experienced that changing lifestyle was manageable because it was a way to regain control of their lives. However, some people found it diffiuclt to understand health advice in a pamphlet about lifestyle changes because they felt they were already doing the right thing: 'I can't work out what we're doing wrong; I think we've been living healthy' (11, female 49 years with a husband with diabetes). Therefore, the people looked for support and advice about changing lifestyle. Apart from being motivated about manageable changes such as diet and exercise, a need arose to meet others like themselves. "I need to see somebody like myself. That's what I'm missing. Because I only see people who are really ill." (5, female 57 years). In the attempt to find a new identity as a stroke survivor, people compared themselves with others who were affected by stroke. People found it important to meet people in a similar situation, and to discuss and reflect on how life can be lived after stroke and how to cope with the existential thoughts that arose. In a way, the people found themselves in a grey zone where they did not see themselves in the target group for the existing peer groups to people after stroke.
Limitations and applicability of evidence	Limitations:

	Informants were recruited from only one acute stroke unit. Thus, the study's results are not necessarily transferable to other settings. Applicability of the evidence: Broadly applicable. Based in Denmark so may have a different healthcare setting which may affect applicability to a United Kingdom based setting.

Study arms

Stroke survivors (N = 11)
People with minor stroke experience in the transitional period from hospital through the first 2-4 weeks after an accelerated care pathway with discharge within 72 weeks after stroke onset. Inclusion criteria were first-time stroke, discharge within 72 hours from admission and people with minor stroke (mRS 0-2). Exclusion criteria were: people with dementia and/or severe aphasia and people who were cared for by the interviewers who worked as experienced nurses at the stroke unit. Participant characteristics: Mean age = 62 years. Female:male = 6:5. Mean length of admission = 2 days. mRS at discharge range = 0-2, median 0-1. Working = 6. Retired = 5.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Kjork, 2019

Bibliographic Reference	Kjork, E. K.; Gunnel, C.; Lundgren-Nilsson, A.; Sunnerhagen, K. S.; Experiences, needs, and preferences for follow-up after stroke perceived by people with stroke and healthcare professionals: A focus group study; PLoS ONE [Electronic Resource]; 2019; vol. 14 (no. 10); e0223338

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To explore the experiences, needs and preferences regarding follow-up perceived by people with stroke and healthcare professionals.
Population	Stroke survivors N=10 People consecutively recruited while visiting a clinical outpatient center from February 2015 to October 2015. The inclusion criterion was having had a stroke regardless of the time of onset. If cognitive impairment or insufficient knowledge of the Swedish language would make participation in the focus groups unreliable, people were excluded. Participant characteristics: Mean age (range): 73 (58-78) years. Male:female = 9:1. Education: Mandatory = 5, High school = 2, University = 3. Months since stroke (range): 10 (1-84) months. Working at stroke onset = 3. Mean length of hospitalisation (range): 9 (4-82) days. History of stroke = 4. Ischaemic/haemorrhagic = 8:2. Right/left/posterior/bilateral =

	6:3:1:0. Mean NIHSS (range): 3 (1-10). Aphasia = 1. Neglect = 1. ADL independency at discharge = 9. Wheel-chair use at discharge = 1. Healthcare professionals N=8 Healthcare professionals working in the targeted outpatient clinics selected to represent different professions before they were invited and gave informed consent to participate in focus group discussions. Participant characteristics: Mean age (range) = 45 (35-55) years. Male:female = 1:7. Nurse/OT/Physician = 3:1:4. Stroke experience - At least 5/5-10/10 = 2:2:4.
Setting	People from primary care or stroke specialised outpatient care at a university hospital (outpatient follow up).
Study design	Explorative qualitative design with an inductive approach. The underlying philosophical frame of reference in the study relied on social constructivism with a focus on a collective understanding of the participants' views. Focus group discussions were conducted in conjunction with a validation and cross-cultural adaptation process of the Post-Stroke Checklist in Sweden. Consolidated criteria for reporting qualitative research were followed when reporting the study. The study was approved by the regional ethical review board in Gothenburg (no. 521-14) and informed written consent was obtained from all participants. Data was collected in outpatient clinical facilitates and included patient characteristics and focus group discussions. Demographic data were registered by healthcare professionals. Patient characteristics (such as the type of stroke, neurological characteristics and activities of daily living dependency) were collected retrospectively from their medical records. Four focus group discussions were carried out, for people with stroke and healthcare professionals separately, to explore their views regarding follow-up. Each group met once and the meetings lasted approximately 1.5 hours. The first author was moderator (EK) in all groups and used a semi-structured question guide with open ended questions to lead discussions. The question guide included the following questions that were complemented by additional questions: What are your experiences with follow-up visits? What problem areas are probably not addressed sufficiently? What do you think is of importance regarding offering good long-term support after stroke? Initially in the meeting, the moderate provided brief information about the study, the focus group

	approach, and encouraged participants to respond and compare experiences with each other openly to stimulate different opinions. At the end, an oral summary was presented by the moderator to ensure that their contributions were understood correctly. All discussions were audio recorded and transcribed verbatim.
Methods and analysis	The focus group data were coded and categorised using the computer software NVivo. Data were analysed by the first and second author following an analysis guide developed by Krueger. The analysis started during the first focus group and was continued thereafter, based on the aim. First, to capture the essential outlines in the discussions, the authors listened to the discussions and read the transcriptions as a whole several times. Second, the data relevant to the aim were identified and grouped into initial categories and subcategories. Data were compared to reveal similarities and differences. Third, a descriptive summary was made of the categories for each group before merging the summaries from all groups. The summaries were descriptive regarding the content of the discussions. Finally, the deeper meaning of the data was interpreted based on the summaries in combination with transcript quotations. In the analysis process, identified patterns were compared and contrasted across all four groups. The analysis resulted in a thematic structure. Quotations revealing the ongoing discussions were selected to illustrate the results. In accordance with sampling strategies and when similar discussions repeated, in all groups, data gathering ended. The first author (PhD student, OT, woman) was the moderator in all focus groups. Multiple coding and discussion of the developing themes were performed in close cooperation with the first and second author (PhD, OT, woman) to highlight alternative interpretations and decisions. Both authors are experienced in qualitative research. All authors have at least 20 years of experience in stroke rehabilitation. The third author (PhD, OT, woman) and last author (PhD, MD, woman) participated by revising and refining the themes.
Findings	**Discovering feelings and changes after returning home** <u>Feelings of emptiness and abandonment</u> People expressed a sense of emptiness after returning home and a feeling of being left behind. Further, due to concerns about having another stroke, their everyday life was perceived to be constrained. Healthcare professionals also expressed similar experiences in their meetings with people and that a lack of follow-up can lead to increased worries. <u>Becoming aware of changes and problems when back in their everyday life</u>

When back in their everyday life, people described changes, both improvements and new problems. People and healthcare professionals recognised that several changes do gradually emerge and are often only noticeable in the context of everyday life. In addition, they brought up how hidden problems, such as fatigue or mood changes, can be easily missed. Consequences, such as changed personality and inactivity, were seen as obstacles also affecting their partner's life. Additionally, driving restrictions and changes in work ability were problem areas mentioned. Healthcare professionals emphasised the importance of offering patients an opportunity to talk about problems that were not apparent at discharge.

Experiences of unequal access to health care services

Obstacles preventing patients from communicating their own needs

Both organisational and personal factors were mentioned as obstacles that prevented patients from effectively discussing their needs. Such obstacles could be a lack of knowledge about the condition and treatment options, i.e. regarding mood changes and appropriate training. Further, difficulties knowing who to turn to and uncertainty if it was their own responsibility to seek care were barriers for accessing services. Similar discussions arose in health professionals and patient groups exemplified by quotes from Group 1, Patients:

'P14: And I think it's really difficult to work out who is responsible for the whole thing [care after stroke]. I got stuck in the middle.'

'P11: No you don't know who to turn to for different things'

'P14: I don't even know which doctor is mine.'

'P11: (...) And there's no problem with what each of them does, but I don't think there's any coordination.'

'P14: Yes, no, I mean you only get help with the stuff you tell them (...).'

People having difficulties distinguishing what was due to the stroke and what was associated with normal ageing raised thoughts whether it was appropriate to address certain issues. Other barriers raised by patients were the lack of ability to initiate care, forgetting to mention important things at the follow-up, and difficulty remembering afterwards what had been said. Healthcare professionals also pointed out that cognitive and emotional problems were common in this group, leading to difficulties receiving appropriate patient support.

No guarantee of a coherent follow-up

The experiences of follow-up differed within the focus groups as well as between groups. Some people had good experiences while others felt disappointed. The focus of the follow-up visits was described as different depending on the kind of site, e.g. specialised care or general practitioner, ranging from mainly medical concerns to broad rehabilitation issues. A common perception from the patients was that it was remarkable that a consistent follow-up is not equally accessible to all. People who received early supported discharge (ESR) automatically received follow-up. In contrast, people who did not receive early supported discharge experienced worries and a substantial wait for the ordinary follow-up visit. The differences in follow-up services described by patients were in agreement with healthcare professionals' views.

Need for comprehensive, planned and tailored follow-up

Planned in agreement with the patient before discharge

Patients, as well as healthcare professionals, suggested a pre-determined plan for follow-up regardless of stroke severity. People agreed that they would like to be called for follow-up, as it may be difficult to make contact themselves. In addition, people suggested a particular focus on those living alone when planning the long-term follow-up in primary care. Healthcare professionals in specialised care had a clear assumption of the needs and were mainly pleased with their organisation for including a follow-up with a nurse at 1 month and a physician at 3 months after discharge. In contrast, physicians in primary care were primarily concerned with the medical issues and were less clear on their understanding of the broader needs.

Both patients and Healtcare professionals emphasised the need for follow-up exemplified by quotations from Group 3, healthcare professionals:

'P6: I think it is important that there is a plan for follow-up, so that they know what is going to happen.'

'P15: That they know who they can turn to if something happened or if they got sick again, etc.'

'P5: That they can come and talk about their problems. You don't always know what problems you have until you get home. So I think that it is good with a follow-up and a plan, then they know that these problems are not strange, but they are quite common. Would reduce some worry, etc. (agreement)'.

Individually tailored

Healthcare professionals described that some patients had feelings of disappointment regarding follow-up, especially when secondary prevention was the focus. People described a feeling of being lost in their new situation after stroke and raised wishes for advice and professionals asking about their life. Healthcare professionals were aware of the importance of adapting the visit to the patient's life situation and often initiated the visit with a broad question "how are you doing?". However, it was described as challenging to physicians to address patient's individual needs beyond medical conditions and specific areas (e.g. driving, sick leave). In addition, patients often had their own agenda that needed to be addressed within the often short visit. The following are quotations from Group 4, healthcare professionals:

'P10: We direct our efforts to reduce risk factors, that is the main thing we check with our yearly check-up.'

'P3: Absolutely, and sometimes you find atrial fibrillations, that you maybe don't always do in the hospital. Then there's the question of the driver's license.'

'P1: Patients sometimes say that it has been very overwhelming and scary and that they sometimes have to wait a long time before they get to see a primary care doctor. (...) they are maybe disappointed that they get asked about medicines when they actually have many, larger questions as well.'

Limitations and applicability of evidence	Limitations: The sample size in the study was small, but was evaluated as adequate for the purpose of the study. Although they attempted to attain heterogeneity in the focus groups, the majority of the patients were male and the majority of the healthcare professionals were female. A limiting factors was the defined time between enrolment and the focus groups. Exclusion of patients evaluated as unable to participate (e.g. cognitive impairment and insufficient knowledge of the Swedish language), accordingly a restriction of the focus group methodology. Further, cognitive function was not assessed, which is a limitation since it might have an impact on how they interpreted their experiences and their participation in the discussions. The homogeneity regarding ethnicity is a limitation since people with different country of birth is representative for the Swedish population as a whole consisting of people with diverse ethnic backgrounds. However, in the discussions, healthcare professionals with extended experience in stroke care contributed to the broader picture, related to the stroke population as a whole. Applicability of evidence: Swedish outpatient/primary care setting. Broadly applicable to the UK, however there are some differences in the healthcare system. However, early supported discharge services are still provided.

Study arms

Stroke survivors (N = 10)
People consecutively recruited while visiting a clinical outpatient center from February 2015 to October 2015. The inclusion criterion was having had a stroke regardless of the time of onset. If cognitive impairment or insufficient knowledge of the Swedish language would make participation in the focus groups unreliable, people were excluded. Participant characteristics: Mean age (range): 73 (58-78) years. Male:female = 9:1. Education: Mandatory = 5, High school = 2, University = 3. Months since stroke (range): 10 (1-84)

months. Working at stroke onset = 3. Mean length of hospitalisation (range): 9 (4-82) days. History of stroke = 4. Ischaemic/haemorrhagic = 8:2. Right/left/posterior/bilateral = 6:3:1:0. Mean NIHSS (range): 3 (1-10). Aphasia = 1. Neglect = 1. ADL independency at discharge = 9. Wheel-chair use at discharge = 1.

Healthcare professionals (N = 8)
Healthcare professionals working in the targeted outpatient clinics selected to represent different professions before they were invited and gave informed consent to participate in focus group discussions. Participant characteristics: Mean age (range) = 45 (35-55) years. Male:female = 1:7. Nurse/OT/Physician = 3:1:4. Stroke experience - At least 5/5-10/10 = 2:2:4.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Kraut, 2016

Bibliographic Reference	Kraut, Jacey; Singer, Barbara; Singer, Kevin; Clinician and client views of utilising early supported discharge services; International Journal of Therapy & Rehabilitation; 2016; vol. 23 (no. 10); 464-471

Study details

Secondary publication of another included	No additional information.

study- see primary study for details	
Other publications associated with this study included in review	No additional information.
Aim	To explore the beliefs and attitudes of potential referrers and referrees regarding the possible utilisation of early supported discharge (ESR) prior to hospital discharge.
Population	Healthcare professionals N=19 Nine consultant doctors (a general physician, rehabilitation specialist and seven geriatricians involved in rehabilitation) from metropolitan hospitals in Perth, Western Australia agreed to be interviewed. In addition, a convenience sample of 10 inpatients and 10 corresponding staff members directly involved in their care was accrued, while the patient was still in an acute care hospital. Participant characteristics: No information about the consultants. Other healthcare professionals in the dyads include: 2 physiotherapists (qualified for 3 years and 36 years respectively), 2 enrolled nurses (qualified for 2 years and 7 years respectively), 4 registered nurses (ranging from 8 months to 13 years since qualification), 1 occupational therapist (qualified for 9 months) and 1 speech pathologist (qualified for 30 years). Stroke survivors N=10 A convenience sample of 10 inpatients and 10 corresponding staff members directly involved in their care was accrued, while the patient was still in an acute care hospital.

	Participant characteristics: Mean age (range): 70 (41-85) years. Patient agree to ESD: 8 extremely likely, 1 likely, 1 unlikely. Mean length of stay at time of intervention (range): 29 (5-72) days. Living situation prior to admission: 4 with wife, 1 with daughter's family, 1 planned move to daughter's home, 4 alone. Mobility at time of interview: 1 independent walking quad-stick, 2 assist x1 walking, 1 supervised walking, 1 independent walking frame, 2 hoist transfer, 1 independent walking, 2 assist x2 walking. Mean GSE score (0-40): 35 (28-40).
Setting	Australia. Face-to-face, semi-structured interviews conducted with consultants involved with inpatient rehabilitation and referral to the Rehabilitation in the Home service. Then dyads of hospital inpatients and a corresponding treating health professional were individually interviewed, using a semi-standardised format.
Study design	Consultant doctors involved in rehabilitation were contacted via e-mail and invited to participate in an interview. Interviews ranged from 30-60 minutes in duration and were conducted using a non-scheduled standardised format, in which the interviewer worked from a list of questions, but the phrasing and order of questioning were adapted to suit individual respondents. The interview responses were documented during the interview and a summary report of each participant's responses was compiled shortly afterwards. The one-to-one semi-standardised interviews with hospital inpatients and a health professional involved in their treatment comprised eight questions. These questions obtained free-format responses and interviewees were invited to provide additional comment at the end of the interview. Patient and staff interviews were tape recorded and recordings were transcribed verbatim by the principal researcher. The inpatient participants also completed the General Self-Efficacy (GSE) Scale questionnaire to allow evaluation of the role that self-efficacy may have had on their likelihood of agreeing to early supported discharge. The GSE scores were calculated for each inpatient and compared with their reported likelihood of agreeing to early supported discharge. All data were stored in a de-identified format.
Methods and analysis	The QSR NVivo software package was utilised to facilitate management of the written text and content analysis was undertaken. Analysis of the interview transcripts involved familiarisation with the data, followed by identification of meaning units within the text, which were shortened while preserving the content (condensed) and the condensed meaning units were then coded. The coded data were reviewed further and categorised. This study used an inductive process, whereby the main categories were directed by the types of questions utilised. Thematic analysis was not undertaken. The NVivo software facilitated the process of grouping the meaning units into codes and categories so that the total number of interviewees who expressed similar ideas could be identified. Coded data and categories for the patient and health professional groups were kept separate so that the finding for each could be compared for similarities and differences.
Findings	**Interviews with consultants involved in referral to rehabilitation in the home (RITH)** Consultants outlined the factors that they considered when deciding whether a person was suitable to go home with RITH and at what stage of the patient journey suitability for RITH was considered. Safety for the patient, their family and treating home visiting staff, and an identified ability for the patient and their carer to cope at home were the main factors considered

with regard to patient suitability for referral to RITH. Safety was considered in the context of physical function, cognition/insight and environmental safety. The absence of available and suitable home supports negated the possibility of a patient going home with RITH for most interviewees. If a person was not independently functioning, the presence and availability of family and/or carers to assist was considered essential before early supported discharge was considered. The potential lack of patient and carer consent to go home with RITH was not perceived to be an issue by any of the consultants. However, views varied about the ability of RITH to manage patients with significant medical problems. Consultants indicated that the timing of referral to RITH was dependent on a number of factors including: level of staff experience, the duration of RITH service intervention (linked with staff awareness of this), current inpatient rehabilitation waiting times and staff expectations.

Interviews with hospital staff/inpatient dyads

Positive aspects of going home with early supported discharge

Patients and staff had similar views concerning the advantages and disadvantages. Most patients, and to a lesser degree staff, agreed that being at home in familiar surroundings and closer to family and friends was an advantage. Three patients mentioned the benefit of 'freeing up' a hospital bed while only one staff member did so. Staff generally considered that being at home would bring a higher level of comfort and allow for context specific rehabilitation. Four patients discussed how being at home would be better for them mentally and emotionally; however, no staff members reported considering this.

'To be discharged earlier would bring more resources for the use at the hospital and it would help me immensely, but I think you would improve more so being in your own home surroundings. I think that you can get well better by being in your own home situation and also as I said earlier, it just brings less pressure to the hospital. It gives them time to get onto something else. - Patient 4'.

'Well it would be an advantage him being at home because he's in his own environment and he can learn around that instead of being in a hospital environment which is more routine ... well it's better being at home than in hospital because you are in your own home, you're doing your own thing - Health professional 4'.

Negative aspects of going home with early supported discharge

Staff described a number of disadvantages that their patient could encounter, including a reduced intensity of rehabilitation compared with hospital; possible readmission to hospital due to recurrence of illness; an unsuitable home environment that would make life difficult at home; and a reduced level of confidence away from the supportive hospital environment. Most patients considered that disadvantages to going home would be few. The reduced level of support from health care professionals once they were discharged home was the main disadvantages cited by patients.

'Well, I can shower myself ... making my bed might be a bit of a chore ... doing the dishes wouldn't because the sink is at the right height. My daughter is going to supply my meals so that's no hardship for me. I can't think of anything off hand that would be a disadvantage to going home - Patient 8'.

'I think just probably ... feeling less confident in her abilities ... In the hospital, everything was taken care of and then having to go home and fend for herself ... a bit daunting - Health professional 1'.

Barriers and enablers for going home with early supported discharge

When asked about barriers and enablers, staff and patients agreed that the presence of family support would make it easier to go home. Most interviewees also discussed the suitability of the home environment in the context of early discharge and whether home adaptations or equipment would be required or a certain level of mobility was necessary prior to discharge. All patients stated that they would need to be ambulant before going home, but for some this meant walking a few steps with minimal assistance while others wanted to be 'completely independent'. The level of support available at home together with personal expectations for recovery influenced patient opinion regarding level of mobility required for discharge

	with early supported discharge. Staff opinion about the level of mobility required for discharge with RITH similarly varied according to the patient and their individual situation. 'I think I need to be able to stand for longer ... walk a bit better ... by myself ... I need my left hand working ... because right now, it's not doing anything. - Patient 6'. 'Well, she'd virtually have to be independent to walk because we won't be there at her beck and call, so she'd have to be able to get up, get out of the bed, go to the toilet and just do the basic things ... by herself. - Health professional 6'. <u>Likelihood of agreeing to go home with early supported discharge</u> Patients and staff generally reported there would be approval all round, '...the hospital wouldn't send you home unless you could cope.' However, the level of agreement between each patient and their treating health professional regarding the likelihood of them leaving hospital sooner with RITH varied. Exact agreement occurred between the patient and their treating staff member in four instances (three of these already had a discharge plan to go home with RITH). Of the seven pairs that did not have a discharge plan at the time of interview, six pairs did not have exact agreement: three pairs agreed in the affirmative but did not agree with the same level of certainty; and three pairs did not agree at all. Two of the instances where no agreement occurred involved relatively recently graduated nurses who were 'unsure', and patients who had previously lived alone and had a low level of mobility at the time of interview. The third instance of no agreement involved a patient whose 'unlikely' response was incongruent with the rest of their interview responses. All inpatient GSE scores were over 28/40, indicating the poor self-efficacy was unlikely to have influenced attitudes to early supported discharge. With the exception of one patient who lived in a rural location and remained in hospital-based rehabilitation until they were discharged home, all patients were eventually discharged home with the RITH service.
Limitations and applicability of evidence	Limitations:

	A series of interviews with a purposive sample of medical consultants and a small convenience sample of inpatients and staff at a single hospital. The findings may not be broadly generalisable to people with other diagnoses, or to staff and inpatients in other settings. The interview data was coded by the main researcher only. Reliability would have been enhanced if a second person had completed categorical coding to achieve a consensus on the categorisation of data. Applicability of evidence: Broadly applicable in terms of context. Based in Australia so may not be applicable to a United Kingdom-based health care setting.

Study arms

Healthcare professionals (N = 19)
Nine consultant doctors (a general physician, rehabilitation specialist and seven geriatricians involved in rehabilitation) from metropolitan hospitals in Perth, Western Australia agreed to be interviewed. In addition, a convenience sample of 10 inpatients and 10 corresponding staff members directly involved in their care was accrued, while the patient was still in an acute care hospital. Participant characteristics: No information about the consultants. Other healthcare professionals in the dyads include: 2 physiotherapists (qualified for 3 years and 36 years respectively), 2 enrolled nurses (qualified for 2 years and 7 years respectively), 4 registered nurses (ranging from 8 months to 13 years since qualification), 1 occupational therapist (qualified for 9 months) and 1 speech pathologist (qualified for 30 years).

Stroke survivors (N = 10)
A convenience sample of 10 inpatients and 10 corresponding staff members directly involved in their care was accrued, while the patient was still in an acute care hospital. Participant characteristics: Mean age (range): 70 (41-85) years. Patient agree to ESD: 8 extremely likely, 1 likely, 1 unlikely. Mean length of stay at time of intervention (range): 29 (5-72) days. Living situation prior to admission: 4 with wife, 1 with daughter's family, 1 planned move to daughter's home, 4 alone. Mobility at time of interview: 1

independent walking quad-stick, 2 assist x1 walking, 1 supervised walking, 1 independent walking frame, 2 hoist transfer, 1 independent walking, 2 assist x2 walking. Mean GSE score (0-40): 35 (28-40).

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Lou, 2017

Bibliographic Reference	Lou, S.; Carstensen, K.; Moldrup, M.; Shahla, S.; Zakharia, E.; Nielsen, C. P.; Early supported discharge following mild stroke: a qualitative study of patients' and their partners' experiences of rehabilitation at home; Scandinavian Journal of Caring Sciences; 2017; vol. 31 (no. 2); 302-311

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.

Aim	To investigate how mild stroke patients' and their partners' experience and manage everyday life in a context of early supported discharge.
Population	People after stroke N=22 Stroke patients were purposely sampled and recruited by three of the regional stroke teams. The inclusion criteria were: mild stroke patients discharged directly from the specialised stroke unit to their home and early supported discharge services, patients living in their own home (not nursing homes or sheltered housing) with a partner who was also willing to participate in an interview, people with sufficient cognitive abilities to complete a qualitative interview of approximately 30 minutes, patients and partner would be available for interview 3-6 weeks after stroke onset. Participant characteristics: Gender: 7 women, 15 men. All were in heterosexual relationships. Mean age (range): 69 (41-85) years. Employment status: Retired = 15. Working = 7. Type of stroke: Ischaemic = 20. Haemorrhagic = 2. Mean days in hospital (range) = 2 (1-6) days. Mean time since stroke (range) = 32 (23-42) days. Mean visits from early supported discharge teams (range): 2 (1-4). Future early supported discharge visits planned: Phone calls = 3. Visits = 4. No = 15. Participating in community-based rehabilitation: Yes = 10. No = 12. Family members/carers N=22 Partners of the same people after stroke. Participant characteristics: Mean age (range) = 69 (53-81). Employment status: Retired = 17. Working = 5.
Setting	Denmark. In 2012, the regional health authority of the Central Denmark Region carried out a major, systematic reconfiguration of stroke care. Acute stroke care was centralised into two hospitals with highly specialised stroke units and thrombolysis services. Multidisciplinary early supported discharge stroke teams were established at all regional hospitals to support discharge and deliver individualised, home-based rehabilitation of patients with mild-to-moderate stroke symptoms. Based on individual assessments of each patient, the stroke team visits each patient 2-7 days after discharge to evaluate the patient's needs and to outline a rehabilitation plan, if needed. The stroke team usually makes 1-4 visits (by a

	physiotherapist, occupational therapist or nurse) to the patient's home, depending upon the patient's needs. Those patients who need further professional rehabilitation are referred to community-based rehabilitation services.
Study design	Qualitative interview study. The qualitative interviews were performed by either KC (sociologist) or SL (anthropologist), and they ranged from 30 to 60 minutes. All interviews were guided by a semi-structured interview guide with open-ended questions. The interview themes included the following: experience of stroke symptoms and hospital admission, experiences of discharge and coming home, experiences of changes in everyday life, and hopes for the future. In addition, the couples were asked to assess the early supported discharge services and describe any unmet rehabilitation needs. During the interviews, KC and SL were mindful to include the viewpoints of both the patients and their partners on all interview topics. All of the interviews were digitally recorded and transcribed verbatim. Data collection continued until data saturation was met.
Methods and analysis	Thematic analysis was used to identify and analyse patterns in the transcribed data. The analysis was mainly performed by SL and KC, using the following steps. First, all of the material was thoroughly read and re-read to generate initial codes. Four interviews were test-coded by SL and KC independently, whereupon discrepancies in coding were discussed and the codes refined. Subsequently, all interviews were coded using NVivo 10 software. The coded material was discussed and sorted into potential themes in an initial thematic map, which was discussed by all of the authors. Potential themes were investigated in relation to the full data set and scrutinised for 'negative cases' and disconfirming evidence. Following this process, the final themes were defined.
Findings	**Home as a healing place** <u>Timely discharge</u> Most patients had only spent 1 or 2 days in the hospital stroke unit before they were discharged. In general, the participants positively evaluated their hospital stay, emphasising competence and empathy of the staff. A few patients found the hospital stay very chaotic and confusing, and they felt ill informed about their condition. However, regardless of whether they had a positive or negative hospital experience, all of the participants said that the timing of discharge was appropriate. In addition, the patients and their partners generally reported feeling secure about leaving the hospital and recognised that it was the right thing to do. For the majority of them, this recognition was related to their confidence in the hospital staff's evaluation of their stroke.

'They just seemed very certain and on top of things at the hospital. Like, they knew exactly how these things normally develop and where I was in that process. So, yeah, I felt completely confident going home'. (Mogens, patient).

The participants acknowledged that nothing further could be done for them in the hospital.

'Well, he's taking those antihypertensive drugs now, but really, that was the only thing they could do for him (at the hospital). So, honestly, there's no reason for him to stay, is there? It's much nicer for him to be at home'. (Maja, partner).

Thus, going home was the obvious next step in the process of recovery; it is a process that takes time, and therefore, it is most appropriately conducted at home. None of the participants felt that the discharge was rushed or too early.

Home as my space

The patients described coming home as 'nice' and 'a relief'. Many participants described the comfort of home relative to the environment at the hospital.

'I think coming home speeds up recovery. Mmm... there was a lot of noise and disturbances at the hospital. Sometimes you don't sleep because the person next to you is unwell and complaining and the staff is rushing back and forth. Home is much nicer. You can take a nap when you want. You have your own stuff... it's not boring. Going home really helps you move on, I think.' (Inger, partner).

'I agree. Being in your own environment means a lot. You are free to go for a walk or something. When it suits *you*.' (Henry, patient).

In the hospital, time and space are structured around hospital practices and routines; there is waiting time, meal times and rules for visits and activities. Patients shared roomed with others and they reported very little privacy and continual disturbances throughout the day and night. They characterised the atmosphere as kind and professional, but also as busy, impersonal and sometimes 'like a train station', as Thea put it. Contrary to this, they described home as calm, well known and personal; a place where time and space was structured by the couples' needs and preferences. Consequently, home was perceived as a suitable arena for continued recovery in accordance with the couples' everyday routines and preferences.

Not alone

The interviews showed that the participants' acceptance of and sense of security about early discharge and home rehabilitation were closely linked to sharing their home with a partner.

'Well, first of all, I just didn't feel that ill. And second, I knew Emma would be around. And that means a lot...a sense of security'. (Karl, patient).

Several patients remarked that going home to an empty house would have been a much more daunting prospect. All of the patients reported feeling safe and confident about going home, and only one partner, Ellen, voiced some concern over getting her husband, Frederik, home. She worried that he might have another stroke and about getting timely help, as they lived in a relatively remote area. However, she recognised with a smile that having home in the hospital would 'also be a hassle'. Discharge and transition to home were eased by the awareness that the ESD team would contact the patient within a few days.

'In this process I've felt completely safe. Like, they didn't just send me home and hope for the best; I knew someone would check up on me, that I was not alone'. (Bodil, patient).

Overall, the participants experienced early discharge as reasonable and meaningful. The participants accepted that the remaining recovery would take time and they embraced home as the most meaningful arena for this process. Their awareness of early supported discharge services supported a safe transition to home.

The flow of everyday life

Physical and cognitive impairment

All of the patients in this study had suffered mild strokes, and the reported severity of their impairments ranged from no difference to considerable change compared with life before stroke. For example, within weeks of her stroke, Molly felt that she had recovered completely and went for her daily run and read the paper with the same ease as before the stroke. At this end of the continuum, the participants were baffled at and grateful for the speed of recovery and lack of impairment. At the other end of the continuum, Peter's stroke was the third in a series of three. He had almost fully recovered from a massive stroke 6 years earlier, and the two recent mild strokes left him with further cognitive impairments. Peter could no longer watch TV or do much work around the house. He and his wife, Thora, reported that the recent strokes had seriously and negatively affected their everyday life. However, the majority of the patients were somewhere in between Molly and Peter. The patients reported different degrees of fatigue, problems with reading and writing, memory loss, mood swings and reduced physical capabilities. These patients reported that their impairments were mild and often invisible to the outside world.

'It's the little details that you never though of in the humdrum of normal, everyday life'. (Oluf, patient).

Thus, most of the participants did not experience dramatic changes in their everyday lives, but nevertheless, life had to be slowed down and adjusted to fit these new conditions.

Adjusting through collaboration

The participants reported that being able to continue with everyday life was a main priority. Home served as a laboratory where abilities were tested and challenged. Prestroke, everyday routines were the yardstick by which the current state was measured. Alma explained the mildness of Asger's stroke by emphasising that he still made their bed every morning, collected the mail and emptied the dishwasher. Focusing on the activities that patients could still perform was a source of hope and motivation for the couples. Simultaneously, home reminded participants of what was still missing. For example, Asger still lacked some strength and coordination in his hand, and, thus he was unable to play the accordion in his band. The participants' accounts of their everyday lives showed how the home environment challenged them to manage the stroke-related limitations of their everyday life. Patients continually tested themselves in daily activities and thereby stretched their physical and cognitive limits and adjusted their activities to fit their current capabilities. The couples collaborated in this process of staying in the flow of everyday life in ways that incorporated the patient's limitations. The couples described how they adjusted their routines and made new divisions of labour at home. For example, before her stroke, Elin was solely responsible for most of the cleaning activities at home. However, because of Elin's poststroke fatigue, Elin and her husband Ejnar redefined their division of labour so that they did the cleaning activities together.

'We do a little bit at the time. One day it's dusting and the next it's vacuuming and 1 day we mop the floors together. That's how we manage ...' Elin (patient).

'And you know what? The other day we cleaned the windows - Elin moved the stuff in the window-sills and I did the cleaning and we had quite a good time, didn't we?' Ejnar (partner).

Generally, the partners considered it their role to nudge, challenge and support the patient in pursuing challenges at the right time. However, the partners (especially the women) recognised that they should not become the patient's proxy therapist or 'mother'. The patients emphasised and valued their partners as anchors in the flow of everyday life: someone who noticed if one is losing one's grip, who cares when days are tough and with whom one can share concerns and considerations. The participants had different resources and experience for dealing with poststroke everyday life. Noticeably, a small group of participants, such as Peter and his wife Thora, had severe and/or chronic illness in their lives prior to the stroke. These participants were experienced at adjusting to illness and interacting with the healthcare system. The group of retired participants could more easily adjust the pace of everyday life to accommodate their stroke-related

impairments, whereas the few working participants in the study experienced considerable change in their everyday lives and expressed all-pervading concerns about their return to work.

Future scenarios

The interviews revealed a strong focus on the nearer future. Couples were concerned with the next step in the patient's rehabilitation: having more energy, improving hand strength, being able to read TV subtitles, etc. However, they also expressed hopes for a more distant future, such as getting 'the old me' back and returning to their prestroke lives. This was particularly evident amongst the working participants. Others expressed very specific hopes regarding events that did not require full recovery but still needed some improvements, such as going on holiday or being able to assist at their daughter's wedding. Some patients were worried about the risk of a new stroke, and female partners in particular expressed this concern. Part of this worry was focused on their responsibility to recognise future symptoms and to get the patient to the hospital in a timely manner. However, there was also a strong sense that worry was useless. Some participants were very determined to reject worry.

'Worrying about it coming back will do no good. You can't live like that, eh? I mean, you just gotta move on, don't you?' Inger (partner).

The stroke opened up new, potential (and not necessarily desired) futures for both patient and partner. However, at the time of interview, shortly after the stroke, the participants had mostly experienced progress and continued recovery. At this time, most participants were positive and hopeful that full recovery would eventually be achieved.

Professional safety net

Home as an arena for rehabilitation

The participants highly valued visits from the early supported discharge team; they found it meaningful and valuable to practice and recovery in their everyday surroundings. The couples reported that the home atmosphere was less stressful and that they were able to ask questions more freely.

'It's just more relaxed...Like, at the hospital I sit in the chair, right? At the patient side of the table. But at home it's different. It's my home ground so the roles are a bit different. She's the visitor. That puts me more in control. In a way.' Jakob (patient).

Being at home promoted a more equal relationship between the couples and the early supported discharge professionals, because the meeting took place on the patient's home group (both physically and figuratively).

Quality of service

With few exceptions, the participants expressed thorough satisfaction with the early supported discharge service. Participants appreciated the professionals' ability to assess the patient's needs and give individually tailored advice that could be managed and incorporated into everyday life. The participants reported that the early supported discharge teams were very knowledgable and experienced with stroke rehabilitation and that they were able to put themselves in the patient's shoes. Only two patients were less satisfied with the early supported discharge services. Both Mogens and Thea were eager to return to work and did not feel that the early supported discharge and municipality services covered their rehabilitation needs. Both of these patients felt that the services were more suited for retired and older patients. Many of the participants appreciated the underlying coordination the early supported discharge team provided, such as assigning relevant professionals from the team to each patient or initiating contact with municipal rehabilitation services. This added to the feeling of being in good hands. Patients who continued in municipal rehabilitation generally reported the transition to be unproblematic. Both the patients and their partners appreciated information and practical advice, which seemed to normalise the situation.

'Just knowing that what you're going through is normal...for your situation. That means the world. Because then you are not taken by surprise. You know what's coming and that it is normal and expected'. Beate (patient).

	Being warned about what to expect and knowing that the novel, poststroke situation is developing as expected was very valuable to the participants. The feeling that others had been in their shoes served to normalise the situation and made the participants feel less alone and less prone to worry. The participants also appreciated the early supported discharge teams as a motivating factor - not only for continued rehabilitation, but also for maintaining a positive outlook and remembering that things could have been worse. For some partners, the early supported discharge professionals could give the patient a gentle scolding that the partner felt was needed but was unable to do themselves. Partner sometimes stifled the urge to make comments and suggestions to the patients because they stressed the importance of upholding a marital relationship rather than becoming the patient's proxy therapist. Therefore, they appreciated that the early supported discharge team could take on this role and responsibility. Most of the patients were discharged from the early supported discharge after only a single visit. Some patients participated in municipal rehabilitation services, but many were 'on their own'. Nethertheless, they generally indicated that they felt safe and capable of continuing their recovery and rehabilitation by themselves. 'They are only a phone call away'. Molly (patient). Participants regarded the early supported discharge team as highly accessible and emphasised that they could be contacted in the future, even though the patient had been discharged from the service. This belief in the team's accessibility added to their feelings of safety and control. Overall, the participants accepted that rehabilitation was up to them and that it had a time course to run that depended upon the pathology of the stroke. The early supported discharge teams were seen as a valuable safety net that provided trustworthy information and advice to support this process.
Limitations and applicability of evidence	Limitations: Participants were recruited based on the early supported discharge teams' identification of potential participants, and they did not know how many patients and partners declined or whether inclusion was somehow skewed (for example: the sample included more men than women, more older and retired participants than younger, working participants).

	A methodological decision to interview the patients and their partners together could have led to under-reporting of problems and concerns by both parties. Interviews were conducted shortly after stroke. The timing may explain the relative optimism, motivation and hopes that the participants expressed. As time passes and complete rehabilitation eludes some patients, couples may experience more frustration and less motivation to explore the boundaries of the patient's capabilities. The sample of participants was narrowly defined and relatively homogenous limiting the generalisability. Applicability of evidence: Broadly applicable. Directly discussing early supported discharge. Denmark based so may not be completed applicable to a United Kingdom healthcare system.

Study arms

People after stroke (N = 22)
Stroke patients were purposely sampled and recruited by three of the regional stroke teams. The inclusion criteria were: mild stroke patients discharged directly from the specialised stroke unit to their home and early supported discharge services, patients living in their own home (not nursing homes or sheltered housing) with a partner who was also willing to participate in an interview, people with sufficient cognitive abilities to complete a qualitative interview of approximately 30 minutes, patients and partner would be available for interview 3-6 weeks after stroke onset. Participant characteristics: Gender: 7 women, 15 men. All were in heterosexual relationships. Mean age (range): 69 (41-85) years. Employment status: Retired = 15. Working = 7. Type of stroke: Ischaemic = 20. Haemorrhagic = 2. Mean days in hospital (range) = 2 (1-6) days. Mean time since stroke (range) = 32 (23-42) days. Mean visits from early supported discharge teams (range): 2 (1-4). Future early supported discharge visits planned: Phone calls = 3. Visits = 4. No = 15. Participating in community-based rehabilitation: Yes = 10. No = 12.

Family members/carers (N = 22)
Partners of the same people after stroke. Participant characteristics: Mean age (range) = 69 (53-81). Employment status: Retired = 17. Working = 5.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Moule, 2011

Bibliographic Reference	Moule, Pam; Young, Pat; Glogowska, Margaret; Weare, Jayne; Fisher, Rebecca; Pessah-Rasmussen, Hélène; Early Stroke Discharge Team: a participatory evaluation; International Journal of Therapy & Rehabilitation; 2011; vol. 18 (no. 6); 319-328

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.

Aim	How did the early supported discharge team members and external stakeholders experience the service implementation process?
Population	Healthcare professionals N=10 Members of the early supported discharge team or key external stakeholders from different disciplines. In total this included six early supported discharge team members: the team manager, the physiotherapy, the occupational therapy (who also had team leader roles at any early stage of the team's initiation), the nurse, the speech and language therapist and the dietician. As the early supported discharge team worked across institutions and community areas, it was necessary to include key stakeholders from these areas. These were identified by the early supported discharge team members as being key external partners. Those interviewed included four staff in health and social care sectors; an NHS Commissioning manager in the Primary Care Trust, and Intermediate Care Service Lead for Health, and Intermediate Care Services Lead for Social Care and the Team Manager for Hospital Social Work Services. Participant characteristics: No additional information.
Setting	Interviews were conducted at the team members' place of work, at the University or in one case in the respondents home. Conducted in the United Kingdom.
Study design	Two phases: an initial qualitative interview to capture the experiences and learning of the interdisciplinary early supported discharge team members about the development of the service. Followed by a second phase of qualitative interviewing, following on to the interview of early supported discharge team members, exploring external key stakeholder perspectives on team development. An interview guide was produced with the following questions: For the early supported discharge team respondents: - The formation and development of the team and how this linked with local, regional and national policies and frameworks - The functioning of the team: roles, hierarchy, organisation, strategy - Relations with others; including patients, carers, staff outside the team, wider organisations

	- Difficulties and challenges faced - Successes and areas for improvement For external stakeholders: - The role of the respondent's own organisation in supporting stroke patients and carers - The respondent's involvement in the working of the early supported discharge team and the functioning of the team in relation to existing services and care delivery processes - Feedback received from patients and their carers - The effectiveness of the team in achieving their objectives - Lessons to be learned and areas for further development/improvement The interviews were conducted between October 2009 and February 2010, and lasted approximately 1 hour each. Though guided by the semi-structured interview framework, the interviews were conducted as conversations to allow the participants to fully share their experiences and reflections. The early supported discharge team interviews either took place at the team members' place of work, at the University or in one case, in the respondent's home. Key stakeholders were interviewed in the work place, at the University or when a face-to-face meeting was not possible, by telephone. The interviews were digitally recorded and transcribed.
Methods and analysis	The interviews were transcribed and subjected to thematic analysis. Individual transcripts were read through repeatedly while listening to the tapes and coded individually by the research team. Members of the University-based evaluation team reviewed each other's initial analysis and code production. Data analysis proceeded with the team coming together to generate and agree on themes across the interviews. These themes were then written up and returned to the participants

	for member checking. The participants were invited to read through the themes and their transcript and confirm accuracy of both the discussion and the interpretations. The interviews were guided by research questions developed in conjunction with the early supported discharge team members who had experienced the service innovation and were able to use their familiarity to support question development. The provision of the interview guides ahead of the interview helped the participants focus and prepare for the discussion. All those interviews were engaged in some way with the early supported discharge team development, either as members or external stakeholders. They were therefore well placed to address the questions and provide rich data of their experiences, although it should be acknowledged that each may have brought their own biases reflecting the agendas of the employing organisations and personal beliefs, to the interviews. Transferability is aided through the provision of description of the research design and methods used.
Findings	**Setting up the team** The participants were aware of the growing evidence of benefits from early supported discharge. 'It is more cost effective, with lower mortality, better outcomes and patient satisfaction'. They also recognised that early supported discharge addressed the broader agendas on patient choice and patient goals. More generally, the project was perceived by one person as: 'Fitting into the national drive around getting patients home, having rehabilitation in their own homes.' There was no new funding for the project, and the nature of the funding from acute care was thought to have influenced the way the project was conceived and developed. 'The financing was based on the ten hospital beds closed.' The creation of a multidisciplinary team was seen as revolutionary for the Trust at the time, though there were inception issues recorded by one individual as: 'The management of the project was one of the fine details that there was no time to work out.' A steering group brought together the heads of the professions represented in the team, with a general manager who had a remit covering two hospitals, and consequently insufficient time for the project. No single person gave the team a sense of clear direction. Within the team, the four senior managers paid at Band 7 attempted to manage by consensus. The team leadership was rotated through the Band 7 staff, with each taking a three-month turn. As well as orienting to the multidisciplinary team, there was a desire for each of the professions to maintain a professional identity and be managed

within their profession. The allied health professions drew support through clinical supervision in their professional teams, this model however left the nurse isolated and lacking support. In the early stages of the project, the budget was not integrated, meaning that any review and alteration to the skills mix would require negotiation with several managers. Although the team needed to work as a truly multidisciplinary team with interdisciplinary practices and a clear identity, it was recognised that the team was not larger enough to operate in isolation, and needed to be fully integrated with other parts of the Trust for mutual provision of cover when needed.

Although most of the respondents felt the right health care professions were represented in the team, the concentration of staff at high bands left gaps which could have been filled more economically with those at support worker level. From outside the Trust, there was a strong feeling by all that the lack of involvement of Social Care undermined the team's ability to provide holistic support. This was expressed by one individual: 'It was set up with quite an expensive team of therapists and a nurse, but no actual social care input or anyone to carry out personal care, which meant that if the idea was that you take people out who've had a stroke earlier than they would otherwise, one would expect that in between the therapists visits they might need some degree of support, but that wasn't available, that wasn't thought about and put into the team.'

Team working experience

A number of factors impacted on team working. Being located in one physical space enabled the team to work well, talk about patients, and gain support. The team members worked well together and one felt: 'It's the passion for 'stroke' that's done it.'. There was a perception that the desire to make the team work for stroke patients was behind the success. The team also had processes in place that facilitated multi-professional working such as: 'Weekly staff meetings where we would talk through any day-to-day issues and concerns. We also had timetabling every week, where we would table patients and ensure that if we needed joint sessions, we could cover them. We also had our own multidisciplinary team meeting where we would talk about unified goals and, when we had seen the patient, come up with a joint plan.' It was also clear that the team members offered a range of skills and expertise, not necessarily directly from the specialty, one example being the noted IT skills of a member of the team. Rotating the team leader role and management of team members created issues expressed by all the team members in different ways, with one example below: 'I think it worked well for those that were full time, but for those of us who were part-time, like myself, we shared it ... my gut feeling is that the team at that time ... may have found it a bit disjointed.'

The lack of external management was also an issue, with the team acknowledging that there was no recognised hierarchy above it. One member reported: 'When we were a pilot, we didn't really have any clear lines of communication or responsibility with professional leads, in other words, the occupational therapy department, physio department, nursing etc. And it was just something we worked with.'

Team within the context of other services and professionals

From the beginning of the pilot all team members perceived themselves as still very much relating back to their own professional groups. They were still essentially managed from within their own disciplines: 'To start with, I think we were very much within our professions and we went to our own line managers with issues'. For a number of team members, they experienced the line management and clinical supervision provided by their own profession as supportive and understanding. However, all acknowledged that this system could give rise to tension, in that issues of importance to the team were being dealt with in the professional departments outside it: 'So we were reporting to our professional managers, and the team lead didn't have much power over things like annual leave, study leave - those kind of things which would have been much better controlled within the team, that was still going out to our individual professions which tends to complicate things a little bit ... in the same way appraisals and objectives and things, they were still quite profession specific.'

Within the hospital setting, the team needed to relate to the existing ward staff, both nursing and therapeutic. Because of the way in which the team had been created, misconceptions sometimes arose among ward staff, and the team members reported the need to educate others as to their role and function, and to make clear their criteria to ensure that appropriate patients were being referred to them: 'We did quite a lot of teaching sessions on the wards to explain what we were and where we'd come from, and what our criteria were.' The early supported discharge team members also perceived that their specialisms in stroke rehabilitation created tension between them and the Community Rehabilitation Team: 'I mean that's potentially another issue. I guess that they might have felt that we were taking all their interesting patients, which is a difficult one isn't it? Because all the recommendations say that people should be treated by stroke specialist staff so that's

one argument for the team in the first place, but I think they found it frustrating to think that what they were doing would differ from what we were doing.'

The impasse in agreeing payment for social care was a major issue for the team and impacted on their dealings both with community services and social care agencies. Both the early supported discharge team members and stakeholders interviewed acknowledged the difficulties created by the question of payment for social care and the way in which this negatively affected the working of the team. In the words of a stakeholder: 'I think the difficulty is actually, no service can operate in isolation, and particularly a service like this that has to refer onwards a patient; it's that whole kind of pipeline thing isn't it?'.

Effectiveness in achieving the aims

The team reported external feedback had been positive, based on patient satisfaction surveys. It was also noted by all stakeholders and the team that the home based rehabilitation seemed to be effective for carers and relatives. 'Our patients' general feedback was that they were just really pleased to be at home'. Additionally, the team reported meeting aims to reduce the length of hospital stay. It was also recognised that the team had provided care in a secondary care setting that had enabled the closure of hospital beds, and broadly delivered on the 'Stroke' strategy: 'I think it does reflect the National Stroke Strategy in terms of a) having the function of an Early Stroke Discharge Team, and b) that function being delivered by Specialists, highly competent staff and those experienced in the care of people with 'Stroke', so from that perspective, I think it's done a good job'. 'From a Trust perspective it's shortening the length of stay, so those people are actually in the hospital for less time.'.

The discussions also highlighted some limitations in the team's abilities to achieve their aims. There was concern that the team were working to a lower than expected capacity and were limited in the cases they could accommodate. The team only ever had seven or eight patients. This arose because they couldn't work with people in nursing homes, or who had existing packages of care. This situation reflects the difficulties of working across health and social care boundaries in

	delivering the service and it was felt that: 'With more health and social care type resources, they [the team] could get even more people home.' **Learning for the future** The key message related to the organisation of the steering group and development of the model of care. It was felt by a number of respondents that it was important to: 'Involve all the stakeholders, consider others and the existing services, and the impact on those existing services, as well as how you could work with them.' It was seen that operational issues and the pathways needed to be talked through and the various stakeholders from health and social care needed to be part of the development process, agreeing the model of care and then using this to determine the team composition and functioning. An approach like this may have helped to get social care input facilitated so that the capacity of the team could be increased. There were also comments made about the team composition. One person suggested: 'It would have been good to have had two healthcare assistants attached to intermediate care that could have provided hands-on support sometimes for those people going home.' This would increase the capacity of the team and may have widened the scope of referrals.
Limitations and applicability of evidence	Limitations: The project considered a local service development and while likely generalisable, this does limit the ease of this. Applicability of the evidence: Directly applicable discussing a United Kingdom-based early supported discharge service.

Study arms

Healthcare professionals (N = 10)
Members of the early supported discharge team or key external stakeholders from different disciplines. In total this included six early supported discharge team members: the team manager, the physiotherapy, the occupational therapy (who also had team leader roles at any early stage of the team's initiation), the nurse, the speech and language therapist and the dietician. As the early supported discharge team worked across institutions and community areas, it was necessary to include key stakeholders from these areas. These were identified by the early supported discharge team members as being key external partners. Those interviewed included four staff in health and social care sectors; an NHS Commissioning manager in the Primary Care Trust, and Intermediate Care Service Lead for Health, and Intermediate Care Services Lead for Social Care and the Team Manager for Hospital Social Work Services. Participant characteristics: No additional information.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Nordin, 2015

Bibliographic Reference	Nordin, A.; Sunnerhagen, K. S.; Axelsson, A. B.; Patients' expectations of coming home with Very Early Supported Discharge and home rehabilitation after stroke - an interview study; BMC Neurology; 2015; vol. 15; 235

Study details

Secondary publication of	No additional information

another included study- see primary study for details	
Other publications associated with this study included in review	MAY BE SOMETHING TO INSERT HERE - CHECK WHEN LOOKING AT QUANTITATIVE STUDIES
Aim	To describe patients' expectations of coming home very early after stroke with support and rehabilitation at home.
Population	Stroke survivors with confirmed stroke according to the WHO's criteria, age at least 18 years, living within 30 minute drive from the stroke unit, and mild to moderate remaining stroke symptoms at day 2, i.e. National Institute of Health Stroke Scale (NIHSS) score 0-16, Barthel Index score 50-99. If barthel index was maximal (100), Montreal Cognitive Assessment should be <26. People were excluded if their life expectancy was <1 year and an inability to speak or communicate in Swedish before the stroke event. Fourteen consecutive participants in GOTVED were approached and informed about this nested interview study by an occupational therapist who was not involved in this part. Participant characteristics: Female/male = 4/6, Median age (range) = 69 (63-95), Living alone/sharing household = 5/5, Housing, apartment/house = 6/4. Median time at stroke unit (days) (range): 12 (5-17). Ischaemic/haemorrhagic stroke = 10/0. Stroke severity, NIHSS (0-42) - moderate (5-15) = 2, minor stroke (1-4) = 5, no stroke symptoms = 3. Median Barthel Index (0-100) (range) = 87.5 (50-100). Median MoCa (0-30) (range) = 22 (15-27).
Setting	Interview study nested within a randomised controlled trial; Gothenburg Very Early Supported Discharge (GOTVED).
Study design	Interview study nested within a randomised controlled trial (a trial that compared very early supported discharge containing a therapeutic rehabilitation intervention from a coordinated multidisciplinary team with conventional care after stroke).
Methods and analysis	The first author, a physiotherapist with >4 years of clinical experience of stroke rehabilitation, gathered the interview data from February 2012 to March 2014. This was done under the guidance of the last author who is a nurse and associate professor with >15 years of experience of doing qualitative research. There was no relationship between the interviewer and the participants prior to the study. A single interview was performed 0-5 days before discharge from the stroke unit. With regards to the participants with aphasia and dysarthria, the interviews were adapted in order to support communication. The adaption was based on the interviewer's knowledge and experience of working with this group of patients in clinical settings. The interviews lasted around 30 minutes (average 28 mins, ranged 9-53 mins), were audio

	recorded and transcribed verbatim. Three of the interviews were noticeably shorter than the others (<15 minutes). The interview guide was made with open-ended questions covering the following areas: 1) Expectations of coming home: - What thoughts do you have about coming home? - How do you think it will work at home? 2) Expectations of the VESD: - What thoughts do you have about the support and training you will receive at home? - What are your wishes with the rehabilitation service you will receive? A conventional qualitative content analysis was performed by the first author. The analysis was mainly descriptive, aiming to systematically organise the data into a structured format. The text material was analysed in the following five steps: 1) the interviews were read repeatedly to get a sense of the content in its entirety; 2) meaning units (text segments that convey interesting information in relation to the research question) were derived from the text, condensed and labelled with a code capturing the key concept of the text; 3) the codes were abstracted and sorted into subcategories and categories based on how the different codes were related; 4) the interviews were read again to check for the adequacy of the categories and subcategories with regards to the content of the interviews; 5) citations for each subcategory were identified from the data. The analysis process moved back and forth between the different stages and between the whole interview and part of the text to see that categories, subcategories, codes and citations made sense. The last author reviewed the interview transcripts and checked the relevance of the codes, the subcategories and categories. Discrepancies between the authors were discussed until a consensus agreement was reached. The computer software programme NVivo 10 (QSR International) was used to organize the data.
Findings	**Support towards independency** The participants expected the team to support them in such a way that they would manage and feel comfortable being at home. The expectation was that the rehabilitation would be varied and full recovery was an overall wish by the participants. *Getting support to manage at home*

Was stated as a positive aspect of the visits. The participants expected the team to check their home environment and how they managed there. ("The first few days after I got home, they should be able to work out what I can't manage to do, what I'm going to need help with". - Participant 4). Another common expectation of the team was to support the participants in their daily activities ("...we decided that on the first day that I was going to cook and she was going to be with me. How to get it to work and the like. // Make something myself, lunch or something. I'm going to try to do it myself, but they would be, she would be with me." - Participant 7). Some people expected the VESD team to prescribe assistive devices to facilitate their everyday life as well as to put them in contact with people who provide the assistive devices. The team was also expected to support the participants to master the environment. ("...if it (the rehabilitation) happens at home, they can see what my place looks like. So they can adapt (my rehab) to it (the home environment) and make sure that I can master my environment more easily than I could do here (in hospital)."). Another aspect mentioned was that the visits from the VESD team were expected to contribute to a feeling of being secure at home ("...it feels secure to know that they are coming home, that they, I know that on Tuesday that she's coming at 10 am, or whatever time it is (appointed time). So I know that they are coming here (to my home)." - Participant 3).

To get support to regain one's former abilities

Described as an important aspect with regards to the rehabilitation provided by the VESD team. For some participants, the most important goal was to regain muscular strength and control. ("...the most important is to get strength in my left arm and be more steady on my foot." - Participant 6). For others, their rehabilitation goals also involved aspects of cognitive function as well as activity and participation in their lives. ("...what I wanted was to rebuild my physical and mental strength so I get back to my regular activities and my regular life." - Participant 10). Yet another wish that was mentioned was to be supported to recover fully from their stroke ("I'm hoping and hoping and hoping, because I don't know yet, I hope that I, that I can be completely recovered, as before." - Participant 7). Functional training and self-exercise program provided by the VESD team were other kinds of support expected as means to regain one's former abilities. The professional competence of the VESD team was stated as important for the rehabilitation outcome. The team was expected to be experienced and competent in stroke rehabilitation and this was highly appreciated among the participants ("It is sensible that people are coming who know what they are doing with this kind of stuff." - Participant 8).

A new and unknown home situation

Six of the participants described expectations of coming home to a new and unknown situation even though they were returning to their homes. This was due to their changed abilities and to the different environmental conditions at home compared to at the hospital environment.

Having changed capacities

Having different capacities compared to before the stroke led to an unfamiliar situation at home. ("...I've always been independent // so it is a completely new situation and I can't know how it is going to be // it might be great or it can go badly." - Participant 6). For some people, this led to insecurity about managing in their new home situation. Another consequence of the changed capacities was a fear of falling, which they expected would negatively affect their ability to manage at home and, would lead to activity limitations.

Different environmental conditions

At home versus the hospital was another reason that caused a feel of something new and unknown. Some example of these different conditions were the adapted environment for patients with stroke in hospital compared to at home and not having access to help from hospital staff 24 hours a day when they were at home. As a result, some participants felt insecure about their ability to manage to perform the necessary activities of daily living at home. ("...I'm worried about going to the toilet, // the worry of waking in the middle of the night and needing to go to the toilet. (At home) I'm the only one who can help me." - Participant 4).

Returning to one's setting

Eight of the participants talked about longing to go home, where they would become autonomous and capable people again.

Being in a familiar environment

Described as desirable. The people longed to be in their own surroundings, to have access to their own things, and to see their family again. ("...living in my own house and doing my own stuff and being able to communicate with the rest of the world, because I don't have any internet access here." - Participant 10).

Regaining one's personal autonomy

Was also a positive aspect of coming home. The participants looked forward to being the ones deciding their daily routines again, and restarting their old habits that they could not pursue while in hospital. ("...being able to do what I want, like, I haven't been able to open the window like I would normally do in the morning and those kind of things." - Participant 3).

Being capable

Was another aspect mentioned with regards to returning to one's own setting. This was described by nearly all of the participants, in stark contrast to the feelings of insecurity that they expressed about being able to manage at home. More than half of the participants stated that they expected to be able to manage the necessary activities of daily living at home. ("I'm certain that I will be able (to go out by myself) when I get home, I can do it." - Participant 8). Being at home was even expected to facilitate managing daily activities and returning to everyday life. ("So at home you know where things are, here (in hospital) you need to go and look for ...//If you need anything you have to, in other words they don't have any particular spot. //It's a bit easier at home." - Participant 9). Another aspect dealt with capability with regards to issues of responsibility for and continuing with rehabilitation exercises "... so you are forced to do more of your rehab exercises on your own (at home). Here (in hospital) you have an appointment, they're coming, so we're doing this now and doing that now. When I'm on my own (at home), that's when it counts, and I know, I'm quite energetic so I think it's going to go really well (with the training at home)." - Participant 1).

A new everyday life

Nine of the people expressed they wanted to resume their everyday life when they came home. Though, some expected to be dependent on others, which raised mixed feelings. Others highlighted the interference in everyday life by family members or the VESD team. Resuming their everyday life was expected to be challenging due to the consequences of the stroke on their functional ability and emotional security. Different strategies to deal with the difficulties were described.

Starting the "old" life again

When coming home was considered as important by almost all participants. They hoped to be able to perform the same activities and to participate in life just like they had done before the stroke. ("I usually go to the tobacconist and bets on horses and I expect that I'll continue doing that. It's just a small hill to get up and shouldn't be too hard for me. What's going to happen is that you'll get back to what you were doing before." - Participant 8).

Being dependent on others

Another main issues brought up. Some expected to be reliant on relatives to take care of the daily tasks. (...the computer, paying bills, my son made sure I did it (made sure the numbers were entered correctly), my son helps me." - Participant 5). Relatives and neighbors were also expected to be important for the participants feeling emotionally secure at home. ("... I've got a phone so I can keep in contact with the outside world. And the neighbors, I keep in contact with them as well, if anything happens. So that's also a bit of comfort. And my daughter's there now too, so that's also a comfort". - Participant 6). Other expectations concerned assistance from the local community health service, which was considered important for managing to perform the necessary activities at home. ("...if someone (from the community service) can go shopping, maybe you can cook by yourself. // If the shop for you, which I hope they do, because in the first few days (at home), I'm not sure I can do it by myself." - Participant 8). Another way participants expected to be able to resume everyday life was by

using the transportation service provided from the local community. They had mixed feelings with both worries and confidence described, that they would get the help they wanted from the community.

Interference in the personal autonomy

Another aspect mentioned with regards to their new day-to-day life. There was an expectation that their family members could influence their behaviour at home. ("Yeah, I've got the kids stopping me now, // so you get reminded a fair bit. I've already been (reminded), they say that 'you should think about yourself', there's lots of that. // So you have to take it a bit easy. // They are firm (with me), they're going to be (firm with me) ... // I am going to listen to them, // I have to, // it isn't greater (to be told what to do by your kids). I'm not hurt by it, but, you know, when you aren't used to it." - Participant 1). Another thing the participants expected was that the VESD team would interfere, implying that team visits would intrude on their daily habits. ("...when I'm free (not working) I usually go and have a lie down after I've eaten, in the middle of the day. // But of course there are a couple of visits planned with them (the team) at 1 pm next week." - Participant 3).

Dealing with one's new condition

Referred to participants' expectations that they will face challenges in their new everyday life due to the stroke's consequences on their functional abilities and emotional security. Some of these expectations concerned that their reduced functional abilities would lead to activity limitations and participation restrictions at home, compared to how they remembered their life prior to the stroke, this gave raise to worries and frustrations. ("Yes, it's a bit like, you can't just go out and shop (for groceries), I can't just sit in the car when I want to, it will make me angry. Yeah, that I can't do it, I don't get sad, or depressed, it's not that, I will just be angry I imagine. Yeah, and this leg here, this damned leg, // ... when you are used to being able to manage and do everything by yourself..." - Participant 1). Other expectations were around the challenges related to their emotions about the stroke event, like fear of a recurrent stroke. These emotional challenges were also expected to result in activity limitations and restricted participant. ("It's just that, going out of your apartment, now I don't want to do that. I mean if I fell over there, maybe no-one would notice and realize 'she's unwell' //, or ring for an ambulance, so I'm a bit scared of that ..." - Participant 3). Several different strategies were described to deal with one's new conditions. Many of the participants wanted to take one day, and one thing at a time, and have a slow return to their usual life. So one strategy mentioned was for activities at home, they planned to postpone or change the way they did them. ("Maybe I won't be able to peel potatoes and cut meat the way I'm used to, but that can't wait and I'll buy something that's

	ready-made, it'll be fine". - Participant 8). Another tactic they described was to perform activities more slowly and with more control than before or to do one thing at a time. This was expected to be a difficult strategy to learn, but was considered as important.
Limitations and applicability of evidence	Limitations: A sample size of 10 people, which can be considered as small. All people were older than 62 years and most of them were born in Sweden, so it is reasonable to assume that different expectations may have been described by younger persons with stroke or from persons born abroad with a different cultural background. Applicability of evidence: Broadly applicable. Based on Sweden, but investigating early supported discharge services directly.

Study arms

Stroke survivors (N = 10)
Stroke survivors with confirmed stroke according to the WHO's criteria, age at least 18 years, living within 30 minute drive from the stroke unit, and mild to moderate remaining stroke symptoms at day 2, i.e. National Institute of Health Stroke Scale (NIHSS) score 0-16, Barthel Index score 50-99. If barthel index was maximal (100), Montreal Cognitive Assessment should be <26.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Minor limitations

Ringsberg, 2003

Bibliographic Reference	Ringsberg, K. C.; Holmgren, B.; Home rehabilitation of stroke patients from the perspective of the patients and their relatives; Nordisk Fysioterapi; 2003; vol. 7 (no. 3); 21-31

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To capture stroke patients' and their relatives' conceptions of home rehabilitation with special focus on their participation in the decision about home rehabilitation, their participation in the rehabilitation and their experiences of the rehabilitation team.
Population	People after stroke N=15 Twenty-four people who had a stroke were consecutively selected in the course of one year from a special stroke unit for rehabilitation in their homes by a special rehabilitation team. Inclusion criteria: acute stroke; had a need for rehabilitation according to Berg, MAS, Sonn; be able to exercise at home, estimated by the team after home visit; be able to contact the home rehabilitation team by telephone, alarm or via relatives; have stable circulation and breathing evaluated by a physician; independent of another person in feeding according to Sonn; be mentally clear, i.e. no diagnosed dementia and be able to follow instructions. Exclusion criteria: presence of other medical complications that could hinder rehabilitation i.e. progressive stroke, severe cardiovascular diseases, dementia, psychiatric diseases, alcoholism; the dwelling was unsuitable for home rehabilitation, estimated by the team after home visit.

	Participant characteristics: Male:female = 11:4; Mean age (range): 69 (59-85) years; cohabiting/living alone = 9:6; villa/apartment = 5:9; infarction/haemorrhage = 12:3; right/left sided weakness = 4:7; earlier stroke 2/13; mean number of days in hospital (range) = 26 (9-60) days; mean number of hours of rehabilitation received (range) = 24 (4-49) hours. Family members/carers N=15 Family members/carers partnered with the stroke survivors. No additional information. Participant characteristics: No additional information.
Setting	People from a special stroke unit for rehabilitation who were discharged to home for continuing rehabilitation in Sweden.
Study design	The phenomenon under study was the informants' experiences of home rehabilitation. In order to capture as many qualitatively different conceptions of the phenomenon as possible a qualitative perspective was found to be suitable. In collecting and analysing data the phenomenographic approach was used. Data were collected in six focus group discussions here called interviews. The interviews were semi-structured, informal and conversational in style lasting approximately one and a half hours. They were carried out at a neutral place. A moderate and a co-moderator who were not involved in the rehabilitation of the patients carried out the interviews. The interviews focused on the informants' various experiences and conceptions of the rehabilitation offered. The guiding questions for the interviews were of comprehensive character: 1) 'Please, tell me about your conceptions of your participation in the decision of the discharge from hospital to home and the decision to accept the offer of home rebilitation.' 2) 'Please, tell me about your experiences and conceptions of your participation in the rehabilitation' and 3) 'Please, tell me about your conceptions of the home rehabilitation team.'
Methods and analysis	The interviews were tape-recorded and transcribed verbatim. The data were analysed according to the principles of phenomenography. The analysis resulted in five comprehensive categories and a pattern of descriptive subcategories. The categories represent qualitatively different ways of experiencing the rehabilitation. The summaries of the informants' conceptions are illustrated with quotations from the interviews. As in the case of qualitative research in general, the credibility of the analysis of the results depend on how well the author succeeds in describing the theoretical framework and the research procedures and how the categories correspond to the content of the interviews. The quotations presented in this study are intended to facilitate the reader's evaluation of the credibility of the results. A number within brackets after the

	quotation represents each informant. The patients have the numbers 1-15. The relatives have the numbers 50-62. A co-examiner was also assigned to test the credibility of the categories and subcategories. These categories and subcategories were presented to the co-examiner, who put the key words, sentences and quotations in the 'correct category'. The agreement was almost unaminous between the person who had analysed the data and the co-examiner.
Findings	**To be offered home rehabilitation** <u>To be chosen</u> When staff on the ward offered the patients home rehabilitation, they felt especially chosen and accepted it. They trusted the staff's assessments that they would manage to continue rehabilitation at home. The patients expressed that they longed for their homes and to be alone sometimes. 'Well, the thing is, I've been assessed as being able to live at home.' (7). 'Well, being allowed to come home to one's proper bed.' (13). The patients expressed that they felt stronger in their own, well-known environment. Furthermore, it was supported that they were going to continue to live in this environment. 'Home is a bit psychological. You come home and you feel a bit stronger straight away.' (3). 'In the environment you're used to and where you will have to function.' (2). The relatives also expressed that it was positive that the patient was offered home rehabilitation. They trusted the staff's assessments that both they and the patient would manage it. 'He wanted to go home, you know, and I suppose I thought that it was nice that he was allowed to come home, that it's easier.' (50). 'O well, I believe in those people'. (52).

The offer of home rehabilitation can be positively understood both by the patients and their relatives, if they feel they are chosen for this particular service. One prerequisite is that they have confidence in the staff's assessments that they will manage to continue to work with rehabilitation at home.

Not to share the decision

There were both patients and relatives who expressed that they did not feel that they had shared the decision about home rehabilitation. They thought that the decision had not been taken jointly by the staff, the patient and the relative. No alternative rehabilitation had been offered. The patients thought that the staff on the ward had first made up their minds, and then recommended the patient to continue rehabilitation at home.

'No, they came with that paper and said sign here. I think you should take part in the training.' (8)

'No I didn't really know what it was all about. But they thought that now I should do my exercises at home.' (8).

The relatives expressed that the decision about home rehabilitation was taken without a jointly discussion. They were informed about the decision after that the patient had accepted it. Therefore, it was difficult for them to have a divergent opinion.

'And ask a person who's lying in bed in hospital if he wouldn't like to go home, I don't believe such a person exist. And then I could hardly refuse could I?' (61).

'He came home too early I think'. (50).

Some relatives were worried that the outcome of the rehabilitation would not be as good as if the patient had remained in hospital or the rehabilitation had continued at another clinic/institution.

'But then I insisted...I wanted to insist that her chance of getting better wouldn't be worse.' (61).

In order to reduce anxiety and to obtain as good a result as possible from rehabilitation, it is important that the staff on the ward make sure that both patients and relatives feel that they share the decision about home rehabilitation.

The home as a workplace

The home as a setting for rehabilitation

Physical changed had to be made, such as adaptation of the patient's apartment or house. The patients were also given various assistive devices.

'Yes, I got things, handrails on the wall and all that. And they provided a wheelchair'. (5).

The relatives were required to assist the patient, which the following quotations elucidate.

'The most troublesome things were the toilet and the shower. As for the bed, he learnt to sit up quite soon, actually, but it's hard. We had to take up all the rugs; he had to go with a walking frame on wheels indoors. It's difficult.' (50).

'I'd like a security alarm, so I can make an emergency call at night. I can't get him up on my own.' (50).

The home was not just a place where the patient and their relative lived, but it was also the place where the rehabilitation exercises were done. The team stroke to make the exercises as functional and integrated in the daily life as possible. At first the team guided the patient and his/her relative. Later, when the rehabilitation period was finished, the patient and his/her relative continued to do the exercises together.

'I've done a lot of training with him at home...first with the team and then I've taken care of it...so we keep going every day. And we still do.' (54).

When a patient with stroke comes home from hospital, both the patient and their relative have to organise their lives according to the patient's functional ability. It is understood, and demanded, that the relative will help with different activities

of daily living. When rehabilitation is given at home, the intention is that the relative will be involved in the rehabilitation exercises.

Changed roles

Daily activity and daily running of the home

Many patients' lives were changed in many ways when they had a stroke. Suddenly they were dependent on other persons in situations, where they had been independent earlier.

'The thing is that you feel worthless, in fact, have to have help with everything'. (4).

The relatives reported that they had to do things at home that the patient had done earlier. New skills had to be learnt. The practical responsibility for the home thus increased for the relatives; one had to do what two had done before.

'You do the things you think you're good at. I've always looked after the outdoor things, the yard and the car and things like that. She's never bothered about that. She's done cleaning and tidying. It was natural to do what you liked doing.' (61).

'All of a sudden, I had to do everything.' (56).

When someone in a family has a stroke, ingrained social roles must be changed. The patient must accept that he/she is dependent on help from others. The relative must take over tasks and learn new practical skills in the home that the patient was responsible for earlier.

Relationship with husband or wife

	Several patients expressed that they were aware of that they were now dependent on their husband and wife. 'I have my wife to look after me'. (13). 'Yes, because I have a wife at home. She's getting more and more free time, so she can help me.' (3). The relatives expressed that it was a matter of course to help and support their husband or wife. 'You always do (help and support) when you have lived together for many years.' (16). When the patient had a stroke, the role of husbands or wife was extended to that of a caregiver too. 'When he can't manage on his own, either on the toilet or in the shower, then it's a lot of work.' (50). 'You become mother to an adult, soft of.' (56). As the rehabilitation was given at home, and as the relative was expected to assist in the exercises, the relative also acquired the role of a rehabilitation staff member. The relatives thought that it was difficult to be supportive in the rehabilitation work, to do the exercises with the patients in the way the team had instructed. When the team was present, the patient tried hard to do the exercises. When the husband and wife were alone, the patient did not exercise in the same way but demanded more helped from the relative. 'Well, it's your own relative, see. I don't think she does what I tell her like when "they" say it.' (61). The disease often leads to a fundamental shift in the person's mood. The following statements shows that it was sometimes difficult for the person to cope with their own mood. 'I could cry for no reason, it just comes.' (2). It was also difficult for the relatives to cope with the persons' shift of mood.

'Well, he can get so angry, he can't speak properly. And sometimes I also have to get angry and say if you don't calm down a bit, I'll get sick too. Then I won't cope any longer. What'll we do then? I know, it won't work, he says.' (50).

When someone has a stroke, the relationship with partners can be put under strain.

Relations with friends

Both patients and their relatives declared that relation with friends was changed. Visits from friends decreased or sometimes stopped altogether.

'That there are friends and acquaintances that can't tackle it. A man who was big and strong one day and then the next day he has to have help with everything. Then the mates wonder. Well, they simply can't cope with it, so they gradually drop out.' (55)

'But I don't have anyone who comes and visits me at home in the apartment at the weekends. I have to be alone.' (6)

According to one relative, the new situation caused problems in their relations with friends.

'You then get folk you know coming and maybe not leaving, then you have to be so impolite as to say now they have to go and lie down.' (55)

The friends very seldom asked how the relative was getting on. Having increased responsibility and being overshadowed by the patient were mentally stressful for some of the relatives, which the following statement illustrates:

'Everybody rings and wonders how he is, but no one asks how I'm coping with the new situation.' (55)

When someone has a stroke, the relation with friends is changed both for the patient and the relative. The number of social contacts might decrease and friends might fail to show understanding. If the friends focus too much on the patient, there is a risk that the relatives might feel ignored.

An extra burden

A constant feeling of anxiety

The relatives expressed that they were very tired and anxious about not managing to handle the complex situation. They were worried about not being capable of doing all the practical work in the home, not managing to give the patient the help they needed in activities of daily living, and not managing to support the patient in the rehabilitation process. They worried about the future, if the person would be ill again, and in the case not being able to cope with that situation.

'For one thing, you became an outcast yourself when such a thing happens. You don't know what has happened.' (56).

'Yes, of course, there's certainly a limit to how long you can cope.' (61).

'But there's that worry all the time that it can come back again.' (58).

The relatives also stated that they were worried about their own health and what would happen if they got a serious disease.

'And then I've got bad hips, you know. I'm getting two new hips and I'm waiting to be admitted to hospital, and then I've had an eye operation.' (53).

Caring for a stroke patient means living with a constant feeling of anxiety about not being able to cope practically as well as mentally. One worries constantly not only about the patient's health but also about one's own.

Constraints on time and space

The relatives expressed that they were tired all hours of the day and night, every day of the week. They indicated that the time the team worked with the patient was short in comparison with the work and time that was demanded of them, the relatives. The team did not visit the home on Saturdays and Sundays, which meant that the work was experienced as still more demanding on these days. Earlier, before the stroke, they had spent their weekends relaxing and resting. After the stroke it was difficult to leave the home or to get time for oneself, as the patient demanded care constantly.

'But I'm also around all the time. Well, him says I have to be there.' (51).

'There's always something, and she can't handle any of it. So it's up to me.' (61).

When one has to take care of a stroke patient, one might feel tied to the home in case the patient needs care. This can be experienced as lack of time for oneself.

Professionalism

Professionally skilled

The members of the team were described as good teachers.

'Stuff I didn't understand myself, and I regarded them, of course, as experts.' (9).

'Yes, they taught me to walk again.' (2).

'And then those girls came home and then I was able to get answers to all those questions I had.' (60).

A professional attitude in a caregiver engenders safety and confidence in the patients and their relatives.

	<u>A keen ear</u> The relatives described the team as sensitive and thoughtful. The members of the team sometimes undertook practical tasks such as making telephone calls, delivering assistive devices, aids and domestic work. The team was perceived a support both for the patient and the relative. 'Yes, they did everything.' (5). 'That they supported both the invalid, well they supported everybody. The whole family! Yes, both the invalid and the other one, that's me.' (60). The total time allocated for home rehabilitation was experienced as too short by the relatives, and they expressed that it suddenly came to an end. Some of the patients continued their rehabilitation some hours per week at an outpatient clinic. 'Well, what I think, well I think they should have had a bit longer time.' (50). A professional attitude among the team members organising rehabilitation at home engenders safety and confidence in the patients and their relatives. Assisting with practical work can be conceived as support in a difficult and demanding situation. It is important that the team gives mental support both to the patients and the relative. The team members should make sure that the patient and the relative have understood how much time they have at their disposal for rehabilitation and when it is supported to end.
Limitations and applicability of evidence	Limitations: Interviews with stroke survivors and family members at the same time, which may limit how information is shared. Applicability of evidence: Does not specifically discuss early supported discharge but discusses home rehabilitation that may be related. Swedish healthcare setting so likely applicable to a UK based healthcare setting but reduces the applicability a little bit.

Study arms

People after stroke (N = 15)
Twenty-four people who had a stroke were consecutively selected in the course of one year from a special stroke unit for rehabilitation in their homes by a special rehabilitation team. Inclusion criteria: acute stroke; had a need for rehabilitation according to Berg, MAS, Sonn; be able to exercise at home, estimated by the team after home visit; be able to contact the home rehabilitation team by telephone, alarm or via relatives; have stable circulation and breathing evaluated by a physician; independent of another person in feeding according to Sonn; be mentally clear, i.e. no diagnosed dementia and be able to follow instructions. Exclusion criteria: presence of other medical complications that could hinder rehabilitation i.e. progressive stroke, severe cardiovascular diseases, dementia, psychiatric diseases, alcoholism; the dwelling was unsuitable for home rehabilitation, estimated by the team after home visit. Participant characteristics: Male:female = 11:4; Mean age (range): 69 (59-85) years; cohabiting/living alone = 9:6; villa/apartment = 5:9; infarction/haemorrhage = 12:3; right/left sided weakness = 4:7; earlier stroke 2/13; mean number of days in hospital (range) = 26 (9-60) days; mean number of hours of rehabilitation received (range) = 24 (4-49) hours.

Family members/carers (N = 15)
Family members/carers partnered with the stroke survivors. No additional information. Participant characteristics: No additional information.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

Rochette, 2021

Bibliographic Reference	Rochette, A.; Dugas, A.; Morissette-Gravel, A. S.; Inclusion of relatives in stroke rehabilitation: Perception of quality of services they received in the context of early supported discharged (ESD), in- and out-patient services; Topics in Stroke Rehabilitation; 2021; vol. 28 (no. 2); 142-152

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To describe their perception of the quality of the services they received in the context of early supported discharge, in- and out-patient rehabilitation services.
Population	Family members/carers of people after stroke N=90 People who had relatives who accessed early supported discharge (n=29), in-patient rehabilitation (n=41), and outpatient rehabilitation (n=20). Qualitative findings are specific to the early supported discharge therapy. Participant characteristics: Age group: 45 years old or less = 14, 46-45 years = 16, 56-65 years = 23, 66-75 years = 20, 76 years and more = 8. Woman:Man = 64:15. Relationship with individual who have had a stroke: Child = 24, spouse = 39, brother/sister = 4, parent = 5, other relative = 4.
Setting	Early supported discharge, outpatient and inpatient rehabilitation. Early supported discharge included intensive interdisciplinary rehabilitation offered 4 to 5 times/week at home and lasting approximately 4 weeks. Canada.

Study design	Cross-sectional study using a mixed methods approach; quantitative close-ended questions and qualitative content by way of two open-ended questions and free-space for comments to quantitative questions. An online bilingual (English and French) questionnaire has been created and implemented in several health-care institutions and programs in the greater Montreal area. The QSQR assesses the perceived quality of services received by relatives of stroke patients. The first 22 questions were based on a four-level Likert scale. The 23rd and 24th statements were open-ended questions. Data collection was conducted through the QSQR questionnaire, online with the Survey Monkey platform. The questionnaire could also be answered in paper format. An invitation to complete the questionnaire (including a link) was sent through e-mail to patients' relatives at the time of discharge by a staff member of the institution or program. Once received, relatives were given the option of completing it on a voluntary basis. The e-mail included an introduction explaining its purpose, which is to improve the quality of rehabilitation services offered to relatives. Respondents were also informed that a comment section was available at the end of each statement. They were asked to write a concrete example illustrating their level of agreement and disagreement with the statement. A maximum of ten minutes was deemed necessary to complete the questionnaire.
Methods and analysis	Questionnaires with more than 50% of responses were included in the study. A thematic analysis of the data was conducted for the qualitative comments/data. All free-text comments were labeled with codes that were further grouped into categories and themes. This coding process was realised by two authors and results further discussed until consensus with the first author who has experience in qualitative analysis.
Findings	Only quotes from people who attended early supported discharge are included. **Multidisciplinary work** *Excellent teamwork and atmosphere* "The workers worked in a very friendly atmosphere!" *Lack of cohesion*

	"Nobody was on the same page." *Access to many professionals* "Everyone was telling us about it." **Communication between professionals and relatives** *Verbal information only* "Verbally only." *Written documentation* "Documentation and lots of explanation." *Use of the stroke patient* "No other than my mother, who was a bit confused about what had happened."

	Language or internet as barriers "No, we don't have internet." "I don't use internet". *Adapted language* "Vocabulary understandable, thank you." **Professionals' approach** *Professionalism* "Their kindness, openness, acceptance." *Inadequate approach such as not taking the time* "Nurse's questions were too direct, and somewhat depressing".

Accessibility to professionals in answering question 24 (what appreciated the most)

"The accessibility and availability of all health professionals."

"We were informed of the changes every day."

Information provision and training/instructions offered by health professionals

Lack of information

"No, and I would have needed it [information on community resources] ... and since I'm alone and I had to pay for two adults."

Seeking as a key strategy

"I have done research on the internet."

Involvement of relatives

Lack of involvement in decision making for discharge

"Not there in person. No-one called."

	Appreciation of involvement "We work like a team, me and them and my brother." *Focus on stroke patient* "The focus was on the patient, not the caregivers." **Continuum of care** *Lack of transition or wrong timing* "Longer home services."
Limitations and applicability of evidence	Limitations: Qualitative comments need to be interpreted cautiously since their number was limited without consideration of the representativeness of the larger sample. Applicability of evidence: Broadly applicable regarding early supported discharge. Based in Canada which is somewhat similar to a United Kingdom healthcare service but may limit applicability.

Study arms

Family members/carers of people after stroke (N = 90)
People who had relatives who accessed early supported discharge (n=29), in-patient rehabilitation (n=41), and outpatient rehabilitation (n=20). Qualitative findings are specific to the early supported discharge therapy. Participant characteristics: Age group: 45 years old or less = 14, 46-45 years = 16, 56-65 years = 23, 66-75 years = 20, 76 years and more = 8. Woman:Man = 64:15. Relationship with individual who have had a stroke: Child = 24, spouse = 39, brother/sister = 4, parent = 5, other relative = 4.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Major limitations

Taule, 2014

Bibliographic Reference	Taule, T.; Raheim, M.; Life changed existentially: a qualitative study of experiences at 6-8 months after mild stroke; Disability & Rehabilitation; 2014; vol. 36 (no. 25); 2107-19

Study details

Secondary publication of another included	No additional information.

study- see primary study for details	
Other publications associated with this study included in review	No additional information.
Aim	To explore experiences of mild-stroke survivors in the context of early supported discharge.
Population	Stroke survivors N=8 People who participated in a larger randomised controlled trial designed to compare conventional treatment with early supported discharge models that included further rehabilitation either at home or at a day unit, after discharge from a specialised acute stroke unit in hospital. Participant information: Mean age (range): 61 (45-80) years. Civil status: Partner = 5, single = 3. Education level: High/elementary = 3, University/college = 4, missing = 1. Working condition: Employed = 4, retired = 2, sick-leave = 2. Diagnosis: Ischaemic = 7, Haemorrhagic = 1. Brain region and localisation: Right hemisphere = 3, left hemisphere = 4, cerebellum = 1. Median modified Rankin Scale (range) = 2 (0-3). Median NIHSS (range) = 1 (0-6). Discharge from acute stroke unit to: Home = 6. Rehabilitation unit = 2.
Setting	People who participated in a larger randomised controlled trial designed to compare conventional treatment with early supported discharge models that included further rehabilitation either at home or at a day unit, after discharge from a specialised acute stroke unit in hospital. Bergen, Norway.
Study design	Qualitative interpretative interview design relying on Interpretative Description. Participants were interviewed one, face-to-face, 6-8 months post stroke. Interviews took place in the participants' homes or at a health institution, at the request of the participants. In one case, the patient's partner was present and contributed during parts of the interview. A semi-structured interview guide containing 6 main topics was developed. The starting point was the first author's disciplinary concerns about activity and participation during rehabilitation. Initial review of the literature indicated that mild stroke survivors were limited affected by the stroke. Gradually, inconsistency between the literature and stroke survivors' experiences were noted. This insight made it relevant to formulate questions that were designed to reveal differences between prior stroke, current situation and future requirements. They wanted to give the participants the opportunity to bring forward topics that were not considered at the beginning. A selection of addition open-ended sub-questions were used when needed for elaboration. To

	encouraged specific and in-depth illustrations of the experiences being described, the interviewer asked the patients to elaborate on these in order to get in-depth information. What meanings they attributed to these experiences and situations were also requested. Clarifying questions were used when required, to obtain the best possible understanding of the participant's experiences. All participants were asked about the same topics, but in a different order and to varying degrees. The interviews lasted 19-80 minutes and were audiotaped. The first author, who had no previous connection to the participants, conducted the interviews from February 2012 and June 2012. She is an experienced occupational therapist with extensive experience in rehabilitation. Data collected ended when the interview material was considered to contain enough variety and common features to enrich the purpose of the study. The main topics of the interview guide were: 1) How do you see your own situation? 2) Can you describe a typical day? 3) What has changed since before your stroke? 4) What are your wishes for what you would like to do? 5) What do you think is of vital importance when it comes to implementing what is important to you? 6) What thoughts do you have about the rehabilitation service you have received? 7) Are there experiences you think are important that we have not talked about?
Methods and analysis	An ID approach was used to to analyse the interview material. ID is a non-categorical stategy aimed at generating knowledge of individuals' subjective experiences relevant for clinical health practice. ID is an inductive, in-depth analysis that focuses on meaning. Before beginning the analytic process, the researcher's practical and theoretical knowledge that motivated the study, and in some respected informed the interpretative inquiry needed to be presented. In this study, the International Classification of Functioning, Disability and Health (ICF) from the rehabilitation context in specialist health care service was from the beginning part of the conceptual framework for this study. As an occupational therapist, the first author is educated to consider activity and participation as the ultimate goal of rehabilitation, where the dynamic interaction

between an individual's health condition and contextual factors in the individual's life can either prevent or promote participation.

During the analysis, ID was supplemented with systemic text condensation. The method is considered suitable when the purpose of the study is to describe common features in the material and highlight individual experiences considered to be of importance for the phenomena under study. The stepwise procedure, is based on the general principles of de-contextualising, where selected text elements/meaning units are considered in relation to identified codes, and re-contextualising, which is the process where new knowledge is created. Re-contextualising implies to consider the findings in the light of the larger context of the original text and present them in a manner, which is true to the original text. The procedure is considered as suitable to assure a systematic and reflexive analytic process from transcription to presentation of findings. The individual steps will be further elaborated in the following. Even if a step-wise method was used, the analytic process was characterised as a dynamic process rather than a sequential.

The interviews were transcribed verbatim by the first author. Intonation, pauses, emotional expression, and flow of the conversations was sought to be preserved. In addition, the author's thoughts concerning the practical implementation of the interviews, the interaction between participants and investigator, and the process of transcription were written down and reflected on. The first and second author read and discussed each interview continuously, with regard to the overall picture, considering for example the importance of certain topics and situations. Principle questions were asked in order to open the analytical process. At this point they were aware of the distinction between their impressions of the participants as physically functioning well, while their stories reflected a demanding daily life. When all interviews were conducted and transcribed, the analytic process was supplemented. Here both authors read all the transcripts, the first author several times. The interviews were red transversally, to apprehend and work with an overall view of the entire material. The second step was a parallel to the identification of meaning units. The transcript was carefully reviewed by the first author in order to identify and differentiate all important textual elements. In the third step of analysis, they decided to include Antonovsky's salutogenic model of sense of coherence as an underlying theoretical basis, in order to deepened the insights of the participants' various nuances of emotional responses to stroke, and into how coping was incorporated into their stories. In the fourth step, analytic texts were established on the basis of discussions between the authors leading to one core theme and 5 sub-themes being identified.

Findings	**Life changed existentially** Post-stroke life had changed in different and fundamental ways for the participants. Some of the participants were uncertain about vital health issues, like being afraid of another stroke. Others seemed indeed struggled about getting familiar with a changed body and a changed self. This resulted in serious consequences as to the participants' daily activities and social life. Their stories revolved around practical and/or emotional issues. Practical issues focused on what had happened and what could now be done to live in the best way possible. Emotional issues were characterised by a strong underlying sadness or pain that life now no longer matched their expectations or their ideal of "the good life". Important aspects of life they previously had taken for granted changed; some termed these the "icing on the cake". The sadness of realising that some appreciated aspects attainable pre-stroke that was now unattainable was present in their stories. However, the participants told how life after stroke still offered both good and bad days, but that the good days were fewer and perceived as being not as "good" as before. They described that joy of life was often absent and difficult to achieve. When good days occurred, however, they had to be utilised to the fullest. Most of the participants described the present situation as a phase they looked forward to seeing the end of. A few, however, reluctantly accepted the recovery situation by expressing resignation, stating that their way of living now was "just the way life had turned out". More specifically, the participants described their life situations with phrases such as "not happy", "I don't want to live like this", "I am depressed", "a boring life", "lots of pain", and "I want to be positive". The underlying sadness was especially evident during their considerations of how they perceived their health and how the stroke influenced major areas such as body perception, ability to complete practical tasks, self-expression and self-esteem. The changes affected not only the participants but also their relationships with confidants. *Self-perceived health: healthy or ill?* Concern and reflection about self-perceived health permeated the participants' stories. Their descriptions varied widely, from declarations of feeling ill to not feeling ill but still having a disease, to declarations of being healthy. All focused on the physical and/or mental implications of stroke, as well as the implications of decreased health in general. The oldest participants however explicated decreased health as something they had to allow for, as a part of being old. Nevertheless, participants' accounts were permeated with comments that suggested they felt as if they were in an opaque situation. Most participants asked questions such as "What happened to me?", "Why did it happen?", "Will it happen again?", comments

	such as "I should have done as the doctor told me" reflect hindsight or self-blame. A few were conscious of avoiding such thoughts, although it was clear that was not easy. Participants were also concerned about their health situation was perceived by others. Basic questions about life and death were raised and reported as being important to deal with. Examples of continued improvement were expressed in most stories, but stagnation was also present. The total impression was an up-and-down situations that could change from one day to the next. A woman in her forties described vital concerns as follows: "I have had, yes, pain inside, like (lower voice) pain inside my heart, from time to time. You wonder about almost everything, right, if there is something wrong with your body (laughs gently)." She expressed uncertainty about her health and had a watchful attitude towards pain and bodily signs. Being in her forties and a mother, may have increased her health concerns. Although some realised that all stroke patients struggle with their problems, the participants were told they had suffered only a mild stroke, and thus felt they should feel relief and gratitude, which they felt was not always easy. Most of the participants did however express gratitude, reasoning that their situation could have been much worse. A woman in her forties compared her own situation to others who had suffered stroke, and emphasised that she was lucky to have managed fairly well, considering that the alternative was to be dead. Luck and relief were also expressed as soon as visible stroke-like paresis or speech difficulties resolved or decreased. This was expressed by a male participant in his fifties: "Early after my stroke, they told me to take my time and speak clearly and slowly. I remember speaking with my brother, because he told me my speech in any case was better these days than in the first place. So in light of that statement, my current pronunciation is hopefully understandable." Although he was encouraged by the confirmation of improvement, he still felt uncertain about what others thought of his ability to express himself in words. Because he was single, he got little feedback from important others. More ambiguous were participants' descriptions of the possibility of having persistent, covert disabilities, such as subtle memory problems. On the other hand, participants experienced relief when visible signs of stroke were not apparent. Some participants also reported feeling frustrated when others failed to see their struggle with concentration, memory and so on. These participants reported that they had reflected on the possibility that their situations may have been better if the effects of their stroke had been more apparent. A woman in her forties expressed it thus: "It actually would have been easier if I had visible signs of stroke, but I don't. Of course, I appreciate, but at the same time I sometimes wish (laugh). Can you see that I'm sick?(talking with feigned and intense voice). No, it is really ungrateful. You should not think of it that way, after all there are those who have it much worse than I." She vacillated between expressing social norms of what she felt she should think, and the needs to have a visible manifestation of her health situation so others could recognise it. With no visible signs after stroke and still being quite young, she may have felt it was expected that she should take part fully in life, but that this was not possible.

All participants seemed to struggle with how they should think about important health concerns, and feared that vital health questions might remain unanswered. This was the case despite a few being conscious of old age, others of health-related habits that put them at risk, or expected problems after the stroke. The struggle for a comprehensible situation might have contributed to their continual worries and distress. Self-perceived health was marked by vacillating expressions about feeling lucky not to have been devastated by stroke on one hand, and feeling less healthy post-stroke on the other. These expressions fell along a continuum of feeling healthy to feeling ill. 6-8 months post-stroke, most patients were still thinking about how much their healthy could improve, while they also expressed uncertainty concerning reasonable expectations of improvement and disappointment about new limitations. This indicated also some willingness to engage. Descriptions of self-perceived health were clearly linked to the perception of one's own body and ability to carry out practical tasks.

The changed body: bothersome, unreliable or recovered

This sub-theme revolved around the awareness of and emotions associated with changes in bodily functions. The participants described their bodies as changed and unfamiliar 6-8 months post-stroke. Perceived bodily changes, both concrete changes and feelings towards one's own body, varied according to time after participants' situations. Body parts were often referred to in the third person and the physical body was described by the participants as feeling separate from the mind. They experiences body-based restrictions related to confidence and control of physical functions, such as arm movement or in formulating a word; reduced mental capacity, such as memory loss or concentration problems; basic bodily functions such as sleep; and expression or and changes in emotions. Bodily changes were also linked to the presence of pain or lack of energy. Descriptions varied from a frightening body that sometimes failed, to an irritating body that was unreliable. The feeling of being seriously afraid of being injured when moving around was described by words such as "nervous", "dreadful", "frustrating", and "prepared for the worst case scenario". Lack of control over the body demanded extra energy. Joy was expressed over one's own body when recovering and, eventually, when the body could be "trusted" again. Participants described their bodies as bothersome or unreliable, especially in cases of severe pain, when missing or hindered body functions were essential for task performance and when body signals were difficult to interpret. The following quote from a male participant in his sixties illustrates the demanding situation caused by an unreliable body: "I'm starting to have firm stools and when I noticed that this is in order, I'll probably move more around outdoors. Like yesterday, for instance, I couldn't (fighting tears). I simply didn't dare to go out." This participant felt helpless because of the loss of control over basic bodily functions with threatening consequences for his dignity and social life.

Worries occurred in the participant's everyday lives when they were confronted with their limits. For instance, when standing at the top of stairs, some did not know whether or not their bodily skills could be trusted to ensure they descended safely. Even if a few expressed a carefree attitude, such as situations were considered a potential threat to their health and autonomy. Small mistakes, a tiny slip of concentration during movement, could lead to disastrous outcomes. A male participant in his eighties said the following about this physically and cognitively demanding situation: "The instant you take the stairs, you tense up and think, damn, will it go well or not? I just have to see." He struggled to trust his own body, which had become unfamiliar, but he also demonstrated a willingness to make an attempt in spite of the risk of injury. Even more challenging was the debility associated with a painful body, as described aptly by a female participant in her fifties: "It was just a lot of pain. One pain comes, and then the next and the next. Well you can manage one [pain] and then another, and then you are way down at the bottom and finally, you cannot go any deeper. Then you have endured so much pain and when you then get up, oh, yes, you are alive after all so you are back in the real world." Her insight into how all-consuming pain can be captured how it felt to be in a situation out of her control. She simply sat there, no energy left, waiting for the pain to diminish or end. Living alone, she missed her social life, but experienced discomfort as being considered different by others. The bodily pain became a threat to her existence and autonomy and seemed gradually intertwined by emotional pain caused by loss of a social life.

One female participant referred to her "recovered body" as a source of "relief". Nevertheless, awareness of a healthy body was described in less-focused and detailed terms compared to that of an unhealthy body. At present she was simply occupied with taking part in life again, and did not want to be reminded frequently of her body's limits. Furthermore, positive bodily changes led to hopes of further improvement, as expressed by a male participant in his sixties: "My left hand is the big problem and of little use. But it improves. Slowly it improves, gradually it improves. So I think life can be a little easier than it is today." Here he refers to his arm in the third person, as if his arm were not a part of him. It was not uncommon for participants to make a distinction between body parts and the brain, for example: "I cannot just blame the arm; there is something about the brain as well". The fluent connection between intention to move and actual movement was broken. The participant quoted above also expressed an awareness of the connection between bodily recovery and positive implications for life in general. Stagnation or negative changes were more difficult to accept, and most participants described this as a frightening or resentful feeling. Frustration was also felt as described by a male participant in his fifties: "At work, for example, if I find myself slow and realise I did the work a lot faster before. Nowadays it frustrates me. I don't like it , you know." He had problems with keeping up with tasks at work and used more energy than previously, despite being a slower performer. He feared he would not manage to do his work in the long run. He described his body as being

uncooperative and his situation as being one with which he was not familiar. This recurrent theme of lack of understanding in the participants' stories seemed strongly associated with uncertainty.

The degree to which changes were perceived as limitations or challenges, and improvements evaluated positively or negatively varied among participants. Most participants expressed having goals of improving bodily disabilities, while a few tended to resignation. However, sometimes even trying to think positively was described as being almost inconceivable. A female participant in her fifties explained her struggles with controlling pain and her experiences with the method she had learnt from her physiotherapist: "So you have to think like, think it will pass, as if you have a broken leg. That is how you have to think and I realise that I need to think, think positively, but it's not so easy [if you have bodily dysfunctions after a stroke]". All the foregoing descriptions focused on bodily restrictions that had serious consequences for the participants' abilities to carry out practical tasks in daily life.

Practical task: even easy, little tasks are a challenge

This sub-theme concentrated on how survivors of mild stroke thought and felt when dealing with their limitations in and performance of daily activities at home or work 6-8 months post-stroke. Participants had clear expectations and knew very well what others expected of them. Bodily capacities and abilities represented the "door", so to speak, to the practical and social world. This became obvious in new ways to the participants. Even if all described themselves as independent in regard to their daily activities, they also expressed limitations linked to specific tasks, such as tying shoes, telling a joke, handling a care or work-related tasks, or concentrating fully for extended periods. Participants provided examples of reduced activity levels, changed habits, and a discrepancy between what they had to do versus what they wanted to do. They used phrases such as "not so pleasant", "it bothers me", "frightening", "shocked", "a disaster", or "just a mess". These phrases suggested that various practical and social situations were a burden. However, there were also comments such as "I guess I'll manage", which suggested they had hope and considered difficult tasks to be a positive challenge, and "it is so fun to do", which indicated they were coping reasonably well. A male participant in his fifties expressed his frustration as he now struggled with activities he had taken for granted before the stroke: "Participant: I've lost some skills I had to catch up on, things that you took for granted, before it happened. I've known how to do it my whole life, and now I have to learn it all over again. Researcher: Can you give an example? Participant: When I tied my shoelaces [before the stroke], for example,

I did it without thinking, simply bent down and it was done. It takes a little longer now." This participant felt he had a long way to go to attain pre-stroke abilities, which made it difficult for him to think about the future.

Loss was sometimes connected to the experience of time; for instance, it now took more time to initiate or complete a task. Balancing available time and expected time meant that necessary or desired tasks might not be completed, making the situation unpredictable. This resulted in frustration. Cognitively processing one's limitations had a sad undertone, sometimes expressed by signs of grief and longing for the past, feelings of failure or guilt. Although a majority indicated that they wished to do things in the same way as before the stroke, they also were uncertain of what to dare to hope for. Only a few saw the post-stroke situation as an opportunity to change a situation with which they had not been happy before the stroke. However, a female participant in her fifties viewed her present situation as a possible way to adjust her unsatisfactory working situation: "Having two jobs is pretty tiring, so I am afraid to start working again [Detailing what she experienced as exhausting]. I would like to deselect one of the jobs, the one in the health-care system, because of the pressure at the workplace." This woman implied that her previous work situation was a threat to her health. She hoped for a better future by quitting one of her jobs. The positive outlook of this participant was a contrast to the outlook of the few who had given up or accepted their present limitations. This was exemplified by the frustration and sorrow of a male participant in his eighties: "I want to be independent (altered voice from eager to monotonous), but when you have suffered stroke, there is nothing to do about the situation, which often makes me feel [was not able to express himself fully]." This man contrasted his desire for independence with his current feelings of helplessness and expressed how he perceived this gap as a burden. Even if he did not find the right words this situation was undoubtedly a demanding experience. Giving up his current role as the family's handyman was especially hard for him.

Each participant approached his or her situation differently. While most still lived with hope, they also acknowledged their limitations, adjusting their expectations and strategies. Even if they could not perform tasks as before, participants spoke of the need to contribute and to feel useful, and about the pleasure they derived from this. One male participant in his fifties described his transition to work with gratitude: "I almost climbed the walls, you know, when you have nothing else to do than for example, read a little and watch the TV, or go for a walk and keep my own house like vacuuming all over the place and so on. However, there are (sigh) limits to how long you can keep on doing things like that. This is how it has turned out; there is nothing left to be done in the house. There I was pleased indeed to get work to do." He expressed the importance of being a doer, especially in relation to returning to his profession. However, there were also descriptions from participants who tried to escape from reality when fear of failure prevented them from executing a task. A female participant in her fifties

explained why she could not start working again: "Pain can just come when I'm running around with a patient, for example. Being in the middle of something and the patient puts pressure on me, right, requiring me [to respond] cognitively. That's what happens at work. The patients require me to be there for them [practically, cognitively]; and it is certainly what I'm afraid of, to meet those requirements again." She described her fear of returning to work in terms of lack of control and how control can be perceived differently, depending on the environment.

The home was perceived as a less-demanding venue where she was more confident than was the workplace; at home, the consequences of failure were considered to be less threatening. Even if the participants knew what was expected of them, bodily dysfunctions and activity limitations contributed to an unpredictable situation. What the future might bring was not obvious. Problems and situations were often defined as threatening, although participants also showed persistence in regard to challenges. Effort was not always easy to maintain. Many had a long way to go. Participants considered their sense of self and ability to participated in society to be defined by body-based and practical limitations and possibilities.

Taking part in society: freedom and loss

This sub-theme concerns how participants thought and felt about their abilities and freedom to live "the good life" they wanted to live. "The good life" was defined as one in which the ability to travel, to attend courses, to make trips to the cottage, and to go hiking or for a walk was attainable. It also involved one's quality of life in general. The participants noted the close link between taking part in society and the sense of freedom. Though most participants had been involved in the process of testing their capacities in various situations, the main impression was that they were cautious in terms of the bigger challenges. They asked themselves: "Will I manage as before?", "Will I perceive this or that as nice and as satisfactory as before?". Those who tested their capacities reported great pleasure when coping successfully with participation in important activities. Just as often, it was stated that taking part in society was strenuous, and less pleasant than before the stroke. Examples of this include situations where they had to make advance preparation, where their lifestyles had changed after stroke, or when engaging in an activity was too demanding and exhausting compared to what they achieved. When asked to explain how going for a walk had changed, a female participant in her seventies described new considerations that came up when engaging in familiar activities: "(Sighs gently) I do not think it's so easy to walk anymore (laughs gently). To tell [the truth], I am a bit reluctant to go, to go out; and I don't dare to go so far anymore." She stated that she had always been fond of walking. Now the pleasure of walking had faded, and implied loss of freedom.

Being dissatisfied with the implications of stroke was not unique. A female participant in her forties was not entirely satisfied with imposed changes such as engaging in healthy behaviour: "Now I can't, for example, drink more than a bottle of wine when I go out and enjoy myself. Whereas before, I drank as much beer as I wanted. I'm not too fond of wine. I fancy beer but it is the way it is." Both had unpleasant experiences regarding their abilities to manage, and to experience pleasure. Their post-stroke capacities limited their abilities to engage in certain social spontaneous activities. In addition, participants' health or medications affected their diets, alcohol intake, and their abilities to cope with stress. This led to lifestyle changes. Their decisions were guided by recommendations from health professionals or by what appeared to be new conscious choices, a situation that was often viewed as an unsatisfactory change. Fortunately, participants expressed great joy when life returned to how it was before the stroke, or when their performances improved. This was the case for the woman in her forties who told how she gradually, but purposefully succeeded in recovering her role as an employee, which described as essential in her life. There were also descriptions of "the hidden threat" that could occur after miscalculating one's strength, which could lead to great discomfort. The following quote from a female participant in her fifties exemplified how she coped successfully with her limitations in a leisure activity that was important to her: "I am skiing, but appallingly slowly. I go through with it and get some kind of pleasure." Her coping gave her some kind of pleasure, but this pleasure was far from the pleasure she derived from mastering skiing before the stroke.

Six to eight months post-stroke, participants expressed their freedom had changed. The ability to participate in activities without assistance and the ability to drive an automobile were major contributors to their sense of freedom. For instance, a male participant in his fifties said this about losing his driver's license: "A bit of explanation [of a cumbersome existence], is that I can't drive, right, which I think has really clipped my wings, you might say." The ability to live "the good life" had changed for the participants. The overall picture seemed to be an unresolved situation with limited testing of one's own limits. The participants vacillated between cautious hope and dreams, and thoughts of resignation. It was hard to know what to dare to hope for in the future. Even if great joy found in coping was reported, the overall impression was that impairments, lack of joy, dissatisfaction and lack of energy affected the ability to participate in society and engagement negatively. Self-perception also influenced how the participants experienced their overall post-stroke situation.

Self-perception: am I still good enough?

	This sub-theme highlights how the participants perceived themselves as being less able than what was "normal" pre-stroke, and how this perception complicated important relationships. Participants described how their self-perception had changed dramatically, even when their stories indicated that they had faith in succeeding. The question of being good enough arose not only in relation to their own perceptions, but also to their roles in close relationships and as professionals. In general, most had experienced isolation in periods, due to lack of confidence. Maintaining previous social roles was important but threatening. The participants compared their performed after stroke with their previous performance or with the performance of others who had suffered stroke. Such comparisons often affected their self-esteem negatively, as shown in some of their comments: "not so talented", "reduced", "stupid", and "not too handsome to being with". Their self-perception was affected by success or failure. It was closely related to the feeling of needing help from others, versus the feeling of being in control of a situation. Their capacity to meet challenges also differed. A male participant in his fifties expressed how his self-perception as an employee had changed: "In my case, I have recovered physically pretty fast. I got a grip on, on that. But professionally [doing his tasks at work], I feel that I still have ended up in the second division." This participant closely linked self-esteem to his role as a professional and expressed a feeling of failure, which in this case was especially - but not only - related to concentration problems. Participants described how their strokes affected the entire families. For instance, a man in his sixties stated that his wife mourned as much as he did. A grandfather expressed that he had valued doing things with his grandson, but now the child withdrew from him: "He withdraws a bit. And he, yes, he does not express it so explicitly (crying), but I do not have the same contact with him, like before. And he knows I can't (crying), eh (swallowing), that grandfather can't take him out fishing (voice cracking) fishing again." This story of deprivation was not unusual among the participants. Loneliness, loss of contact with friends and colleagues, and longing to belong in work communities was expressed, as well as the absence of someone with whom simply to share thoughts. These experiences were expressed with some sadness. Nevertheless, for most it was worth the time investment and effort, regardless of how uncertain the outcome might be. A male participant in his sixties who could retire if he desired explained emotionally: "Yes, I miss the whole work situation. The contact with my workmates and having dealings (crying), yes (crying), with my student. (...) I want to try one more year as a professional (coughs), but I am a little bit eager to see how to handle the students when I start to sob as I do now. Yet, I am determined to succeed." He expressed the importance of maintaining his precious professional role and how he assessed the situation as a challenge, despite uncertainties. The new ways of resuming one's professional role were challenging and painful.

With one exception, no participant had reached his or her previous level of activity. What complicated important relationships the most was the need for assistance. Participants explained challenging situations in which they felt compelled to ask for help or to receive help. They talked about the freedom of asking for help and turning down help from others, versus being dependent on aid and having limited choices about when and whom to ask for help. The interview with the man who had returned to work but felt he was in the "second division" also included comments concerning how he had to ask for help several times during work hours. Constantly asking for help made the relationship with his workmates problematic, resulted in feelings of inferiority. Most participants described that the relationship with their assistant or spouse was characterised by fear of being a burden, by being at the mercy of others' circumstances. The negative consequences of loss of dignity are described in the following: "I stopped taking the initiative to vacuum and such things and yes, to clean the bathroom and stuff like that. Before the stroke I had fixed days for housework. After the stroke I started to be a parasite on my spouse; I felt like a burden to her. (...) Now, I have at least improved." The participant did not want to burden his spouse more than necessary and expressed relief when the situation changed for the better. The fear or reality of being a burden was resolved by one participant by paying the helper, which was considered a way to maintain balance in an important relationship. However, whether the experienced turned out to be good or bad was situational. A male participant in his eighties expressed his feelings towards the assistance he received from his children: "I felt it was a bit awful when you come to the point of receiving help, but I just have to live with it, I'll have to."

However, there were examples in which help was consciously used as a mean of communication and not a hindrance, as depicted by a man in his sixties, "I ask for help when needed and say, 'no thanks', if I see someone who wants to help me, but I don't need the help." He described how he controlled the situation, first by clarifying his own needs, followed by appropriate actions. Among other things, he described how he got his wife to help him to tie his shoelaces early in the morning before she went to work, and then he remained inside wearing his outdoor shoes until he went out on his own. As we have seen, the participants' own bodily or practical limitations were factors that complicated relationships, and were solved differently. Those who had difficulty expressing themselves verbally were very much concerned with how others perceived them, and as a result their self-esteem was negatively affected. Participants sometimes assumed that changes in emotional reactions, such as easily getting angry, impatience, crying often, and so on, were difficult for others to understand or deal with. A male participant in his fifties explained how difficult he found it to be patient: "My wife says that I am changed. Since, after the stroke I have changed in that case [Resorting to impatient outbursts more often than before the stroke]. I have, yes she certainly feels my behaviour changed. I think so too, and I think I was a nicer person before, because I stir myself up easier and it is easy to say not actually ugly things, but words you should not have said." His

	expressions of uncertainty and vulnerability were interspersed with emotional outbursts, and closely linked to feeling cognitively hampered in his doings and dependent on his spouse. The participants also found themselves to be more isolated after their strokes. Examples of impaired social capacity came up during the interviews: less physical and emotional access, reduced ability to withstand conflicts, and reduced ability to manage familiar activities with others. For instance, one woman related that she was more impatient towards her children. She was convinced that the stroke was to blame. Also present was the unpleasant feeling of being scrutinised. Fear of falling short of others' expectations was present in all stories. Suffering low self-esteem had consequences for social life, and there were examples of participants who even opted out of social contact, because comporting themselves as they in the same manner as before the stroke was too demanding. However, they missed their social lives. On the other hand, there were also examples where giving up was not an option. A familiar participant in her forties described her struggle as a mother, "You just have to find the strength. I have to say, if you are there or not, you just have to find your hidden power even though you do not know where to take it from." Giving up was simply not an option with children who still needed her on a daily basis. Even if this participant found her strength by living with grief and loss over time, as described by the participants above, this remained a challenge. Their need for help, fear of being a burden and/or unpredictable emotional reactions indicated an incomprehensible situation. However, if participants regarded the return to their social lives worth the investment, then challenges seemed to motivate them to change their situation for the better.
Limitations and applicability of evidence	Limitations: The sample is relatively young compared to the average age of first-time stroke in Norway (on average 77 years for women, 75 years for men). The somewhat limited knowledge of the participants' possible cognitive impairments and/or fatigue needs to be taken into account. Two of the participants were transferred to a rehabilitation unit at the hospital before discharge to home, and this may change their experience. The partner was present for one interview which may have added information, but also could have changed the information being provided.

	The first author's professional concerns about activity and participation may have influenced what was emphasised in the interviews and the interpretive process. There was no opportunity to do data source triangulation. Applicability of evidence: About early supported discharge, but more looking at experiences afterwards so may not give direct information about moderators for the intervention itself. Norway healthcare setting which may be applicable to a United Kingdom healthcare setting but this is unclear.

Study arms

Stroke survivors (N = 8)
People who participated in a larger randomised controlled trial designed to compare conventional treatment with early supported discharge models that included further rehabilitation either at home or at a day unit, after discharge from a specialised acute stroke unit in hospital. Participant information: Mean age (range): 61 (45-80) years. Civil status: Partner = 5, single = 3. Education level: High/elementary = 3, University/college = 4, missing = 1. Working condition: Employed = 4, retired = 2, sick-leave = 2. Diagnosis: Ischaemic = 7, Haemorrhagic = 1. Brain region and localisation: Right hemisphere = 3, left hemisphere = 4, cerebellum = 1. Median modified Rankin Scale (range) = 2 (0-3). Median NIHSS (range) = 1 (0-6). Discharge from acute stroke unit to: Home = 6. Rehabilitation unit = 2.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Minor limitations

Taule, 2015

Bibliographic Reference	Taule, Tina; Strand, Liv Inger; Skouen, Jan Sture; Råheim, Målfrid; Striving for a life worth living: stroke survivors' experiences of home rehabilitation; Scandinavian Journal of Caring Sciences; 2015; vol. 29 (no. 4); 651-661

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	The aim of this study was to explore mild-to-moderate stroke survivors' experiences with home rehabilitation after early supported discharge from hospital.
Population	People after stroke N=8 People in the home rehabilitation group of an RCT, who replied to an invitation to a 6-month follow up. Participant characteristics: Men:women = 4:4. Median age (range): 57.5 (45-80) years. NIHSS scores of at least 14. Modified Rankin scale and Assessment of Motor and Process Skills showing that most were independent in activities of daily living.
Setting	People who had participated in a randomised controlled trial investigating early supported discharge. Bergan, Norway.

Study design	The participants were interviewed once by the first author, in their homes or in a health institution, 6-8 months after their stroke. All interviews were recorded and transcribed verbatim. In one case, the participant's partner, who was present during the interview, elaborated on parts of the interview. The interview was extensive and guided by 6 topics related to the participants' experiences with home rehabilitation and their daily life. The questions were formulated to reveal differences between the present situation, prestroke situation and their future needs of taking part in every-day activities. Additionally, one question was designed to give the participants the opportunity to freely address topics of their own concern. Additional open-ended questions were asked when elaboration was needed. Interviews ceased when the material was considered to contain a sufficient variety of experience and common features to achieve the purpose of the study.
Methods and analysis	Analysis of the transcribed interviews was informed by ID. ID is an inductive, in-depth form of analysis that focuses on meaning and that is designed to generate knowledge of individuals' subjective experience relevant within health practice. The first and last author read each interview continuously, to obtain an overall impression, discussing certain topics and situations in the participants' stories that stood out as especially interesting with respect to the research questions. Once the interviews and transcriptions were completed, ID was supplemented by systematic text condensation. First, the transcripts were read transversally, searching for an overall view characterising the interviews as a whole. This also entailed comparison across all interviews looking for preliminary themes that possibly reflected important meanings across the participants' experience. These preliminary themes were also assessed in relation to previous preliminary topics and situations identified in each of the individual interviews. Next, they searched for intuitive meaning units in the participants' experience. The transcripts were read systematically in order to identify and classify these into codes; that is all text elements that elucidated the phenomena being studies. During this process of de-contextualising, the similarities and differences of each code were reflect on. The final codes chosen were based on the consensus of the first and last author. At this stage, the possible connection between the material and coping with stroke was recognised and contributed in the coding process. In the next step, it was decided to incorporate Antonovsky's theory of coping as an underlying theoretical basis to guide the analysis, while hope seemed important to the participation in the study. The participants' experiences of the current situation as comprehensible and/or meaningful are discussed in a previously published paper elucidating how stroke affected the participants' existential dimensions of life. The interviews also included more concrete experiences related to how professionals' behaved and acted, and how this influence their rehabilitation experience, which is elucidated in the current study. Comprehensibility as a dimension was only touched upon in these parts of the interviews and was therefore not included in further analyses. Each subgroup with its meaning units was examined to determine which of the participants' experience seemed challenging or manageable given their available resources, and whether they were meaningful to engage in. This inductive process of theorising helped them to arrive at the 'best guesses' about how home rehabilitation suited stroke survivors' needs and contributed to their

	recovery 6-8 months after home coming. Meaning content was further abstracted and sorted into subcodes. Essential knowledge within each code and subcode was condensed into consistent descriptions intended to address the aim of the study. The next step of the analysis involved establishing analytic texts derived from a systematic, in-depth examination of the transcripts and discussions among the authors. This meant re-contextualising, which resulted in an interpretive description of core meanings in the participants' experience. This is outlined in core theme and subthemes, and present in the findings. These descriptions were validated as being consistent with descriptions expressed by the participants. The analytic process was completed by looking for crucial variations and contradictions.
Findings	**Hope of a life worth living** Recovering from mild-to-moderate stroke affected the participants strongly at an emotional and existential level, and the analysis showed that the emotional aspects of living with a changed body were especially challenging. Even 6-8 months after the stroke, their situation was characterised as demanding. In their struggle to make their situation comprehensible and worthwhile, a sense of hope emerged as the most important driving force. Several participants emphasised their hope for continued engagement in activities they had appreciated before the stroke. This was related to travelling, belonging in social fellowships, and/or mastering simple tasks, which have been and still was important in their everyday lives. Others had only a vague notion of what they could hope for. Crucial to their hope was making sense of their altered body and emotional reactions, and cultivating confidence in the professionals they were involved with. **The trauma of a changed body: making sense of emotional reactions** The participants' hard times emerged clearly in their stories. They struggled to get to know their now-altered body and to make sense of emotional reactions. Their changed bodies had widespread consequences for their self-esteem and engagement in practical and social activities. In their quest to regain some control over their situation, processing emotional reactions was substantial. Initially this meant getting familiar with bodily limitations and resources. In the long run, belonging in valued relationships was a fundamental prerequisite for creating a life worth living, despite the stroke. Although the participants relied on the professionals' abilities to help, they also felt left alone with crucial concerns. A female participant in her 40s expressed her unmet needs in this regard: "I intend to ask my GP about getting a referral to a psychologist, so I can sort out [emotional reactions]. To live on, I need to sort out my depression. (Participant 6)". Seven months after her stroke, she still experienced her situation as being chaotic. Her quest for help to get ahead was not unusual. Questions about uncertainties of life and death, such as being afraid of having another stroke, or of possible medication side effects needed to be clarified. This indicates that the team was unable to sufficiently address her intrusive emotional reactions. Consultations with a psychologist were requested, but not offered. The participants' need for stroke-related information

seemed insatiable, and the physicians' role seemed important in their search for explanations and solutions. Improved bodily functions and fulfilled requests for treatment, which included city tours, hobbies and other meaningful activities satisfied participants. A confusing split between body and will, and difficulties with re-incorporating know-how about bodily abilities and limitations emerged as important theme for professionals to address. Even if negative emotional reactions could be unavoidable or tempting to turn to, a fighting attitude was also exhibited, as by this may in his 50s: "All the weaknesses I felt I had, or that were uncovered [by others], my thought was: What can I do to overcome this? I don't want to accept my weaknesses. At least I'll do what I can to fight them. (Participant 2)." He found the situation meaningful enough to engage in, but was reluctant to accept functional problems and what we can sense as a widespread emotional reaction related to his changed body.

Participants gave specific examples of areas for potential improvements. Initially, after their home-coming, they perceived physical exercise and massage as lacking. Even if these treatment options were offered, they were perceived as occurring too infrequently. Disagreement about priorities arose when professionals spent much of their time filling out forms at the expense of physical training. Memory training was offered only be some professionals and not delivered during vacations, which meant significant negative consequences for the participants and frustration. A man in his 80s with stroke-related memory-difficulties told how he 'suffered' when his problem emerged in conversations, especially with his children (participant 3). Speaking about the treatment he was offered, he told of aids and hand exercises. Findings like this illuminate that treatment was not sufficiently guided by the patients' needs. In the long run, the participants seemed to struggle with the notion of whether they, in spite of having an altered body, were still good enough to be loved by their grandchildren, to be respected by colleagues etc. Maintaining previous social roles were considered important, even if it was threatening. Even if 5 weeks of home rehabilitation was deemed sufficient for some, the need for follow-up was still prominent for several participants, especially to help in their efforts to redefine important aspects of their lives. Beyond encouragement, and in some cases, facilitation of leisure activities promoted by the healthcare team, there was, however, little in the participants' stories that indicated that the professionals showed interest in the participants' social life. Some of the participants lacked the necessary capacity to change a demanding situation on their own, which meant that they became increasingly isolated. Grief and loneliness related to loss of contact with important others were common, both among those who lived alone and those in a partnership. A mother and career woman in her 40s told of loneliness in the period when she was still on sickleave and was home alone during the day: "When they [municipal healthcare team] left, I felt so lonely because there was no one else there. (Participant 6)." She had no one to talk to and was unable to fill her days with activities which were meaningful to her. Being home in familiar surroundings was initially expressed exclusively

as being positive, but in the long run, it was perceived also as a hindrance for some. This may indicate that the participants have a limited social capacity early on after stroke and a need for long-term follow-up.

A man in his 50s elaborated on what he appreciated when starting to work again: "To get something to do and mingle with my colleagues, I've many nice co-workers, who I like to talk and socialise with. Just to get out of bed, catch the bus, get to work and be where you were before. (Participant 5)." This man clarified his feelings on how belonging in valued relationships and social arenas gave meaning to his life. Rehabilitation in groups was considered to be an opportunity for social interaction, and disappointment was expressed when the follow-up service was based on training alone. These experiences of unfulfilled needs indicated the need for greater focus on particular areas of recovery and on emotional processes in order to better deal with the after effects of a changed body caused by stroke.

Encounters with professionals: the challenge of cultivating mutual confidence

This subtheme deals with the participants' encounters with professionals, and how personal and professional approaches contributed to mutual confidence, or failed to do so. Professionals were assigned a crucial role with regard to guiding the participants' bodily recovery and what they should dare to hope for. The professionals' individual ways of behaving and communicating, as well as their professional expertise, were deemed important. Successful encounters involved like engagement, empathy and equality. This promoted the participants' confidence in the professionals' ability to help them manage their condition, their feelings of being empowered, and their hope for future successful coping. Less successful encounters could leave the participants helpless and uncertain of what to hope for, which added an extra burden to an alright vulnerable situation. Professionals' capability in encouraging personal engagement and qualified support was emphasised in the participants' responses. One male participant in his 60s highlighted how the healthcare team was important for building hope in his recovery: "They [the municipal healthcare team] really came and stayed here and did something. They showed faith in positive development and supported me in that. It's important to convey that recovery can still happen, although the progress is slow. (Participant 1)". His statement underscores how cultivating confidence was mutual. He appreciated professionals believing in him and the possibility of progress, but he also needed to believe in their ability to understand his situation and provide appropriate help.

The participants appreciated and expressed a desire to cooperate with empathic professionals. Their taking time to listen, offer comfort and being nice were essential therapeutic communication qualities described. Emphasised also were enthusiastic and optimistic statements from therapists, such as confirmations of doing 'this or that' the correct way. Encouragement helped participants feel like their treatment was a priority. These were highlighted by those who addressed the therapists' responsibility to even mask their lack of faith in the participant's progress. The delicate balance between optimism and realism was, however, requested, and being too optimistic on the part of the therapists was actually provocative to some. The data material also reflected feelings of equality between therapists and participants, such as having respected disagreement about treatment decisions. The ideal in successful rehabilitation is patients' being actively engaged in their recovery. However, it occasionally felt good when the professional took charge. Initially after stroke it was not always easy to know how or express one's wishes for rehabilitation. Confidence was, however, challenged when experienced unmanageable pressure about what to do and manage. A female participant in her 50s described a situation controlled by the therapist that went totally wrong: "They just had a plan of returning me back to work. It was their goal. When they repeated that every time we met, then I started to cry I think, every time. (Participant 7)". The professionals' attitudes and approach to her on this point, made her feel inadequately understood, indicating that the treatment was not sufficiently guided by her needs.

Lack of self-determination was also expressed when healthcare professionals told patients to change their diet, or that their driving license would be revoked because of the stroke. This could make the participants feel helpless or uncertain about the future, even if they agreed with the purpose of the request. Confidence was also undermined by controversies that developed between the participants and professionals and also among professionals. Professionals' lack of expertise was another source of frustration; for instance, when being diagnosed incorrectly. Situations in which these problems emerged meant that participants had to make their own independent decisions. That could work out okay, but might also foster strong feelings, such as great disappointment. A woman in her 80s was very confused when her GP and the doctors involved in the Early Supported Discharge service held different opinions: "When there are different opinions among the doctors, it's problematic. It's very important to give the patient a feeling of security and knowledge about what to be done if this or that may occur. (Participant 4)." She expected a clear recommendation, but instead received ambiguous information, which in turn contributed to her uncertainty about her situation. Responsibility for her altered situation was thrown upon her, a responsibility that she was not ready to handle. Collaboration among stakeholders was also essential during transfers between healthcare levels, which emerged as a vulnerable period for the participants. This scenario is represented well by a response from a female participant in her 40s: "They told me I had to wait because of some paperwork that had to be done. They put me aside for several weeks before I got started [with my follow-up treatment], while I felt it was very urgent for me. I lost some [valuable] time, and when I got started I had lost the glow, and they lost a little glow too, and then we

	were, not enemies, but I ... [sentence not completed]. (Participant 7)". The patient felt betrayed by the professionals' in whom she had put her trust. She could not mobilise the necessary 'fighting spirit' anymore and was no longer in contact with someone who advocated for her. These stories of challenging encounters with professionals indicate that mutual confidence was an important theme in the participants' experience of home rehabilitation. This also meant more individually tailored treatment in domains such as physical training, memory training and long-term follow-up with a focus on increasing social interactions.
Limitations and applicability of evidence	Limitations: The choice of ID means aiming at developing knowledge with implications for practice. However, the framework of the RCT might have limited the flexibility of the home rehabilitation, and thereby contributed to the participants' experiences of insufficient flexibility in the rehabilitation offered. The relatively young sample of younger mild-to-moderate stroke survivors and that two participants received extensive rehabilitation before arriving home may effect the results. The sample size is small (8 participants). The first author was not involved in the rehabilitation or planning the RCT. However, the participants were recruited because they participated in the RCT, also linked the researcher to the RCT, which may affect their choices. Applicability of evidence: Discusses early supported discharge. Conducted in Norway where the setting may not apply directly to a United Kingdom based setting.

Study arms

People after stroke (N = 8)
People in the home rehabilitation group of an RCT, who replied to an invitation to a 6-month follow up. Participant characteristics: Men:women = 4:4. Median age (range): 57.5 (45-80) years. NIHSS scores of at least 14. Modified Rankin scale and Assessment of Motor and Process Skills showing that most were independent in activities of daily living.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Minor limitations

van der Veen, 2019

Bibliographic Reference	van der Veen, D. J.; Dopp, C. M. E.; Siemonsma, P. C.; Nijhuis-van der Sanden, M. W. G.; de Swart, B. J. M.; Steultjens, E. M.; Factors influencing the implementation of Home-Based Stroke Rehabilitation: Professionals' perspective; PLoS ONE [Electronic Resource]; 2019; vol. 14 (no. 7); e0220226

Study details

Secondary publication of another included study- see primary study for details	No additional information.

Other publications associated with this study included in review	No additional information.
Aim	To explore professionals' perspectives on the provision of Home-Based Stroke Rehabilitation (HBSR) in the Netherlands and on the barriers and facilitators influencing the implementation of HBSR in daily practice.
Population	Healthcare professionals N=15 15 professionals. Most of the participants knew each other, but none knew the focus group moderator and primary researcher. No contact was established with speech therapists working within primary care, despite multiple efforts trying to get in touch by e-mailing potential participants. However, the participating case manager could provide this perspective because she worked as a primary care speech therapist until recently. Three participants could not attend any of the focus groups (a geriatrician, a general practitioner and a rehabilitation physician), so instead took part in individual telephone interviews. Participants included 2 occupational therapists, 2 physical therapists, 2 case managers, a psychologist, an elderly advisor, a nurse, a speech therapist, a nursing home manager, a manager in allied healthcare, a general practitioner and a geriatrician. Participant characteristics: Men:women = 5:9. Age range: 28-61 years. Work settings included hospitals, nursing homes (delivering primary care), home care organisations, a primary care rehabilitation and healthcare center, an outpatient facility and a general practitioners' office.
Setting	Two focus groups conducted in November and December 2013 and telephone interviews for some participants taking place in the Netherlands. Professionals were from a range of work settings including hospitals, nursing homes (delivering primary care), home care organisations, a primary care rehabilitation and healthcare center, an outpatient facility and a general practitioners' office.
Study design	Focus groups utilising a naturalistic study design based upon a constructionist epistemology for the study's exploratory aims. The professionals perspectives were kept wide (inviting people from a range of settings) therefore the atmosphere was designed to be informal with a focus group moderator who asked for elaboration of statements and/or topics related to the key questions. Individual interviews (using the same interview guide) were considered as an alternative when a specific discipline was unable to take part in the focus groups. After each participant introduced themselves, the focus group moderate made explicit that different perspectives were expected and welcomes, and that everyone's viewpoint was highly

	valued. Data collection started with asking participants to give verbal informed consent to audiotape the interviews. An interview guide with nondirective, open-ended questions was used. The first questions were aimed at defining home-based stroke rehabilitation. To get the participants 'warmed-up', open-ended questions were directed on gaining insight in the participants' perceptions and experiences regarding the current status of stroke rehabilitation in the Netherlands. Thereafter the interview guide contained open-ended questions relating to the participants' opinions about factors influencing the implementation of home-based stroke rehabilitation. If necessary, the focus group moderator asked participants to elaborate on their statements and/or on specific topics related to the key questions. During the focus groups, a secretary was present to take notes. When information was collected on all key questions and no new information emerged, the secretary provided a brief summary of the discussion for verification purposes. Thereafter the focus group moderate asked if anything was missed.
Methods and analysis	The focus group and interview recordings were transcribed verbatim by the first author. In the transcript each participant was assigned an ID number, so that statements from participants can be distinguished when reporting results, without using the names of participants. To identify key issues and patterns in the data, the first author performed content analyses based on the directed content analysis. Raw data were analysed through a line-by-line review of the transcripts to identify quotes. Quotes relating to experiences with the current status of stroke rehabilitation in the Netherlands and quotes relating to factors influencing the implementation of home-based stroke rehabilitation were highlighted. The highlighted quotes were coded through open coding. Thereafter, the codes referring to the same key issue were grouped, resulting in categories emerging from the data. These categories were grouped using determinants: the innovation, the users, the organisation and social-political context. This concludes the last stage of the directed content analysis. Consensus on codes and categorisation was reached through discussion between two of the authors. After reaching consensus the final categorisation of codes was reviewed by two other authors.
Findings	**Participants perspective on the current status of stroke rehabilitation in the Netherlands** Participants gave their perspectives on how stroke rehabilitation is organised and delivered in the Netherlands, distinguishing 1) institution-based rehabilitation, 2) outpatient rehabilitation and 3) home-based stroke rehabilitation. According to the participants, the form of rehabilitation that is most suitable for a specific client depends on multiple factors (e.g. clients' situation, client system and resources). However, it is not clear what the exact clinical criteria (and cut-off points) are. Firstly, participants stated that intensive inter-professional collaboration characterises institution-based rehabilitation. According to the participants the regular (formal and informal) inter-professional meetings facilitate inter-professional collaboration. However, participants reported that institution-based rehabilitation is delivered to less people and for shorter durations. The lower (cost) effectiveness compared to other types of rehabilitation were stated as the main reason for this. Relating to outpatient rehabilitation, participants stated that especially the cognitive outpatient clinic is

consulted by a lot of clients after stroke. Participants reported that these clients experience difficulties performing activities of daily living in their own environment after institution-based rehabilitation.

According to participants, an important characterisation of the home-based stroke rehabilitation is the amount of financed treatment hours. Participants reported the amount of guidance and treatment they can offer differs, depending mostly on insurance coverage of the client. Participants also stated that home-based stroke rehabilitation is highly valued as a safety net after discharge. Clients with neurological difficulties can experience paramount problems in their home environment because of 1) the large gap between the institution and the home situation, 2) problems generalising and transferring learned skills, 3) the rehabilitation setting hindering exposure (and recovery) of cognitive difficulties. It was suggested home-based stroke rehabilitation could embody client-centred follow-up care after discharge, coordinated by a "key agent".

Determinants influencing the implementation of home-based stroke rehabilitation in the Netherlands

Determinants of the innovation: Pros and cons of home-based stroke rehabilitation

Focus group participants reported the importance of client-centred treatment, tailored to the clients' and caregivers' needs. They characterised institution-based treatment to be standardized, leaving little room for client-centred treatment and caregivers involvement. Meanwhile, they reported that the less rigid structure of home-based stroke rehabilitation makes it easier to adapt the rehabilitation process to the needs and preferences of clients and caregivers. Also, participants reported some advantages of treating clients within their own environment. One of them concerns the professional being a guest in the clients' home. According to them, this can strengthen the client's position. Participants experience this can facilitate a stronger voice of clients and caregivers in reporting their needs and wishes regarding the rehabilitation process. Moreover, treating clients in their own environment has some other consequences. Participants stated benefits of overcoming problems with generalising and transferring learned skills from the training setting to the home setting. Participants stated that there currently is a large gap between the institution (a structured and low-stimulus environment) and the home setting (a high-stimulus environment where people need to build up and follow their own daily structure.

"The 'body function-oriented' institution-based rehabilitation, combined with the constructed environment, covers up most of the client's cognitive problems. So when a client returns home, they are up for a challenge. Guaranteed." - Neuropsychologic, outpatient rehabilitation

Participants also mentioned that everyday living experiences in the home environment can facilitate meaningful task specific training "around the clock". Participants stated this could make the treatment more effective.

"Every activity can be a challenge. Someone <client> has a lot to do. They find themselves within a skills lab, for 16 hours a day!" - Manager in allied healthcare, primary care.

According to participants, especially clients with higher physical and mental capabilities can benefit from the higher intensity of home-based stroke rehabilitation. On the other hand, this higher intensity of treatment could make home-based stroke rehabilitation more demanding to clients compared to institution-based rehabilitation. Participants reported that this, combined with the lower amount of financed supervised training and medical care associated with hospital-based stroke rehabilitation, could make home-based stroke rehabilitation less suitable to clients with lower capabilities and those in frail health.

Determinants of the user: Client and caregiver characteristics

The participants emphasised the large heterogeneity regarding the healthcare needs of clients post stroke. According to participants the main reason for this heterogeneity is the large variety in cognitive deficits after stroke and the impact on daily life. However, as mentioned above, institution-based treatment after stroke is experienced to be standardised and therefore not always in line with the specific clients' needs.

"The complexity, the reported needs ... they are so diverse. However, hospital care is standardized; everything that needs to be done is described per second." - Case manager 1, primary care

Participants also emphasised the important role caregivers can have within the rehabilitation process of people after stroke. According to participants it is important to inform, instruct and coach caregivers, in order to prepare them for the client's transfer home. This could limit the caregiver's burden and preserve or expand the client's capabilities. However, participants experience that the involvement of primary caregivers is limited during institution-based rehabilitation.

"They <clients and caregivers> hear: "It was a stroke", and the next second they are home again. Caregivers are not included at all." - Case manager 1, primary care

Determinants of the user: Professional expertise

Participants reported the importance for sufficient expertise in order to deliver care to people after stroke. According to participants expertise can be build by being educated in the field of neurology and treating clients after stroke on a regular basis. However, participants experience that not all professionals meet these conditions. Participants stated that the expertise of primary care professionals is diverse and sometimes lacking.

"How can you build expertise when you treat three to four stroke clients a year?" - Physical therapist, institution-based rehabilitation

Participants not only experience the amount of expertise within primary care to be diverse, but also to be not transparent. Participants reported that it is unclear who has the required (and/or the most) expertise concerning stroke rehabilitation and an easily accessible overview of (local) professional is lacking. Not knowing who has sufficient or the most expertise makes it difficult for clients, caregivers and referring professionals to know which professional they should consult for home-based stroke rehabilitation.

"When a client needs home-based stroke rehabilitation, I do not know to which professional I need to refer him to. Everybody <professionals> says they can deliver the treatment, but I do not know if they really can and who is the best." - General practitioner, primary care

Participants reported that the diversity in the expertise of primary care professionals, and this expertise not being visible, makes it harder to collaborate. Participants stated it is not easy to involve other professionals for inter-professional collaboration, when you do not know who to consult. However, not only the expertise of professionals is experienced to influence collaboration. According to focus group participants some organisations factors influence the ability for inter-professional collaboration as well.

Determinants of organisation: Transparency in working together

According to participants, inter-professional collaboration is needed to deliver good care. Participants reported the need for a comprehensive treatment plan and regular meetings to make explicit "the overall goal" and "who does what". However, participants experience that within primary care, most (if not all) disciplines have their own method 'language' and way of documenting treatment findings into health records. Also, the absence of regular scheduled meetings within primary care is experienced to hinder collaboration. Within institution-based care these meetings take place on a regular basis. According to participants it takes a lot of effort to organise these meetings within primary care because central organisation and financial support are lacking.

"Local authorities are also developing their own documentation system. Some bits are new. Anyway, it is yet another new system." - Case manager 2, primary care

"Within primary care professionals simply do not run into each other. We need to organise inter-professional contact to be able to collaborate." - Manager in allied healthcare, primary care

Beside a lack of organised collaboration, participants also experience a lack of (central) coordination of community care. Participants mentioned that there should be one "key agent", who facilitates the client during the different stages of rehabilitation. According to participants, this person should coordinate care delivery, stand beside the client and should know where and how to find and access professionals with sufficient expertise.

"Everybody holds a piece of the elephant, but nobody sees the whole picture." - Neuropsychologist, outpatient rehabilitation

A lack of collaboration within primary care is experienced to be influenced by the large number of different professionals involved in primary care, while "trust" and "knowing each other" are supporting factors for cooperation between professionals.

Determinants of the social-political context: Financing structure

Within the Dutch healthcare system, the involved disciplines and the amount of financed treatment hours after stroke are predefined and restricted per discipline. In the last decades many changes have been made concerning the financing of rehabilitation after stroke in the Netherlands. Participants experience the predefined and restricted character of financing rehabilitation after stroke per discipline to be inappropriate considering the heterogeneity among clients. Participants reported the need for a more client-centred way of financing rehabilitation after stroke.

"One of our clients was in need for intensive speech therapy, but otherwise was ready to go home. However, because the sufficient amount of speech therapy was not financed within primary care, the client needed to stay. Such as shame..." - Speech therapist, institution-based rehabilitation

Participants suggested the implementation of a financial structure depending on the clients' stage of rehabilitation, functional status and resources. However, according to participants, an important precondition for successful implementation is a stable financial structure (during and after implementation). They consider that this might be a

	challenge, considering the history of change regarding the fractioned financing of rehabilitation after stroke in the Netherlands.
Limitations and applicability of evidence	Limitations: Using a focus group could risk opinion contamination among participants. The focus group moderator was an expert in home-based stroke rehabilitation and implementation science, which may led to them asking about factors that are known. The perspective of a rehabilitation physician is lacking (was not able to be contacted). Due to the design of the trial, study findings may not be transferable to other professionals. The absence of clients' and caregivers' perspectives on factors influencing the implementation of home-based stroke rehabilitation. Applicability of evidence: Does not explicitly discuss early supported discharge, instead discussing home based stroke rehabilitation. This may be somewhat related, but this is not clear. Netherlands healthcare setting is different from that in the United Kingdom (different sounding financial structure) which limits the applicability of some parts of the evidence.

Study arms

Healthcare professionals (N = 15)
15 professionals. Most of the participants knew each other, but none knew the focus group moderator and primary researcher. No contact was established with speech therapists working within primary care, despite multiple efforts trying to get in touch by e-mailing potential participants. However, the participating case manager could provide this perspective because she worked as a primary care speech therapist until recently. Three participants could not attend any of the focus groups (a geriatrician, a general practitioner and a rehabilitation physician), so instead took part in individual telephone interviews. Participants included 2 occupational therapists, 2 physical therapists, 2 case managers, a psychologist, an elderly advisor, a nurse, a speech therapist, a nursing home manager, a

manager in allied healthcare, a general practitioner and a geriatrician. Participant characteristics: Men:women = 5:9. Age range: 28-61 years. Work settings included hospitals, nursing homes (delivering primary care), home care organisations, a primary care rehabilitation and healthcare center, an outpatient facility and a general practitioners' office.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Minor limitations

von Koch, 2000

Bibliographic Reference	von Koch, L.; Holmqvist, L. W.; Wottrich, A. W.; Tham, K.; de Pedro-Cuesta, J.; Rehabilitation at home after stroke: a descriptive study of an individualized intervention; Clinical Rehabilitation; 2000; vol. 14 (no. 6); 574-583

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To describe the content of a programme involving early hospital discharge and continued rehabilitation at home after stroke.

Population	For the qualitative component of the study, only the healthcare professionals views were gathered. Healthcare professionals N=6 Two occupational therapists, two physical therapists and one speech and language therapist. The speech and language therapist engaged at the outset of the trial changed positions after one year and was replaced. Thus data collected represent the work of six therapists. The team members were regular staff, who combined the home rehabilitation service with their usual clinical duties. For each patient receiving rehabilitation at home, one therapist was assigned as case manager with the responsibility of co-ordinating the early discharge procedure and the home rehabilitation programme in which they were the main provider of the services. Participant characteristics: Male:female = 0:6. Age range: 20-45 years. Professional experience range: 8 months to 15 years, median 5.5 years.
Setting	Interviews with healthcare professionals working in the home rehabilitation program associated with Huddinge University Hospital, Stockholm, Sweden. The interviews were conducted in the hospital.
Study design	Semi-structured interviews were conducted by two of the authors with each therapist. The theme and the questions of the interviews were presented to the therapists in advance. The therapists were asked to provide descriptions of their work with stroke rehabilitation in the patients' homes in a narrative manner. The interviews were conducted in hospital, tape recorded and transcribed in extenso (185 typewritten pages). Participant checks were made in order to ensure accuracy and completeness of data.
Methods and analysis	Analysis of the data was performed by two of the authors in close collaboration with a third. A step-by-step procedure was adopted in which each interview was analysed separately. The sequence implied reading the interview as a whole; searching for and identifying descriptions of actions performed by the therapist; labelling the identified actions; sorting the labelled actions into categories, and identifying recurrent themes among the categories. The authors tried to understand each part in the light of the whole text by repeatedly returning to and reading the transcript. Each step was performed by the authors separately and then discussed and agreed upon before continuing with the next step. Finally the categories and themes of all the interviews were compared in order to identify similarities, differences and common patterns between the therapists. The result was reviewed by two of the interviewees and the two authors not involved in the process of analysis.

Findings	The therapists emphasised the importance of being a good listened in order to understand the patient's needs and perceived problems: "Therapy should be based more on what they've had time to discover on their own than on me calling things to their attention and forcing them to see their problems." The goals were based on the interest of the patient, as in this example cited by one of the speech and language therapists: "This man used to take a walk in order to place bets on the football games. Now he had problems writing his signature on the coupon and the goal for his walk had in some way lost its function. It was brought to my attention, and then I asked him if he wanted to practice writing his signature, something I would probably not have given priority to in a different situation. He wrote page after page practicing his signature. He was very motivated." All therapists offered anecdotal evidences that decisions concerning what to do were based on the interests and goals expressed by the patient. The expert opinion of the therapist was presented when asked for but not emphasised or trusted to assume the dominant position, as described by one of the therapists: "She was very stubborn when it came to doing exercises and to what exercises to do and when. She assumed a lot responsibility for her own situation. I could only give her my professional opinion, and then it was up to her to decide." As far as 'doing it', the content of a home visit varied from interventions applied immediately, during the same visit as the problem was identified, to activities planned and prepared several weeks in advance. In the words of one of the occupational therapists: "It was not only a matter of having to walk a certain distance but also the emotional problem of having to meet people who had not seen her paralysed. So we planned this activity for several weeks before she could make herself do it." Between the home visits the patients were encouraged to practice activities on their own. The patients were encouraged to devise solutions, to test them and to evaluate the outcome. Evaluation of the interventions applied included reminding the patient of their own. The patients were encouraged to devise solutions, to test them and to evaluate the outcome. Evaluation of the interventions applied included reminding the patient of their own previous ability, thus teaching the patient a strategy of reflecting on changes over time. "You remember the way it was in the beginning. You couldn't do this, you couldn't do that. But now you can actually dress yourself and cook and do this and that. So you see, you've improved. It usually helps the patient to get on with his life." Several other themes emerged from the data. One such theme was that activities between visits also could include the therapists acting on behalf of the patient in order to retrieve information or convey messages, "We act like a kind of an ombudsman for the patient. We make it easier for the patients and you assist them in finding the right authority for their problems."

A very prominent theme characterising the rehabilitation process was the partnership formed by the therapist and the patient, as illustrated in one of the interview, "In the hospital, this big institution where you are an authority in a white coat, the patient submits himself to you and wants you to help him and make him well. But at home I think it's more like you discuss the patient's problems and co-operate with him to find solutions." A substantial part of the face-to-face contact with the patient was spent talking. Thus the dialogue between the therapist and the patient emerged as an important vehicle for the elements of the rehabilitation process. "Well, to start with, about half the visits we spend talking about various things. How things have worked out, and they can tell you about all different kinds of things. That is, the patient does most of the talking."

The case manager was the main provider of the home rehabilitation service, using the team as a resource. At weekly meetings the team members assisted, supported, taught and learned from each other. "We can discuss the patients and ventilate things, otherwise it would be difficult. You get advice, support and a few reminders. Sometimes I have deep thoughts about various things, and then the team provides a lot of good support." The timing and the number of visits were decided in partnership. The early hospital discharge was carefully prepared by the case manager according to the patient's needs. The therapists reported that, initially, prior to discharge from the hospital, most patients believed they needed frequent home visits by the therapists. Once they were at home, however, the patients realised that frequent visits were not required - a realisation reflected in longer and longer time intervals between visits until the final discharge from the program. "When it's time for the early discharge from hospital they want you to make frequent home visits, but once they're at home they're not so anxious any longer. The patient is also aware of the fact that the important thing is not the times when I come but what they themselves do between the home visits."

The discontinuation of the program was well prepared by the partnership, and it was the patient who, within the time limits allowed, made the decision. A few patients considered themselves ready and ended the program even though their therapists felt there were more things that could have been accomplished. There were at least two problem-solving processes within the rehabilitation process. One involved the partnership. In addition therapists were observing and analysing the patient in his or her environment. In doing so the therapists achieved an understanding of discrepancies between the desires and abilities of the patient on the one hand and the environmental demands and expectations on the other. This implicit problem-solving was concurrent with and enmeshed within the rehabilitation process. Undesirable

	behaviour on the part of the spouses when communicating with patients with dysphasia, or their assisting more than required and desired by the patient are examples of problems that otherwise might have remained undetected. Examples of interventions used as a result of implicit problem-solving were counselling, teaching e.g. instructing the spouse how to assist the patient, and role modelling the desirable behaviour for spouses, as explained by one speech and language therapists: "Then I try to be a model for this spouse so that he or she will see how you can behave towards a person with aphasia. Not that I actively correct that much, but rather I show them that you sometimes have to wait a long time for an answer, or use body language, or write or draw or find other ways of communicating. I show them how they can do this themselves. Initially the therapist underwent a learning process in adopting and implementing the philosophy of the home rehabilitation program. In order to enable the patient to take an active part in the rehabilitation process the therapists had to modify their behaviour. As the patients assumed more responsibility the therapists came to realise that their part in the process had been altered to the extent that it was initially perceived as if they were not doing their job properly. "In the beginning it did feel as if you did not do a whole lot. You didn't do a lot of training. Now I understand that it all works out in the end, and the patient is satisfied."
Limitations and applicability of evidence	Limitations: None raised in the study. Limited number of participants. No clear themes reported. No involvement of stroke survivors in the qualitative section. Applicability of evidence: Discusses early supported discharge. Based in Sweden so may not be completely relevant to a United Kingdom healthcare setting.

Study arms

Stroke survivors (N = 41)
A subgroup of the stroke population with a good prognosis. People admitted to the Huddinge University Hospital with first or recurrent stroke, who one week after onset had impaired motor capacity according to the Lindmark Motor Capacity Assessment and/or dysphasia as per Reinvang Aphasia Test, were continent, independent in feeding according to Katz ADL Index and had a Mini-Mental State Examination score >23 were offered inclusion in a randomised controlled trial of early discharge and continued rehabilitation at home. Participant characteristics: Mean age (range) = 70.8 (49-86) years. Men:women = 22:19. Living with spouse = 30. Housing, apartment:private house = 26:15. Country of origin, Sweden:other = 36:5. Other diseases before stroke:no known disease = 36:5. Hemisphere, right:left:cerebellum = 15:24:2. Median Frenchay Activities index before stroke (0-45) (range) = 29 (10-35). 5-7 days after stroke... Median Scandinavian Stroke Scale maximal score (0-56) (range) = 49 (22-56). Aphasia, severe:moderate:mild:none = 4:6:7:24. Median Reinvang aphasia quotient (0-100) (range) = 24 (10-78). Median Mini-Mental State Examination (0-30) (range) = 27 (23-30). Median Lindmark motor capacity (0-153) (range) = 131 (38-153). Able to perform peg test on affected side = 19. Median time to walk 10m (s) (range) = 14 (7-55) seconds. At hospital discharge... Katz extended activities of daily living, independent (%) = 2 (4.9%).

Healthcare professionals (N = 6)
Two occupational therapists, two physical therapists and one speech and language therapist. The speech and language therapist engaged at the outset of the trial changed positions after one year and was replaced. Thus data collected represent the work of six therapists. The team members were regular staff, who combined the home rehabilitation service with their usual clinical duties. For each patient receiving rehabilitation at home, one therapist was assigned as case manager with the responsibility of co-ordinating the early discharge procedure and the home rehabilitation programme in which they were the main provider of the services. Participant characteristics: Male:female = 0:6. Age range: 20-45 years. Professional experience range: 8 months to 15 years, median 5.5 years.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Major limitations

Wottrich, 2007

Bibliographic Reference	Wottrich, A. W.; von Koch, L.; Tham, K.; The meaning of rehabilitation in the home environment after acute stroke from the perspective of a multiprofessional team...including commentary by Jensen GM; Physical Therapy; 2007; vol. 87 (no. 6); 778-788

Study details

Secondary publication of another included study- see primary study for details	No additional information.
Other publications associated with this study included in review	No additional information.
Aim	To identify the meaning of rehabilitation in the home environment after stroke from the perspective of members of a multiprofessional team.
Population	Healthcare professionals N=13 Thirteen members of a multiprofessional outreach team (5 physical therapists, 5 occupational therapists, 2 speech and language therapists and 1 social worker) working at a geriatric hospital in Stockholm, Sweden. Responses were based on experiences in treating 9 patients who were selected to ensure variation in age (range = 63-86 years), sex (6 women, 3

	men), side of lesion (6 left, 3 right) and living conditions (4 living alone, 5 living with a spouse). The patients were included in the home rehabilitation program after approximately 1 month in hospital. The program entailed between 3 and 6 visits per week by team members according to the patients' needs. The mean duration of rehabilitation at home was 29 days (range 16-68), the mean number of home visits was 18.6 (range 4-54) and the mean time per home visit was 57 minutes. Participant characteristics: Mean age (range) = 37 (23-51) years. Mean professional experience (range) = 9 (0.5-27) years. Mean experience in home rehabilitation (range): 2 (0.5-3) years.
Setting	People working in an outreach team attached to a geriatric hospital in Stockholm, Sweden.
Study design	Interview (therapeutic story) regarding the rehabilitation of a particular patient. These interviews were conducted in the hospital within a week after the patient had been discharged from the home rehabilitation program. To ensure collection of data reflected the participants' experiences of providing rehabilitation in the home environment, they were asked to recount the therapeutic story of each patient included in the home rehabilitation program. The therapeutic story entailed the rehabilitation process from its beginning to its end. The participants were asked to give concrete details regarding their work with each patient (eg, what the patient did, said, or reported feeling or thinking during the rehabilitation process and how the patient reacted upon their actions). The researcher asked follow-up questions when needed. The 22 interviews were conducted by the first author, lasted about 30 minutes and were tape recorded and transcribed verbatim.
Methods and analysis	The interviews were analysed according to the EPP method. This method aims at describing the essence, structure and character of a phenomenon (ie, rehabilitation in the home environment after stroke in this study) based on the participants' life-world experiences. In order to discover essential descriptions during the analysis, we disregarded, or bracketed any theory outside phenomenology that explains or accounts for the phenomenon under study. Bracketing refers to the researchers trying to set aside, or hold in abeyance, their presuppositions and previous knowledge based on scientific ideas and theories about the phenomenon under study. Thus, we approached the interviews openly and unconditionally let the phenomenon present itself in the team members' described life-world experiences. We examined and analysed each participant's concrete description (ie, the therapeutic story) of his or her experiences of rehabilitation in the patient's home for a particular patient after stroke. The analysis was performed in 5 steps. Steps 1 through 4 were performed separately for each interview. In the first step of the analysis, they read the transcribed interview from one of the participants to obtain a general understanding of the concrete facts, events and actual feelings pertaining to the participating team members' original experiences of conducting

	rehabilitation in the patients' home. Based on our understanding of the whole transcribed interview, we needed to divide the text into smaller units to analyse the meaning embedded in the text. During the second step, the first author thus divided the participant's transcribed interview into smaller units called "meaning units". A new meaning unit was discriminated each time there was a shift in meaning in the text. The process of identifying meaning units helped the researcher to focus on the meaning structure of the phenomenon. In the third step, they interpreted each meaning unit in light of the whole interview and the phenomenon under study. The meaning hidden in the facts was the focus of this interpretation (referred to as the "transformed meaning"). They traced out and interpreted the meaning of rehabilitation in the home environment as expressed by the participants. The first author performed the fourth step, which entailed synthesizing the transformed meaning units into a "situated structure of meaning," which was presented in a summary of each transcribed interview. The author arranged features of the phenomenon in a phenomenologically significant way by identifying an interpreting the meaning of different aspects of rehabilitation in the home environment. In the final step, they analysed the summaries linked to each patient to move from the "situated structure of meaning" to a "general structure of meaning" that ran across participants in order to identify the participants' shared experiences of rehabilitation after stroke in the home environment. Thereafter, the analysis was based on data from all team members working with a particular patient, which generated a meaning structure consisting of 1 main theme and 4 subthemes describing the meaning of stroke rehabilitation in the patient's home. The themes were general for the therapist-described experiences of the rehabilitation. Throughout the analysis, they went back to the original interview data to validate interpretations until the one that was considered to be the most valid was chosen to represent what was described to be the meaning of rehabilitation in the patient's home from the perspective of the team members. A peer review was conducted in which the finders were read and commented on by a group of 8 experienced researchers and clinicians. The aim of the peer review was to ensure the trustworthiness of the fingers (ie, that the descriptions of the themes made sense and were recognised as plausible interpretations). Some minor changes then were made to improve and clarify the description of the themes.
Findings	**Supporting continuity** The participants described a number of different strategies as ways of assisting the patient to find continuity in their daily lives. The strategies were described as meeting the same team members in the hospital and at home, finding associations

	or links to former activities, assisting the patients in recognising themselves in self-perceived former roles, and asking the patients to tell their life story. In their therapeutic stories, the participants described how all patients wanted to return home and how they appreciated the offer of taking part in a home rehabilitation program. For one of the patients, coming home was described to be the most natural thing in her new life situation. The team members initiated collaboration with the patients while they were still in the hospital and informed them that this collaboration would continue in the patients' home. Thus, the patient met the same team members in their home as they had met in the hospital. This way of working in an outreach team was interpreted as a way to support continuity. Working with the patients in their home environment helped the team members to see how continuity could be regained. Taking part in the patients' home life gave them unique opportunities to find associations or links to former (prestroke) activities. The team members enabled the patients to reestablish these previous activities and to find substitutions in meaningful alternatives with which they could connect. High priorities of the team members were confirming and strengthening the patients' feelings of pleasure and assisting the patients to recognise themselves in their self-perceived former social roles, whether as grandparents, housewives, or family members taking part in family life. The team members actively sought out key activities that were unique to each patient (eg, shopping in favourite deli store) that could ripple outward to widen the spectrum of activities. The team members commented on how they were impressed by the patients' creativity and how they found the constant renewal of the patients' activities surprising, both as recounted by the patients and as observed by the team members when in the patients' home environment. This opened up new arenas in which to work, resulted in new problems to be solved, and made the existence of new gaps between desired and attainable goals, as expressed by the individual patients, evident. The team members supported the patients' prestroke experiences by inviting the patients to try their own solutions during the home rehabilitation sessions and between these sessions. One example was when one patient with aphasia unexpectedly paid a visit to the hairdresser. The activity - to walk to the hairdresser and ask for a haircut - had not been suggested or trained by the speech and language therapist, the occupational therapist or the physical therapist. The team members expressed that the patients' growing trust in themselves created positive expectations, gave a feeling of continuity, and made it easier to see a "possible future for them in their familiar contexts. A strategy used to assist the participants to recapture earlier aspects of their life that were of importance to them was to ask them to tell their life story. The life stories often opened up discussions on activities that the patient found important. They also acted as a counseling dialogue. These dialogues were often initiated by discussions of practical matters, such as

whether domestic help or assisted transport services were required; however, the existence of such dialogues created an opportunity for the patient and the team member to have a heart-to-heart talk, sharing experiences and thereby contributing to the team members' understanding of how best to support continuity.

Making a journey together from hospital to home

At discharge, the team members described how their actions were intended to bridge the gap between the hospital and the home, which was interpreted as a way to minimise disruption to the rehabilitation process and support continuity for the patient. The process of returning home involved collaborative planning among the patients, the relatives and the team members to ensure that the transfer was smooth. In order to be one step ahead and to avoid unforeseen events, the team members had planned this first encounter with the well-known environment beforehand and made a home visit to make sure that the patient's return would be successful. One team member commented: "At home I watched her doing things like watering the flowers and could see that she compensated well for her visual problem and had no big problems with walking around in the apartment." To enable the patient to have an initial positive experience was described as a way for the patient to have greater confidence in his or her ability and in the home rehabilitation program. The team members also were concerned about reducing feelings of anxiety and insecurity. At the time that the patient was discharged from the hospital, one of the team members accompanied the patient home; they made the journey together. One of the team members described the experience as followed: "Team member: When she returned home I went with her. Researcher: How was it? Team member: It was quite a short visit because she felt, "Here I am, I'm home." Her husband met her just to check that she could get inside. It felt like everything went quite well right from the beginning."

Being able to make this journey together also gave the team members an opportunity to reduce their own feelings of anxiety by observing the patients performing basic activities at home. Observing the performance of the patient in his or her own environment, even if the visit was short, reassured the team member that the patient would be safe at home. Several team members emphasised that training in transferring and walking was crucial on the first visit for safety to avoid falls and to ensure that being at home started off well.

Enabling experiences of functioning

The team members recounted how, early on in the rehabilitation, in an attempt to enable the patient to experience how his or her body functioned when performing activities, they had sought to obtain information about the patient's previous patterns of behaviour in collaboration with the patient and the relatives. We interpreted this seeking as a way of mapping out the patient's individual experiences of functioning and as a way for the team members to see how the patient's "new" (poststroke) body could be linked to the "former" (prestroke) body. The team members initiated activities that enabled and promoted habitual performance, such as activities involving the use of both hands that came more naturally when using known utensils, climbing well-known stairs, and walking familiar routes. The team members stated how, during visits to the patients' home, they could see how the patients performed movements and activities spontaneously in their familiar context. With this knowledge of the individual's movement ability, activities were chosen and initiated by the team members with the specific intention of enabling the patients to have experiences with their "new" body that had previously been taken for granted. The following situation was described by one of the team members: "She cooked twice and made coffee once just to see how it went after the injury she had received. She spent some time in the kitchen confronting her body, maybe taking it easier [than she otherwise would have done] and listening more to her body."

Suggesting activities that made the patient "confront" and "listen to his or her body" was interpreted as a way for the team member to try to assist the patient in recognising the becoming more familiar to his or her body after stroke. In training the patients to transfer themselves or to perform self-care activities, the team members described how, in some situations, being in the patient's home environment made it easier for the patient to perform the activity than it would have been in a hospital, while in other situations, it made it more difficult. One team member remarked: "We did shower training at the ward, too, so that was pretty much the same kind of training, but the transfers were different because they had a bathtub, which was quite high. It became a different experience, even if the activity of showering was the same." When patients were not comfortable with their ability to perform an activity the activity was repeated to give varied and detailed experience of functioning. If the patient needed extensive assistance to perform an activity all the team members involved practiced that same activity with the patient. Another way to bridge a gap in the performance was through talking about the performance with the patient and to discuss tactics such as deliberately considering how to achieve the next step in the activity, thereby putting trust in one's own body. The two bridging strategies could be combined as reported by a team member in this example: "When problems occurred during an activity, the patient was encouraged to think about the problem, not just to keep repeating the task several times." One of the team members did not express interest in building the training on the patients' previous experiences and habits because of the lack of appropriate training equipment in the home environment.

All equipment had to be brought to the patients' home, and thus this team member expressed a preference for conducting the training in the hospital.

Refraining from interventions - encouraging patient problem-solving skills

The therapeutic stories revealed that the team members allocated time and ensured that there were opportunities to allow the patients to try different solutions by themselves to identify the best way to perform an activity. This implied that, occasionally, activities that the team members had planned were not carried out, and instead they used a "wait-and-see" strategy to discover what the patients could manage to achieve on their own. Because the team members were able to observe and assess the patients in difficult but totally relevant situations, it appeared that the home environment offered many opportunities to be creative and to encourage patient problem-solving skills. It was possible for the team member to wait with interventions or to refrain from conducting a planned intervention in order to encourage the patients to find appropriate solutions on their own and to take their own actions. This was interpreted as a way in which patients can be supported in the longer term, by enabling them to find ways to continue to solve problems after being discharged from the home rehabilitation program. The team members described that by observing and working together with the patient in his or her own home, they were supplied with a large amount of detailed and specific information from each patient's context on which they could base their decisions, not only regarding what they needed to work with together, but also what could be left for the patient to solve alone.

One of their interpretations of the descriptions of how the team members were working in the home environment was that they were encouraging the patients to improve their own performance and that the team members were intervening only when assistance of advice was absolutely necessary, as revealed by the following statement of one of the team members: "There are patients who do things that almost scare you to death, but in his case, I was never really nervous that something was going to happen to him. He was a bit careless sometimes, but not without a degree of awareness. No, I was never nervous, I just think that it was great that he was in control and was a step ahead all the time. I did not try to stop him." The team members described how they assessed what could be gained by refraining from training patients to perform a specific activity. For example, one planned activity in the kitchen was not carried out because the team member realised that the patient and her husband had already found another solution to the problem. The team member had had a different solution in mind, but refrained from intervening to strengthen the patient's trust in herself. In this way, not only was the patient's solution respected, but also her ability to make decisions was supported to make it easier for her to continue making her

own decisions. One of the team members described such a situation in this way: "Yes, there was a problem of some kind, and I felt it should really have been practiced one more time, but then I was afraid she might fail to accomplish the task, so I let it be. One stops there when the patient has done something that works."

One of the other team members was not prepared to let her patient take responsibility for her own actions and advised against the patient continuing to work in the kitchen until major home adaptations had been made. However, it took too long to carry out these changes, and the patient had lost a considerable number of her former routines and great deal of confidence by waiting. In the meantime, the spouse took over the responsibility for the cooking.

Looking for a new phase - uncertain endings

The team members expressed both negative and positive experiences of ending the home rehabilitation program. There was several reasons for the rehabilitation program to end. Either the team member of the patient might say that he or she could end the rehabilitation because he or she felt the the goals had been achieved. The most common goals achieved that led to the team member and the patient making the decision to end the rehabilitation were that the patient was able to carry out the necessary daily routines and activities for a life at home and that the patient was able to leave the home unassisted. The team members then expressed a feeling of security provided that the patients were in agreement that the goals were achieved. This positive experience was interpreted as a suitable ending to the home rehabilitation program because therapy could cease without disrupting the patient's continuity in life. Home rehabilitation was described as being very time consuming, but all of the team members reported that it had to take time, in regard to both the length of each session and the duration of the period over which rehabilitation took place. Negative experiences, with feelings of insecurity on behalf of both the team members and the patients, were described when the rehabilitation had to end for other reasons, such as because the time allocated was running out or because a new patient was in greater need of home rehabilitation. They interpreted this described insecurity as a team members' concern of experiencing a threat to the patients' continuity. All of the team members mentioned that they were worried over the lack of time. Here is one example: "Something always crops up. There is still only quite a short period available for rehabilitation. Maybe it takes time to land on one's feet at home, and it's possible that you miss things the team could deal with, but there are things that turn up during the course of the journey and the rehabilitation might take a little longer than anticipated."

	When goals were not achieved, the team members expressed how they looked for possibilities to continue the collaboration with the patients by offering them rehabilitation as outpatients. According to one team member, becoming an outpatient at the hospital could be seen as a part of the home rehabilitation program, provided that the transport to the hospital and back home was included in the training program. At the time that the home rehabilitation program ceased, a new phase in the process occurred. This phase was accompanied by the team members' described feelings of insecurity, which they tried to find ways to overcome. One way was that the team members took the advantage of the possibility for the patient to have follow-up sessions with another team member, because the team members were working closely together. As one team member commented: "I could have assisted him more in the training, but there was not time, and he got follow-up training with the physical therapist." This transfer of responsibility to a colleague could be viewed as a strategy for maintaining continuity parallel with the aim of enabling the patients to gradually gain more independence in their new life situation after stroke.
Limitations and applicability of evidence	Limitations: Not clearly stated. Findings are specific to the context of the study, but may be applied beyond the study setting. Applicability of evidence: May be relevant to early supported discharge (discussing home rehabilitation at a time period that is possibly beyond early, but still will likely have some relevance to easy supported discharge). Setting was in Sweden, so the healthcare system may be different to the United Kingdom but is likely still broadly applicable.

Study arms

Healthcare professionals (N = 13)
Thirteen members of a multiprofessional outreach team (5 physical therapists, 5 occupational therapists, 2 speech and language therapists and 1 social worker) working at a geriatric hospital in Stockholm, Sweden. Responses were based on experiences in treating 9 patients who were selected to ensure variation in age (range = 63-86 years), sex (6 women, 3 men), side of lesion (6 left, 3 right) and living conditions (4 living alone, 5 living with a spouse). The patients were included in the home rehabilitation program after

approximately 1 month in hospital. The program entailed between 3 and 6 visits per week by team members according to the patients' needs. The mean duration of rehabilitation at home was 29 days (range 16-68), the mean number of home visits was 18.6 (range 4-54) and the mean time per home visit was 57 minutes. Participant characteristics: Mean age (range) = 37 (23-51) years. Mean professional experience (range) = 9 (0.5-27) years. Mean experience in home rehabilitation (range): 2 (0.5-3) years.

Critical appraisal - CASP Qualitative Checklist (1.1 Early supported discharge)

Section	Question	Answer
Overall	Overall quality assessment	Moderate limitations

References

1. National Institute for Health and Care Excellence. Developing NICE guidelines: the manual [updated January 2022]. London. National Institute for Health and Care Excellence, 2014. Available from: https://www.nice.org.uk/process/pmg20