National Institute for Health and Care Excellence

Draft for consultation

Stroke rehabilitation in adults (update)

[F] Evidence reviews for self-management

NICE guideline GID-NG10175

A research recommendation was made for this review

April 2023

Draft for Consultation

These evidence reviews were developed by the Guideline Development Team at NICE

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1 Self-management

1.1 Review question

In people after stroke, what is the clinical and cost effectiveness of self-management and/or supported self-management compared with usual rehabilitation?

1.1.1 Introduction

Self-care management usually takes the form of a tailored education programme designed to enable a stroke survivor to take a more active approach to his or her own management and goals. It usually has the following components: problem solving by improved knowledge of a stroke, decision-making and individual goal setting with an action plan, knowledge and access to available community resources and training in how to ask for help.

1.1.2 Summary of the protocol

Table 1: PICO characteristics of review question

Population	Inclusion: • Adults (age ≥16 years) who have had a first or recurrent stroke (including people after subarachnoid haemorrhage) Exclusion: • Children (age <16 years) • People who had a transient ischaemic attack

Intervention	Self management interventions (including interventions specific to people after stroke and generic interventions)
	• Could be delivered face-to-face, postal, or online
	• The intervention must be aiming at empowering the stroke survivor to, at least in part, manage the following areas…
	  ○ Problem-solving
	  ○ Goal-setting
	  ○ Decision-making
	  ○ Self monitoring
	  ○ Coping with the condition
	  ○ An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning
	Including interventions provided by health professionals or lay leaders, or a combination of both

Comparisons	Usual care: • Inactive control intervention (for example: usual care, waiting list control) • Active control intervention (for example: information only, alternative intervention that was not considered self management)
Outcomes	All outcomes are considered equally important for decision making and therefore have all been rated as critical: At the following time periods: • End of intervention • End of scheduled follow-up Where a time point for an outcome is the end of scheduled follow-up but this is also the first-scheduled follow-up, the outcome will be classified as the end of scheduled follow-up only.

	• Person/participant generic health-related quality of life (continuous outcomes will be prioritised [validated measures])
	• Carer generic health-related quality of life (continuous outcomes will be prioritised [validated measures]))
	• Self efficacy (continuous outcomes will be prioritised)
	• Activities of daily living (continuous outcomes will be prioritised)
	• Participation restrictions (including social, vocational and recreational roles, such as measured by the Life Habits instrument: LIFE-H)
	• Psychological distress (continuous outcomes will be prioritised)
	  ○ Depression (if people have communication difficulties, measures specific to this difficulty will be prioritised, for example for depression: depression intensity scale circles, stroke aphasic depression questionnaire, signs of depression scale, aphasic depression rating scale)
	• Stroke-specific Patient-Reported Outcome Measures (continuous outcomes will be prioritised)
	• Health service usage
	  ○ Hospital readmissions
	  ○ General practitioner attendance
	  ○ Emergency department visits
	• Participant satisfaction
	• Adverse events (type and frequency)

Study design	Systematic reviews of randomised controlled trials and randomised controlled trials (randomised at the individual participant level or via clusters with appropriate methods)

For full details see the review protocol in Appendix A.

1.1.3 Methods and process

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

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

1.1.4 Effectiveness evidence

1.1.4.1 Included studies

One systematic review[11] and in total twenty randomised controlled trials (twenty six papers) and two cluster randomised controlled trial studies were included in the review;[1, 3-10, 12-26, 30, 31, 33, 35] these are summarised in Table 2 below. Evidence from these studies is summarised in the clinical evidence summary below (Table 3).

This review updated a previous Cochrane review, Fryer 2016[11]. This review included fourteen studies in a quantitative synthesis[3, 5, 8, 10, 14-17, 19, 21, 23, 25, 30, 34], all of these studies were included in the review. However, as was the case in the Cochrane review, no quantitative outcomes that could be used in the review was reported by one study[8]. This study was included, as it had been included in the Cochrane review, but was noted to report no usable outcomes and so does not contribute to the analysis.

All the evidence was in people who had suffered a first or recurrent stroke, with no people with transient ischemic attacks included. There was a large range of post-stroke durations, ranging from 45 days to 11 years, representing a broad sample of the stroke survivor population. Stroke severity was generally poorly reported, although those reporting severity indicated a wide range, with mean Barthel Index's ranging from 14 to 88.

The majority of studies compared self-management interventions to inactive controls (25 studies), including usual care, with a limited amount of evidence for the comparison between self-management and active controls (3 studies). There was significant variation in the content and frequency of contact with healthcare professionals in the self-management interventions. The most commonly applied strategies utilised were goal setting, education and workbooks which people used to help direct their self-care. Frequencies of contact ranged from a single session through to telephone follow-up multiple times per week, although the majority of interventions consisted of weekly contacts.

No evidence was available for the following outcomes for the comparison between self-management and inactive controls:

- Health service usage (emergency department visits and general practitioner attendance)
- Participant satisfaction

No evidence was available for the following outcomes for the comparison between self-management and active controls:

- Carer generic health-related quality of life
- Activities of daily living
- Participation restrictions
- Health service usage (emergency department visits)

Inconsistency

Where heterogeneity was present, subgrouping was not possible due to the small number of studies included in the relevant analyses. In these cases, the evidence was downgraded in GRADE for inconsistency and analysed using a random effects model.

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

1.1.4.2 Excluded studies

See the excluded studies list in Appendix J.

1.1.5 Summary of studies included in the effectiveness evidence

Table 2: Summary of studies included in the evidence review

Study	Intervention and comparison	Population	Outcomes	Comments
Bishop 2014[3]	**Self-management** (n=23) Family Intervention: Telephone Tracking model, consisting of psychoeducation and telephone follow-up delivered to stroke survivors and their caregivers. Frequency: weekly for 6 weeks, biweekly for the following 2 months, and monthly for the final 2 months (13 calls per patient) Person supporting the intervention: clinically experienced staff (family therapy or stroke) Domain of therapy: general Mechanism of intervention: problem solving **Inactive control** (n=26) **Concomitant therapy:** Standard medical follow-up	**People after a first or recurrent stroke** Mean age (SD): 70.1 (11.6) years N = 49 Severity: Not reported Time period since stroke (mean [SD]): Not reported	Psychological distress – depression at end of intervention and end of scheduled follow up Activities of daily living at end of intervention and end of scheduled follow-up Health service usage (days hospitalised, therapy hours, physician visits) at end of intervention and end of scheduled follow-up End of intervention = 3 months End of scheduled follow-up = 6 months	Setting: Community, delivered via telephone contact in the United States of America. Sources of funding: National Institute for Mental Health grant.
Cadilhac 2011[5] Subsidiary studies: Battersby 2009[1] Cadilhac 2010[4]	**Self-management** (n=95) Combined generic Stanford Chronic Condition Self-management Programme and Stroke Self-management Programme. Both programmes aimed to improve patient's ability to cope with their stroke through education, physical	**People after a first or recurrent stroke** Mean age (SD): 69 (11.7) years N = 143 Severity: Not reported Time period since stroke (frequency ≥12 months [%]): Intervention: 39 (41)	Health service usage (rehospitalisation) at end of scheduled follow-up Adverse effects at end of scheduled follow-up End of scheduled follow-up = 8 weeks	Setting: Community, delivered face-to-face in Australia. Sources of funding: grant from the J.O and J.R Wicking Trust and in-kind support from the National Stroke Foundation.

Study	Intervention and comparison	Population	Outcomes	Comments
	and cognitive therapy. Frequency: weekly 2.5-hour sessions for 6 weeks (Stanford Programme) or 8 weeks (Stroke Programme) Person supporting the intervention: co-facilitated by health professionals and trained peer leaders Domain of therapy: general Mechanism of intervention: problem solving **Inactive control** (n=48) **Concomitant therapy:** Usual care	Control: 26 (70)		
Chang 2011[6]	**Self-management** (n=39) Psychological intervention split into a knowledge and behavioural training component. Behavioural training was split into belief changes, forgiveness training and anger management. Frequency: weekly 1–2-hour sessions for 1-month Person supporting the intervention: psychology graduate Domain of therapy: mood Mechanism of intervention: coping with the condition **Inactive control**	**People after a first or recurrent stroke** Mean age (SD): 58.86 (10.40) years N = 77 Severity: Not reported Time period since stroke (mean [SD]): 136.29 (69.10) days	Activities of daily living at end of intervention Stroke-specific Patient Reported Outcome Measures at end of intervention Psychological distress – depression at end of intervention End of intervention = 1-month	Setting: Inpatient treatment in rehabilitation centre in China. Sources of funding: Not reported.

Study	Intervention and comparison	Population	Outcomes	Comments
	(n=38) **Concomitant therapy:** Regular therapy			
Chen 2018[7]	**Self-management** (n=72) Patient-centred Self-management Empowerment Intervention consisting of educational sessions during the inpatient period, and telephone follow-ups post-discharge to provide positive reinforcement and empowerment. Frequency: 5 20-minute daily sessions (day 3-7), 1 60-minute group session, one discharge instruction and four 20-30-minute weekly telephone follow-ups Person supporting the intervention: nurses Domain of therapy: general Mechanism of intervention: mixed **Inactive control** (n=72) **Concomitant therapy:** Conventional nursing	**People after a first or recurrent stroke** Mean age (SD): 65.4 (11.4) years N = 144 Severity (median NIHSS score [range]): Intervention: 4 (1-9) Control: 4 (0-9) Time period since stroke (mean [SD]): Not reported	Hospital readmission at end of intervention End of intervention = 3 months	Setting: Neurology department in a tertiary care institute in China. Sources of funding: funded by National Natural Science Fund of China.
Forster 2021[9]	**Self-management** (n=5)* New Start self management intervention including a needs assessment at approximately 6 months, with goal-	**People after a first or recurrent stroke** Mean age (SD): 73 (12) years N = 10	Participation restrictions at end of intervention and end of scheduled follow-up	Setting: Community-based in England and Wales Funding: This project was funded by the National Institute for Health Research (NIHR) Programme

Study	Intervention and comparison	Population	Outcomes	Comments
	setting, action-planning and supported self-management care strategy formation. **Inactive control** (n=5) Continued care as determined by local policy and practices. **Concomitant therapy:** No additional information.	Severity (mean NIHSS score [SD]): 4.8 (5.0) Time period since stroke (mean [SD]): 13 (21) days	End of intervention = 6 months End of scheduled follow-up = 9 months	Grants for Applied Research Programme. *This study is a cluster randomised trial. The number of participants are the number of centers randomised in the trial.
Frank 2000[10]	**Self-management** (n=19) Independent workbook based on individual lifestyle needs in relation to stroke. Individual recovery plans were also developed in consultation with the researcher Frequency: 2 initial visits in the first week, followed by weekly telephone calls for 3 weeks Person supporting the intervention: not stated Domain of therapy: general Mechanism of intervention: problem solving **Inactive control** (n=20) **Concomitant therapy:** None	**People after a first or recurrent stroke** Mean age (SD): 64.0 (13.3) years N = 39 Severity: Not stated/unclear Time period since stroke (mean [SD]): 39.6 (26.2) weeks	Activities of daily living at end of intervention Psychological distress – depression at end of intervention Self-efficacy at end of intervention End of intervention = 4 weeks	Setting: Community, delivered via a mix of face-to-face and telephone contacts with individual daily tasks in the United Kingdom Sources of funding: Not reported
Fu 2020[12]	**Self-management** (n=270) 'Take Charge' sessions which were one-to-one explorations of the	**People after a first or recurrent stroke** Mean age (SD): 72.1 (12.4) years N = 400	Patient/participant generic health-related quality of life at end of scheduled follow-up	Setting: community (non-institutional) in New Zealand. Sources of funding: grant from Health

Study	Intervention and comparison	Population	Outcomes	Comments
	individuals' views on what is important in their lives and what they wanted to prioritise over the following year. Frequency: 2 Take Charge intervention groups (combined). Group 1 received a single session, group 2 received a second session 6 weeks after the first. Each session lasted 30-60 minutes) Person supporting the intervention: nurses and physiotherapists Domain of therapy: general Mechanism of intervention: mixed **Inactive control** (n=130) **Concomitant therapy:** None	Severity: Not stated/unclear. Time period since stroke (mean [SD]): 45.3 (25.5) days	Activities of daily living at end of scheduled follow-up Adverse effects at end of scheduled follow-up End of scheduled follow-up = 12 months	Research Council of New Zealand.
Guidetti 2011[13]	**Self-management** (n=19) Client-centred self-care intervention aiming to enable stroke patients to resume responsibility for their own self-care through a global problem-solving strategy – goal-plan-do-check. Frequency: varied – occupational therapist contacts occurred when patients achieved their individual goal Person supporting the intervention:	**People after a first or recurrent stroke** Mean age (SD): 67.6 (14.6) years N = 40 Severity: Not reported Time period since stroke (mean [SD]): Not reported	Stroke-specific Patient Reported Outcome Measures at end of scheduled follow-up End of scheduled follow-up = 12 months	Setting: Rehabilitation clinics in Sweden. Sources of funding: Grants from Karolinska Institute, Karolinska University Hospital, Stockholm County Council, Solstickan Foundation and The Swedish Association of Occupational Therapists.

Study	Intervention and comparison	Population	Outcomes	Comments
	occupational therapists Domain of therapy: functional independency Mechanism of intervention: mixed **Active control** (n=21) **Concomitant therapy:** Rehabilitation as needed, for example: physiotherapy, speech therapy			
Harwood 2012[14]	**Self-management** (n=85) Three combined intervention groups, 1 receiving an 80-minute 'Take Charge' session focussed on goal setting, supported by a structured booklet. The second group also received the Take Charge session in addition to an 80-minute inspirational DVD based on stroke survivors' stories. Frequency: single session at the start of the intervention Person supporting the intervention: research assistant Domain of therapy: general Mechanism of intervention: mixed **Inactive control** (n=39) **Concomitant therapy:** None	**People after a first or recurrent stroke** Mean age (SD): 61.3 (13.8) years N = 124 Severity: Not stated/unclear Time period since stroke (mean [SD]): Not reported	Person/participant generic health-related quality of life at end of scheduled follow-up Activities of daily living at end of scheduled follow-up Adverse events at end of scheduled follow-up End of scheduled follow-up = 12 months	Setting: Community, delivered face-to-face in New Zealand. Sources of funding: The study was funded by the Health Research Council of New Zealand and the B Basham Medical Charitable Trust.

Study	Intervention and comparison	Population	Outcomes	Comments
Hoffmann 2015[15]	**Self-management** (n=12) 8 sessions, delivering individualised information and activities aimed at developing problem solving skills, communication with health professionals and adjusting to life post-stroke. Frequency: 8 1-hour sessions Person supporting the intervention: occupational therapist Domain of therapy: general Mechanism of intervention: mixed **Inactive control** (n=10) **Concomitant therapy:** None	**People after a first or recurrent stroke** Mean age (SD): 59.1 (13.0) years N = 22 Severity: Not reported Time period since stroke (mean [SD]): Not reported	Self-efficacy at end of intervention and end of scheduled follow-up Psychological distress – depression at end of intervention and end of scheduled follow-up Activities of daily living at end of intervention and end of scheduled follow-up Stroke-specific Patient Reported Outcome Measures at end of intervention and end of scheduled follow-up End of intervention = 2 months End of scheduled follow-up = 5 months	Setting: Tertiary hospital stroke unit, delivered face-to-face in Australia. Sources of funding: Early Career Research grant from the University of Queensland and a Griffith University Encouragement grant.
Johnston 2007[16]	**Self-management** (n=103) Workbook-based intervention containing information on stroke and recovery, coping skills and self-management instructions as well as task materials to encourage self-management such as diary sheets, relaxation tapes and breathing exercises. Frequency: Delivered over a 5-week period with face-to-face contacts at the start of the intervention	**People after a first or recurrent stroke** Mean age (SD): 68.9 (12.3) years N = 203 Severity: Not stated/unclear Time period since stroke (mean [SD]): Not reported	Self-efficacy at end of intervention Psychological distress – depression at end of intervention Activities of daily living at end of intervention End of intervention = 5 weeks	Setting: Community, delivered face-to-face at home in the United Kingdom. Sources of funding: Grant from the Scottish Executive Chief Scientist.

Study	Intervention and comparison	Population	Outcomes	Comments
	and 1-week later, and telephone contacts at weekly intervals in weeks 3 and 4 with a final face-to-face contact in week 5 Person supporting the intervention: Trained health professional Domain of therapy: General Mechanism of intervention: Mixed **Inactive control** (n=100) **Concomitant therapy:** None			
Jones 2016[17]	**Self-management** (n=2)* Bridges Stroke Self-management Programme: one-to-one rehabilitation sessions using 7 principles (problem solving, reflection, goal setting, accessing resources, self-discovery, activity, knowledge) at each session. Frequency: Unclear Person supporting the intervention: Trained stroke health professionals Domain of therapy: General Mechanism of intervention: Goal setting **Inactive control** (n=2)* **Concomitant therapy:** None	**People after a first or recurrent stroke** Mean age (SD): 65.3 (13.9) years N = 4 (centers) Severity: Not reported Time period since stroke (median [IQR]): Intervention: 76 (44.5-130.5) days Control: 116 (46-170.5) days	Person/participant generic health-related quality of life at end of intervention Self-efficacy at end of intervention Psychological distress – depression at end of intervention Activities of daily living at end of intervention End of scheduled follow-up = 12 weeks	Setting: Community, delivered face-to-face at home in the United Kingdom. Sources of funding: National Institute for Health Research grant. *This study is a cluster randomised trial. The number of participants are the number of centers randomised in the trial.

Study	Intervention and comparison	Population	Outcomes	Comments
Kalav 2021[18]	**Self-management** (n=34) StrokeCARE intervention based on the Chronic Care Model self-management component: booklet containing self-management strategies was given to patients upon discharge. Frequency: Telephone calls occurred in the 1st, 2nd, 4th and 8th weeks post-discharge, each lasting 15-20 minutes Person supporting the intervention: Researcher Domain of therapy: General Mechanism of intervention: An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning **Inactive control** (n=34) **Concomitant therapy:** Routine care	**People after a first or recurrent stroke** Mean age (SD): 57.4 (12.8) years N = 68 Severity: Not reported Time period since stroke (mean [SD]): Not reported	Self-efficacy at end of intervention Activities of daily living at end of intervention Stroke-specific Patient Reported Outcome Measures at end of intervention End of intervention = 12 weeks	Setting: Inpatient recruitment/community intervention in Turkey. Sources of funding: Not reported.
Kendall 2007[19]	**Self-management** (n=58) Chronic Disease Self-management Programme (Stanford) with an additional stroke specific information session at the end of the intervention.	**People after a first or recurrent stroke** Mean age (SD): 65.96 (10.67) years N = 100 Severity: Not reported	Self-efficacy at end of intervention and end of scheduled follow-up Stroke-specific Patient Reported Outcome Measures at end of intervention and end of	Setting: Community, delivered face-to-face in Australia. Sources of funding: support from the Australian Research Council, the Motor Accident insurance Commission of Queensland, the

Study	Intervention and comparison	Population	Outcomes	Comments
	Frequency: Weekly 2-hour sessions for 6 weeks Person supporting the intervention: Trained stroke health professionals Domain of therapy: General Mechanism of intervention: Mixed **Inactive control** (n=42) **Concomitant therapy:** None	Time period since stroke (mean [SD]): Not reported	scheduled follow-up End of intervention = 3 months End of scheduled follow-up = 12 months	Acquired Brain Injury Outreach Service and the Brisbane South Division of General Practice.
Kessler 2017[20]	**Self-management** (n=10) Occupational Performance Coaching: based around emotional support, individualised education and goal-focussed problem-solving. Frequency: Up to 10 1-hour sessions over 16 weeks Person supporting the intervention: Occupational therapist Domain of therapy: General Mechanism of intervention: Mixed **Inactive control** (n=11) **Concomitant therapy:** Standard care (not occupational therapy)	**People after a first or recurrent stroke** Mean age (SD): 67.8 (15.2) years N = 21 Severity: Not reported Time period since stroke (mean [SD]): 45.7 (66.5) weeks	Psychological distress – depression at end of intervention and end of scheduled follow-up Activities of daily living at end of intervention and end of scheduled follow-up Participation restrictions at end of intervention and end of scheduled follow-up End of intervention = 14 weeks End of scheduled follow-up = 6 months	Setting: Community, delivered face-to-face at patient's home in Canada. Sources of funding: grant from the University of Ottawa.
Kim 2013[21]	**Self-management** (n=18) Web-based education focussed on improving stroke	**People after a first or recurrent stroke** Mean age (SD): 65.7 (7.6) years	Self-efficacy at end of intervention	Setting: community, delivered at face-to-face at home in the Republic of Korea.

Study	Intervention and comparison	Population	Outcomes	Comments
	prevention knowledge and self-efficacy of health behaviours (3 topic areas: understanding of stroke, recurrence prevention, family life). Frequency: Sessions were designed to be completed on a weekly basis for 9 weeks. Person supporting the intervention: Trained stroke health professionals Domain of therapy: General Mechanism of intervention: Mixed **Inactive control** (n=18) **Concomitant therapy:** None	N = 36 Severity (NIHSS score): 0.8 (1.3) Time period since stroke (mean [SD]): 3.6 (3.4) months	End of intervention = 3 months	Sources of funding: supported by Basic Science Research Programme through the National Research Foundation of Korea.
Li 2021[22]	**Self-management** (n=33) e-intervention providing self-management education based on health beliefs and planned behaviour integration theory with two stages: in-hospital and post-discharge health education. Provided with corresponding support from a nurse to support the intervention. **Inactive control** (n=34) Usual routine treatment and health education during	**People after a first or recurrent stroke** Mean age (SD): 54.4 (2.8) years N = 67 Severity: Not stated/unclear Time period since stroke: Not stated/unclear	Self efficacy at end of intervention Stroke-specific Patient-Reported Outcome Measures at end of intervention End of intervention = 3 months	Setting: Community in China. Sources of funding: None reported.

Study	Intervention and comparison	Population	Outcomes	Comments
	hospitalisation and usual health education but not specifically aiming to improve self management. **Concomitant therapy:** No additional information.			
Lund 2012[23]	**Self-management** (n=48) Lifestyle course addressing occupation-based themes through peer exchange, self-reflection, discussion, lectures and outings in addition to physical activity sessions Frequency: Weekly 2-hour sessions for 36 sessions Person supporting the intervention: Occupational therapists and trained volunteers Domain of therapy: General Mechanism of intervention: Goal setting **Inactive control** (n=51) **Concomitant therapy:** Volunteer-led physical activity sessions	**People after a first or recurrent stroke** Mean age (SD): 77.1 (7.1) years N = 99 Severity: Not stated/unclear Time period since stroke (mean [SD]): 149 (153) days	Person/participant generic health-related quality of life at end of intervention Activities of daily living at end of intervention Psychological distress – depression at end of intervention End of intervention = 9 months	Setting: Community, delivered at face-to-face in Norway. Sources of funding: funded by the Eastern Health Region in Norway, the Department of Geriatric Medicine at Oslo University Hospital and the Norwegian Women's Public Health Association, as well as grants from Oslo University College and the Norwegian Association for Occupational Therapists.
Maulet 2021[24]	**Self-management** (n=17) Self-rehabilitation programme with the aim of maintaining the individual's adherence to a daily self-care	**People after a first or recurrent stroke** Mean age (SD): 56.0 (14.2) years N = 33 Severity: Not reported.	Patient/participant generic health-related quality of life at end of intervention End of intervention = 4 weeks	Setting: Community, delivered at face-to-face at patient's home in France. Sources of funding: Partially funded by Allergan.

Study	Intervention and comparison	Population	Outcomes	Comments
	routine in the long term. Frequency: 30 minutes daily over 4 weeks following an initial face-to-face session with the physiotherapist and a telephone call after 2 weeks Person supporting the intervention: Physiotherapists Domain of therapy: Upper limb Mechanism of intervention: Coping with the condition **Inactive control** (n=16) **Concomitant therapy:** All people received BOTOX injections, subject to individual needs	Time period since stroke (mean [SD]): 9.9 (4.7) years		
McKenna 2015[25]	**Self-management** (n=12) Bridges Self-management Programme: structured one-to-one sessions aiming to enable patients to take control of their daily lives by setting small goals, recording their progress, and problem solving. Frequency: Weekly 1-hour sessions for 6 weeks Person supporting the intervention: Trained stroke health professionals Domain of therapy: General	**People after a first or recurrent stroke** Mean age (SD): 64.9 (12.4) years N = 25 Severity: Not stated/unclear Time period since stroke (mean [SD]): 9.3 (9.9) weeks	Person/participant generic health-related quality of life at end of intervention and end of scheduled follow-up Self-efficacy at end of intervention and end of scheduled follow-up Activities of daily living at end of intervention and end of scheduled follow-up Psychological distress – depression at end of intervention and end of scheduled follow-up Stroke-specific Patient Reported Outcome Measures at end	Setting: community, delivered face-to-face in the United Kingdom. Sources of funding: Funded by Northern Ireland Chest, Heart and Stroke.

Study	Intervention and comparison	Population	Outcomes	Comments
	Mechanism of intervention: Mixed **Inactive control** (n=13) **Concomitant therapy:** None		of intervention and end of scheduled follow-up End of intervention = 6 weeks End of scheduled follow-up = 4.5 months	
Minshall 2020[26]	**Self-management** (n=42) Stroke Care Optimal Health Programme: patients were given a workbook and psychologist who worked with them individually. The workbook contained educational information and self-management/reflective exercises, culminating in a health plan. Frequency: 8 weekly 1-hour sessions, followed by a booster session at 3 months Person supporting the intervention: Psychologists Domain of therapy: General Mechanism of intervention: Mixed **Inactive control** (n=31) **Concomitant therapy:** Usual care	**People after a first or recurrent stroke** Mean age (SD): 67.9 (13.0) years Severity: Not reported Time period since stroke (mean [SD]): 52.2 (93.0) months	Patient/participant generic health-related quality of life at end of intervention and end of scheduled follow-up Carer generic health-related quality of life at end of intervention and end of scheduled follow-up Self-efficacy at end of intervention and end of scheduled follow-up Psychological distress – depression at end of intervention and end of scheduled follow-up End of intervention = 3 months End of scheduled follow-up = 12 months	Setting: Mixed home/hospital depending upon patient preference in Australia. Sources of funding: Grant from Australian Government Collaborative Research Network.
Sabariego 2013[30]	**Self-management** (n=130) Patient education programme consisting of 3	**People after a first or recurrent stroke** Mean age (SD): 57.3 (12.8) years	Person/participant generic health-related quality of life at end of intervention and	Setting: Community, delivered face-to-face in small groups in Germany.

Study	Intervention and comparison	Population	Outcomes	Comments
	modules: identification of problematic functional areas post-stroke, developing solutions for commonly identified problems, and a refresher session. Frequency: 5 1-hour sessions delivered on consecutive days Person supporting the intervention: Psychologists Domain of therapy: General Mechanism of intervention: Mixed **Active control** (n=130) **Concomitant therapy:** None	Severity: Not reported Time period since stroke (mean [SD]): 150.3 (530.3) days	end of scheduled follow-up Self-efficacy at end of intervention and end of scheduled follow-up Stroke-specific Patient Reported Outcome Measures at end of intervention and end of scheduled follow-up Adverse effects at end of intervention and end of scheduled follow-up End of intervention = 5 days End of scheduled follow-up = 6 months	Sources of funding: Supported by the German Federal Ministry of Education and Research.
Sit 2016[31]	**Self-management** (n=105) Health Empowerment Intervention for Stroke Self-management. Part 1 consisted of small group sessions to begin personal goal setting and action planning. Part 2 was home implementation where patients worked on the action plan with encouragement from the nurse facilitator. Frequency: Part 1 had 6-weekly sessions from week 3 – week 8. Part 2 in weeks 9 – 13	**People after a first or recurrent stroke** Mean age (SD): 69.3 (14.1) years N = 210 Severity: Not reported Time period since stroke (mean [SD]): Not reported	Activities of daily living at end of intervention and end of scheduled follow-up End of intervention = 1 week End of scheduled follow-up = 6 months	Setting: Ambulatory rehabilitation centre in China Sources of funding: Health and Medical Research grant

Study	Intervention and comparison	Population	Outcomes	Comments
	contained biweekly telephone calls. Person supporting the intervention: Nurses Domain of therapy: General Mechanism of intervention: Mixed **Inactive control** (n=105) **Concomitant therapy:** Usual care			
Tielemans 2015[34] Subsidiary study: van Mastrigt 2020[35]	**Self-management** (n=58) Self-management intervention aiming to teach proactive action planning strategies around 4 themes: handling negative emotions, social relations and support, participation in society and less visible stroke consequences. Frequency: 7 sessions split across 10 weeks: 6 2-hour sessions in the first 6 weeks and a 2-hour booster session in week 10. Person supporting the intervention: Psychologist and occupational therapist Domain of therapy: Coping with the condition Mechanism of intervention: Mixed **Active control** (n=55)	**People after a first or recurrent stroke** Mean age (SD): 57.0 (9.0) years N = 113 Severity: Not stated/unclear Time period since stroke (mean [SD]): 18.7 (28.3) months	Psychological distress – depression at end of intervention and end of scheduled follow-up Stroke-specific Patient Reported Outcome Measures at end of intervention and end of scheduled follow-up End of intervention = 10 weeks End of scheduled follow-up = 9 months	Setting: Community, delivered face-to-face in small groups in the Netherlands. Sources of funding: Supported by the Dutch VSBFonds and the Dutch Heart Association

Study	Intervention and comparison	Population	Outcomes	Comments
	Concomitant therapy: None			

See Appendix D for full evidence tables.

1.1.6 Summary of the effectiveness evidence

1.1.6.1 Self-management compared to inactive control

Table 3: Clinical evidence summary: self-management compared to inactive control

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Person/Participant Generic Health-Related Quality of Life (EQ-VAS, EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Intervention	87 (2 RCTs) follow-up: mean 2 months	⊕◯◯◯ Very low[a,b]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 66.83	MD **3.29 higher** (5.76 lower to 12.35 higher)	MID = 10.31 (0.5 x median baseline SD)
Person/Participant Generic Health-Related Quality of Life (SF-36 Bodily Pain, 0-100, higher values are better, final values) at End of Intervention	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[b,c]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 61.6	MD **2.5 higher** (9.54 lower to 14.54 higher)	MID = 3 (established MID)
Person/Participant Generic Health-Related Quality of Life (SF-36 General Health, 0-100, higher values are better, final values) at End of Intervention	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[b,c]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 60.6	MD **3.2 lower** (12.2 lower to 5.8 higher)	MID = 2 (establishes MID)
Person/Participant Generic Health-Related Quality of Life (SF-36 Mental Health, 0-100, higher values are better, final values) at End of Intervention	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[b,d]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 77.9	MD **1.8 higher** (5.13 lower to 8.73 higher)	MID = 3 (established MID)
Person/Participant Generic Health-Related Quality of Life (SF-12 Mental	4 (1 RCT)[e] follow-up: 12 weeks	⊕◯◯◯ Very low[b,d]	-	The mean person/Participant Generic Health-Related	MD **3.3 higher** (18.88 lower to 25.48 higher)	MID = 3 (established MID)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Component, 0-100, higher values are better, final values) at End of Intervention				Quality of Life was 42.8		
Person/Participant Generic Health-Related Quality of Life (SF-36 Physical Functioning, 0-100, higher values are better, final values) at End of Intervention	86 (1 RCT) follow-up: 9 months	⨁◯◯◯ Very low[b,d]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 55.3	MD **0** (11.55 lower to 11.55 higher)	MID = 3 (establishes MID)
Person/Participant Generic Health-Related Quality of Life (SF-12 Physical Component, 0-100, higher values are better, final values) at End of Intervention	4 (1 RCT)[e] follow-up: 12 weeks	⨁◯◯◯ Very low[b,d]	-	The mean person/Participant Generic Health-Related Quality of Life was 33.1	MD **3.2 higher** (16.11 lower to 22.51 higher)	MID = 2 (established MID)
Person/Participant Generic Health-Related Quality of Life (SF-36 Role Emotional, 0-100, higher values are better, final values) at End of Intervention	86 (1 RCT) follow-up: 9 months	⨁◯◯◯ Very low[b,c]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 57.2	MD **11.2 higher** (5.15 lower to 27.55 higher)	MID = 4 (established MID)
Person/Participant Generic Health-Related Quality of Life (SF-36 Role Physical, 0-100, higher values are better, final values) at End of Intervention	86 (1 RCT) follow-up: 9 months	⨁◯◯◯ Very low[b,c]	-	The mean person/Participant Generic Health-Related Quality of Life (SF-36 Role Physical, 0-100, higher values are better, final values) at End	MD **5.5 lower** (22.1 lower to 11.1 higher)	MID = 3 (established MID)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
				of Intervention was 38.8		
Person/Participant Generic Health-Related Quality of Life (SF-36 Social Functioning, 0-100, higher values are better, final values) at End of Intervention	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[b,c]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 71.8	MD **2.6 lower** (13.32 lower to 8.12 higher)	MID = 3 (establishes MID)
Person/Participant Generic Health-Related Quality of Life (SF-36 Vitality, 0-100, higher values are better, final values) at End of Intervention	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[b,c]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 55.6	MD **4.7 lower** (12.86 lower to 3.46 higher)	MID = 2 (establishes MID)
Person/Participant Generic Health-Related Quality of Life (EQ-5D, -0.11-1, higher values are better, change scores) at End of Intervention	24 (1 RCT) follow-up: 6 weeks	⊕◯◯◯ Very low[b,f]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 0.15	MD **0.06 lower** (0.32 lower to 0.2 higher)	MID = 0.03 (established MID)
Person/Participant Generic Health-Related Quality of Life (EQ-VAS, EQ-5D-3L, 0-100, higher values are better, final values) at End of Scheduled Follow-up	438 (2 RCTs) follow-up: 12 months	⊕⊕⊕⊕ High	-	The mean person/Participant Generic Health-Related Quality of Life at End of Scheduled Follow-up was 68.8	MD **2.25 higher** (1.19 lower to 5.7 higher)	MID = 10.3 (0.5 x median baseline SD)
Person/Participant Generic Health-Related Quality of Life (SF-36 Mental Component, 0-100, higher values are better, final	139 (1 RCT) follow-up: 12 months	⊕◯◯◯ Very low[b,d]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Scheduled Follow-up was 52.17	MD **0.48 higher** (2.42 lower to 3.38 higher)	MID = 3 (established MID)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
values) at End of Scheduled Follow-up						
Person/Participant Generic Health-Related Quality of Life (SF-36 Physical Component, 0-100, higher values are better, final values) at End of Scheduled Follow-up follow-up: 12 months	139 (1 RCT)	⊕◯◯◯ Very low[b,d]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Scheduled Follow-up was 37.88	MD **6.01 higher** (2.39 higher to 9.63 higher)	MID = 2 (established MID)
Person/Participant Generic Health-Related Quality of Life (EQ-5D, -0.11-1, higher values are better, change scores) at End of Scheduled Follow-up	24 (1 RCT) follow-up: 4.5 months	⊕◯◯◯ Very low[b,f]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Scheduled Follow-up was -0.09	MD **0.04 higher** (0.23 lower to 0.31 higher)	MID = 0.03 (establishes MID)
Carer Generic Health-Related Quality of Life (EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Intervention	54 (1 RCT) follow-up: 3 months	⊕◯◯◯ Very low[b,d]	-	The mean carer Generic Health-Related Quality of Life at End of Intervention was 71.29	MD **7.93 higher** (0.07 higher to 15.79 higher)	MID = 8.6 (0.5 x baseline SD)
Carer Generic Health-Related Quality of Life (EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Scheduled Follow-up	52 (1 RCT) follow-up: 12 months	⊕◯◯◯ Very low[b,d]	-	The mean carer Generic Health-Related Quality of Life at End of Scheduled Follow-up was 69.83	MD **3.11 higher** (7.69 lower to 13.91 higher)	MID = 8.6 (0.5 x baseline SD)
Self-Efficacy (Recovery Locus of Control, Self-Efficacy Questionnaire,	480 (8 RCTs)[e] follow-up: mean 9 weeks	⊕◯◯◯ Very low[b,g,h]	-	-	SMD **1.21 SD higher** (0.27 higher to 2.15 higher)	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Self-Efficacy Scale, Sense of Control - Mastery, General Self-Efficacy Questionnaire, Stroke Self-Efficacy Questionnaire, Stroke Self-Management Behaviour Rating Scale [different scale ranges], higher values are better, final values) at End of Intervention						
Self-Efficacy (Stroke Self-Efficacy Questionnaire [different scale ranges], higher values are better, change scores) at End of Intervention	92 (2 RCTs) follow-up: 9 weeks	⨁◯◯◯ Very low[b,h,i]	-	-	SMD **0.01 SD higher** (0.79 lower to 0.8 higher)	MID = 0.5 SD (SMD)
Self-Efficacy (Self-Efficacy Questionnaire, Self-Efficacy Scale, General Self-Efficacy Questionnaire [different scale ranges], higher values are better, final values) at End of Scheduled Follow-up	174 (3 RCTs) follow-up: 10 months	⨁◯◯◯ Very low[b,j]	-	-	SMD **0.3 SD higher** (0 to 0.6 higher)	MID = 0.5 SD (SMD)
Self-Efficacy (Stroke Self-Efficacy Questionnaire, 0-10, higher values are better, change scores) at End of Scheduled Follow-up	24 (1 RCT) follow-up: 4.5 months	⨁◯◯◯ Very low[b,f]	-	The mean self-Efficacy at End of Scheduled Follow-up was -0.15	MD **0.24 lower** (1.28 lower to 0.8 higher)	MID = 1.1 (0.5 x baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Activities of Daily Living (Barthel Index, Functional Limitations Profile, Extended Activities of Daily Living [different scale ranges], higher values are better, final values) at End of Intervention	320 (5 RCTs)[e] follow-up: mean 6 weeks	⊕⊕⊕◯ Moderate[i]	-	-	SMD **0.1 SD higher** (0.12 lower to 0.32 higher)	MID = 0.5 SD (SMD)
Activities of Daily Living (Barthel Index, Functional Independence Measure [different scale ranges], higher values are better, change scores) at End of Intervention	299 (4 RCTs) follow-up: mean 9 weeks	⊕◯◯◯ Very low[h,k]	-	-	SMD **0.19 SD lower** (0.42 lower to 0.04 higher)	MID = 0.5 SD (SMD)
Activities of Daily Living (Canadian Occupational Performance Measure - Satisfaction Subscale, 0-10, higher values are better, final values) at End of Intervention	103 (2 RCTs) follow-up: mean 25 weeks	⊕⊕◯◯ Low[l]	-	The mean activities of Daily Living at End of Intervention was 6.1	MD **0** (0.92 lower to 0.92 higher)	MID = 1.1 (0.5 x median baseline SD)
Activities of Daily Living (Canadian Occupational Performance Measure - Performance Subscale, 0-10, higher values are better, final values) at End of Intervention	103 (2 RCTs) follow-up: mean 25 weeks	⊕⊕◯◯ Low[l]	-	The mean activities of Daily Living at End of Intervention was 6.15	MD **0.18 higher** (0.63 lower to 1 higher)	MID = 1.1 (0.5 x median baseline SD)
Activities of Daily Living	722 (4 RCTs)	⊕⊕⊕⊕ High	-	-	SMD **0.2 SD higher**	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
(Barthel Index [different scale ranges] higher values are better, final values) at End of Scheduled Follow-up	follow-up: mean 9 months				(0.05 higher to 0.35 higher)	
Activities of Daily Living (Barthel Index, scale range, Functional Independence Measure [different scale ranges], higher values are better, change scores) at End of Scheduled Follow-up	73 (2 RCTs) follow-up: mean 5 months	⨁◯◯◯ Very low[b,m]	-	-	SMD **0.12 SD higher** (0.35 lower to 0.58 higher)	MID = 0.5 SD (SMD)
Activities of Daily Living (Canadian Occupational Performance Measure - Performance Subscale, 0-10, higher values are better, final values) at End of Scheduled Follow-up	17 (1 RCT) follow-up: 6 months	⨁◯◯◯ Very low[b,d]	-	The mean activities of Daily Living at End of Scheduled Follow-up was 6.1	MD **0** (2.7 lower to 2.7 higher)	MID = 1.2 (0.5 x baseline SD)
Activities of Daily Living at End of Scheduled Follow-up (Canadian Occupational Performance Measure - Satisfaction Subscale, 0-10, higher better, final values)	17 (1 RCT) follow-up: 6 months	⨁◯◯◯ Very low[b,d]	-	The mean activities of Daily Living at End of Scheduled Follow-up was 5.7	MD **0.1 lower** (2.84 lower to 2.64 higher)	MID = 1.0 (0.5 x baseline SD)
Participation Restrictions (Reintegration to Normal Living Index, 1-110, higher values	17 (1 RCT) follow-up: 14 weeks	⨁◯◯◯ Very low[a,b]	-	The mean participation Restrictions at End of	MD **2 lower** (27.05 lower to 23.05 higher)	MID = 10.4 (0.5 x baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
are better, final values) at End of Intervention				Intervention was 86.7		
Participation Restrictions (Complex WHODAS score, 0-100, lower values are better, change score) at End of Intervention	9 (1 RCT)[n] follow-up: 6 months	⨁◯◯◯ Very low[b,o]	-	-	MD **2.07 higher** (7.46 lower to 11.6 higher)	MID = 3.3 (0.5 x median baseline SD)
Participation Restrictions (Reintegration to Normal Living Index, 1-110, higher values are better, final values) at End of Scheduled Follow-up	17 (1 RCT) follow-up: 6 months	⨁◯◯◯ Very low[a,b]	-	The mean participation Restrictions at End of Scheduled Follow-up was 88.7	MD **6.5 higher** (10.46 lower to 23.46 higher)	MID = 10.4 (0.5 x baseline SD)
Participation Restrictions (Complex WHODAS score, 0-100, lower values are better, change score) at End of Scheduled Follow-up	9 (1 RCT)[n] follow-up: 9 months	⨁◯◯◯ Very low[b,o]	-	-	MD **0.16 lower** (9.82 lower to 9.5 higher)	MID = 3.3 (0.5 x median baseline SD)
Psychological Distress - Depression (Hospital Anxiety and Depression Scale, Hospital Anxiety and Depression Scale - Depression Subscale, Hamilton Depression Scale [different scale ranges], lower values are better, final values) at End of Intervention	446 (8 RCTs)[e] follow-up: mean 12 weeks	⨁⨁◯◯ Low[k]	-	-	SMD **0.13 SD lower** (0.32 lower to 0.06 higher)	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Psychological Distress - Depression (Geriatric Depression Scale Short Form, General Health Questionnaire-28 [different scale ranges], lower values are better, change scores) at End of Intervention	73 (2 RCTs) follow-up: mean 9 weeks	⨁◯◯◯ Very low[b,m]	-	-	SMD **0.41 SD higher** (0.05 lower to 0.88 higher)	MID = 0.5 SD (SMD)
Psychological Distress - Depression (Hospital Anxiety and Depression Scale, Hospital Anxiety and Depression Scale - Depression Subscale [different scale ranges], lower values are better, final values) at End of Scheduled Follow-up	91 (3 RCTs) follow-up: mean 7.5 months	⨁◯◯◯ Very low[b,d]	-	-	SMD **0.13 SD lower** (0.54 lower to 0.29 higher)	MID = 0.5 SD (SMD)
Psychological Distress - Depression (Geriatric Depression Scale Short Form, General Health Questionnaire [different scale ranges], lower values are better, change scores) at End of Scheduled Follow-up	125 (3 RCTs) follow-up: mean 7.5 months	⨁◯◯◯ Very low[b,d]	-	-	SMD **0.17 SD lower** (0.18 lower to 0.53 higher)	MID = 0.5 SD (SMD)
Stroke-Specific Patient Reported Outcome	179 (4 RCTs) follow-up:	⨁◯◯◯ Very low[h,p]	-	-	SMD **3.29 SD higher** (0.6 higher to 5.99 higher)	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Measures (Stroke-Specific Quality of Life, Stroke and Aphasia Quality of Life - General [different scale ranges], higher values are better, final values) at End of Intervention	mean 6 weeks					
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life, 1-5, higher values are better, change scores) at End of Intervention	68 (1 RCT) follow-up: 3 months	⨁⨁◯◯ Low[b,i]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 0.54	MD **0.1 lower** (0.45 lower to 0.25 higher)	MID = 0.40 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Energy subscale, 3-15, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 8.07	MD **1.01 higher** (0.53 lower to 2.55 higher)	MID = 1.94 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Family Roles subscale, 3-15, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 10.71	MD **0.4 lower** (1.94 lower to 1.14 higher)	MID = 1.86 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome	100 (1 RCT)	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported	MD **0.23 higher** (1.62 lower	MID = 2.39 (0.5 x median

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Measures (Stroke-Specific Quality of Life - Fine Motor Tasks subscale, 5-25, higher values are better, final values) at End of Intervention	follow-up: 3 months			Outcome Measures at End of Intervention was 20.23	to 2.08 higher)	control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Language subscale, 5-25, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 21.9	MD **0.06 higher** (1.46 lower to 1.58 higher)	MID = 1.90 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Mobility subscale, 12-60, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 23.1	MD **0.59 higher** (1.96 lower to 3.14 higher)	MID = 3.42 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Mood subscale, 5-25, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 17.76	MD **0.83 higher** (1.19 lower to 2.85 higher)	MID = 2.41 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures	100 (1 RCT) follow-up: 3 months	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome	MD **0.33 higher** (1.19 lower	MID = 1.85 (0.5 x median

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
(Stroke-Specific Quality of Life - Personality subscale, 3-15, higher values are better, final values) at End of Intervention				Measures at End of Intervention was 10	to 1.85 higher)	control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Self-Care subscale, 5-25, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 19.59	MD **1.39 higher** (0.62 lower to 3.4 higher)	MID = 2.67 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Social Roles subscale, 5-25, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 13.71	MD **0.88 higher** (1.4 lower to 3.16 higher)	MID = 2.80 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Thinking subscale, 3-15, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 9.34	MD **0.57 higher** (0.99 lower to 2.13 higher)	MID = 1.97 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life -	100 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of	MD **0.43 higher** (0.41 lower to 1.27 higher)	MID = 1.16 (0.5 x median control group SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Vision subscale, 3-15, higher values are better, final values) at End of Intervention				Intervention was 13.59		
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Work Productivity subscale, 3-15, higher values are better, final values) at End of Intervention	100 (1 RCT) follow-up: 3 months	⊕⊕◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 9.67	MD **0.4 higher** (1.15 lower to 1.95 higher)	MID = 2.05 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Aphasia Quality of Life - General, Stroke Specific Quality of Life [different scale ranges], higher values are better, final values) at End of Scheduled Follow-up	46 (2 RCTs) follow-up: mean 5 months	⊕◯◯◯ Very low[b,f]	-	-	SMD **0.05 SD lower** (0.64 lower to 0.53 higher)	MID = 0.5 SD (SMD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Energy subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⊕⊕◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 9.64	MD **0.27 higher** (1.13 lower to 1.67 higher)	MID = 1.68 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome	100 (1 RCT)	⊕◯◯◯	-	The mean stroke-Specific Patient Reported	MD **0.3 higher** (0.97 lower	MID = 1.48 (0.5 x median

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Measures (Stroke Specific Quality of Life - Family Roles subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up	follow-up: 12 months	Very low[a,b]		Outcome Measures at End of Scheduled Follow-up was 11.37	to 1.57 higher)	control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Fine Motor Tasks subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 20.79	MD **0.7 higher** (1.05 lower to 2.45 higher)	MID = 2.31 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Language subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 21.32	MD **0.86 higher** (0.66 lower to 2.38 higher)	MID = 2.02 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Mobility subscale, 12-60, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 24.87	MD **0** (2.05 lower to 2.05 higher)	MID = 2.58 (0.5 x median control group SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Mood subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 18.46	MD **1.18 higher** (0.74 lower to 3.1 higher)	MID = 2.43 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Personality subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 10.54	MD **0.38 lower** (1.85 lower to 1.09 higher)	MID = 1.84 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Self-Care subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 21.22	MD **0.98 higher** (0.63 lower to 2.59 higher)	MID = 2.23 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Social Roles subscale, 5-25, higher values are better, final values) at End	100 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 14.89	MD **2.51 higher** (0.14 higher to 4.88 higher)	MID = 2.90 (0.5 x median control group SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
of Scheduled Follow-up						
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Thinking subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⊕⊕◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 9.86	MD **0.23 higher** (1.29 lower to 1.75 higher)	MID = 1.80 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Vision subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⊕⊕◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 13.7	MD **0.28 higher** (0.63 lower to 1.19 higher)	MID = 1.23 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Work Productivity subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up	100 (1 RCT) follow-up: 12 months	⊕◯◯◯ Very low[a,b]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 11.14	MD **0.48 higher** (0.91 lower to 1.87 higher)	MID = 1.68 (0.5 x median control group SD)
Health Service Usage (rehospitalisation) at End of Intervention	336 (3 RCTs) follow-up: mean 4 months	⊕◯◯◯ Very low[h,m,q]	RD -0.04 (-0.17 to 0.09)	116 per 1,000	**40 fewer per 1,000** (170 fewer to 90 more) [q]	Precision calculated through Optimal Information Size (OIS) due to zero events in

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
						some studies. OIS determined power for the sample size = 0.97 (0.8-0.9 = serious, <0.8 = very serious) MID (clinical importance) = 50 per 1000
Health Service Usage (rehospitalisation) at End of Scheduled Follow-up	592 (3 RCTs) follow-up: mean 6.5 months	⊕◯◯◯ Very low[b,m]	RR 0.87 (0.68 to 1.11)	333 per 1,000	**43 fewer per 1,000** (107 fewer to 37 more)	MID (precision) = RR 0.80 – 1.25 MID (clinical importance) = 50 per 1000
Health Service Usage (Days Hospitalised, frequency, lower values are better, final values) at End of Intervention	49 (1 RCT) follow-up: 3 months	⊕◯◯◯ Very low[b,m]	-	The mean health Service Usage at End of Intervention was 2.73	MD **1.86 days lower** (4.36 lower to 0.64 higher)	MID = 3.05 (0.5 x median control group SD)
Health Service Usage (Days Hospitalised, frequency, lower values are better, final values) at End of Scheduled Follow-up	49 (1 RCT) follow-up: 6 months	⊕◯◯◯ Very low[b,m]	-	The mean health Service Usage at End of Scheduled Follow-up was 5.32	MD **3.72 days lower** (7.67 lower to 0.23 higher)	MID = 4.85 (0.5 x median control group SD)
Health Service Usage (Therapy Hours, frequency, final values) at End of Intervention	49 (1 RCT) follow-up: 3 months	⊕◯◯◯ Very low[b,m]	-	The mean health Service Usage at End of Intervention was -15.1	MD **6.45 hours higher** (2.77 lower to 15.67 higher)	MID = 10.05 (0.5 x median control group SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
Health Service Usage (Therapy Hours, frequency, final values) at End of Scheduled Follow-up	49 (1 RCT) follow-up: 6 months	⨁◯◯◯ Very low[b,m]	-	The mean health Service Usage at End of Scheduled Follow-up was -10.5	MD **7.93 hours higher** (0.25 lower to 16.11 higher)	MID = 10.05 (0.5 x median control group SD)
Health Service Usage (Physician Visits, frequency, lower values are better, final values) at End of Intervention	49 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[b,m]	-	The mean health Service Usage at End of Intervention was -0.8	MD **0.94 higher** (0.3 lower to 2.18 higher)	MID = 1.05 (0.5 x median control group SD)
Health Service Usage (Physician Visits, frequency, lower values are better, final values) at End of Scheduled Follow-up	49 (1 RCT) follow-up: 6 months	⨁◯◯◯ Very low[b,m]	-	The mean health Service Usage at End of Scheduled Follow-up was -0.8	MD **1.01 higher** (0.4 lower to 2.42 higher)	MID = 1.2 (0.5 x median control group SD)
Adverse Events at End of Intervention	346 (2 RCTs) follow-up: 3 months	⨁◯◯◯ Very low[k,p,r]	RD 0.01 (-0.02 to 0.05)	20 per 1,000	**10 more per 1,000** (20 fewer to 50 more) [q]	Sample size used to determine precision: >350 = No imprecision 70-350 = serious imprecision <70 = very serious imprecision
Adverse Events at End of Scheduled Follow-up	715 (3 RCTs) follow-up: mean 10 months	⨁◯◯◯ Very low[b,d,h]	RR 0.85 (0.35 to 2.07)	106 per 1,000	**16 fewer per 1,000** (69 fewer to 113 more)	MID (precision) = RR 0.8 – 1.25
Adverse Events (Recurrent Stroke) at End	400 (1 RCT)	⨁⨁◯◯ Low[b]	RR 3.37 (0.78	15 per 1,000	**36 more per 1,000**	MID (precision

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with inactive control	Risk difference with self-management	
of Scheduled Follow-up	follow-up: 12 months		to 14.61)		(3 fewer to 209 more)	) = RR 0.8 – 1.25

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

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

c. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to deviations from the intended intervention, missing outcome data and bias in selection of the reported results)

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

e. Includes a study with a cluster randomised design, the number of participants includes the number of clusters (in this study, the total number of participants was 78. 40 in the intervention arm, 38 in the control arm).

f. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to deviations from the intended intervention and bias in selection of the reported result)

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

h. Downgraded by 1 or 2 increments due to heterogeneity, subgroup analysis not possible

i. Downgraded by 1 increment as the majority of the evidence was at high risk of bias (due to bias due to deviations from the intended interventions)

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

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

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

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

n. Includes a study with a cluster randomised design, the number of participants includes the number of clusters (in this study, the total number of participants was 269. 145 in the intervention arm, 124 in the control arm).

o. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias due to missing outcome data)

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

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

r. Downgraded by 1 to 2 increments for imprecision due to zero events and small sample size

1

2

1.1.6.1 Self-management compared to active control

Table 4: Clinical evidence summary: self-management compared to active control

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with active control	Risk difference with self-management	
Person/Participant Generic Health-Related Quality of Life (EQ-VAS, 0-100, higher values are better, final values) at End of Intervention	213 (1 RCT) follow-up: 5 days	⊕⊕◯◯ Low[a]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Intervention was 62.27	MD **1.2 higher** (4.06 lower to 6.46 higher)	MID = 9.7 (0.5 x median baseline SD)
Person/Participant Generic Health-Related Quality of Life (EQ-VAS, 0-100, higher values are better, final values) at End of Scheduled Follow-up	172 (1 RCT) follow-up: 6 months	⊕⊕◯◯ Low[a]	-	The mean person/Participant Generic Health-Related Quality of Life at End of Scheduled Follow-up was 64.29	MD **0.51 higher** (5.3 lower to 6.32 higher)	MID = 9.7 (0.5 x median baseline SD)
Self-Efficacy (Liverpool Self-Efficacy Scale, 11-44, higher values are better, final values) at End of Intervention	213 (1 RCT) follow-up: 5 days	⊕⊕◯◯ Low[a]	-	The mean self-Efficacy at End of Intervention was 29.83	MD **0.54 lower** (2.16 lower to 1.08 higher)	MID = 2.4 (0.5 x median baseline SD)
Self-Efficacy (Liverpool Self-Efficacy Scale, 11-44, higher values are better, final values) at End of Scheduled Follow-up	172 (1 RCT) follow-up: 6 months	⊕⊕◯◯ Low[a]	-	The mean self-Efficacy at End of Scheduled Follow-up was 30.91	MD **0.33 lower** (2.09 lower to 1.43 higher)	MID = 2.4 (0.5 x median baseline SD)
Psychological Distress - Depression (Hospital Anxiety Depression Scale, Hospital Anxiety Depression Scale - Depression Subscale	326 (2 RCTs) follow-up: mean 6 weeks	⊕⊕◯◯ Low[a]	-	-	SMD **0.22 SD lower** (0.44 lower to 0)	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with active control	Risk difference with self-management	
[different scale ranges] lower values are better, final values) at End of Intervention						
Psychological Distress - Depression (Hospital Anxiety Depression Scale, Hospital Anxiety Depression Scale - Depression Subscale [different scale ranges] lower values are better, final values) at End of Scheduled Follow-up	285 (2 RCTs) follow-up: mean 7.5 months	⨁⨁◯◯ Low[a]	-	-	SMD **0.12 SD lower** (0.35 lower to 0.11 higher)	MID = 0.5 SD (SMD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Communication Subscale, 0-100, higher values are better, final values) at End of Intervention	172 (1 RCT) follow-up: 5 days	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 86.91	MD **3.02 lower** (8.16 lower to 2.12 higher)	MID = 8.4 (0.5 x median baseline SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Emotion Subscale, 0-100, higher values are better, final values) at End of Intervention	172 (1 RCT) follow-up: 5 days	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 58.62	MD **1.65 lower** (5.56 lower to 2.26 higher)	MID = 6.2 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with active control	Risk difference with self-management	
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Memory Subscale, 0-100, higher values are better, final values) at End of Intervention	172 (1 RCT) follow-up: 5 days	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 82.19	MD **1.38 lower** (6.37 lower to 3.61 higher)	MID = 8.5 (0.5 x median baseline SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Physical Functioning Subscale, 0-100, higher values are better, final values) at End of Intervention	172 (1 RCT) follow-up: 5 days	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 70.65	MD **1.82 higher** (5.2 lower to 8.84 higher)	MID = 12.1 (0.5 x median baseline SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Social Participation Subscale, 0-100, higher values are better, final values) at End of Intervention	172 (1 RCT) follow-up: 5 days	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Intervention was 63.12	MD **3.21 higher** (4.53 lower to 10.95 higher)	MID = 13.3 (0.5 x median baseline SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Communication Subscale, 0-100, higher values are better, final values) at End	213 (1 RCT) follow-up: 6 months	⨁⨁◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 87.17	MD **0.05 lower** (4.48 lower to 4.38 higher)	MID = 8.4 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with active control	Risk difference with self-management	
of Scheduled Follow-up						
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Emotion Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up	213 (1 RCT) follow-up: 6 months	⊕⊕◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 59.84	MD **0.6 higher** (2.62 lower to 3.82 higher)	MID = 6.2 (0.5 x median baseline SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Memory Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up	213 (1 RCT) follow-up: 6 months	⊕⊕◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 83.32	MD **1.59 higher** (2.88 lower to 6.06 higher)	MID = 8.5 (0.5 x median baseline SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Physical Functioning Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up	213 (1 RCT) follow-up: 6 months	⊕⊕◯◯ Low[a]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 68.63	MD **2.99 higher** (3.05 lower to 9.03 higher)	MID = 12.1 (0.5 x median baseline SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Social Participation Subscale, 0-	237 (2 RCTs) follow-up: mean 9 months	⊕◯◯◯ Very low[c,d]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled	MD **3.54 higher** (2.85 lower to 9.93 higher)	MID = 13.3 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with active control	Risk difference with self-management	
100, higher values are better, final values) at End of Scheduled Follow-up				Follow-up was 54.9		
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Self-Assessed Recovery Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up	24 (1 RCT) follow-up: 12 months	⊕◯◯◯ Very low[e,f]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 59	MD **4 lower** (21.22 lower to 13.22 higher)	MID = 13 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Activities of Daily Living, 0-100, higher values are better, final values) at End of Scheduled Follow-up	24 (1 RCT) follow-up: 12 months	⊕◯◯◯ Very low[e,f]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 64	MD **6 higher** (13.22 lower to 25.22 higher)	MID = 10 (0.5 x median control group SD)
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life, 1-5, higher values are better, final values) at End of Scheduled Follow-up	113 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[e,f]	-	The mean stroke-Specific Patient Reported Outcome Measures at End of Scheduled Follow-up was 3.5	MD **0.3 higher** (0.01 lower to 0.61 higher)	MID = 0.38 (0.5 x median baseline SD)
Health Service Usage (Hospital readmissions, frequency,	113 (1 RCT) follow-up: 12 months	⊕◯◯◯	-	The mean health service usage (Hospital	MD **0.5 lower** (1.75 lower	MID = 2.05 (0.5 x

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with active control	Risk difference with self-management	
lower values are better, final values) at End of Scheduled Follow-up		Very low[f,i]		readmissions) was 1.5	to 0.75 higher)	control group SD)
Health Service Usage (General Practitioner Attendance, frequency, final values) at End of Scheduled Follow-up	113 (1 RCT) follow-up: 12 months	⊕◯◯◯ Very low[e,f]	-	The mean health service usage (general practitioner attendance) was 11	MD **2.3 higher** (2.95 lower to 7.55 higher)	MID = 5.5 (0.5 x control group SD)
Adverse Events at End of Intervention	260 (1 RCT) follow-up: 5 days	⊕◯◯◯ Very low[a,g]	RD 0.00 (-0.01 to 0.01)	0 per 1,000	**0 fewer per 1,000** (10 fewer to 10 more) [h]	Sample size used to determine precision: 75-150 = serious imprecision, <75 = very serious imprecision.
Adverse Events at End of Scheduled Follow-up	260 (1 RCT) follow-up: 6 months	⊕◯◯◯ Very low[a,f]	RR 0.50 (0.05 to 5.45)	15 per 1,000	**8 fewer per 1,000** (15 fewer to 68 more)	MID (precision) = RR 0.8-1.25.

a. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to missing outcome data and bias in measurement of the outcome)

b. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias arising from the randomisation process and bias in the selection of the reported result)

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

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

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

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

g. Downgraded by 1 to 2 increments for imprecision due to zero events and small sample size

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

i. Downgraded by 1 or 2 increments due to the outcome not directly matching the protocol

1.1.7 Economic evidence

1.1.7.1 Included studies

Four health economic studies with relevant comparisons were included in this review.[9, 17, 32, 35] One study compared a self-management intervention to an active control intervention[35], while the remaining three studies had an inactive control intervention.[9, 17, 32]

Note that the study with an active control as the comparator[17, 35] was also included as part of the community participation review for this guideline. These are summarised in the health economic evidence profiles below (Table 5 and Table 6) and the health economic evidence tables in Appendix H.

1.1.7.2 Excluded studies

No relevant health economic studies were excluded due to assessment of limited applicability or methodological limitations.

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

1.1.8 Summary of included economic evidence

Table 5: Health economic evidence profile: Self-management versus inactive control

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
Jones 2016[17] (UK)	Partially applicable[a]	Potentially serious limitations[b]	• Within-RCT analysis (feasibility cluster-RCT, Jones 2016[17]) • Cost-consequence analysis (various health outcomes) • Population: Patients referred for community stroke rehab who could follow a two-stage command and/or have a carer to assist. • Comparators: 1. Community stroke rehabilitation (CSR) (n=38); including PT, OT and SLT (if required). 2. Self-management program (n=40). Clinicians were trained to integrate seven defined key principles of self-management into existing CSR sessions, supported by a patient-held workbook. • Follow up: 12 weeks	£606 to £711[c]	From clinical review (2−1):[17(d)] • Quality of life (SF-12 physical subscale): 3.2 (-16.11, 22.51) • Quality of life (SF-12 mental subscale): 3.3 (-18.88, 25.48) • Activities of Daily Living (NEADL): 3.4 (-31.84,36.64) • Depression HADS-D[e]: -1 (-9.23, 7.23) • Self-efficacy (SSEQ): 4.9 (-14.37 to 24.17)	n/a	No sensitivity analyses undertaken. It was noted that rehabilitation costs varied substantially between the two cluster units within the self-management program group.
Te Ao 2022[32] (New Zealand)	Partially applicable[f]	Potentially serious limitations[g]	• Within-trial analysis of the Taking Charge after Stroke (TaCAS)[12] RCT included in the clinical review. • Cost-utility analysis (health outcome: QALYs). • Population: Adults who experienced a stroke (<16 weeks prior), living in the community.	(2−1): Saves £1,173[h]	(2−1): 0.04 QALYs gained[i]	Results suggested that the 'Take Charge' intervention dominates usual care (lower costs and higher	The primary analysis results were based on a societal perspective; therefore, the results of the sensitivity analyses do not assess the level of uncertainty of the intervention's cost-

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
			• Comparators: 1) Inactive control group (n=130) received usual care, including acute inpatient stroke care and early stroke rehabilitation care along with inpatient and community stroke rehabilitation. 2) Two 'Take Charge' groups (n=270) received sessions which were one-to-one explorations of the individuals' views on what is important in their lives and what they wanted to prioritise over the following year. Group 1 received a single session, while group 2 received a second session 6 weeks after the first. Each session lasted 30-60 minutes). • Follow up: 12 months after stroke			QALYs), however QALY gains were not statistically significant between groups.	effectiveness for a healthcare perspective. The results of the societal perspective also suggested that the 'Take Charge' intervention dominates usual care.
Forster 2021[9] (UK)	Partially applicable[(j)]	Potentially serious limitations[(k)]	• Exploratory within-trial analysis of the LoTS2Care cluster feasibility RCT included in the clinical review (same paper). • Cost-utility analysis (health outcome: QALYs) • Population: Adults between 4 and 6 months since confirmed primary diagnosis of stroke, resident in the community and their carers, and health and social care professionals in the included stroke services. • Comparators: 1) Usual care (n=124). Stroke services randomised to usual care (control) continued to deliver care as	2−1: saves £520[(l)]	2−1: 0.002 Fewer QALYs	£260,140 per QALY lost [(m)]	The primary analysis results were based on a societal perspective, which produced an ICER of £65,835 per QALY lost. Sensitivity analyses were conducted from a societal perspective and so do not assess the level of uncertainty of the intervention's cost-effectiveness for a healthcare perspective.

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
			determined by local policy and practices. 2) New Start intervention (n=145). Key components were problem-solving, self-management with survivors and carers, help with obtaining usable information, and helping survivors and their carers build sustainable, flexible support networks. The average duration of delivery of New Start intervention by facilitator was 58.6 minutes. • Follow-up: 9 months				

Abbreviations: HADS-D= Hospital Anxiety and Depression Scale – Depression subscale (higher values are worse); EQ-5D-5L= EuroQol 5 dimensions 5 levels (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); ICER= incremental cost-effectiveness ratio; NEALD= Nottingham Extended Activities of Daily Living scale; OT= occupational therapy/therapist; PT= physiotherapy/therapist; QALY= quality-adjusted life years; RCT= randomised controlled trial; SLT= speech and language therapy/therapist; SSEQ= Stroke Self-efficacy Questionnaire

(a) 2013 UK resource use and 2012 costs may not reflect current UK NHS context. QALYs and cost per QALY gained were not calculated.

(b) Within-trial analysis of costs and clinical outcomes and so only reflects this study and not the wider evidence base identified in the clinical review. Feasibility trial was not designed to evaluate intervention effects with certainty nor long enough to estimate the duration of treatment effect. 12-week trial with no long-term follow-up data may be too short to show much change in healthcare resource use between groups. Results of the analysis of health and social care resource use are not presented, and it is not clear which items have been allocated as stroke-related. Assumptions were used to estimate patient-related non-face-to-face time. Sensitivity analyses were not conducted for the results due to the study design aims seeking to assess the feasibility of a definitive RCT.

(c) 2012 UK pounds. Cost components incorporated: Total hours of face to face and non-face to face contact (including training) for OTs, PTs, SLTs and therapy assistants (TA); other stroke-related health and social services (for example GP, practice nurse or other professionals and social care). Patient-related non-face-to-face time was estimated using three alternative assumptions on the ratio of face-to-face to non-face-to-face time (High is 1:1 for OT, PT, SLT and 1:0.5 for TA; Middle is 1:0.5 for OT, PT, SLT and 1:0.25 for TA; Low is 1:0.25 for OT, PT, SLT and for TA).

(d) Mean difference taken from Appendix E guideline clinical review.

(e) Higher scores on HADS indicate worse morbidity, for all other scales this is reversed.

(f) New Zealand version of the EQ-5D-5L questionnaire was used to estimate QALYs when NICE reference case specifies that EQ-5D-3L is preferred. New Zealand 2018 unit costs and 2017 resource use estimates may not reflect current UK NHS context.

(g) Within-trial analysis of costs and outcomes based on a single RCT included in clinical review and so only reflects this study and not the wider evidence base identified in the clinical review. Probabilistic analysis and sensitivity analyses were performed for the societal perspective only and so are not available for the results presented here. One author declared a potential conflict of interest with respect to the research, authorship, and/or publication of this article.

(h) 2018 US dollars converted to UK pounds.[29] US dollars were converted from 2017/18 New Zealand dollars ($NZ). Bootstrap results presented here are based on 1000 bootstrap samples. Costs have been presented to reflect an NHS and PSS perspective to be consistent with NICE reference case; reported analysis uses societal perspective for the base case that included non-healthcare costs (short-term loss of income and informal care costs). Cost components incorporated: Cost per 'Take Charge' session, outpatient rehabilitation services, home and hospital-level residential care, home help and personal care.

(i) There were no statistically significant differences at 12 months after stroke for EQ-5D-5L (p>0.05).
(j) EQ-5D-5L was used to estimate QALYs when NICE reference case specifies that EQ-5D-3L is preferred.
(k) Exploratory within-trial analysis of a single RCT, therefore results only reflect this study and not the wider evidence base identified in the clinical review. Furthermore, the primary purpose of the analysis was to assess the feasibility of conducting an economic evaluation as part of a definitive trial and was therefore not designed to evaluate intervention effects with certainty. Probabilistic analysis and sensitivity analyses were performed for the societal perspective only and so are not available for the ICER of interest presented here.
(l) 2017 UK pounds (£). Costs have been presented to reflect an NHS and PSS perspective to be consistent with NICE reference case; reported analysis uses societal perspective for the base case that included non-healthcare costs (Patient and carer out-of-pocket expenses and time off work). Cost components incorporated: Interventions costs, community health and social services (for example: GP/Nurse/Rehabilitation MDT consultations, home help/care worker appointments and family support groups) and hospital services (for example: inpatient days, day centre, outpatient and A&E visits and residential care).
(m) When the ICER is over £20,000 per QALY lost, intervention 2 is considered the cost-effective option.

Table 6: Health economic evidence profile: Self-management versus active control

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
Van Mastrigt 2020[35] (Netherlands)	Partially applicable[(a)]	Potentially serious limitations[(b)]	• Within-RCT analysis (Restore4Stroke, Tielemans 2015[34]) • Cost-utility analysis (QALYs) • Population: Adults with stroke at least six weeks prior to recruitment, reporting problems in social reintegration • Comparators: 1. Stroke-specific education only (n=55); 10 weeks of three 1-hour sessions in the first 6 weeks and one 1-hour booster session in the 10th week. Treatment was provided by one rehabilitation medicine professional (i.e., a psychologist or a social worker) following 1.5 hours of training. 2. Self-management intervention (SMI) based on proactive coping action planning (n=58); 10 weeks of 2-hour sessions for the 6 weeks and one 2-hour booster session in the 10th week. Group-based treatment (4-8 per group) by two rehabilitation staff who received one-day training on SMI content.	£414[(c)]	0.05 QALYs	£8,284 per QALY gained.	None available for the ICER estimate presented here.

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
			• Time horizon: 12 months				

Abbreviations: ICER= incremental cost-effectiveness ratio; QALY= quality-adjusted life years; RCT= randomised controlled trial.

(a) Dutch 2012-2014 resource use and 2012-unit costs may not reflect current UK NHS context.

(b) Within-trial analysis of costs and outcomes based on Tielemans 2015 RCT included in clinical review and so only reflects this study and not the wider evidence base identified in the clinical review. Baseline differences between intervention groups were not corrected for gender and stroke characteristics (number of months post-stroke, type of stroke and stroke history). Probabilistic analysis and sensitivity analyses were performed for the societal perspective only and so are not available for the ICER of interest presented here.

(c) 2012 Euros converted to UK pounds. Costs have been recalculated to reflect an NHS and PSS perspective to be consistent with NICE reference case; reported analysis uses societal perspective for the base case that includes productivity costs; a sensitivity analysis with a healthcare perspective is presented but this excludes costs considered to be relevant including intervention costs, tools and home adaptations. Cost components incorporated: intervention costs (including psychologist and social worker wages for training and delivery of care and workbooks for professionals and patients); healthcare costs (GP and medical consultants, alternative care, prescription drugs, and home care); tools (e.g., braces and special glasses); and home adjustments (e.g., toilet or shower adjustment).

1.1.9 Economic model

This area was not prioritised for new cost-effectiveness analysis.

1.1.10 Unit costs

Self-management interventions require additional resource use compared to not providing such interventions. Studies included in the clinical review reported varied resource use (see Table 1 for details) due to:

- Variation in the delivery of therapy sessions: Studies reported either individual and group-based sessions or a combination of both. Group therapy will be lower cost per person. Some studies would also begin with face-to-face sessions before moving to telephone calls as part of the follow-up. Telephone calls will incur a lower cost per person than in-person appointments.
- Significant variation in the frequency and duration of the self-management intervention delivered, with sessions ranging from 20 minutes to 2.5 hours, occurring 1-7 days per week. In the included clinical studies, the interventions were delivered for between 5 weeks and 9 months and had follow-up periods from 5-12 months.
- Staff who delivered the intervention varied but it was primarily delivered by a member of the rehabilitation team or a healthcare professional trained to provide stroke-related care such as nurses, physiotherapists, occupational therapists, and psychologists. One study (Lund 2012[19]) had occupational therapists as well as trained volunteers to deliver a self-management course.
- Additional equipment required as part of the intervention, such as staff-training costs and workbook and website materials.
- Clinical setting: most studies were conducted in a community setting, however three Studies (Chang 2011[5], Chen 2018[6] and Sit 2016[24]) took place in an inpatient setting.

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

Table 7: Unit costs of health care professionals who may be involved in delivering self-management interventions

Resource	Cost per working hour[(a)]		Source
	Hospital	Community	
Band 6/7 PT, OT or SLT	£53/£64	£55/£67	PSSRU 2021{, #4635}
Band 6/7 Nurse	£54/£64	£58/£69	
Band 7 psychologist	£64	£67	PSSRU 2021{, #4635}, assumed to be the same as dietitian[(b)]
Band 3 Clinical support worker higher level	£33	£32	PSSRU 2021{, #4635}, estimated based on agenda for change band 3 salary[(c)]

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

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

b) Same assumption was used in the NICE chronic pain guideline.[27]

c) Band 3 not in PSSRU 2021 so salary was assumed to equal Band 3 Mean annual basic pay per FTE for administration and estates staff, NHS England (PSSRU2021 p.149).

1.1.11 Evidence statements

Effectiveness/Qualitative

Economic

- One cost-utility analysis found that in post-stroke adults, a self-management intervention (based on proactive coping action planning) was cost-effective (ICER of £8,284 per QALY) compared to an active control group receiving a stroke-specific education programme only. This analysis was assessed as partially applicable with potentially serious limitations.
- One cost-utility analysis found that in post-stroke adults, the 'New Start' self-management intervention (for problem solving and building sustainable support networks) was cost-effective (ICER of £260,140 per QALY lost, lower costs but also fewer QALYs) compared to inactive control. This analysis was assessed as partially applicable with potentially serious limitations.
- One cost-utility analysis found that in post-stroke adults, 1-2 sessions of the 'Take Charge' intervention (for goal setting and prioritisation) dominated inactive control, incurring lower costs (£1,173 less per participant) and greater QALYs (0.04 QALYs gained). However, QALY gains were not statistically significant between groups. This analysis was assessed as partially applicable with potentially serious limitations.
- One cost-consequence analysis found that in post-stroke adults, a community-based self-management program incurred higher costs (£606 to £711 more patient) and clinically important benefits in terms of quality of life (mean difference of 3.2 and 3.3 reported for the SF-12 physical and mental subscales, respectively) compared to inactive control. This analysis was assessed as partially applicable with potentially serious limitations.

1.1.12 The committee's discussion and interpretation of the evidence

1.1.12.1. The outcomes that matter most

The committee included the following outcomes: Person/participant generic health-related quality of life, carer health-related quality of life, self-efficacy, activities of daily living, participation restrictions, psychological distress (depression), stroke-specific patient-reported outcome measures, health service usage (hospital readmissions, general practitioner attendance, emergency department visits), participant satisfaction, adverse events. Each of these outcomes were investigated at the end of the intervention and the end of the scheduled follow-up, as determined by the individual studies. All outcomes were considered equally important for decision making and have therefore all been rated as critical. Person/participant generic health-related quality of life outcomes were considered particularly important as a holistic measure of the impact on the person's quality of living.

The committee chose to investigate these outcomes at <6 months and ≥6 months, as they considered that there could be a difference in the short term and long-term effects.

There was evidence available for the majority of outcomes. However, for the comparison between self-management and inactive control (usual care, waiting list) there was no available evidence for participant satisfaction or health service usage (emergency department visits and general practitioner attendance). For the comparison between self-management and active control (other intervention that was not self-management) there was no available data for carer generic health-related quality of life, activities of daily living,

participation restrictions, participant satisfaction or health service usage (hospital readmissions).

1.1.12.2 The quality of the evidence

Evidence was available for most outcomes when comparing self-management to inactive controls (usual care, waiting list). The quality of evidence ranged from high to very low, although the majority was of very low quality. Outcomes were most commonly downgraded for risk of bias and imprecision. The most common domains where risk of bias was identified were bias due to deviations from the intended interventions and bias due to missing outcome data. These biases were likely non-directional and were a result of the nature and duration of the studies included in the review, which was highlighted to the committee. Some degree of imprecision was seen in the majority of the outcomes. This was largely due to small sample sizes within analyses. One outcome was downgraded for indirectness due to the outcome not directly matching the protocol. This was due to the study in question reporting emergency department visits, which was accepted as an indirect measure of hospital readmissions. In the small number of analyses where inconsistency was seen, heterogeneity was not resolved by subgroup analyses. This resulted in the use of random effects analysis for this outcome and downgrading for inconsistency.

1.1.12.3 Benefits and harms

1.1.12.3.1 Key uncertainties

The content and duration of self-management interventions varied significantly between studies. The most variable component of the interventions was the number of contact sessions with a health professional or group, which ranged from a single session to daily contacts. In general, interventions providing weekly sessions that lasted between one and two hours were most common, although the large variability in interventions was highlighted as a significant issue in the interpretation of the evidence. Additionally, the components of the interventions were varied between studies, with the majority of studies using a mixture of methods including goal setting, education and workbook tasks.

The heterogeneity in the contents of the interventions limited the committee's ability to come to conclusions on the evidence presented. The committee agreed that further research would be required to determine:

- The required frequency of sessions to achieve a benefit to people after stroke.
- The specific components of the interventions that make them successful.

The committee acknowledged the evidence presented but agreed that there were additional benefits to self-management interventions that may not be captured by quantitative research (such as effects on motivation and interactions with rehabilitation). They acknowledged the value of considering qualitative experiences to gain a thorough understanding of the interventions.

1.1.12.3.2 Self-management compared to inactive control

No outcomes were highlighted as preferentially important at the outset, but as the discussion of the evidence progressed there was a consensus that person generic health-related quality of life and hospital readmissions were of especially high importance. These were deemed to be of particular importance due to the typically depleted quality of life experienced in people after stroke and because of the serious burden that hospital admission places on the person and their carer.

A clinically important benefit with seen as a result of the self-management intervention in 5 outcomes measuring person/participant generic health-related quality of life. Three of these

were at the end of intervention timepoint (SF-36 role emotional, SF-12 physical component, SF-12 mental component), and 2 were at the end of scheduled follow-up (EQ-5D, SF-12 physical component). In contrast, a clinically important benefit was seen with inactive control in four outcomes also measuring person/participant generic health-related quality of life. All four of these were measured at the end of intervention time point (EQ-5D, SF-36 physical component, SF-36 vitality, SF-36 general health). All the clinically important differences highlighted above came from outcomes reported in single trials where the outcomes were all very low quality.

A mixed effect was seen in self efficacy and stroke-specific Patient-Reported Outcome Measures, where 1 outcome showed a clinically important benefit while others showed no clinically important difference. The committee noted that the outcome where a clinically important benefit was seen appeared to do so due to the outcome from one study which appeared to be an outlier which significantly inflated the effect. Therefore, they expected that the effect would likely otherwise show no clinically important difference but would trend towards a beneficial effect. No clinically important difference was identified in carer generic health-related quality of life, activities of daily living, participation restrictions, psychological distress – depression, health service usage and adverse events. Outcomes for carer generic health-related quality of life showed a trend towards a benefit of self-management while outcomes for health service usage showed a trend towards a benefit of inactive control. However, these trends were not of a sufficient magnitude to indicate a clinically important difference. Outcomes for activities of daily living, participation restrictions, psychological distress – depression, and adverse events were inconsistent; outcomes did not show a consistent trend towards a benefit of self-management or a benefit of inactive control. This evidence was acknowledged by the committee, but the low or very low quality of evidence and inclusion of a small number of studies with a small number of participants limited the impact of the outcomes.

The committee discussed the size of the effect for the healthcare utilisation outcomes. The first outcome where the effect was unclear was days hospitalised. This referred to the number of days an individual would spend in hospital following initial discharge. At both the end of intervention and end of scheduled follow-up timepoints the committee noted that there was a reduced number of days in hospital in the group of people involved in a self-management intervention. On considering this, the committee agreed that this was a potentially important finding. However, the evidence for this outcome was insufficient to draw conclusions from as it came from a single study which had a limited sample size and was of very low quality.

A similar discussion of the health service utilization (therapy hours) outcome was held. Here a potentially important effect was seen, but again this was from a single study of very low quality, limiting its use in the overall decision making process. Moreover, the benefit of self-management was debatable as more health service utilisation occurred in those who took part in the self-management programme. The committee noted that many of the self-management interventions included an educational element that encouraged participants to utilise the available health services, making it unclear whether an effect was a benefit of the intervention (people accessing more health services as following the intervention) or a harm (whether people were needing to access more health services because their needs were not being met).

On balance of the presented evidence and the committees' expert opinion, no recommendations were made. The vast majority of evidence indicated no clinically important difference between self-management and control treatments. Despite the lack of clinical evidence supporting self-management, it was agreed by the committee that self-management plays a useful role in the lives of people after stroke. It was agreed that self-management is unlikely to cause harm and so use could continue due to its potential benefits. The committee agreed on the need for further quantitative research, comparing components of self-management interventions, to provide an evidence base for the

widespread use of self-management. The need to consider qualitative evidence was also agreed by the committee to capture the benefits of self-management that are not seen through quantitative data.

1.1.12.3.3 Self-management compared to active control

There were no clinically important benefits or harms for this comparison. Evidence was limited to three studies when comparing self-management to active controls (other form of rehabilitation deemed not to be self-management). All three studies reported stroke-specific patient reported outcome measures, however the use of subscales in these studies prevented the combination of results in a single analysis.

Evidence was reported for person/participant generic health-related quality of life, self efficacy, psychological distress, stroke-specific patient reported outcome measures, health service usage (hospital readmissions and general practitioner attendance) and adverse events. All outcomes were low/very low quality. The committee did not comment on any outcomes specifically and acknowledged that overall evidence was lacking in both quantity and quality in order to have a significant impact, relative to outcomes in the previous comparison, on decision making.

On balance of the presented evidence and the committees' expert opinion, no recommendations were made. The vast majority of evidence indicated no clinically important difference between self-management and control treatments. Despite the lack of clinical evidence supporting self-management, it was agreed by the committee that self-management plays an important role in the lives of people after stroke. It was agreed that self-management is unlikely to cause harm and so use could continue due to its potential benefits. The committee agreed on the need for further quantitative research, comparing components of self-management interventions, to provide an evidence base for the widespread use of self-management. The need to consider qualitative evidence was also agreed by the committee to capture the benefits of self-management that are not seen through quantitative data.

1.1.12.4 Cost effectiveness and resource use

Four studies met the inclusion criteria for this review, with one study comparing a self-management intervention to an active control intervention[35], while the remaining three studies compared self-management to an inactive control intervention.[9, 17, 32]

The study containing an active control intervention was also included as part of the community participation review for this guideline.[17, 35] This was a within-trial cost-utility analysis that compared a self-management intervention (SMI) (based on proactive coping action planning) to a stroke-specific education only programme. The analysis adopted a Dutch societal perspective for the base case; however, it was possible to report the results excluding non-health and social care costs to reflect an NHS and PSS perspective. Based on the revised calculations the incremental cost was estimated to be £414, much of which is attributable to the intervention and home costs. Despite this, tools and home adjustment costs were lower in the self-management group compared to the active control group. Using the scenario that applied the UK tariff provided a QALY gain of 0.05 and combined with the incremental cost this produced a cost-effectiveness ratio of £8,284 per QALY gained. This study was assessed as partially applicable due to the use of 2012 to 2014 Dutch resource use and 2012-unit costs. Potentially serious limitations were identified as the within-trial analysis of costs and outcomes meant that the study results were representative of only one study included in the review. Sensitivity analyses were performed for the Dutch societal perspective and not for the results generated to suit the NICE reference case, meaning that it was not possible for the committee to ascertain the probability that the self-management intervention would remain cost-effective for the NICE £20,000 threshold. The committee was

informed that a sensitivity analysis using a healthcare perspective was conducted, however, this excluded costs that the NHS would typically cover.

The first study to include an inactive group was a within-trial cost-consequence analysis of a feasibility-cluster RCT[17] that compared a self-management programme (revolving around principles such as goal setting, problem solving and self-discovery) to standard community stroke rehabilitation (CSR), and this included access to physiotherapy, occupational therapy, and speech and language therapy (if required). The study was conducted across four UK sites, with two sites for each comparator. The total mean cost per participant for both interventions was not reported as the study reported the total costs for each cluster. Using a weighted average of the costs for each comparator across the two sites provided estimates of the incremental cost, which were then presented to the committee. This found the additional cost of providing the self-management intervention to range between £606 to £711 pounds, depending on the assumed ratio face-to-face to non-face-face time. Costs also differed across sites due to other stroke-related health and social resource use, as 1 site used 20 hours of therapy on average while the other had 50 therapy hours. The incremental effects are included as per the clinical review, which found clinically important benefits in terms of quality of life for the self-management intervention compared to inactive control (mean difference of 3.2 and 3.3 reported for the SF-12 physical and mental subscales, respectively).

A cost-effectiveness ratio could not be provided as quality-adjusted life years (QALYs) were not calculated. For this reason, alongside the use of 2013 resource use and 2012-unit costs which may not reflect current UK NHS context, the committee agreed with the assessment that this study was partially applicable to this review. The study was also found to have potentially serious limitations as it was a within-trial analysis and so only reflects this study. Furthermore, the analysis was based on a feasibility trial that was not designed to evaluate intervention effects with certainty, and the 12-week follow-up period prevented the estimation of the duration of the long-term treatment effect (or changes in healthcare resource use between groups). In addition, no sensitivity analyses were conducted for the results. The use of different assumptions to estimate patient-related non-face-to-face time was another limiting factor against the certainty of the incremental costs.

The second study to include an inactive control group was a within-trial cost-utility analysis of a study included in the clinical review.[32] The analysis compared 1-2 sessions of the ‘Take Charge’ intervention, which focused on goal setting and prioritisation, to usual care (including inpatient care or rehabilitation, early supported discharge or community-based rehabilitation). Costs were recalculated to reflect an NHS and PSS perspective to be consistent with NICE reference case, as the reported analysis used a societal perspective for the base case that included non-healthcare costs (short-term loss of income and informal care costs). The results suggested that the ‘Take Charge’ intervention dominated usual care (£1,173 saving and 0.04 QALY gain) however it was noted that QALY gains were not statistically significant between groups. The study did report more improvements for activities of daily living, with a mean difference of 0.5 on the Barthel Index. The analysis was assessed as partially applicable as the New Zealand version of the EQ-5D-5L questionnaire was used to estimate QALYs when NICE reference case specifies that EQ-5D-3L is preferred. New Zealand 2018-unit costs and 2017 resource use estimates was also used which may not reflect the current UK NHS context. Potentially serious limitations were found, including the use of a single trial which meant that the results only reflect this study and not the wider evidence base identified in the clinical review. In addition, probabilistic analysis and sensitivity analyses were performed for the societal perspective only and so are not available for results presented here, and one author declared a potential conflict of interest with respect to the research, authorship, and/or publication of this article.

The third study that included an inactive control group was a within-trial cost-utility analysis of a cluster feasibility RCT included in the clinical review.[9] The analysis compared

the 'New Start' self-management intervention (for problem solving and building sustainable support networks) to usual care. Costs were presented to reflect an NHS and PSS perspective to be consistent with NICE reference case, as the reported analysis uses societal perspective for the base case that included non-healthcare costs (such as patient and carer out-of-pocket expenses and time off work). The results showed that the 'New Start' intervention was cost-effective (ICER of £260,140 per QALY lost) compared to inactive control. When an intervention is less costly and less effective, the ICER is presented as the cost per QALY loss, where an ICER of greater than £20,000 per QALY lost is considered cost effective. Of note, a Markov model was also conducted from a societal perspective to analyse future costs and benefits beyond the trial time horizon. Over a lifetime horizon, this analysis found that New Start was dominated by usual care (more costly and less effective). This analysis was uncertain and driven by small differences in total costs and total QALYs. The analysis was found to be partially applicable as EQ-5D-5L was used to estimate QALYs when NICE reference case specifies that EQ-5D-3L is preferred. Potentially serious limitations that were noted include that the study was a within-trial analysis of a single RCT, which meant that the results only reflected this study and not the wider evidence base identified in the clinical review. Furthermore, the primary purpose of the analysis was to assess the feasibility of conducting an economic evaluation as part of a definitive trial and was therefore not designed to evaluate intervention effects with certainty. Finally, probabilistic analysis and sensitivity analyses were only available from a societal perspective.

In addition to these studies, relevant unit costs were presented to the committee to aid consideration of cost effectiveness of self-management interventions, which require additional resource use compared to not providing such interventions, related to staff time and equipment. Studies included in the clinical review reported varied resource use, owing to a few factors such as the delivery of therapy sessions (either individual and group-based); the frequency and duration of therapy delivered (with sessions ranging from 20 minutes to 2.5 hours, occurring 1 to 5 days per week for between 5 weeks and 9 months); additional staff training costs or equipment (e.g. workbook and website materials.); clinical setting (most reported a community setting, however three took place in an inpatient setting) and staff delivering the intervention, which was usually a rehabilitation team member or a healthcare professional trained to provide stroke-related care but one study also included volunteers (which would generate less resource use). The committee felt uncertain towards the potential resource impact of a recommendation considering the variation in resource use requirements from the clinical studies, alongside uncertainty towards the study results of the economic evidence, as each study was a single-trial analysis that did not use probability sensitivity analyses to test the robustness of the study conclusions from a healthcare perspective.

The vast majority of clinical evidence indicated no clinically important difference between self-management and control treatments. However, the committee consensus was that their experiences with self-management interventions were not reflected in the included studies. There was agreement for the need of further quantitative research that could capture the benefits of self-management interventions currently observed in clinical practice. Additional research was also regarded as important for determining the frequency and specific components of such interventions required to achieve benefits for people after stroke, given the heterogeneous nature of the clinical evidence. For this reason, alongside the uncertainty towards the economic evidence the committee decided to not make a recommendation for self-management interventions. A research recommendation has been made.

1.1.12.5 Other factors the committee took into account

The committee discussed how self-management interventions are delivered in the United Kingdom. It was agreed that these may be delivered by NHS services, by charity organisations or as collaborations between both. The committee noted that access to these interventions was inconsistent across the country. They agreed that if services were found to

be beneficial in the future that they should be available across the country, rather than limited to specific regions.

In the discussion of the health service usage (hospital readmissions) outcome for self-management compared to inactive control, the committee noted that the outcome was solely based on results from a study carried out in the USA. Given the differences between healthcare services in the UK and the USA, this outcome was considered to have limitations in its applicability to the NHS.

1.1.13 Recommendations supported by this evidence review

This evidence supports the research recommendation on self-management in Appendix K.

1.1.14 References

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Appendices

Appendix A – Review protocols

Review protocol for the clinical and cost effectiveness of self-care management and/or supported self-care management compared with usual rehabilitation

ID	Field	Content
0.	PROSPERO registration number	CRD42021283322
1.	Review title	In people after stroke, what is the clinical and cost effectiveness of self management and/or supported self management compared with usual rehabilitation?
2.	Review question	3.2 In people after stroke, what is the clinical and cost effectiveness of self management and/or supported self management compared with usual rehabilitation?
3.	Objective	To assess the clinical and cost-effectiveness of self management (with or without support) for people after stroke.
4.	Searches	Key paper: Fryer, CE et al. (2016). Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews. 8. DOI: 10.1002/14651858.CD010442.pub2. The following databases (from inception) will be searched: • Cochrane Central Register of Controlled Trials (CENTRAL) • Cochrane Database of Systematic Reviews (CDSR) • Embase • MEDLINE • PsychINFO • CINAHL • AMED • Epistemonikas Searches will be restricted by: • English language studies • Human studies • Date limitation: From April 2016.

		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) Exclusion: • Children (age <16 years) • People who had a transient ischaemic attack

7.	Intervention	Self management interventions (including interventions specific to people after stroke and generic interventions)
		• Could be delivered face-to-face, postal, or online
		• The intervention must be aiming at empowering the stroke survivor to, at least in part, manage the following areas…
		  ○ Problem-solving
		  ○ Goal-setting
		  ○ Decision-making
		  ○ Self monitoring
		  ○ Coping with the condition
		  ○ An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning
		Including interventions provided by health professionals or lay leaders, or a combination of both

8.	Comparator	Usual care: • Inactive control intervention (for example: usual care, waiting list control)

		• Active control intervention (for example: information only, alternative intervention that was not considered self management)
9.	Types of study to be included	• Systematic reviews of randomised controlled trials • Randomised controlled trials (randomised at the individual participant level or via clusters with appropriate methods) If no randomised controlled trial data are available, non-randomised data will be considered. 1. Prospective and retrospective cohort studies 2. Case control studies (if no other evidence identified) Published NMAs and IPDs will be considered for inclusion.
10.	Other exclusion criteria	• Non-English language studies. • Crossover RCTs • Non comparative cohort studies • Before and after studies • Conference abstracts will be excluded as it is expected there will be sufficient full text published studies available.
11.	Context	People after a stroke. This may include people in an acute, subacute or chronic 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 the following time periods: • End of intervention • End of scheduled follow-up • Person/participant generic health-related quality of life (continuous outcomes will be prioritised [validated measures]) o EQ-5D o SF-6D o SF-36 o SF-12 o Other measures (AQOL, HUI, 15D, QWB) • Carer health-related quality of life (continuous outcomes will be prioritised [validated measures]) o EQ-5D o SF-6D o SF-36 o SF-12 o Other utility measures (AQOL, HUI, 15D, QWB)

		• Self efficacy (continuous outcomes will be prioritised)
		  ○ General Self-Efficacy Scale
		  ○ Stroke-specific Self-Efficacy Scale
		• Activities of daily living (continuous outcomes will be prioritised)
		  ○ Barthel Index
		  ○ National Institutes of Health Stroke Scale
		  ○ Orpington Prognostic Scale
		  ○ Canadian Occupational Performance Measure
		  ○ Extended activities of daily living
		• Participation restrictions (including social, vocational and recreational roles, such as measured by the Life Habits instrument: LIFE-H)
		• Psychological distress (continuous outcomes will be prioritised)
		  ○ Depression (if people have communication difficulties, measures specific to this difficulty will be prioritised, for example for depression: depression intensity scale circles, stroke aphasic depression questionnaire, signs of depression scale, aphasic depression rating scale)
		  – PHQ-9
		  – Hospital Anxiety and Depression scale - depression subscale
		  – Beck Depression Inventory
		  – Hamilton Depression Scale
		  – Centre of Epidemiologic Studies Depression
		  – GHQ-28
		  – Geriatric Depression Scale
		• 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
		• Health service usage
		  ○ Hospital readmissions
		  ○ General practitioner attendance
		  ○ Emergency department visits
		• Participant satisfaction
		  ○ Likert satisfaction scale
		• Adverse events (type and frequency)

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.
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 • Case control study: CASP case control checklist
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.
17.	Analysis of sub-groups	Subgroups that will be investigated if heterogeneity is present: 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) Person supporting the intervention: • Nurses • Physiotherapists • Occupational Therapists • Speech and Language Therapists • Dietician • Clinical Neuropsychologist • Stroke Consultants • Rehabilitation Assistants • Multidisciplinary team • Non-health care professional

<table>
<tr><td></td><td></td><td colspan="3">• Stroke survivors (for example: led by expert patients)
• Other

Domain of therapy:
• Upper limb
• Lower limb
• Swallow
• Cognition
• Communication
• Mood
• Pain
• Fatigue
• Functional independency (Return to work, return to driving ect.)
• Mixed (including multidisciplinary packages of care)
• No specific domain of therapy (general)

Mechanism of intervention:
• Problem-solving
• Goal-setting
• Decision-making
• Self monitoring
• Coping with the condition
• An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning
• Combination of the above</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)</td></tr>
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<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>23.</td><td></td><td>Review stage</td><td>Started</td><td>Completed</td></tr>
</table>

	Stage of review at time of this submission	Preliminary searches	☐	☐
		Piloting of the study selection process	☐	☐
		Formal screening of search results 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; Intervention; Outpatient; Rehabilitation; Self care; Self management; 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	

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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).[28] 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.

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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 8: Database parameters, filters and limits applied

Database	Dates searched	Search filter used
Medline (OVID)	01 January 2016 – 08 January 2023	Randomised controlled trials Systematic review studies Observational studies Exclusions (animal studies, letters, comments, editorials, case studies/reports) English language
Embase (OVID)	01 January 2016 – 08 January 2023	Randomised controlled trials Systematic review studies Observational studies Exclusions (animal studies, letters, comments, editorials, case studies/reports, conference abstracts) English language
The Cochrane Library (Wiley)	Cochrane Reviews to 2023 Issue 1 of 12 CENTRAL to 2023 Issue 1 of 12	Exclusions (clinical trials, conference abstracts)
Epistemonikos (The Epistemonikos Foundation)	01 January 2016 – 08 January 2023	Exclusions (Cochrane reviews) English language
AMED, Allied and Complementary Medicine (OVID)	01 January 2016 – 08 January 2023	Randomised controlled trials Systematic review studies Exclusions (animal studies, letters, comments, case reports) English language
Current Nursing and Allied Health Literature - CINAHL (EBSCO)	01 January 2016 – 08 January 2023	Human Exclusions (Medline records)

Database	Dates searched	Search filter used
		English Language
PEDro (Physiotherapy Evidence Database)	01 January 2016 – 08 January 2023	Systematic review studies English Language

1

2 **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.	self efficacy/ or self care/
29.	self administration/ or self-assessment/ or self concept/
30.	patient compliance/ or patient education as topic/ or patient participation/ or patient satisfaction/
31.	consumer health information/ or consumer participation/
32.	attitude to health/ or health behavior/ or health education/ or health knowledge, attitudes, practice/ or health promotion/
33.	life style/ or disease management/ or risk reduction behavior/ or Self-help groups/ or Peer group/

34.	adaptation, psychological/ or motivation/ or goals/ or problem solving/ or exp decision making/
35.	health plan implementation/
36.	(self care or self-care or self management or self-management or self efficacy or self-efficacy or self monitor* or self-monitor* or self administrat* or self-administrat* or self rehab* or self-rehab*).ti,ab,kf.
37.	((self or oneself) adj3 care).ti,ab,kf.
38.	((patient* or consumer* or client*) adj5 (educat* or participat* or behaviour* or behavior* or compliance or centered)).ti,ab,kf.
39.	(health adj5 (promot* or educat* or behav*)).ti,ab,kf.
40.	(risk adj3 reduc* adj3 behav*).ti,ab,kf.
41.	((patient* or consumer* or client*) adj5 manag* adj5 disease*).ti,ab,kf.
42.	(((behav* adj3 chang*) or (problem* adj3 solv*) or (goal* adj3 setting) or (decision* adj3 mak*) or coping) adj5 (patient* or consumer* or client*)).ti,ab,kf.
43.	or/28-42
44.	27 and 43
45.	randomized controlled trial.pt.
46.	controlled clinical trial.pt.
47.	randomi#ed.ti,ab.
48.	placebo.ab.
49.	randomly.ti,ab.
50.	Clinical Trials as topic.sh.
51.	trial.ti.
52.	or/45-51
53.	Meta-Analysis/
54.	exp Meta-Analysis as Topic/
55.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
56.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
57.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
58.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
59.	(search* adj4 literature).ab.
60.	(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.
61.	cochrane.jw.
62.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
63.	or/53-62
64.	Epidemiologic studies/
65.	Observational study/
66.	exp Cohort studies/
67.	(cohort adj (study or studies or analys* or data)).ti,ab.
68.	((follow up or observational or uncontrolled or non randomi#ed or epidemiologic*) adj (study or studies or data)).ti,ab.
69.	((longitudinal or retrospective or prospective or cross sectional) and (study or studies or review or analys* or cohort* or data)).ti,ab.
70.	Controlled Before-After Studies/

71.	Historically Controlled Study/
72.	Interrupted Time Series Analysis/
73.	(before adj2 after adj2 (study or studies or data)).ti,ab.
74.	exp case control studies/
75.	case control*.ti,ab.
76.	Cross-sectional studies/
77.	(cross sectional and (study or studies or review or analys* or cohort* or data)).ti,ab.
78.	or/64-77
79.	44 and (52 or 63 or 78)

1 **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 or rodent*).ti.
25.	or/17-24
26.	8 not 25
27.	limit 26 to English language
28.	self monitoring/ or self care/
29.	self administration/ or self evaluation/ or *self concept/
30.	patient compliance/ or patient education/ or patient participation/ or patient satisfaction/
31.	consumer health information/ or *consumer/
32.	attitude to health/ or health behavior/ or health education/ or health promotion/
33.	*life style/ or disease management/ or *risk reduction/ or self help/

34.	psychological adjustment/ or motivation/ or problem solving/ or exp decision making/
35.	*health care planning/
36.	(self care or self-care or self management or self-management or self efficacy or self-efficacy or self monitor* or self-monitor* or self administ* or self-administ* or self rehab* or self-rehab*).ti,ab,kf.
37.	((self or oneself) adj3 care).ti,ab,kf.
38.	((patient* or consumer* or client*) adj5 (educat* or participat* or behaviour* or behavior* or compliance or centered)).ti,ab,kf.
39.	(health adj5 (promot* or educat* or behav*)).ti,ab,kf.
40.	(risk adj3 reduc* adj3 behav*).ti,ab,kf.
41.	((patient* or consumer* or client*) adj5 manag* adj5 disease*).ti,ab,kf.
42.	(((behav* adj3 chang*) or (problem* adj3 solv*) or (goal* adj3 setting) or (decision* adj3 mak*) or coping) adj5 (patient* or consumer* or client*)).ti,ab,kf.
43.	or/28-42
44.	27 and 43
45.	random*.ti,ab.
46.	factorial*.ti,ab.
47.	(crossover* or cross over*).ti,ab.
48.	((doubl* or singl*) adj blind*).ti,ab.
49.	(assign* or allocat* or volunteer* or placebo*).ti,ab.
50.	crossover procedure/
51.	single blind procedure/
52.	randomized controlled trial/
53.	double blind procedure/
54.	or/45-53
55.	Clinical study/
56.	Observational study/
57.	family study/
58.	longitudinal study/
59.	retrospective study/
60.	prospective study/
61.	cohort analysis/
62.	follow-up/
63.	cohort*.ti,ab.
64.	62 and 63
65.	(cohort adj (study or studies or analys* or data)).ti,ab.
66.	((follow up or observational or uncontrolled or non randomi#ed or epidemiologic*) adj (study or studies or data)).ti,ab.
67.	((longitudinal or retrospective or prospective or cross sectional) and (study or studies or review or analys* or cohort* or data)).ti,ab.
68.	(before adj2 after adj2 (study or studies or data)).ti,ab.
69.	exp case control study/
70.	case control*.ti,ab.
71.	cross-sectional study/
72.	(cross sectional and (study or studies or review or analys* or cohort* or data)).ti,ab.
73.	or/55-61,64-72

74.	systematic review/
75.	meta-analysis/
76.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
77.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
78.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
79.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
80.	(search* adj4 literature).ab.
81.	(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.
82.	cochrane.jw.
83.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
84.	or/74-83
85.	44 and (54 or 73 or 84)

1 **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: [Self Efficacy] explode all trees
#11.	MeSH descriptor: [Self Care] explode all trees
#12.	MeSH descriptor: [Self Administration] explode all trees
#13.	MeSH descriptor: [Self-Assessment] explode all trees
#14.	MeSH descriptor: [Self Concept] explode all trees
#15.	MeSH descriptor: [Patient Compliance] explode all trees
#16.	MeSH descriptor: [Patient Education as Topic] explode all trees
#17.	MeSH descriptor: [Patient Participation] explode all trees
#18.	MeSH descriptor: [Patient Satisfaction] explode all trees
#19.	MeSH descriptor: [Consumer Health Information] explode all trees
#20.	MeSH descriptor: [Community Participation] explode all trees
#21.	MeSH descriptor: [Attitude to Health] explode all trees
#22.	MeSH descriptor: [Health Behavior] explode all trees
#23.	MeSH descriptor: [Health Educators] explode all trees
#24.	MeSH descriptor: [Health Knowledge, Attitudes, Practice] explode all trees
#25.	MeSH descriptor: [Health Promotion] explode all trees
#26.	MeSH descriptor: [Life Style] explode all trees
#27.	MeSH descriptor: [Disease Management] explode all trees
#28.	MeSH descriptor: [Risk Reduction Behavior] explode all trees

#29.	MeSH descriptor: [Self-Help Groups] explode all trees
#30.	MeSH descriptor: [Peer Group] explode all trees
#31.	MeSH descriptor: [Adaptation, Psychological] explode all trees
#32.	MeSH descriptor: [Motivation] explode all trees
#33.	MeSH descriptor: [Goals] explode all trees
#34.	MeSH descriptor: [Problem Solving] explode all trees
#35.	MeSH descriptor: [Decision Making] explode all trees
#36.	MeSH descriptor: [Health Plan Implementation] explode all trees
#37.	(self care or self-care or self management or self-management or self efficacy or self-efficacy or self monitor* or self-monitor* or self administrat* or self-administrat* or self rehab* or self-rehab*):ti,ab
#38.	((self or oneself) near/3 care):ti,ab
#39.	((patient* or consumer* or client*) near/5 (educat* or participat* or behaviour* or behavior* or compliance or centered)):ti,ab
#40.	(health near/5 (promot* or educat* or behav*)):ti,ab
#41.	(risk near/3 reduc* near/3 behav*):ti,ab
#42.	((patient* or consumer* or client*) near/5 manag* near/5 disease*):ti,ab
#43.	(((behav* near/3 chang*) or (problem* near/3 solv*) or (goal* near/3 setting) or (decision* near/3 mak*) or coping) near/5 (patient* or consumer* or client*)):ti,ab
#44.	(or #10-#43)
#45.	#9 and #44

1 **PEDro search terms**

1.	Stroke rehabilitation self management

2 **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 "Self-Efficacy") or (MH "Self Care")) OR ((MH "Self Administration") or (MH "Self Assessment") or (MH "Self Concept")) OR ((MH "Patient Compliance") or (MH "Patient Education") or (MH "Consumer Participation") or (MH "Patient Satisfaction")) OR (MH "Consumer Health Information") OR ((MH "Attitude to Health") or (MH "Health Behavior") or (MH "Health Education") or (MH "Attitude to Health") or (MH "Health Knowledge and Behavior (Iowa NOC) (Non-Cinahl)") or (MH "Health Promotion")) OR ((MH "Life Style") or (MH "Disease Management")) OR ((MH "Adaptation, Psychological") or (MH "Motivation") or (MH "Goals and Objectives") or (MH "Problem Solving") or (MH "Decision Making+")) OR “health plan implementation”
S7.	((self care or self-care or self management or self-management or self efficacy or self-efficacy or self monitor* or selfmonitor*)) OR (((self or oneself) N3 care)) OR (((patient# or consumer# or client#) N5 (educat* or participat* or behaviour? or behaviour? or compliance or centered))) OR ((health N5 (promot* or educat* or behav*))) OR (risk N3 reduc* N3 behav*) OR (((patient# or consumer# or client#) N5 manag* N5 disease#)) OR ((((behav* N3 chang*) or (problem# N3 solv*) or (goal* N3 setting) or (decision# N3 mak*) or coping) N5 (patient? or consumer? or client?)))
S8.	S6 or S7
S9.	S5 and S8

3 **AMED 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.	case report/
8.	(letter or comment*).ti.
9.	or/7-8
10.	randomized controlled trials/ or random*.ti,ab.
11.	9 not 10
12.	animals/ not humans/
13.	(rat or rats or mouse or mice or rodent*).ti.
14.	or/11-13
15.	6 not 14
16.	self efficacy/ or self care/
17.	self administration/ or self-assessment/ or self concept/
18.	patient compliance/ or patient education as topic/ or patient participation/ or patient satisfaction/
19.	attitude to health/ or health behavior/ or health education/ or health knowledge, attitudes, practice/ or health promotion/
20.	life style/ or disease management/ or risk reduction behavior/ or Self-help groups/ or Peer group/
21.	adaptation, psychological/ or motivation/ or goals/ or problem solving/ or exp decision making/
22.	[(((behav* adj3 chang*) or (problem* adj3 solv*) or (goal* adj3 setting) or (decision* adj3 mak*) or coping) adj5 (patient* or consumer* or client*)).ti,ab,kf.]
23.	(self care or self-care or self management or self-management or self efficacy or self-efficacy or self monitor* or self-monitor* or self administrat* or self-administrat* or self rehab* or self-rehab*).ti,ab.
24.	((self or oneself) adj3 care).ti,ab.
25.	((patient* or consumer* or client*) adj5 (educat* or participat* or behaviour* or behavior* or compliance or centered)).ti,ab.
26.	(health adj5 (promot* or educat* or behav*)).ti,ab.
27.	(risk adj3 reduc* adj3 behav*).ti,ab.
28.	((patient* or consumer* or client*) adj5 manag* adj5 disease*).ti,ab.
29.	(((behav* adj3 chang*) or (problem* adj3 solv*) or (goal* adj3 setting) or (decision* adj3 mak*) or coping) adj5 (patient* or consumer* or client*)).ti,ab.
30.	or/16-29
31.	15 and 30
32.	limit 31 to English language
33.	randomized controlled trials/
34.	randomized controlled trial.pt.
35.	controlled clinical trial.pt.
36.	placebo.ab.
37.	random*.ti,ab.

38.	trial.ti,ab.
39.	groups.ab.
40.	or/33-39
41.	Meta-Analysis/
42.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
43.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
44.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
45.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
46.	(search* adj4 literature).ab.
47.	(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.
48.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
49.	or/41-48
50.	32 and (40 or 49)

Epistemonikos search terms

2.	(title:(tools OR tool OR assess* OR screen* OR question* OR test* OR measur* OR diagnos* OR inventory OR evaluat* OR examin*) OR abstract:(tools OR tool OR assess* OR screen* OR question* OR test* OR measur* OR diagnos* OR inventory OR evaluat* OR examin*)) AND (title:(hear OR hears OR hearing OR listen* OR audio* OR auditory OR acoustic* OR psychoacoustic* OR otolog* OR tinnitus OR hyperacusis) OR abstract:(hear OR hears OR hearing OR listen* OR audio* OR auditory OR acoustic* OR psychoacoustic* OR otolog* OR tinnitus OR hyperacusis)) AND (title:(stroke OR strokes OR cva OR poststroke* OR apoplexy) OR abstract:(stroke OR strokes OR cva OR poststroke* OR apoplexy))

B.2 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	

Database	Dates searched	Search filters and limits applied
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
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

1 **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

1 **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

1 **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

2 **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])

3 **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

1 **PsycINFO search terms**

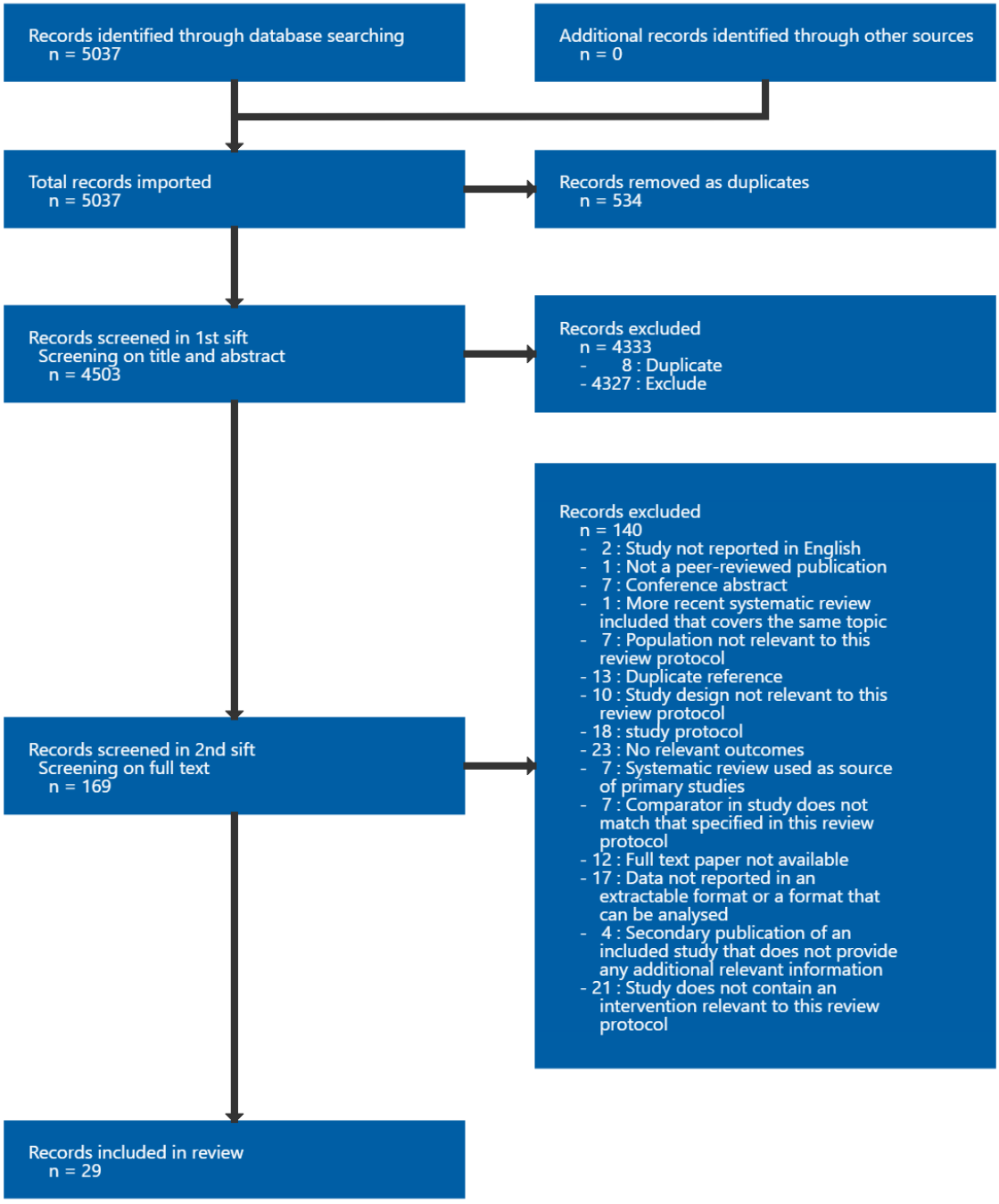
1.	exp Stroke/
2.	exp Cerebral hemorrhage/
3.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
4.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
5.	"brain attack*".ti,ab.
6.	Cerebrovascular accidents/
7.	exp Brain damage/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

1
2

Appendix C – Effectiveness evidence study selection

Figure 1: Flow chart of clinical study selection for the review of self-management for people after a stroke



1

2

3

Appendix D – Effectiveness evidence

Battersby, 2009

Bibliographic Reference	Battersby, M.; Hoffmann, S.; Cadilhac, D.; Osborne, R.; Lalor, E.; Lindley, R.; 'Getting your life back on track after stroke': a Phase II multi-centered, single-blind, randomized, controlled trial of the Stroke Self-Management Program vs. the Stanford Chronic Condition Self-Management Program or standard care in stroke survivors; International journal of stroke; 2009; vol. 4 (no. 2); 137-144

Study details

Secondary publication of another included study- see primary study for details	Cadilhac D, Hoffman S, Kilkenny M, Lindley R, Lalor E, Osborne R, et al. A phase II multi-centred, single-blinded randomised, controlled trial of the stroke self-management program. *Stroke* 2011;42:1673-9.
Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Additional comments	

1 Bishop, 2014

Bibliographic Reference	Bishop, D.; Miller, I.; Weiner, D.; Guilmette, T.; Mukand, J.; Feldmann, E.; Keitner, G.; Springate, B.; Family Intervention: telephone Tracking (FITT): a pilot stroke outcome study; Topics in stroke rehabilitation; 2014; vol. 21suppl1; S63-74

2

3 **Study details**

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Other A mixture of a psychiatric resident, a family therapy graduate student, a stroke rehabilitation nurse and a master's level family therapist
Subgroup 3: Domain of therapy	Mixed Family function, but this influenced general care across the spectrum
Subgroup 4: Mechanism of intervention	Coping with the condition
Population subgroups	

4

Study arms

Self management intervention and usual care (N = 23)
FITT programme and standard care

Usual care (N = 26)
Standard medical follow-up

Outcomes

Study timepoints
- Baseline
- 3 month (End of intervention)
- 6 month (End of scheduled follow-up)

Continuous outcomes

Outcome	Self management intervention and usual care, Baseline, N = 23	Self management intervention and usual care, 3 month, N = 23	Self management intervention and usual care, 6 month, N = 23	Usual care, Baseline, N = 26	Usual care, 3 month, N = 26	Usual care, 6 month, N = 26
Activities of daily living (functional independence measure) Scale range: 18-126. Change scores. Mean (SD)	NR (NR)	-23 (24)	-15.9 (22)	NR (NR)	-13.2 (16)	-14.6 (22)

Outcome	Self management intervention and usual care, Baseline, N = 23	Self management intervention and usual care, 3 month, N = 23	Self management intervention and usual care, 6 month, N = 23	Usual care, Baseline, N = 26	Usual care, 3 month, N = 26	Usual care, 6 month, N = 26
Psychological distress - Depression (Geriatric Depression Scale short form) Scale range: 0-15. Change scores. Mean (SD)	NR (NR)	0 (2.8)	0.69 (3.5)	NR (NR)	-1.27 (2.3)	-1.12 (2.8)
Health service usage (physician visits) Continuous outcome Mean (SD)	NA (NA)	0.14 (2.3)	0.21 (2.6)	NA (NA)	-0.8 (2.1)	-0.8 (2.4)
Health service usage (days rehospitalised) (days) Mean (SD)	NA (NA)	0.87 (2.1)	1.6 (3.2)	NA (NA)	2.73 (6.1)	5.32 (9.7)
Health service usage (therapy hours) (hours) Number of hours of physical therapy, occupational therapy and speech therapy during the 4 weeks before each assessment period Mean (SD)	NR (NR)	-8.65 (12.3)	-2.57 (6.6)	NR (NR)	-15.1 (20.1)	-10.5 (20.1)

1 Activities of daily living (functional independence measure) - Polarity - Higher values are better
2 Psychological distress - Depression (Geriatric Depression Scale short form) - Polarity - Lower values are better
3 Health service usage (physician visits) - Polarity - Lower values are better
4 Health service usage (days rehospitalised) - Polarity - Lower values are better

Dichotomous outcomes

Outcome	Self management intervention and usual care, Baseline, N = 23	Self management intervention and usual care, 3 month, N = 23	Self management intervention and usual care, 6 month, N = 23	Usual care, Baseline, N = 26	Usual care, 3 month, N = 26	Usual care, 6 month, N = 26
Health service usage (rehospitalisation) No of events	n = NA ; % = NA	n = NR ; % = NR	n = 6 ; % = 27	n = NA ; % = NA	n = NR ; % = NR	n = 12 ; % = 45

Health service usage (rehospitalisation) - Polarity - Lower values are better

Cadilhac, 2011

Bibliographic Reference	Cadilhac, D. A.; Hoffmann, S.; Kilkenny, M.; Lindley, R.; Lalor, E.; Osborne, R. H.; Batterbsy, M.; A phase II multicentered, single-blind, randomized, controlled trial of the stroke self-management program; Stroke; a journal of cerebral circulation; 2011; vol. 42 (no. 6); 1673-1679

Study details

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.

	Battersby M, Hoffmann S, Cadilhac D, Osborne R, Lalor E, Lindley R. 'Getting your life back on track after stroke': a phase II multi-centered, single-blind, randomized, controlled trial of the Stroke Self-Management Program vs the Stanford Chronic Condition Self-Management Program or standard care in stroke survivors. *International Journal of Stroke* 2009;4(2):137-44. Cadilhac D, Kilkenny M, Hoffmann S, Osborne R, Lindley R, Lalor E, et al. Developing a self management program for stroke: results of a phase II multi centred, single blind RCT. *International Journal of Stroke* 2010;5:343.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Other Mixture of health professionals and peer leaders trained in Stanford Model
Subgroup 3: Domain of therapy	Functional independency
Subgroup 4: Mechanism of intervention	Problem-solving
Population subgroups	No additional information
Indirectness	
Additional comments	Continuous outcomes were reported but were not usable as they reported raw changes between the generic and stroke specific programme compared to usual care, rather than reporting the usual care arm separately. This meant that the calculations required to combine the groups was not possible.

1

Study arms

Self management programme (N = 95)
A combination of two groups: a stroke specific self management program (using a disease specific version of the generic Standford type self management programme) (n=48) and a generic version of the programme (n=47). These two have been combined as both fill the same intervention group in our protocol.

Usual care (N = 48)
Independent - variable

Outcomes

Study timepoints
- Baseline
- 8 week (End of intervention (2-4 weeks after the completion of the 6 week programme))
- 6 month (End of scheduled follow-up)

Dichotomous outcomes

Outcome	Self management programme, Baseline, N = 95	Self management programme, 8 week, N = 95	Self management programme, 6 month, N = 95	Usual care, Baseline, N = 48	Usual care, 8 week, N = 48	Usual care, 6 month, N = 48
Adverse events (total) Events were made up of: Stroke (self management = 4, usual care = 0), death (self management = 3, usual care = 1), fall (self management = 4, usual care = 0), hospitalisation (self management = 11,	n = NA ; % = NA	n = NR ; % = NR	n = 28 ; % = 30	n = NA ; % = NA	n = NR ; % = NR	n = 8 ; % = 17

Outcome	Self management programme, Baseline, N = 95	Self management programme, 8 week, N = 95	Self management programme, 6 month, N = 95	Usual care, Baseline, N = 48	Usual care, 8 week, N = 48	Usual care, 6 month, N = 48
usual care = 3), moved to residential care (self management = 0, usual care = 1). No of events						
Health service usage (hospital readmissions) Note: These values were included in the total adverse events count. No of events	n = NA ; % = NA	n = NR ; % = NR	n = 11 ; % = 12	n = NA ; % = NA	n = NR	n = 3 ; % = 6

Adverse events (total) - Polarity - Lower values are better

Health service usage (hospital readmissions) - Polarity - Lower values are better

Cadilhac, 2010

Bibliographic Reference	Cadilhac, D.; Kilkenny, M.; Hoffmann, S.; Osborne, R.; Lindley, R.; Lalor, E.; Battersby, M.; Developing a self management program for stroke: results of a phase II multi centred, single blind RCT; International journal of stroke; 2010; vol. 5 (no. suppl2); 343

Study details

Secondary publication of another included	Cadilhac D, Hoffman S, Kilkenny M, Lindley R, Lalor E, Osborne R, et al. A phase II multi-centred, single-blinded randomised, controlled trial of the stroke self-management program. *Stroke* 2011;42:1673-9.

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: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.

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3 **Chang, 2011**

Bibliographic Reference	Chang, Kyle; Zhang, Hongjing; Xia, Ying; Chen, Chuansheng; Testing the effectiveness of knowledge and behavior therapy in patients of hemiplegic stroke; Topics in stroke rehabilitation; 2011; vol. 18 (no. 5); 525-535

4

5 **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
Trial name / registration number	No additional information
Study type	Randomised controlled trial (RCT)

Study location	China
Study setting	Inpatient treatment in a rehabilitation centre for disabled individuals
Study dates	No additional information
Sources of funding	No additional information
Inclusion criteria	First-time stroke diagnosed by CT or MRI scan
Exclusion criteria	Organic disease by TBI History of mental illness Cognitive impairment or severe aphasia <2 weeks post stroke Score <24 on the Mini-Mental State Examination
Recruitment / selection of participants	Participants were recruited through the Rehabilitation Center for Disabled People of Shandong Province.
Intervention(s)	The experimental group received counselling which consisted of a knowledge component and a behavioural training component. Counselling took place weekly during 1-2 hour sessions for 1 month. The knowledge component consisted of education about health psychology and recovery from stroke e.g., lifestyle risks for stroke, lifestyle changes that were necessary after stroke (medications, behavioural changes, changes in emotional regulation and personality). The behavioural training component consisted of belief changes, forgiveness training and anger management. These components broadly consisted of coping strategies, positive attitude training and self-reflection.

	Concomitant Treatments: Both groups received regular therapy, including prescribed medications and rehabilitation training for physical functioning.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Other Psychology graduate
Subgroup 3: Domain of therapy	Mood
Subgroup 4: Mechanism of intervention	Coping with the condition
Population subgroups	No additional information
Comparator	**Concomitant Treatments:** Both groups received regular therapy, including prescribed medications and rehabilitation training for physical functioning.
Number of participants	n = 77 (total) n = 39 (intervention) n = 38 (usual care)
Duration of follow-up	1-month
Indirectness	No additional information

Additional comments	Complete case analysis

Study arms

Behavioural Training Intervention (N = 39)

Usual Care (N = 38)

Characteristics

Study-level characteristics

Characteristic	**Study (N = 77)**
% Female Sample size	n = 21 ; % = 31.8
Mean age (SD) (years) Mean (SD)	58.86 (10.4)
Ethnicity Nominal	NR
Comorbidities Nominal	NR

Characteristic	Study (N = 77)
Severity Nominal	NR
Time since stroke (days) Mean (SD)	136.29 (69.1)

Outcomes

Study timepoints

- Baseline
- 1 month (End of intervention)

Continuous Outcomes

Outcome	Behavioural Training Intervention , Baseline, N = 34	Behavioural Training Intervention , 1 month, N = 34	Usual Care, Baseline, N = 32	Usual Care, 1 month, N = 32
Activities of daily living (barthel index) Scale range unclear, final values Mean (SD)	94.15 (32)	116.47 (25.19)	112.56 (24.4)	119.63 (23.08)
Stroke-specific Patient-Reported Outcome Measures (Stroke-Specific Quality of Life) Scale range 49-245, final values Mean (SD)	100.71 (40.33)	124.41 (33.5)	127.81 (21.14)	107.84 (30.9)

Outcome	Behavioural Training Intervention , Baseline, N = 34	Behavioural Training Intervention , 1 month, N = 34	Usual Care, Baseline, N = 32	Usual Care, 1 month, N = 32
Psychological Distress (Hamilton Depression Scale) Scale range 0-52, final values Mean (SD)	29.29 (13.45)	21.26 (9.69)	29.97 (5.84)	27.91 (5.79)

Activities of daily living (barthel index) - Polarity - Higher values are better
Stroke-specific Patient-Reported Outcome Measures (Stroke-Specific Quality of Life) - Polarity - Higher values are better
Psychological Distress (Hamilton Depression Scale) - Polarity - Lower values are better

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

Activities of Daily Living

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

Stroke-Specific Patient-Reported Outcome Measures

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Psychological Distress

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

Chen, 2018

Bibliographic Reference	Chen, L.; Chen, Y.; Chen, X.; Shen, X.; Wang, Q.; Sun, C.; Longitudinal Study of Effectiveness of a Patient-Centered Self-Management Empowerment Intervention During Predischarge Planning on Stroke Survivors; Worldviews on Evidence-Based Nursing; 2018; vol. 15 (no. 3); 197-205

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	
Trial name / registration number	No additional information
Study type	Randomised controlled trial (RCT)
Study location	China
Study setting	Department of Neurology at a tertiary care institution, with patients recruited from hospitalization through to 3 months post-discharge
Study dates	January 2015 - July 2016
Sources of funding	Funded by the National Natural Science Fund of China
Inclusion criteria	Diagnosis of first acute stroke ≥18 years old Slight to moderate neurological deficits (NIHSS <15) upon admission Slight to moderate level of disability (Modified Rankin Scale <4) upon admission Mini-Mental State Examination score >20 Able to communicate Nanjing resident Contactable by telephone

Exclusion criteria	Aphasia Coexisting severe disease (renal failure, heart failure, end stage diseases) Premorbid dependence Transferred to another unit during hospitalization Involved in other research programmes
Recruitment / selection of participants	Patients were recruited from the Department of Neurology at a tertiary care centre
Intervention(s)	Patients in the intervention group received a nurse-led patient-centred self-management empowerment intervention which began in the inpatient setting and was extended following discharge. Following a patient-centred assessment of health status, stroke knowledge, functional disability, worries and rehabilitation goals, conducted by a nurse, a personalised self-management goal and plan were organised according to the assessment. Self-management education then began, with 5 daily individual sessions aiming to transfer self-management knowledge and skills. During the hospitalization period, short-term goals, set by the patient, carer and nurse, needed to be accomplished. The educational sessions covered aspects such as post-stroke functional status and stroke risk factors. Coaching comprised advice, problem solving and self monitoring skills. Following the individual session week, a second week of education was carried out in a group format, allowing patients to talk with each other. This single 60-minute session was divided into 2 sections - the first was a DVD on stroke self-management, self-care knowledge and skills, whilst the second part was about self-efficacy and self-management development. This included experience sharing about ward-based self-management, goal attainment, mutual encouragement and verbal commitments. Following this, a discharge period occurred with the goal of increasing readiness for discharge through rehabilitation and self-management goal setting. In the post-discharge period, 4 weekly telephone calls were carried out based on the patients medical assessment records and self-management plan made at discharge, aiming to assess the patients self-management skills and behaviours. Critical inputs were assessing the patients performance, identifying barriers or problems and teaching problem solving skills, and identifying goal accomplishment and providing positive reinforcements and empowerment.

	Concomitant Treatments: Both groups received conventional nursing
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Mild (or NIHSS 1-5)
Subgroup 2: Person supporting the intervention	Nurses
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Combination of the above
Population subgroups	No additional information
Comparator	Usual care with unstructured health education. Patients in the control group also received the same number of telephone calls as the intervention group to balance the psychological effects of professional contact in the intervention group. **Concomitant Treatments:** Both groups received conventional nursing
Number of participants	n = 144 (total) n = 72 (intervention) n = 72 (control)

Duration of follow-up	3 months post-discharge
Indirectness	No additional information
Additional comments	ITT

Study arms

Health Empowerment Intervention (N = 72)

Usual Care (N = 72)

Characteristics

Arm-level characteristics

Characteristic	**Health Empowerment Intervention (N = 72)**	**Usual Care (N = 72)**
% Female Sample size	n = 20 ; % = 27.78	n = 18 ; % = 25
Mean age (SD) (years) Mean (SD)	65.92 (12.8)	64.78 (9.87)
Ethnicity Nominal	NR	NR

Characteristic	Health Empowerment Intervention (N = 72)	Usual Care (N = 72)
Comorbidities Nominal	NR	NR
Severity NIHSS Score (median (min - max)) Median (IQR)	4 (1 to 9)	4 (0 to 9)
Time since stroke Nominal	NR	NR

Outcomes

Study timepoints

- Baseline
- 3 month (End of intervention)

Dichotomous Outcomes

Outcome	Health Empowerment Intervention, Baseline, N = 72	Health Empowerment Intervention, 3 month, N = 72	Usual Care, Baseline, N = 72	Usual Care, 3 month, N = 72
Hospital Readmission No of events	n = NA ; % = NA	n = 7 ; % = 9.72	n = NA ; % = NA	n = 17 ; % = 23.61

Hospital Readmission - Polarity - Lower values are better

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

Hospital Readmission

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

Evans-Hudnall, 2014

Bibliographic Reference	Evans-Hudnall, G. L.; Stanley, M. A.; Clark, A. N.; Bush, A. L.; Resnicow, K.; Liu, Y.; Kass, J. S.; Sander, A. M.; Improving secondary stroke self-care among underserved ethnic minority individuals: a randomized clinical trial of a pilot intervention; Journal of behavioral medicine; 2014; vol. 37 (no. 2); 196-204

Study details

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review. No outcomes were reported in the Cochrane review or the article that could be included in the analysis.
Subgroup 1: Severity (as stated	Not stated/unclear

by category or as measured by NIHSS scale)	
Subgroup 2: Person supporting the intervention	Other Health educators (stroke trained)
Subgroup 3: Domain of therapy	Functional independency
Subgroup 4: Mechanism of intervention	Combination of the above Self monitoring, goal-setting, problem-solving
Population subgroups	No additional information
Number of participants	

Study arms

Self management (N = 27)
STOP (secondary stroke prevention)

Usual care (N = 27)
Usual care

Forster et al.

Bibliographic Reference	Forster A; Ozer S; Crocker TF; House A; Hewison J; Roberts E; Dickerson J; Carter G; Hulme C; Fay M; Richardson G; Wright A; McKevitt C; McEachan R; Foy R; Barnard L; Moreau L; Prashar A; Clarke D; Hardicre N; Holloway I; Brindle R; Hall J; Burton LJ; Atkinson R; Hawkins RJ; Brown L; Cornwall N; Dawkins B; Meads D; Schmitt L; Fletcher M; Speed M; Grenfell K; Hartley S; Young J; Farrin A; Longer-term health and social care strategies for stroke survivors and their carers: the LoTS2Care research programme including cluster feasibility RCT

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.
Trial name / registration number	LoTS2Care
Study type	Randomised controlled trial (RCT)
Study location	England and Wales.
Study setting	Community setting.
Study dates	No additional information.
Sources of funding	This project was funded by the National Institute for Health Research (NIHR) Programme Grants for Applied Research Programme.

Inclusion criteria	Stroke survivors between 4 and 6 months since confirmed primary diagnosis of new stroke; resided in the community (i.e. not in a nursing or residential care home); lived among the defined population covered by the stroke service; provided informed consent or consultee declaration; returned a completed baseline questionnaire.
Exclusion criteria	No exclusion criteria were applied.
Recruitment / selection of participants	Stroke services were eligible if they agreed to undertake a robust mechanism to identify all stroke survivors at 4-6 months post stroke, had the facilities and capacity to deliver the New Start intervention (i.e. staff available to undertake training and provide face-to-face contact with community-based stroke survivors who were at least 6 months post stroke) and were excluded if they had previously participated in research contributing to the New Start intervention development and were currently implementing or intending to implement a service comparable to the New Start intervention (e.g. a self-management focused approach) within the study duration). People were recruited from clinical commissioning groups covering three geographical areas and NIHR CRNs covering four areas. In addition 29 sites had participated in a previous unrelated trial were also approached.
Intervention(s)	Self-management intervention (New Start) N=5 A self-management intervention with the following components: a needs assessment delivered through a face-to-face review at approximately 6 months post stroke; supported self-management care strategy; materials to support needs assessment, self-management, goal-setting and action-planning as well as the provision of usable information (the 'priming tool' and 'New Start Guide') and a structured training programme for staff (face to face modules, supported by training worksheets and video content as well as online learning resource through Google hub/website and e-mailed links to training videos developed by the team and uploaded to YouTube). (Note: the number of participants is the number of sites. The number of stroke survivors assessed is 145, the number of carers assessed is 46). Concomitant therapy: No additional information.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Moderate (or NIHSS 5-14)

Subgroup 2: Person supporting the intervention	Multidisciplinary team
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Combination of the above Problem-solving, goal-setting, action-planning
Population subgroups	No additional information.
Comparator	Usual care (inactive control intervention) N=5 Continued care as determined by local policy and practices (Note: the number of participants is the number of sites. The number of stroke survivors assessed is 124, the number of carers assessed is 39). Concomitant therapy: No additional information.
Number of participants	10 sites, 269 stroke survivors, 83 carers
Duration of follow-up	3 months, 6 months and 9 months
Indirectness	No additional information.
Additional comments	Intention to treat analysis.

1

Study arms

Self-management intervention (New Start) (N = 5)
A self-management intervention with the following components: a needs assessment delivered through a face-to-face review at approximately 6 months post stroke; supported self-management care strategy; materials to support needs assessment, self-management, goal-setting and action-planning as well as the provision of usable information (the 'priming tool' and 'New Start Guide') and a structured training programme for staff (face to face modules, supported by training worksheets and video content as well as online learning resource through Google hub/website and e-mailed links to training videos developed by the team and uploaded to YouTube). (Note: the number of participants is the number of sites. The number of stroke survivors assessed is 145, the number of carers assessed is 46). Concomitant therapy: No additional information.

Usual care (inactive control intervention) (N = 5)
Continued care as determined by local policy and practices (Note: the number of participants is the number of sites. The number of stroke survivors assessed is 124, the number of carers assessed is 39). Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Self-management intervention (New Start) (N = 5)	Usual care (inactive control intervention) (N = 5)
% Female Nominal	64	54
Mean age (SD) (years) Mean (SD)	72 (11)	73 (12)
Ethnicity Nominal	NA	NA

Characteristic	Self-management intervention (New Start) (N = 5)	Usual care (inactive control intervention) (N = 5)
White Nominal	115	78
Black Nominal	1	1
Asian Nominal	1	2
Mixed Nominal	0	1
Other ethnic group Nominal	0	2
not stated Nominal	28	26
MIssing Nominal	0	14
Comorbidities Nominal	NR	NR
Severity NIHSS score at admission Mean (SD)	4.5 (4.51)	5 (5.51)

Characteristic	Self-management intervention (New Start) (N = 5)	Usual care (inactive control intervention) (N = 5)
Time since stroke days after hospital admission Mean (SD)	11 (18)	15 (24)

The baseline characteristics are reported for the number of people in each treatment arm rather than the number of trial centers (the unit of randomisation). The total number of people in the self management intervention arm = 145, the total number of people in the usual care arm = 124.

Outcomes

Study timepoints

- Baseline
- 6 month (Post-intervention)
- 9 month (End of scheduled follow-up)

Continuous outcomes

Outcome	Self-management intervention (New Start), Baseline, N = 5	Self-management intervention (New Start), 6 month, N = 4	Self-management intervention (New Start), 9 month, N = 4	Usual care (inactive control intervention), Baseline, N = 5	Usual care (inactive control intervention), 6 month, N = 5	Usual care (inactive control intervention), 9 month, N = 5
Participation restrictions (Complex WHODAS score) Scale range: 0-100. Final values. World Health Organisation	28 (5.34)	23.9 (4.56)	26.2 (6.22)	24.7 (7.72)	26 (6.89)	26 (5.99)

Outcome	Self-management intervention (New Start), Baseline, N = 5	Self-management intervention (New Start), 6 month, N = 4	Self-management intervention (New Start), 9 month, N = 4	Usual care (inactive control intervention), Baseline, N = 5	Usual care (inactive control intervention), 6 month, N = 5	Usual care (inactive control intervention), 9 month, N = 5
Disability Assessment Scale. Mean (SD)						

Participation restrictions (Complex WHODAS score) - Polarity - Lower values are better

Continuous outcomes (mean differences)

Outcome	Self-management intervention (New Start) vs Usual care (inactive control intervention), Baseline, N2 = 5, N1 = 5	Self-management intervention (New Start) vs Usual care (inactive control intervention), 6 month, N2 = 4, N1 = 5	Self-management intervention (New Start) vs Usual care (inactive control intervention), 9 month, N2 = 4, N1 = 5
Participation restrictions (Complex WHODAS score) Scale range: 0-100. Change scores. World Health Organisation Disability Assessment Scale. Mean (95% CI)	-3.26 (-14.05 to 7.53)	2.07 (-7.46 to 11.59)	-0.16 (-9.82 to 9.5)

Participation restrictions (Complex WHODAS score) - Polarity - Lower values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Cluster randomised trials

Continuousoutcomes(meandifferences)-Participationrestrictions(ComplexWHODASscore)-MeanNineFivePercentCI-Self-management intervention (New Start)-Usual care (inactive control intervention)-t6

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

Continuousoutcomes(meandifferences)-Participationrestrictions(ComplexWHODASscore)-MeanNineFivePercentCI-Self-management intervention (New Start)-Usual care (inactive control intervention)-t9

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

Frank, 2000

Bibliographic Reference	Frank, G.; Johnston, M.; Morrison, V.; Pollard, B.; MacWalter, R.; Perceived control and recovery from functional limitations: preliminary evaluation of a workbook-based intervention for discharged stroke patients; British journal of health psychology; 2000; vol. 5 (no. 4); 413-420

Study details

Secondary publication of	

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: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Other Workbook led
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Coping with the condition

Study arms

Self management (N = 19)
Workbook group

Usual care (N = 20)
Waiting list

Outcomes

Study timepoints

- Baseline
- 4 week (End of intervention)

Continuous outcomes

Outcome	Self management, Baseline, N = 19	Self management, 4 week, N = 19	Usual care, Baseline, N = 20	Usual care, 4 week, N = 20
Self efficacy (Recovery Locus of Control Scale) Scale range: 9-45. Final values. Mean (SD)	36.1 (4.93)	36.42 (5.56)	35.5 (5.23)	37.55 (4.08)
Activities of daily living (Functional Limitations Profile) Scale range: Unclear. Final values. Mean (SD)	69.62 (17.77)	64.03 (20.96)	71.73 (25.41)	66.89 (22.87)
Psychological distress - Depression (HADS depression) Scale range: 0-42. Final values. Mean (SD)	6.58 (4.19)	6.05 (3.57)	6.15 (3.9)	5.55 (4.03)

Self efficacy (Recovery Locus of Control Scale) - Polarity - Higher values are better
Activities of daily living (Functional Limitations Profile) - Polarity - Lower values are better
Psychological distress - Depression (HADS depression) - Polarity - Lower values are better

Fu, 2020

Bibliographic Reference	Fu, V.; Weatherall, M.; McPherson, K.; Taylor, W.; McRae, A.; Thomson, T.; Gommans, J.; Green, G.; Harwood, M.; Ranta, A.; Hanger, C.; Riley, J.; McNaughton, H.; Taking Charge after Stroke: A randomized controlled trial of a person-centered, self-directed rehabilitation intervention; International Journal of Stroke; 2020; vol. 15 (no. 9); 954-964

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
Trial name / registration number	Australia New Zealand Clinical Trials Registry: ACTRN12615001163594
Study type	Randomised controlled trial (RCT)
Study location	New Zealand
Study setting	Community (non-institutional care)
Study dates	October 2015 - August 2017
Sources of funding	The study was funded by a grant from the Health Research Council of New Zealand (15/297)
Inclusion criteria	Adults diagnosed with stroke

	Not of Maori or Pacific ethnicity Living in the community in non-institutional care <16 weeks following stroke
Exclusion criteria	Exclusions were full recovery from stroke (modified Rankin Scale <1) Communication or cognitive deficit precluding personal written informed consent Premorbid condition making 12-month survival unlikely
Recruitment / selection of participants	The trial was conducted in seven centers in New Zealand, four tertiary and three non-tertiary centers
Intervention(s)	Following baseline assessments in the person's home, participants were randomized to either a control intervention, a single Take Charge session, or two Take Charge sessions six weeks apart. Participants randomized to the Take Charge interventions received a one-to-one, non-directive exploration of their views on what and who was important to them in their lives, and what they wanted to prioritize for the next 12 months, from a research clinician trained to facilitate this process. Family members or friends could be present at the person's request. An illustrated workbook was used to structure the process, to help the person consider the future, and to generate ideas (under headings such as mobility and activities of daily living, communication, information needs, financial issues, emotional needs, supports, and stroke prevention) and the booklet remained with them after the session was completed. The facilitator encouraged the person with stroke to describe their desired outcomes and possible ways to achieve them. Research clinicians who delivered the intervention worked independently from the community stroke rehabilitation service, and were either nurses or physiotherapists, of whom fewer than half had rehabilitation or stroke experience. They received a half-day training session plus one follow-up session after two months, supplemented by a training manual with email and phone backup from a central trainer and fellow research clinicians. The training emphasized the Take Charge session aims. The intervention was not time-limited and usually took between 30 and 60 minutes to complete. The second Take Charge session included all components of the first, including a repeat baseline assessment.
Subgroup 1: Severity (as stated by category or as	Mild (or NIHSS 1-5) Majority (63%) had mild stroke (21% moderate and 16% severe)

measured by NIHSS scale)	
Subgroup 2: Person supporting the intervention	Other Nurses and physiotherapists
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Combination of the above
Population subgroups	No additional information
Comparator	Evidence-based acute stroke care along with inpatient and community stroke rehabilitation. Participants randomized to control were given written educational material about stroke produced by the Stroke Foundation of New Zealand, covering common issues following stroke and risk factor management.
Number of participants	n = 400 (total) n = 270 (combined interventions) n = 130 (usual care)
Duration of follow-up	12 months
Indirectness	No additional information
Additional comments	ITT

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Study arms

Self-Management Intervention (N = 270)
Combined two 'Take Charge' intervention groups into one

Usual Care (N = 130)

Characteristics

Arm-level characteristics

Characteristic	Self-Management Intervention (N = 270)	Usual Care (N = 130)
% Female Sample size	n = 111 ; % = 41.1	n = 55 ; % = 43.3
Mean age (SD) (years) Mean (SD)	71.6 (12.6)	73 (12.2)
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA
New Zealand European Sample size	n = 190 ; % = 70.4	n = 97 ; % = 74.6
Other European Sample size	n = 72 ; % = 26.7	n = 27 ; % = 20.8

Characteristic	Self-Management Intervention (N = 270)	Usual Care (N = 130)
Other Sample size	n = 7 ; % = 2.6	n = 6 ; % = 4.6
Comorbidities Sample size	n = NA ; % = NA	*empty data*
Diabetes % Sample size	n = 50 ; % = 18.5	n = 26 ; % = 20
Severity Barthel Index Mean (SD)	18.9 (2.1)	18.8 (1.7)
Time since stroke (days) Mean (SD)	45.5 (25.3)	45 (26.9)

Outcomes

Study timepoints

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

Continuous Outcomes

Outcome	Self-Management Intervention, Baseline, N = 266	Self-Management Intervention, 12 month, N = 257	Usual Care, Baseline, N = 130	Usual Care, 12 month, N = 129
Activities of daily living (barthel index) Scale range 0-20, final values Mean (SD)	18.9 (2.1)	19.2 (2)	18.8 (1.7)	18.7 (2.8)
Patient/participant Generic Health-Related Quality of Life (EQ-VAS) Scale range 0-100, final values; intervention group 12-month n = 250, Control group 12-month n = 117 Mean (SD)	NR (NR)	73.48 (16.5)	NR (NR)	70.6 (17.3)

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

Patient/participant Generic Health-Related Quality of Life (EQ-VAS) - Polarity - Higher values are better

Combined two 'Take Charge' intervention groups into one to create 'self-management intervention'

Dichotomous Outcomes

Outcome	Self-Management Intervention, Baseline, N = 270	Self-Management Intervention, 12 month, N = 270	Usual Care, Baseline, N = 130	Usual Care, 12 month, N = 130
Adverse events No of events	n = NA ; % = NA	n = NA ; % = NA	n = NA ; % = NA	n = NA ; % = NA
Death No of events	n = NA ; % = NA	n = 8 ; % = 3	n = NA ; % = NA	n = 10 ; % = 7.7
Recurrent stroke	n = NA ; % = NA	n = 14 ; % = 5.2	n = NA ; % = NA	n = 2 ; % = 1.5

Outcome	Self-Management Intervention, Baseline, N = 270	Self-Management Intervention, 12 month, N = 270	Usual Care, Baseline, N = 130	Usual Care, 12 month, N = 130
No of events				
Hospital Readmission No of events	n = NA ; % = NA	n = 95 ; % = 35.2	n = NA ; % = NA	n = 53 ; % = 40.8

Adverse events - Polarity - Lower values are better
Hospital Readmission - Polarity - Lower values are better
Combined two 'Take Charge' intervention groups into one to create 'self-management intervention'

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

Barthel Index

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

Adverse Events

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

Hospital Readmission

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

Quality of Life

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

Guidetti, 2011

Bibliographic Reference	Guidetti, Susanne; Ytterberg, Charlotte; A randomised controlled trial of a client-centred self-care intervention after stroke: a longitudinal pilot study; Disability and rehabilitation; 2011; vol. 33 (no. 6); 494-503

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
Trial name / registration number	No additional information
Study type	Randomised controlled trial (RCT)
Study location	Sweden
Study setting	Rehabilitation clinics
Study dates	October 2006 - June 2007
Sources of funding	This work was funded by grants from Karolinska Instituet, the Centre for Health Care Science, Karolinska University Hospital, ALF-funds from Karolinska Instituet and The Stockholm County Council, Solstickan Foundation and The Swedish Association of Occupational Therapists in Stockholm, Sweden
Inclusion criteria	Stroke diagnosis No dementia diagnosis Able to follow instructions Need for self-care intervention Referred to one of three participating rehabilitation clinics
Exclusion criteria	No additional information
Recruitment / selection of participants	Consecutive series of individuals with stroke admitted to the stroke units at Karolinska University Hospital
Intervention(s)	The Client-Centred Self-Care Intervention (CCSCI) consisted of 9 main steps with the overall aim of enabling individuals with stroke to resume responsibility for their self-care and to influence their own rehabilitation process by adjusting the intervention to each individual's unique situation. Patients learned to use a and implement a global problem-solving

	strategy, goal-plan-do-check, when performing self-care activities. Setting up a goal required self-interrogation. Planning required self-monitoring. Do demanded self-observation. Check required self-evaluation. The 9 steps of the CCSCI were broadly as follows: 1) First meeting between occupational therapist and patient, with the aim of establishing a relationship 2) Occupational therapist observes the patient performing self-care activities 3) Occupational therapist scores the patient's ADL using the Sunnaas Index, helping the client to identify difficulties in performing the activity 4) Occupational therapist invites the patient to formulate 3 goals 5) Patient is introduced to the goal-plan-do-check strategy 6) Based on the formulated goals, the occupational therapist and patient identify specific strategies to formulate a plan to help the patient carry out the activities successfully. A training diary is introduced so the patient can assume responsibility for their own goals and training 7) Occupational therapist informs other staff at the rehabilitation centre of the patients goals and planned strategies 8) Patient practises self-care activities on their own and with the occupational therapist 9) When the goals have been reached, the patient and occupational therapist discuss and evaluate before formulating new goals **Concomitant Treatments:** Both groups also received other rehabilitation as needed e.g., physiotherapy, speech therapy.
Subgroup 1: Severity (as stated	Not stated/unclear

by category or as measured by NIHSS scale)	
Subgroup 2: Person supporting the intervention	Occupational Therapists
Subgroup 3: Domain of therapy	Functional independency
Subgroup 4: Mechanism of intervention	Combination of the above
Population subgroups	No additional information
Comparator	Patients in the usual care group received ordinary self-care training which varied according to the routines and practices of the rehabilitation clinic and the individual experiences of the occupational therapist. The amount of rehabilitation was meant to align with that in the intervention group. **Concomitant Treatments:** Both groups also received other rehabilitation as needed e.g., physiotherapy, speech therapy.
Number of participants	n = 40 (total) n = 19 (intervention) n = 21 (control)
Duration of follow-up	12 months
Indirectness	No additional information

Additional comments	ITT with LOCF imputation

Study arms

Client-Centred Self-Care Intervention (N = 19)

Regular Self-Care Training (N = 21)

Characteristics

Arm-level characteristics

Characteristic	Client-Centred Self-Care Intervention (N = 19)	Regular Self-Care Training (N = 21)
% Female Sample size	n = 11 ; % = 57.9	n = 12 ; % = 57.1
Mean age (SD) (years) Mean (SD)	66 (14)	69 (15)
Ethnicity Nominal	NR	NR
Comorbidities Nominal	NR	NR

Characteristic	Client-Centred Self-Care Intervention (N = 19)	Regular Self-Care Training (N = 21)
Severity Nominal	NR	NR
Time since stroke Nominal	NR	NR

Outcomes

Study timepoints

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

Continuous Outcomes

Outcome	Client-Centred Self-Care Intervention, Baseline, N = 19	Client-Centred Self-Care Intervention, 12 month, N = 10	Regular Self-Care Training, Baseline, N = 21	Regular Self-Care Training, 12 month, N = 14
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Subscale 5) Scale range 0-100, final values Mean (SD)	NR (NR)	70 (19)	NR (NR)	64 (29)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact	NR (NR)	53 (27)	NR (NR)	70 (20)

Outcome	Client-Centred Self-Care Intervention, Baseline, N = 19	Client-Centred Self-Care Intervention, 12 month, N = 10	Regular Self-Care Training, Baseline, N = 21	Regular Self-Care Training, 12 month, N = 14
Scale - Subscale 8) Scale range 0-100, final values Mean (SD)				
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Self-Assessed Recovery Scale range 0-100, final values; intervention group 12-month n = 9, Control group 12-month n = 13 Mean (SD)	NR (NR)	55 (17)	NR (NR)	59 (26)

Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Subscale 5) - Polarity - Higher values are better
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Subscale 8) - Polarity - Higher values are better
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Self-Assessed Recovery - Polarity - Higher values are better

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

Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale-Subscale 5)

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

Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale-Subscale 8)

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

Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale-Self-Assessed Recovery)

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

Harwood, 2012

Bibliographic Reference	Harwood, M.; Weatherall, M.; Talemaitoga, A.; Barber, P. A.; Gommans, J.; Taylor, W.; McPherson, K.; McNaughton, H.; Taking charge after stroke: promoting self-directed rehabilitation to improve quality of life--a randomized controlled trial; Clinical rehabilitation; 2012; vol. 26 (no. 6); 493-501

Study details

Subgroup 1: Severity (as stated by category or as	Not stated/unclear

measured by NIHSS scale)	
Subgroup 2: Person supporting the intervention	Non-health care professional Research assistant trained in the process
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Coping with the condition
Population subgroups	No additional information

Study arms

Self management (N = 85)
Combination of two arms: an arm that received an 80 minute individual assessment and goal setting with booklet (n=46) and an arm that received a combination of the individual session and a DVD that provided encouragement (n=39).

Control (N = 87)
Combination of two arms: an arm that received an 80 minute DVD with encouragement to listen to as often as the person wished (n=48), and an arm that received usual care only, consisting of a single 30-minute education session with standard written information (n=39). Due to the comparison used above this will be counted as an inactive control arm.

Outcomes

Study timepoints
- Baseline

- 12 month (End of scheduled follow up)

Continuous outcomes

Outcome	Self management, Baseline, N = 85	Self management, 12 month, N = 70	Control, Baseline, N = 87	Control, 12 month, N = 69
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 Mean (SD)	NR (NR)	43.89 (10.45)	NR (NR)	37.88 (11.33)
SF-36 mental component Mean (SD)	NR (NR)	52.65 (9.26)	NR (NR)	52.17 (8.16)
Activities of daily living (barthel index) Scale range: 0-100. Final values. Mean (SD)	NR (NR)	18.27 (3.82)	NR (NR)	17.39 (4.23)

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 outcome

Outcome	Self management, Baseline, N = 85	Self management, 12 month, N = 85	Control, Baseline, N = 87	Control, 12 month, N = 87
Adverse events Only reported the number who died. Intervention: 8. Control: 10. No of events	n = NA ; % = NA	n = 8 ; % = 9	n = NA ; % = NA	n = 10 ; % = 12

Adverse events - Polarity - Lower values are better

Hoffmann, 2015

Bibliographic Reference	Hoffmann, T.; Ownsworth, T.; Eames, S.; Shum, D.; Evaluation of brief interventions for managing depression and anxiety symptoms during early discharge period after stroke: a pilot randomized controlled trial; Top Stroke Rehabil; 2015; vol. 22 (no. 2); 116-26

Study details

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear

Subgroup 2: Person supporting the intervention	Occupational Therapists
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Coping with the condition
Population subgroups	No additional information

Study arms

Self management (N = 12)
Self management framework of Lorig 1993

Usual care (N = 10)
Standard care. Individual, variable.

Outcomes

Study timepoints

- Baseline
- 2 month (An average time. End of intervention, which could vary.)
- 5 month (End of scheduled follow up)

Continuous outcomes

Outcome	Self management, Baseline, N = 12	Self management, 2 month, N = 12	Self management, 5 month, N = 12	Usual care, Baseline, N = 10	Usual care, 2 month, N = 10	Usual care, 5 month, N = 10
Self efficacy (Self-efficacy questionnaire) Scale range: 9-90. Final values. Mean (SE)	NA (NA)	71.7 (1.2)	71.7 (1.1)	NA (NA)	70.3 (1.3)	69.7 (1.2)
Self efficacy (Self-efficacy questionnaire) Scale range: 9-90. Final values. Mean (SD)	67.8 (10.5)	NR (NR)	NR (NR)	67 (14.8)	NR (NR)	NR (NR)
Activities of daily living (Modified Barthel Index) Scale range: 0-100. Final values. Mean (SE)	NA (NA)	75.4 (2.5)	81.7 (2.6)	NA (NA)	69.2 (2.6)	80.9 (2.7)
Activities of daily living (Modified Barthel Index) Scale range: 0-100. Final values. Mean (SD)	78.2 (19.2)	NR (NR)	NR (NR)	63.8 (26.1)	NR (NR)	NR (NR)
Stroke-specific Patient Reported Outcome Measures (SAQOL-general) Scale range: 0-5. Final values. Mean (SE)	NA (NA)	3.9 (0.1)	4 (0.1)	NA (NA)	3.7 (0.1)	3.9 (0.1)

Outcome	Self management, Baseline, N = 12	Self management, 2 month, N = 12	Self management, 5 month, N = 12	Usual care, Baseline, N = 10	Usual care, 2 month, N = 10	Usual care, 5 month, N = 10
Stroke-specific Patient Reported Outcome Measures (SAQOL-general) Scale range: 0-5. Final values. Mean (SD)	3.7 (0.5)	NR (NR)	NR (NR)	3.6 (0.7)	NR (NR)	NR (NR)
Psychological distress - Depression (HADS depression) Scale range: 0-21. Final values. Mean (SE)	NA (NA)	6.6 (0.4)	6.4 (0.6)	NA (NA)	6.4 (0.5)	7 (0.7)
Psychological distress - Depression (HADS depression) Scale range: 0-21. Final values. Mean (SD)	6.1 (2.5)	NR (NR)	NR (NR)	7.3 (2.9)	NR (NR)	NR (NR)

Self efficacy (Self-efficacy questionnaire) - Polarity - Higher values are better
Activities of daily living (Modified Barthel Index) - Polarity - Higher values are better
Stroke-specific Patient Reported Outcome Measures (SAQOL-general) - Polarity - Higher values are better
Psychological distress - Depression (HADS depression) - Polarity - Lower values are better

Johnston, 2007

Bibliographic Reference	Johnston, M.; Bonetti, D.; Joice, S.; Pollard, B.; Morrison, V.; Francis, J. J.; Macwalter, R.; Recovery from disability after stroke as a target for a behavioural intervention: results of a randomized controlled trial; Disability and rehabilitation; 2007; vol. 29 (no. 14); 1117-1127

Study details

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Other Trained health professional (type not specified)
Subgroup 3: Domain of therapy	Mixed Cognition and mood
Subgroup 4: Mechanism of intervention	An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning
Population subgroups	No additional information

Study arms

Self management (N = 103)
Intervention to control cognitions and mood

Usual care (N = 100)
Normal care

Outcomes

Study timepoints
- Baseline
- 5 week (End of intervention)

Continuous outcomes

Outcome	Self management, Baseline, N = 103	Self management, 5 week, N = 74	Usual care, Baseline, N = 100	Usual care, 5 week, N = 84
Activities of daily living (barthel index) Scale range: 0-100. Final values. Mean (SD)	18.02 (3.14)	1.43 (0.68)	18.36 (2.74)	1.39 (0.61)
Self efficacy (Recovery Locus of Control Scale) Scale range: 9-45. Final values. Indirect outcome as the outcome is only reported at the 2nd interview (half way through intervention). Mean (SD)	35.3 (4.14)	35.87 (4.31)	35.41 (4.36)	35.53 (5.21)

Outcome	Self management, Baseline, N = 103	Self management, 5 week, N = 74	Usual care, Baseline, N = 100	Usual care, 5 week, N = 84
Psychological distress (HADS Depression) Scale range: 0-42. Final values. Mean (SD)	6.89 (4.46)	10.67 (7.89)	6.03 (3.81)	9.67 (7.34)

Activities of daily living (barthel index) - Polarity - Higher values are better
Self efficacy (Recovery Locus of Control Scale) - Polarity - Higher values are better
Psychological distress (HADS Depression) - Polarity - Lower values are better

Dichotomous outcomes

Outcome	Self management, Baseline, N = 103	Self management, 5 week, N = 103	Usual care, Baseline, N = 100	Usual care, 5 week, N = 100
Adverse events Reported death only. Intervention: 5. Control: 3. No of events	n = NA ; % = NA	n = 5 ; % = 5	n = NA ; % = NA	n = 3

Adverse events - Polarity - Lower values are better

Jones, 2016

Bibliographic Reference	Jones, F.; Gage, H.; Drummond, A.; Bhalla, A.; Grant, R.; Lennon, S.; McKevitt, C.; Riazi, A.; Liston, M.; Feasibility study of an integrated stroke self-management programme: a cluster-randomised controlled trial; BMJ Open; 2016; vol. 6 (no. 1); e008900

1 **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
Trial name / registration number	No additional information
Study type	Cluster randomised controlled trial
Study location	UK
Study setting	21 community stroke rehabilitation centres in London boroughs
Study dates	July 2012 - August 2013
Sources of funding	This study was funded by the National Institute for Health Research (Research for Patient Benefit Programme; Grant Number: PB-PG-0610–22276).
Inclusion criteria	Diagnosis of stroke Able to follow two-stage commands
Exclusion criteria	No additional information
Recruitment / selection of participants	Consecutive patients with stroke referred for community stroke rehabilitation (CSR) were screened within 2 weeks of referral to the CSR team
Intervention(s)	The self-management programme consisted of seven key principles:

	Problem solving - not being given solutions, but encouraged to come up with ideas and strategies Reflection - attributing changes and progress to personal effort Goal setting - avoiding therapy-led goals, encouraging small steps for mastery experiences and longer term goals Accessing resources - using resources available to achieve personal goals Self discovery - finding out new ways of doing things and trying different activities Activity - encouraging activity Knowledge - knowledge about stroke and self Patients allocated to the intervention clusters were introduced to the stroke workbook and the seven key principles of self-management by the therapist integrated into existing CSR sessions **Concomitant Treatments:** Both groups received community stroke rehabilitation as usual which included physiotherapy, occupational therapy and speech and language therapy as required.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Multidisciplinary team

Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Combination of the above
Population subgroups	No additional information
Comparator	**Concomitant Treatments:** Both groups received community stroke rehabilitation as usual which included physiotherapy, occupational therapy and speech and language therapy as required.
Number of participants	n = 4 clusters, 78 patients (total) n = 2 clusters, 40 patients (intervention) n = 2 clusters, 38 patients (control)
Duration of follow-up	12 weeks
Indirectness	No additional information
Additional comments	ITT

Study arms

Self-Management Programme (N = 2)
n = 40 in clusters

Usual Care (N = 2)
n = 38 in clusters

Characteristics

Arm-level characteristics

Characteristic	Self-Management Programme (N = 2)	Usual Care (N = 2)
% Female Sample size	n = 20 ; % = 50	n = 13 ; % = 34
Mean age (SD) Mean (SD)	61.79 (16.03)	68.82 (10.28)
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA
White British Sample size	n = 17 ; % = 45	n = 19 ; % = 51
Other white Sample size	n = 3 ; % = 8	n = 8 ; % = 22
Black Caribbean Sample size	n = 10 ; % = 26	n = 6 ; % = 16
Other Sample size	n = 8 ; % = 21	n = 4 ; % = 11

Characteristic	Self-Management Programme (N = 2)	Usual Care (N = 2)
Comorbidities Nominal	NR	NR
Severity Nominal	NR	NR
Time since stroke (days) Range	31 to 1369	17 to 1105

Outcomes

Study timepoints

- Baseline
- 12 week (End of intervention Intervention clusters; baseline n = 40, 12-week n = 36 Control clusters; baseline n = 38, 12-week n = 30)

Continuous Outcomes

Outcome	Self-Management Programme, Baseline, N = 2	Self-Management Programme, 12 week, N = 2	Usual Care, Baseline, N = 2	Usual Care, 12 week, N = 2
Quality of life (SF-12 Physical Subscale) Scale range 0-100, final values Mean (SD)	34 (8.5)	36.3 (10.8)	30.9 (10.1)	33.1 (8.8)

Outcome	Self-Management Programme, Baseline, N = 2	Self-Management Programme, 12 week, N = 2	Usual Care, Baseline, N = 2	Usual Care, 12 week, N = 2
Quality of life (SF-12 Mental Subscale) Scale range 0-100, final values Mean (SD)	46.8 (12.6)	46.1 (10.7)	41 (14.2)	42.8 (11.9)
Self-Efficacy (Stroke Self-Efficacy Questionnaire) Scale range unclear, final values Mean (SD)	25.9 (8.6)	26.4 (9)	23.5 (9.7)	21.5 (10.6)
Depression (Hospital Anxiety and Depression Scale - Depression Subscale) Scale range 0-21, final values Mean (SD)	6.9 (4.2)	7.1 (4.3)	7.1 (3.4)	8.1 (4.1)
Activities of Daily Living (Nottingham Extended Activities of Daily Living) Scale range 0-66, final values Mean (SD)	29.9 (14.4)	35.5 (16.9)	30.8 (17)	32.1 (19)

Quality of life (SF-12 Physical Subscale) - Polarity - Higher values are better
Quality of life (SF-12 Mental Subscale) - Polarity - Higher values are better
Self-Efficacy (Stroke Self-Efficacy Questionnaire) - Polarity - Higher values are better
Depression (Hospital Anxiety and Depression Scale - Depression Subscale) - Polarity - Lower values are better
Activities of Daily Living (Nottingham Extended Activities of Daily Living) - Polarity - Higher values are better

Critical appraisal - Cochrane Risk of Bias tool (RoB 2.0) Cluster randomised trials

Quality of Life - Physical Subscale

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

Quality of Life - Mental Subscale

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

Self-Efficacy

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

Depression

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Activities of Daily Living

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

Kalav, 2021

Bibliographic Reference	Kalav, S.; Bektas, H.; Unal, A.; Effects of Chronic Care Model-based interventions on self-management, quality of life and patient satisfaction in patients with ischemic stroke: A single-blinded randomized controlled trial; Japan Journal of Nursing Science: JJNS; 2021; e12441

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	
Trial name / registration number	No additional information
Study type	Randomised controlled trial (RCT)
Study location	Turkey
Study setting	Initial interviews help in an inpatient neurology clinic before discharge home where intervention was carried out
Study dates	September 2018 - September 2019
Sources of funding	No additional information
Inclusion criteria	TOAST classification of ischemic stroke Having space, time, person orientation Receiving scores of 0-3 on the Modified Rankin Scale upon discharge ≥18 years Diagnosed with first ischemic stroke through a CT and MRI scan Literate Able to use a phone No disability of verbal communication

Exclusion criteria	Diagnosed with a psychiatric disorder Having advanced liver/kidney disease Having malignancy or another neurological disorder
Recruitment / selection of participants	All patients treated at an inpatient neurology clinic and meeting inclusion criteria were invited for participation
Intervention(s)	An initial interview was held upon discharge to obtain baseline data. Following this, discharge education was given for 30-45 minutes with a booklet based on the chronic care model and contained information and suggestions related to self-management strategies. Patients were followed up by telephone at weeks 1, 2, 4 and 8 after discharge. During the telephone calls, patients were asked questions pertaining to their beliefs and behaviours, as well as checking on their general health with recommendations made as necessary. Each phone call lasted 15-20 minutes. In unexpected/unpredictable circumstances during the 12-week period, patients were directed to outpatient clinics or to a neurologist for consultation where deemed necessary. Short reminder messages related to self-management were given to the patients 7 times across the 12-week period in order to assist patient education. All patient contacts were carried out by a single researcher. **Concomitant Treatments:** Routine patient care was given to all patients and included standard hospital care given to all of the patients with ischemic stroke in the clinic during their stay.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Other

Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning
Population subgroups	No additional information
Comparator	**Concomitant Treatments:** Routine patient care was given to all patients and included standard hospital care given to all of the patients with ischemic stroke in the clinic during their stay.
Number of participants	n = 68 (total) n = 34 (intervention) n = 34 (control)
Duration of follow-up	12 weeks
Indirectness	No additional information
Additional comments	ITT

Study arms

Chronic Care Model Intervention (N = 34)

Usual Care (N = 34)

1 **Characteristics**

2 ***Arm-level characteristics***

Characteristic	Chronic Care Model Intervention (N = 34)	Usual Care (N = 34)
% Female Sample size	n = 12 ; % = 35.3	n = 12 ; % = 35.2
Mean age (SD) (years) Mean (SD)	55.9 (11.44)	58.9 (13.82)
Ethnicity Nominal	NR	NR
Comorbidities Sample size	n = NA ; % = NA	n = NA ; % = NA
Hypertension Sample size	n = 18 ; % = 52.9	n = 19 ; % = 55.9
Diabetes Sample size	n = 13 ; % = 38.2	n = 13 ; % = 38.2
Heart diseases Sample size	n = 4 ; % = 11.8	n = 9 ; % = 26.5
Severity Nominal	NR	NR

Characteristic	Chronic Care Model Intervention (N = 34)	Usual Care (N = 34)
Time since stroke Nominal	NR	NR

Outcomes

Study timepoints

- Baseline
- 12 week (End of intervention)

Continuous Outcomes

Outcome	Chronic Care Model Intervention, Baseline, N = 34	Chronic Care Model Intervention, 12 week, N = 34	Usual Care, Baseline, N = 34	Usual Care, 12 week, N = 34
Activities of daily living (Modified Barthel Index) Scale range 0-100, change scores Mean (SD)	NA (NA)	2.44 (5.57)	NA (NA)	9.29 (11.41)
Self-Efficacy (Stroke Self-Efficacy Questionnaire) Scale range 0-39, change scores Mean (SD)	NA (NA)	0.07 (0.38)	NA (NA)	0.22 (0.5)

Outcome	Chronic Care Model Intervention, Baseline, N = 34	Chronic Care Model Intervention, 12 week, N = 34	Usual Care, Baseline, N = 34	Usual Care, 12 week, N = 34
Stroke-specific Patient-Reported Outcome Measures (Stroke-Specific Quality of Life) Scale range 1-5, change scores Mean (SD)	NA (NA)	0.44 (0.67)	NA (NA)	0.54 (0.79)

Activities of daily living (Modified Barthel Index) - Polarity - Higher values are better
Self-Efficacy (Stroke Self-Efficacy Questionnaire) - Polarity - Higher values are better
Stroke-specific Patient-Reported Outcome Measures (Stroke-Specific Quality of Life) - Polarity - Higher values are better

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

Activities of Daily Living

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

Self Efficacy

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Stroke-Specific Patient-Reported Outcome Measures

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

Kendall, 2007

Bibliographic Reference	Kendall, E.; Catalano, T.; Kuipers, P.; Posner, N.; Buys, N.; Charker, J.; Recovery following stroke: the role of self-management education; Social science & medicine (1982); 2007; vol. 64 (no. 3); 735-746

Study details

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear

Subgroup 2: Person supporting the intervention	Other Health care professional, type not specified
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Coping with the condition
Population subgroups	No additional information

Study arms

Self management (N = 58)
Chronic Disease Self Management Program

Usual care (N = 42)
Usual care

Outcomes

Study timepoints
- Baseline
- 3 month (End of intervention)
- 12 month (End of scheduled follow-up)

Continuous outcomes

Outcome	Self management, Baseline, N = 58	Self management, 3 month, N = 58	Self management, 12 month, N = 58	Usual care, Baseline, N = 42	Usual care, 3 month, N = 42	Usual care, 12 month, N = 42
Self efficacy (self efficacy scale) Scale range: 0-96 (five point scale with 24 items). Mean (SD)	NR (NA)	68.46 (15.31)	69.42 (15.16)	NR (NR)	61.45 (14.93)	61.68 (18.16)
Stroke-specific Patient Reported Outcome Measures (Stroke Specific Quality of Life) Final values Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
Energy Scale range: 3-15 Mean (SD)	NR (NR)	9.08 (3.85)	9.91 (3.72)	NR (NR)	8.07 (3.88)	9.64 (3.36)
Language Scale range: 5-25 Mean (SD)	NR (NR)	21.96 (3.88)	22.18 (3.52)	NR (NR)	21.9 (3.79)	21.32 (4.04)
Mobility Scale range: 12-60 Mean (SD)	*empty data*	23.69 (5.82)	24.87 (5.15)	NR (NR)	23.1 (6.83)	24.87 (5.15)
Fine motor tasks Scale range: 5-25	NR (NR)	20.46 (4.5)	21.49 (4.09)	NR (NR)	20.23 (4.77)	20.79 (4.62)

Outcome	Self management, Baseline, N = 58	Self management, 3 month, N = 58	Self management, 12 month, N = 58	Usual care, Baseline, N = 42	Usual care, 3 month, N = 42	Usual care, 12 month, N = 42
Mean (SD)						
Vision Scale range: 3-15 Mean (SD)	NR (NR)	14.02 (1.77)	13.98 (2.04)	*empty data*	13.59 (2.32)	13.7 (2.46)
Thinking Scale range: 3-15 Mean (SD)	NR (NR)	9.91 (3.92)	10.09 (4.13)	NR (NR)	9.34 (3.93)	9.86 (3.59)
Personality Scale range: 3-15 Mean (SD)	NR (NR)	10.33 (4.01)	10.16 (3.74)	NR (NR)	10 (3.7)	10.54 (3.67)
Mood Scale range: 5-25 Mean (SD)	NR (NR)	18.59 (5.41)	19.64 (4.81)	NR (NR)	17.76 (4.82)	18.46 (4.86)
Work productivity Scale range: 3-15 Mean (SD)	NR (NR)	10.07 (3.62)	11.62 (3.67)	NR (NR)	9.67 (4.09)	11.14 (3.36)
Social roles Scale range: 5-25 Mean (SD)	NR (NR)	14.59 (5.92)	17.4 (6.22)	NR (NR)	13.71 (5.59)	14.89 (5.79)

Outcome	Self management, Baseline, N = 58	Self management, 3 month, N = 58	Self management, 12 month, N = 58	Usual care, Baseline, N = 42	Usual care, 3 month, N = 42	Usual care, 12 month, N = 42
Family roles Scale range: 3-15 Mean (SD)	NR (NR)	10.31 (4)	11.67 (3.5)	NR (NR)	10.71 (3.77)	11.37 (2.95)
Self-care domain Scale range: 5-25 Mean (SD)	NR (NR)	20.98 (4.65)	22.2 (3.41)	NR (NR)	19.59 (5.34)	21.22 (4.45)

Self efficacy (self efficacy scale) - Polarity - Higher values are better

Stroke-specific Patient Reported Outcome Measures (Stroke Specific Quality of Life) - Polarity - Higher values are better

Kessler, 2017

Bibliographic Reference	Kessler, D.; Egan, M.; Dubouloz, C. J.; McEwen, S.; Graham, F. P.; Occupational Performance Coaching for Stroke Survivors: A Pilot Randomized Controlled Trial; American Journal of Occupational Therapy; 2017; vol. 71 (no. 3); 7103190020p1-7103190020p7

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
Trial name / registration number	Identifier NCT01800461 at ClinicalTrials.gov
Study type	Randomised controlled trial (RCT)
Study location	Canada
Study setting	Home-based
Study dates	January 2013 - May 2014
Sources of funding	This research was funded by a grant from the University of Ottawa Brain and Mind Research Institute. Kessler was supported during this study by the following awards: Vanier Canada Scholarship, Canadian Occupational Therapy Foundation Doctoral Scholarship, Ontario Graduate Scholarship, and Ontario Research Coalition Early Researcher Award
Inclusion criteria	First hospitalization due to diagnosis of stroke Discharge from acute care hospital or inpatient rehabilitation to a non-institutionalized setting FIM scores at rehabilitation discharge of at least 3 for expression, comprehension, memory, and problem solving Residence within the city of Ottawa Stroke survivors referred to outpatient stroke rehabilitation for occupational therapy were eligible following completion of their outpatient occupational therapy
Exclusion criteria	Other degenerative neurological diagnoses Current major depressive or psychotic disorder
Recruitment / selection of participants	Patients were recruited at the time of discharge from hospital or outpatient stroke rehabilitation. Health professionals employed at each hospital screened and referred interested clients who met the inclusion and exclusion criteria to a research assistant, who then sought informed consent.

Intervention(s)	The occupational Performance Coaching (OPC) comprised 3 main domains; emotional support, individualised education and a goal-focussed problem-solving process. Emotional support is conveyed to the client through use of active listening, empathizing, reframing, guiding, and encouraging. Individualized education occurs through a reciprocal exchange of information between the occupational therapist and client that is grounded in adult learning principles. This individualized education involves exchange of information that is relevant to the individual needs of the stroke survivor and his or her participation goals. Education can be related to health conditions and impairments, specialized strategies, provision of information about community resources and entitlements, typical development related to the person's stage of life, and teaching and learning strategies. Goal-focused problem solving consists of processes to facilitate goal setting and problem solving to promote goal achievement. Identification of participation goals is facilitated through the use of personal projects analysis to promote reflection during goal setting. Personal projects are activities carried out over time within a particular social context to achieve an end that is named and given meaning by the doer. In this way, personal projects reflect occupations. During the process of PPA, participants are facilitated to reflect on specific aspects of goals, such as importance, support available, and degree of challenge. Once goals have been identified, a structured problem-solving process of (a) set goal, (b) explore options, (c) plan action, (d) carry out plan, (e) check performance, and (f) generalize is presented. The occupational therapist guides the participant through this process as he or she strives to achieve set goals. During the explore options step of a particular goal, collaborative performance analysis (CPA) is used. In CPA, the client is guided to analyse different aspects that contribute to his or her performance using the Person-Environment-Occupation (PEO) model. The PEO model facilitates the examination of the interaction between the person, the environment, and the demands of the occupation that promote or inhibit participation. In conjunction with use of the PEO model, CPA involves the following four steps: (a) identify what currently happens, (b) identify what the client would like to happen, (c) explore barriers and bridges to enabling performance, and (d) identify client needs in planning and taking actions to achieve goals. Throughout these steps, the emphasis is on finding solutions as opposed to focusing on problems. The OPC intervention consisted of up to 10 one-to-one visits with an occupational therapist over a 16-week period. Visits lasted approximately 1 hr and took place in the patient's home or location of his/her choice. Three personal projects were identified by each participant as intervention goals, and the following nine OPC-Stroke sessions were focused on these projects. **Concomitant Treatments:** Both groups received standard care which could consist of outpatient therapy (not occupational) and/or personal support services for activities of daily living.
Subgroup 1: Severity (as stated	Not stated/unclear

by category or as measured by NIHSS scale)	
Subgroup 2: Person supporting the intervention	Occupational Therapists
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Combination of the above
Population subgroups	No additional information
Comparator	**Concomitant Treatments:** Both groups received standard care which could consist of outpatient therapy (not occupational) and/or personal support services for activities of daily living.
Number of participants	n = 21 (total) n = 10 (intervention) n = 11 (control)
Duration of follow-up	6 months
Indirectness	No additional information
Additional comments	Complete case analysis

1

Study arms

Occupational Performance Coaching (N = 10)

Usual Care (N = 11)

Characteristics

Arm-level characteristics

Characteristic	Occupational Performance Coaching (N = 10)	Usual Care (N = 11)
% Female Sample size	n = 5 ; % = 50	n = 5 ; % = 45
Mean age (SD) (years) Mean (SD)	71 (13.2)	64.9 (16.3)
Ethnicity Nominal	NR	NR
Comorbidities Number of Comorbidities Mean (SD)	4.1 (2.3)	4.1 (1.6)
Severity Nominal	NR	NR

Characteristic	Occupational Performance Coaching (N = 10)	Usual Care (N = 11)
Time since stroke (Weeks) Mean (SD)	29.2 (18.2)	60.6 (87.6)

Outcomes

Study timepoints

- Baseline
- 14 week (End of intervention)
- 6 month (End of follow-up)

Continuous Outcomes

Outcome	Occupational Performance Coaching, Baseline, N = 6	Occupational Performance Coaching, 14 week, N = 6	Occupational Performance Coaching, 6 month, N = 6	Usual Care, Baseline, N = 11	Usual Care, 14 week, N = 11	Usual Care, 6 month, N = 11
Activities of Daily Living (Canadian Occupational Performance Measure - Performance Subscale) Scale range 1-10, final values Mean (SD)	3.7 (2)	6.3 (3.1)	6.1 (2.4)	5 (2.6)	6.3 (2.3)	6.1 (3.2)
Activities of Daily Living (Canadian Occupational Performance Measure -	2.7 (1.6)	6.2 (2.8)	5.6 (2.4)	4.1 (2.5)	6.2 (2.3)	5.7 (3.3)

Outcome	Occupational Performance Coaching, Baseline, N = 6	Occupational Performance Coaching, 14 week, N = 6	Occupational Performance Coaching, 6 month, N = 6	Usual Care, Baseline, N = 11	Usual Care, 14 week, N = 11	Usual Care, 6 month, N = 11
Satisfaction Subscale) Scale range 1-10, final values Mean (SD)						
Psychological Distress (Hospital Anxiety and Depression Scale) Scale range 0-42, final values Mean (SD)	5.8 (5.4)	7.7 (6.8)	7.8 (7.8)	7.4 (3.6)	10 (7.8)	9.6 (6)
Participation Restrictions (Reintergration to Normal Living Index) Scale range 1-110, final values Mean (SD)	92 (21.4)	84.7 (27.2)	95.2 (18.7)	79 (20)	86.7 (21)	88.7 (13.5)

1 Activities of Daily Living (Canadian Occupational Performance Measure - Performance Subscale) - Polarity - Higher values are better
2 Activities of Daily Living (Canadian Occupational Performance Measure - Satisfaction Subscale) - Polarity - Higher values are better
3 Psychological Distress (Hospital Anxiety and Depression Scale) - Polarity - Lower values are better
4 Participation Restrictions (Reintergration to Normal Living Index) - Polarity - Higher values are better

5

6

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

Activities of Daily Living - Performance Subscale

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

Activities of Daily Living - Satisfaction Subscale

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

Psychological Distress

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Did not use the HADS depression subscale)*

Activities of Daily Living - Performance Subscale - End of Follow-up

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

1

2 ***Activities of Daily Living - Satisfaction Subscale - End of Follow-up***

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

3

4 ***Psychological Distress - End of Follow-up***

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Did not use the HADS depression subscale)*

5

6 ***Participation Restrictions - End of Intervention***

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

7

Participation Restrictions - End of Follow-up

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

Kim, 2013

Bibliographic Reference	Kim, J. I.; Lee, S.; Kim, J. H.; Effects of a web-based stroke education program on recurrence prevention behaviors among stroke patients: a pilot study; Health education research; 2013; vol. 28 (no. 3); 488-501

Study details

Secondary publication of another included study- see primary study for details	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Other publications associated with this study included in review	
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Mild (or NIHSS 1-5)

Subgroup 2: Person supporting the intervention	Other Research assistant
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning
Population subgroups	No additional information

Study arms

Self management (N = 18)
Internet-based education programme

Usual care (N = 18)

Outcomes

Study timepoints
- Baseline
- 3 month (End of intervention)

Continuous outcome

Outcome	Self management, Baseline, N = 18	Self management, 3 month, N = 18	Usual care, Baseline, N = 18	Usual care, 3 month, N = 18
Self efficacy (Sense of control - Mastery Scale) Scale range: 7-28. Final values. Mean (SD)	16 (4.1)	19.8 (3.7)	16.5 (4.5)	17.6 (4.1)

Self efficacy (Sense of control - Mastery Scale) - Polarity - Higher values are better

Li, 2021

Bibliographic Reference	Li, Y; Zhang, S; Song, J; Tuo, M; Sun, C; Yang, F; Effects of self-management intervention programs based on the health belief model and planned behavior theory on self-management behavior and quality of life in middle-aged stroke patients; Evidence-Based Complementary andAlternative Medicine; 2021; vol. 2021; 8911143

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.

Trial name / registration number	No additional information.
Study type	Randomised controlled trial (RCT)
Study location	China
Study setting	Community
Study dates	May to September 2019
Sources of funding	None reported
Inclusion criteria	(1) age 45–59 years old; (2) met the diagnostic criteria of the Fourth National Cerebrovascular Disease in 1996, were confirmed by brain CT and MRI, and were all patients with first stroke; (3) with clear consciousness, stable condition, and no communication disorder after treatment; (4) patients or caregivers will use WeChat or other apps; (5) informed consent, voluntary participation in the study
Exclusion criteria	(1) with obvious heart, liver, lung, and other organ failure and malignant tumours; (2) a history of mental illness or existing mental disorder; (3) with obvious consciousness disorder and severe cognitive disorder; (4) participating in other research programs. The patient's standard of abscission was (1) unforeseeable circumstances caused by the loss of visitors; (2) voluntarily withdraw from the study; (3) fail to take intervention measures as required; or (4) the disease is not stable, cannot continue to cooperate
Recruitment / selection of participants	A total of 70 subjects were included in the study. In the intervention group, 35 cases were studied; 1 case lost contact with the patient, and 1 case withdrew due to the aggravation of the disease during the intervention. In the control group, 35 cases were studied; 1 case withdrew from study due to migration. A total of 67 subjects completed the study, including 33 in the intervention group and 34 in the control group.
Intervention(s)	The intervention group received intervention measures based on health beliefs and planned behaviour integration theory. The intervention process of the intervention group was divided into two stages: in-hospital health education and post-discharge health education. The intervention mainly included the following four parts: establishing positive behaviour attitude, promoting patients' subjective norms, improving patients' perceived behaviour control, and promoting behavioural intention to behaviour change. The duration of intervention was during hospitalisation and 3 months after discharge. With the support of the head nurse in the department of neurology, the intervention during hospitalisation was assisted by the responsible nurse to increase the patient's convincing power. Post-discharge intervention mainly relied on the WeChat group and telephone guidance, and the intervention content was divided into 4 modules and completed within 12 weeks. Health education knowledge was sent to the WeChat group at 20:00 every Friday night, once a week, for 20–30 min each time.

Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Nurses
Subgroup 3: Domain of therapy	Cognition
Subgroup 4: Mechanism of intervention	An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning
Population subgroups	No additional information.
Comparator	Control Group- The control group received routine neurological treatment and health education during hospitalisation and continued to receive routine health education for 3 months after discharge. They received hospital health education with the help of neurology nurses, 20–30 minutes each time, including hospital guide (such as detailed introduction to patients on hospital department rules and regulations and the environment, director of the doctors and nurses, reducing anxiety and strangeness, and so on), the matters needing attention of stroke (for example, usually pay attention to exercise and diet low in salt), and discharge guidance. Telephone follow-up was conducted 1 to 3 months after discharge
Number of participants	n=67 Intervention: n=33 control: n=34
Duration of follow-up	1 month and 3 months after the intervention
Indirectness	No additional information.

Additional comments	Multivariate analysis of variance (ANOVA) was used to explain differences between groups

Study arms

Self-management intervention (N = 33)
The intervention group received intervention measures based on health beliefs and planned behaviour integration theory. *e intervention process of the intervention group was divided into two stages: in-hospital health education and post-discharge health education. The intervention mainly included the following four parts: establishing positive behaviour attitude, promoting patients' subjective norms, improving patients' perceived behaviour control, and promoting behavioural intention to behaviour change. The duration of intervention was during hospitalization and 3 months after discharge. With the support of the head nurse in the department of neurology, the intervention during hospitalisation was assisted by the responsible nurse to increase the patient's convincing power. Post-discharge intervention mainly relied on the WeChat group and telephone guidance, and the intervention content was divided into 4 modules and completed within 12 weeks. Health education knowledge was sent to the WeChat group at 20:00 every Friday night, once a week, for 20–30 min each time.

Usual care (inactive control intervention) (N = 34)
The control group received routine neurological treatment and health education during hospitalisation and continued to receive routine health education for 3 months after discharge. They received hospital health education with the help of neurology nurses, 20–30 minutes each time, including hospital guide (such as detailed introduction to patients on hospital department rules and regulations and the environment, director of the doctors and nurses, reducing anxiety and strangeness, and so on), the matters needing attention of stroke (for example, usually pay attention to exercise and diet low in salt), and discharge guidance. Telephone follow-up was conducted 1 to 3 months after discharge.

1 **Characteristics**

2 ***Study-level characteristics***

Characteristic	Study (N = 67)
Mean age (SD) (years) Mean (SD)	54.4 (2.8)

3

4 ***Arm-level characteristics***

Characteristic	Self-management intervention (N = 33)	Usual care (inactive control intervention) (N = 34)
% Female Sample size	n = 10 ; % = 30.3	n = 18 ; % = 52.9
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Mean (SD)	NR (NR)	NR (NR)
Time since stroke Mean (SD)	NR (NR)	NR (NR)

5

Outcomes

Study timepoints

- Baseline
- 3 month (End of intervention)

outcomes

Outcome	Self-management intervention, Baseline, N = 33	Self-management intervention, 3 month, N = 33	Usual care (inactive control intervention), Baseline, N = 34	Usual care (inactive control intervention), 3 month, N = 34
Self efficacy (Stroke Self-Management Behaviour Rating Scale) Scale range: 51-255. Final values. Mean (SD)	117.09 (4.25)	221.36 (3.27)	117.06 (3.37)	154.65 (5.54)
Stroke-specific Patient-Reported Outcome Measures (Stroke-Specific Quality of Life) Scale range: 49-245. Final values. Mean (SD)	135.55 (3.93)	227.21 (3.77)	135.56 (4.52)	195.74 (4.63)

Self efficacy (Stroke Self-Management Behaviour Rating Scale) - Polarity - Higher values are better

Stroke-specific Patient-Reported Outcome Measures (Stroke-Specific Quality of Life) - Polarity - Higher values are better

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

outcomes-Selfefficacy(StrokeSelf-ManagementBehaviourRatingScale)-MeanSD-Self-management intervention-Usual care (inactive control intervention)-t3

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

outcomes-Stroke-specificPatient-ReportedOutcomeMeasures(Stroke-SpecificQualityofLife)-MeanSD-Self-management intervention-Usual care (inactive control intervention)-t3

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

Lund, 2012

Bibliographic Reference	Lund, A.; Michelet, M.; Sandvik, L.; Wyller, T.; Sveen, U.; A lifestyle intervention as supplement to a physical activity programme in rehabilitation after stroke: a randomized controlled trial; Clinical rehabilitation; 2012; vol. 26 (no. 6); 502-512

Study details

Other publications associated with	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews

this study included in review	2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Occupational Therapists
Subgroup 3: Domain of therapy	Functional independency
Subgroup 4: Mechanism of intervention	Coping with the condition
Population subgroups	No additional information

Study arms

Self management (N = 48)
Lifestyle course and physical activity

Usual care (N = 51)
Physical activity only

Outcomes

Study timepoints

- Baseline
- 9 month (End of intervention)

Continuous outcomes

Outcome	Self management, Baseline, N = 48	Self management, 9 month, N = 39	Usual care, Baseline, N = 51	Usual care, 9 month, N = 47
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 functioning Mean (SD)	52.6 (25.9)	55.3 (27.2)	53.8 (25.6)	55.3 (27.2)
SF-36 bodily pain Mean (SD)	64.7 (29.6)	64.1 (27.8)	66.4 (26.4)	61.6 (29)
SF-36 Role Physical Mean (SD)	21.8 (33.5)	33.3 (39.5)	18.4 (29.8)	38.8 (38.6)
SF-36 vitality Mean (SD)	44.2 (20.1)	50.9 (19.5)	47.2 (22.7)	55.6 (18.9)
SF-36 general health Mean (SD)	58 (24.2)	57.4 (21.7)	60.6 (23.4)	60.6 (20.6)

Outcome	Self management, Baseline, N = 48	Self management, 9 month, N = 39	Usual care, Baseline, N = 51	Usual care, 9 month, N = 47
SF-36 Mental Health Mean (SD)	72.5 (17.8)	79.7 (15)	72.6 (20.6)	77.9 (17.8)
SF-36 Role Emotional Mean (SD)	43.2 (38.9)	68.4 (38.2)	45.7 (36.8)	57.2 (38.9)
SF-36 social functioning Mean (SD)	62.8 (28.9)	69.2 (25.3)	63 (29.8)	71.8 (25.2)
Activities of daily living (Canadian Occupational Performance Measure) Scale range: 1-10. Final values. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
COPM Performance 36 participants in intervention group, 38 people in control group. Mean (SD)	4.1 (2.2)	6.2 (2)	4.3 (2)	6 (2)
COPM Satisfaction 36 participants in intervention group, 38 people in control group. Mean (SD)	4.9 (2.5)	6 (2.4)	4.1 (2)	6 (2.2)
Psychological distress - depression Scale range: 0-42. Final values. Mean (SD)	4.1 (3)	3.4 (2.7)	5.3 (*empty data*)	4.2 (3.4)

Person/participant generic health-related quality of life (SF-36) - Polarity - Higher values are better
Activities of daily living (Canadian Occupational Performance Measure) - Polarity - Higher values are better

Maulet, 2021

Bibliographic Reference	Maulet, T.; Pouplin, S.; Bensmail, D.; Zory, R.; Roche, N.; Bonnyaud, C.; Self-rehabilitation combined with botulinum toxin to improve arm function in people with chronic stroke. A randomized controlled trial; Annals of Physical & Rehabilitation Medicine; 2021; vol. 64 (no. 4); 101450

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
Trial name / registration number	No additional information
Study type	Randomised controlled trial (RCT)
Study location	France
Study setting	Home-based

Study dates	March 2016 - March 2018
Sources of funding	This study was partly funded by Allergan
Inclusion criteria	Aged 18 to 75 years with hemiparesis due to a single hemispheric stroke more than 6 months previously Ability to perform active shoulder, elbow and wrist movements against gravity and the movements required for the self-rehabilitation program Ability to understand instructions and the program Previously received BTX At least 4 months since the last BTX
Exclusion criteria	Severe aphasia, apraxia or neglect that would prevent performance of the program alone at home Unlikely to adhere to the program (based on the patient's reaction when the program was presented before inclusion) Uncontrolled progressive pathology Musculoskeletal surgery to the upper limb in the last 6 months Any lesions with contraindications to rehabilitation
Recruitment / selection of participants	No additional information
Intervention(s)	The intervention group was asked to perform a standardized self-rehabilitation program at home for 30 min daily over 4 weeks: the aim was to maintain the individual's adherence to a daily self-care routine over the long term. The program included 3 domains of rehabilitation: strengthening, stretching and task oriented exercises. The exercises were the same for all patients. Three exercises were provided for each domain (10 min per domain). For the active movements, participants were instructed to perform as many repetitions as possible in the allotted time. For the stretches, participants were instructed to maintain the stretch for as long as possible, to rest for 30 sec between each stretch and to perform as many stretches as possible in the allotted time. The 3 stretching exercises were standardized and targeted the most commonly shortened muscle groups that affect UL activities. The strengthening exercises focused on the shoulder flexors, elbow

	extensors and wrist extensors. The functional tasks included grasping and displacing a bottle, grasping at teaspoon and raising it to the mouth and holding a water bottle while opening it with the nonparetic hand. During visit 1, participants were taught the exercises by a physiotherapist for 30 min. They were provided a workbook illustrating the program and a logbook in which to note the exercises performed and the duration each day. The physiotherapist telephoned each participant 2 weeks after visit 1 to discuss any problems and to ensure that they experienced no pain, performed the prescribed dose of exercises and completed their logbook daily. **Concomitant Treatments:** All patients received BTX injections that were performed under electrical stimulation at visit 1 by the same experienced physician who used the same batch of Botox (Allergan France). Injection patterns depended on each participant's clinical needs.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Physiotherapists
Subgroup 3: Domain of therapy	Upper limb
Subgroup 4: Mechanism of intervention	Coping with the condition
Population subgroups	No additional information
Comparator	No additional exercises were given and usual care was provided.

	Concomitant Treatments: All patients received BTX injections that were performed under electrical stimulation at visit 1 by the same experienced physician who used the same batch of Botox (Allergan France). Injection patterns depended on each participant's clinical needs.
Number of participants	n = 33 (total) n = 17 (intervention) n = 16 (control)
Duration of follow-up	4 weeks
Indirectness	No additional information
Additional comments	No additional information

Study arms

Self-Rehabilitation (N = 17)
BTX plus self-rehabilitation program

Usual Care (N = 16)
BTX with usual care

1 **Characteristics**

2 ***Arm-level characteristics***

Characteristic	Self-Rehabilitation (N = 17)	Usual Care (N = 16)
% Female Sample size	n = 3 ; % = 18	n = 5 ; % = 31
Mean age (SD) Mean (SD)	58.8 (13.2)	53 (14.5)
Ethnicity Nominal	NR	NR
Comorbidities Nominal	NR	NR
Severity Nominal	NR	NR
Time since stroke (years) Mean (SD)	8.7 (5.1)	11.1 (3.9)

3

4 **Outcomes**

5 ***Study timepoints***

6 • Baseline
7 • 4 week (End of intervention)

Continuous Outcomes

Outcome	Self-Rehabilitation , Baseline, N = 17	Self-Rehabilitation , 4 week, N = 17	Usual Care, Baseline, N = 16	Usual Care, 4 week, N = 16
Patient/participant generic health related Quality of Life (EQ-VAS) Scale range 0-100, final values Mean (SD)	63.8 (15)	71.6 (17.9)	64.5 (26.3)	68.2 (23.6)

Patient/participant generic health related Quality of Life (EQ-VAS) - Polarity - Higher values are better

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

Quality of Life

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

McKenna, 2015

Bibliographic Reference	McKenna, S.; Jones, F.; Glenfield, P.; Lennon, S.; Bridges self-management program for people with stroke in the community: a feasibility randomized controlled trial; International journal of stroke; 2015; vol. 10 (no. 5); 697-704

Study details

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Other Community stroke team members
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Coping with the condition
Population subgroups	No additional information

Study arms

Self management (N = 12)
Bridges SSMP

Usual care (N = 13)
Usual care

Outcomes

Study timepoints

- Baseline
- 6 week (End of intervention)
- 4.5 month (End of scheduled follow up. The study states that the values are 6 weeks to 3 months follow up, however these are the values used by the Cochrane review which were provided by the study authors. Therefore, those have been used in the analysis.)

Continuous outcomes

Outcome	Self management, Baseline, N = 11	Self management, 6 week, N = 11	Self management, 4.5 month, N = 11	Usual care, Baseline, N = 13	Usual care, 6 week, N = 13	Usual care, 4.5 month, N = 13
Person/participant generic health-related quality of life (EQ-5D index) Scale range: -0.11-1. Change scores. Mean (95% CI)	NA (NA to NA)	0.09 (-0.09 to 0.3)	-0.05 (-0.13 to 0.08)	NA (NA to NA)	0.15 (-0.1 to 0.35)	-0.09 (-0.37 to 0.18)
Person/participant generic health-related quality of life (EQ-5D index) Scale range: -0.11-1. Change scores. Mean (SD)	0.42 (0.36)	NR (NR)	NR (NR)	0.53 (0.41)	NR (NR)	NR (NR)
Self efficacy (Stroke Self-efficacy Questionnaire) Scale range: 0-10. Change scores.	NA (NA to NA)	1.04 (0.05 to 1.69)	-0.39 (-0.9 to 0.28)	NA (NA to NA)	0.65 (0.08 to 0.99)	-0.15 (-1.01 to 0.71)

Outcome	Self management, Baseline, N = 11	Self management, 6 week, N = 11	Self management, 4.5 month, N = 11	Usual care, Baseline, N = 13	Usual care, 6 week, N = 13	Usual care, 4.5 month, N = 13
Mean (95% CI)						
Self efficacy (Stroke Self-efficacy Questionnaire) Scale range: 0-10. Change scores. Mean (SD)	6.68 (2.56)	NR (NR)	-0.39 (0.99)	7.94 (1.85)	NR (NR)	-0.15 (1.58)
Activities of daily living (barthel index) Scale range: 0-20. Change scores. Mean (95% CI)	NA (NA to NA)	1.73 (0.14 to 2.86)	0.73 (-0.27 to 1.27)	NA (NA to NA)	1.46 (-0.07 to 2.4)	-0.08 (-1.37 to 1.04)
Activities of daily living (barthel index) Scale range: 0-20. Change scores. Mean (SD)	14.09 (5.3)	NR (NR)	0.73 (1.3)	17.08 (3.4)	NR (NR)	NR (NR)
Psychological distress - depression (GHQ 28) Scale range: 0-84. Change scores. Mean (95% CI)	NA (NA to NA)	-8.45 (-14.05 to -3.95)	0.45 (-4.26 to 5.26)	NA (NA to NA)	-11.31 (-19.28 to -3.39)	2.77 (-8.6 to 13.93)
Psychological distress - depression (GHQ 28) Scale range: 0-84. Change scores. Mean (SD)	24.09 (10.9)	NR (NR)	NR (NR)	23.6 (15.52)	NR (NR)	NR (NR)
Stroke-specific Patient Reported Outcome Measures (Stroke Specific	NA (NA to NA)	1.11 (0.15 to 2.65)	1.05 (0.46 to 1.6)	NA (NA to *empty data*)	1.94 (0.74 to 3.09)	0.12 (-1.35 to 1.37)

Outcome	Self management, Baseline, N = 11	Self management, 6 week, N = 11	Self management, 4.5 month, N = 11	Usual care, Baseline, N = 13	Usual care, 6 week, N = 13	Usual care, 4.5 month, N = 13
Quality of Life) Scale range: 0-20. Change scores. The Cochrane review reports the mean (SD) for the final values for 4.5 months. Mean (95% CI)						
Stroke-specific Patient Reported Outcome Measures (Stroke Specific Quality of Life) Scale range: 0-20. Change scores. The Cochrane review reports the mean (SD) for the final values for 4.5 months. Mean (SD)	13.22 (2.35)	NR (NR)	15.38 (3.4)	14.62 (3.42)	NR (NR)	16.68 (3.5)

Person/participant generic health-related quality of life (EQ-5D index) - Polarity - Higher values are better
Self efficacy (Stroke Self-efficacy Questionnaire) - Polarity - Higher values are better
Activities of daily living (barthel index) - Polarity - Higher values are better
Psychological distress - depression (GHQ 28) - Polarity - Lower values are better
Stroke-specific Patient Reported Outcome Measures (Stroke Specific Quality of Life) - Polarity - Higher values are better

Minshall, 2020

Bibliographic Reference	Minshall, C.; Castle, D. J.; Thompson, D. R.; Pascoe, M.; Cameron, J.; McCabe, M.; Apputhurai, P.; Knowles, S. R.; Jenkins, Z.; Ski, C. F.; A psychosocial intervention for stroke survivors and carers: 12-month outcomes of a randomized controlled trial; Topics in Stroke Rehabilitation; 2020; vol. 27 (no. 8); 563-576

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
Trial name / registration number	Clinical Trial Registration: ACTRN12615001046594
Study type	Randomised controlled trial (RCT)
Study location	Australia
Study setting	Mixture of home and hospital visits, depending on patient preference
Study dates	March 2016 - September 2018
Sources of funding	This study was supported by a Australian Government's Collaborative Research Network grant.
Inclusion criteria	Diagnosis of stroke as identified from medical records or self-nominated carer of a stroke patient 18 years or older

	Able to converse in English without an interpreter or professional assistance Absence of developmental disability or amnestic disorders impairing their ability to learn from the intervention Absence of serious comorbid illness, including severe forms of aphasia and cognitive impairment, as identified by the senior nurse
Exclusion criteria	No additional information
Recruitment / selection of participants	Participants were recruited from three metropolitan hospitals and community referrals in Melbourne, Australia
Intervention(s)	The intervention group received a program of personalized psychosocial support - Stroke Care Optimal Health Program (SCOHP) - delivered over 8 one-hour weekly sessions, followed by a 'booster' session at three months. Participants received a structured workbook and professional facilitator (psychologist) who worked with them on an individualized basis and offered flexible delivery times (weekend, afterhours) and modes (face-to-face, telephone, Skype). Participants receiving face-to-face support could choose between attending the hospital or receiving home visits. The workbook was comprised of educational information and self-management and reflective exercises which culminated in a health plan. Modules addressed: what is optimal health; I-can-do model; medication; collaborative partners and strategies; timeline activities; visioning and goal setting; building health plans; my health journal. Survivor-carer dyads could choose to participate individually or jointly. **Concomitant Treatments:** Both groups received usual care according to national stroke guidelines, which included secondary prevention, rehabilitation, managing complications and community particiption and long-term management.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear

Subgroup 2: Person supporting the intervention	Other Psychologists
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Combination of the above
Population subgroups	No additional information
Comparator	**Concomitant Treatments:** Both groups received usual care according to national stroke guidelines, which included secondary prevention, rehabilitation, managing complications and community particiption and long-term management.
Number of participants	n = 73 (total) n = 42 (intervention) n = 31 (control)
Duration of follow-up	12 months
Indirectness	No additional information
Additional comments	Available case analysis

Study arms

Psychosocial Intervention (N = 42)

Usual Care (N = 31)

Characteristics

Arm-level characteristics

Characteristic	Psychosocial Intervention (N = 42)	Usual Care (N = 31)
% Female Sample size	n = 22 ; % = 52	n = 11 ; % = 35
Mean age (SD) Mean (SD)	67 (13.7)	69 (11.9)
Ethnicity Nominal	NR	NR
Comorbidities Nominal	NR	NR
Severity Nominal	NR	NR
Time since stroke (Months) Mean (SD)	70 (117)	28 (28)

Outcomes

Study timepoints

- Baseline
- 3 month (End of intervention)
- 12 month (End of follow-up)

Continuous Outcomes

Outcome	Psychosocial Intervention, Baseline, N = 42	Psychosocial Intervention, 3 month, N = 29	Psychosocial Intervention, 12 month, N = 27	Usual Care, Baseline, N = 31	Usual Care, 3 month, N = 25	Usual Care, 12 month, N = 25
Patient/participant generic health related Quality of life (EQ-5D-3L) Scale range 0-100, final values Mean (SD)	65.05 (18.01)	68.67 (20.34)	62.55 (20.5)	58.72 (23.19)	65.45 (23.01)	67 (22.62)
Psychological Distress (Hospital Anxiety Depression Scale - Depression Subscale) Scale range 0-21, final values Mean (SD)	6.31 (4.2)	6.19 (4.44)	6.57 (5.07)	6.4 (4.52)	6.88 (5.09)	6.72 (5.51)
Carer Quality of Life (EQ-5D-3L) Scale range 0-100, final values; Intervention group baseline n = 35, 3-month n = 17, 12-month n = 18; Control group baseline n = 29, 3-month n = 20, 12-month n = 23 Mean (SD)	73.88 (17.49)	79.22 (13.19)	72.94 (19.94)	74.93 (17)	71.29 (15.89)	69.83 (19.78)

Outcome	Psychosocial Intervention, Baseline, N = 42	Psychosocial Intervention, 3 month, N = 29	Psychosocial Intervention, 12 month, N = 27	Usual Care, Baseline, N = 31	Usual Care, 3 month, N = 25	Usual Care, 12 month, N = 25
Self-Efficacy (General Self-Efficacy Questionnaire) Scale range 10-40, final values Mean (SD)	30.55 (5.29)	29.51 (5.97)	29.81 (4.87)	27.93 (6.14)	29.64 (7.21)	30.4 (8.04)

Patient/participant generic health related Quality of life (EQ-5D-3L) - Polarity - Higher values are better
Psychological Distress (Hospital Anxiety Depression Scale - Depression Subscale) - Polarity - Lower values are better
Carer Quality of Life (EQ-5D-3L) - Polarity - Higher values are better
Self-Efficacy (General Self-Efficacy Questionnaire) - Polarity - Higher values are better

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

Patient Quality of life - end of intervention

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

Carer Quality of Life - end of intervention

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

Psychological Distress - end of intervention

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

Self Efficacy - end of intervention

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

Patient Quality of Life - end of follow-up

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

Psychological Distress - end of follow-up

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

Carer Quality of Life - end of follow-up

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

Self-Efficacy - end of follow-up

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

Sabariego, 2013

Bibliographic Reference	Sabariego, C.; Barrera, A. E.; Neubert, S.; Stier-Jarmer, M.; Bostan, C.; Cieza, A.; Evaluation of an ICF-based patient education programme for stroke patients: a randomized, single-blinded, controlled, multicentre trial of the effects on self-efficacy, life satisfaction and functioning; British journal of health psychology; 2013; vol. 18 (no. 4); 707-728

Study details

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review.
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Clinical Neuropsychologist
Subgroup 3: Domain of therapy	Functional independency
Subgroup 4: Mechanism of intervention	An alternative method designed to facilitate behaviour change and improvements in physical and psychological functioning
Population subgroups	No additional information

Study arms

Self management (N = 130)

ICF-based education programme

Control (N = 130)
Attention control with standardised lectures about stroke, symptoms, risk factors, health promotion behaviours

Outcomes

Study timepoints
- Baseline
- 5 day (End of intervention. We would normally exclude outcomes at <1 week but this follow up duration was the one used by the Cochrane review so this was included.)
- 6 month (End of scheduled follow up)

Continuous outcomes

Outcome	Self management, Baseline, N = 130	Self management, 5 day, N = 110	Self management, 6 month, N = 83	Control, Baseline, N = 130	Control, 5 day, N = 103	Control, 6 month, N = 89
Person/participant generic health-related quality of life (EQ 5D-VAS) Scale range: 0-100. Final values. Mean (SD)	56.74 (18.28)	63.47 (18.72)	64.8 (18.9)	58.14 (20.45)	62.27 (20.33)	64.29 (20)
Self efficacy (Liverpool Self-efficacy Scale) Scale range: 11-44. Final values. Mean (SD)	29.19 (4.69)	29.29 (6.03)	30.58 (5.67)	29.45 (5.06)	29.83 (6.06)	30.91 (6.13)
Psychological distress - Depression (HADS depression) Scale range: 0-42. Final values.	5.77 (3.87)	5.01 (3.72)	6.45 (4.74)	6.19 (4.45)	5.75 (3.94)	6.48 (4.69)

Outcome	Self management, Baseline, N = 130	Self management, 5 day, N = 110	Self management, 6 month, N = 83	Control, Baseline, N = 130	Control, 5 day, N = 103	Control, 6 month, N = 89
Mean (SD)						
Stroke-specific Patient Reported Outcome Measures (Stroke Impact Scale) Scale range: 0-100. Final values. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
SIS Physical functioning Mean (SD)	67.18 (23.18)	71.62 (21.67)	72.47 (24.09)	64.62 (25.06)	68.63 (23.23)	70.65 (22.8)
SIS Social participation Mean (SD)	54.03 (25.7)	60.84 (25.02)	66.33 (25.3)	54.32 (27.47)	54.9 (25.2)	63.12 (26.46)
SIS Emotion Mean (SD)	60.06 (11.62)	60.44 (12.64)	56.97 (12.46)	60.67 (13.25)	59.84 (11.31)	58.62 (13.67)
SIS Communication Mean (SD)	84.57 (19.1)	87.12 (17.39)	83.89 (19.44)	87.98 (14.52)	87.17 (15.62)	86.91 (14.4)
SIS Memory Mean (SD)	81.66 (17.22)	84.91 (16.65)	80.81 (18.12)	82.38 (16.69)	83.32 (16.6)	82.19 (15.02)

1 Person/participant generic health-related quality of life (EQ 5D-VAS) - Polarity - Higher values are better
2 Self efficacy (Liverpool Self-efficacy Scale) - Polarity - Higher values are better
3 Psychological distress - Depression (HADS depression) - Polarity - Lower values are better
4 Stroke-specific Patient Reported Outcome Measures (Stroke Impact Scale) - Polarity - Lower values are better

Dichotomous outcomes

Outcome	Self management, Baseline, N = 130	Self management, 5 day, N = 130	Self management, 6 month, N = 130	Control, Baseline, N = 130	Control, 5 day, N = 130	Control, 6 month, N = 130
Adverse events Intervention: 1 death. Control: 2 seriously ill. No of events	n = NA ; % = NA	n = NA ; % = NA	n = 1 ; % = 0.8	n = NA ; % = NA	n = NA ; % = NA	n = 2 ; % = 1.6

Adverse events - Polarity - Lower values are better

Sit, 2016

Bibliographic Reference	Sit, J. W.; Chair, S. Y.; Choi, K. C.; Chan, C. W.; Lee, D. T.; Chan, A. W.; Cheung, J. L.; Tang, S. W.; Chan, P. S.; Taylor-Piliae, R. E.; Do empowered stroke patients perform better at self-management and functional recovery after a stroke? A randomized controlled trial; Clinical Interventions In Aging; 2016; vol. 11; 1441-1450

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	
Trial name / registration number	Clinical trials registration: ISRCTN08913646
Study type	Randomised controlled trial (RCT)
Study location	China
Study setting	Ambulatory Rehabilitation Centre of a subacute hospital
Study dates	No additional information
Sources of funding	This study was funded by the Health and Medical Research Grant (09100551)
Inclusion criteria	Adults who had experienced a first stroke either haemorrhagic or ischemic Scheduled for the ambulatory stroke rehabilitation Experienced post-stroke functional difficulties that limited self-care
Exclusion criteria	Aphasia Cognitive impairment (mini-mental state examination score <18) Coexisting severe/life-limiting diseases Premorbid activities of daily living (ADL) dependence Diagnosed with depression, or on anti-depressive treatments
Recruitment / selection of participants	Stroke survivors attending the Ambulatory Rehabilitation Centre of a subacute hospital were recruited
Intervention(s)	The intervention aimed to empower stroke survivors with “how to” knowledge and skills to enhance self-management in conjunction with their post-stroke rehabilitation journey. The HEISS consisted of two parts: part 1 had 6-weekly small group sessions from week 3 to week 8 in parallel with the ambulatory rehabilitation schedule (usual care); groups of four to six

	participants were given an opportunity to establish a partnership with the nurse facilitator for stroke self-management to begin personal goal setting and action planning. Self-efficacy activities to develop self-management skills and articulating participants' health needs with their personal resources for goal attainment were provided through mastery, verbal persuasion, vicarious experience, and physiological feedback. A mutually agreed-upon personal rehabilitation goal setting and action plan was devised on completion of the 6-weekly group sessions, and participants were given a personal stroke self-management workbook to guide their implementation at home. Part 2 included the home-based implementation during weeks 9–13 with biweekly telephone follow-up calls to the participants during this period. The purpose of the telephone follow-up was to encourage and commend participants on their actions for positive changes and to provide problem solving skills to overcome any perceived barriers that participants encountered. The nurse facilitator provided feedback with a series of self-management steps and problem-solving strategies to strengthen confidence and motivation. **Concomitant Treatments:** Both groups received usual care
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Nurses
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Combination of the above
Population subgroups	No additional information

Comparator	**Concomitant Treatments:** Both groups received usual care
Number of participants	n = 210 (total) n = 105 (intervention) n = 105 (control)
Duration of follow-up	6 months
Indirectness	No additional information
Additional comments	ITT

Study arms

Patient Empowerment Intervention (N = 105)

Usual Care (N = 105)

Characteristics

Arm-level characteristics

Characteristic	Patient Empowerment Intervention (N = 105)	Usual Care (N = 105)
% Female	n = 50 ; % = 47.6	n = 50 ; % = 47.6

Characteristic	Patient Empowerment Intervention (N = 105)	Usual Care (N = 105)
Sample size		
Mean age (SD) Mean (SD)	67.8 (14.2)	70.7 (13.9)
Ethnicity Nominal	NR	NR
Comorbidities Chronic Illnesses Sample size	n = 93 ; % = 90.3	n = 96 ; % = 91.4
Hypertension Sample size	n = 73 ; % = 70.9	n = 74 ; % = 70.5
Diabetes mellitus % Sample size	n = 36 ; % = 35	n = 38 ; % = 36.2
Hyperlipidemia Sample size	n = 50 ; % = 48.5	n = 47 ; % = 44.8
Heart disease Sample size	n = 24 ; % = 23.3	n = 11 ; % = 10.5
Severity Nominal	NR	NR
Time since stroke	NR	NR

Characteristic	Patient Empowerment Intervention (N = 105)	Usual Care (N = 105)
Nominal		

Outcomes

Study timepoints

- Baseline
- 1 week (Post-intervention)
- 6 month (End of follow-up)

Continuous Outcomes

Outcome	Patient Empowerment Intervention, Baseline, N = 105	Patient Empowerment Intervention, 1 week, N = 97	Patient Empowerment Intervention, 6 month, N = 93	Usual Care, Baseline, N = 105	Usual Care, 1 week, N = 92	Usual Care, 6 month, N = 82
Activities of daily living (barthel index) Scale range 0-100, final values Mean (SD)	72.6 (22.9)	86.6 (19.5)	86.3 (24.9)	75.8 (22)	84.5 (19)	82.2 (26.3)

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

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

Activities of Daily Living - end of intervention

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

Activities of Daily Living - end of follow-up

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

Tielemans, 2015

Bibliographic Reference	Tielemans, N. S.; Visser-Meily, J. M.; Schepers, V. P.; van de Passier, P. E.; Port, I. G.; Vloothuis, J. D.; Struyf, P. A.; van Heugten, C. M.; Effectiveness of the Restore4Stroke self-management intervention "Plan ahead!": a randomized controlled trial in stroke patients and partners; Journal of rehabilitation medicine; 2015; vol. 47 (no. 10); 901-909

Study details

Other publications associated with this study included in review	This study was included in the Cochrane review that this review was based on: Fryer CE, Luker JA, McDonnell MN, Hillier SL. Self management programmes for quality of life in people with stroke. Cochrane Database of Systematic Reviews

	2016, Issue 8. Art. No.: CD010442. DOI: 10.1002/14651858.CD010442.pub2. For further information about the data extraction and quality assessment of outcomes please see the Cochrane review. van Mastrigt, Gapg; van Eeden, M.; van Heugten, C. M.; Tielemans, N.; Schepers, V. P. M. et al., A trial-based economic evaluation of the Restore4Stroke self-management intervention compared to an education-based intervention for stroke patients and their partners BMC Health Services Research; 2020; vol. 20 (no. 1); 294
Subgroup 1: Severity (as stated by category or as measured by NIHSS scale)	Not stated/unclear
Subgroup 2: Person supporting the intervention	Multidisciplinary team Psychologist and occupational therapist
Subgroup 3: Domain of therapy	No specific domain of therapy (general)
Subgroup 4: Mechanism of intervention	Combination of the above Problem solving, goal setting, coping
Population subgroups	No additional information

Study arms

Self management (N = 58)
Coping skills, action planning strategies

Usual care (N = 55)
Education

Outcomes

Study timepoints

- Baseline
- 10 week (End of intervention)
- 9 month (End of scheduled follow up (also reports outcomes at 3 months))

Continuous outcomes

Outcome	Self management, Baseline, N = 58	Self management, 10 week, N = 58	Self management, 9 month, N = 58	Usual care, Baseline, N = 55	Usual care, 10 week, N = 55	Usual care, 9 month, N = 55
Psychological distress - depression (HADS total) Indirect outcome - includes anxiety component of HADS. Scale range: 0-84. Final values. The 9 month value is taken from the Cochrane review (which appeared to report only the 9 month values) - the number of participants are intervention group: 52, control group: 51 Mean (SD)	13.2 (7.3)	12.1 (7.4)	11.6 (7)	12.8 (6.6)	14 (6.8)	13.6 (6.7)
Stroke-specific Patient Reported Outcome Measures (SSQOL-12) Scale range: 1-5. Final values. Mean (SD)	3.6 (0.7)	NR (NR)	3.8 (0.8)	3.6 (0.8)	NR (NR)	3.5 (0.9)

Outcome	Self management, Baseline, N = 58	Self management, 10 week, N = 58	Self management, 9 month, N = 58	Usual care, Baseline, N = 55	Usual care, 10 week, N = 55	Usual care, 9 month, N = 55
Health Service Usage (Hospital readmissions, frequency, final values) Assessed over 12 months Mean (SD)	NA (NA)	NA (NA)	1 (2.4)	NA (NA)	NA (NA)	1.5 (4.1)
Health Service Usage (General Practitioner Attendance, frequency, final values) Assessed over 12 months Mean (SD)	NA (NA)	NA (NA)	13.3 (17)	NA (NA)	NA (NA)	11 (11)

Psychological distress - depression (HADS total) - Polarity - Lower values are better
Stroke-specific Patient Reported Outcome Measures (SSQOL-12) - Polarity - Higher values are better
Health Service Usage (Hospital readmissions, frequency, final values) - Polarity - Lower values are better

van Mastrigt, 2020

Bibliographic Reference	van Mastrigt, Gapg; van Eeden, M.; van Heugten, C. M.; Tielemans, N.; Schepers, V. P. M.; Evers, Smaa; A trial-based economic evaluation of the Restore4Stroke self-management intervention compared to an education-based intervention for stroke patients and their partners; BMC Health Services Research; 2020; vol. 20 (no. 1); 294

Study details

Secondary publication of another included study- see primary study for details	Tielemans, N. S.; Visser-Meily, J. M.; Schepers, V. P.; van de Passier, P. E.; Port, I. G. et al. Effectiveness of the Restore4Stroke self-management intervention "Plan ahead!": a randomized controlled trial in stroke patients and partners Journal of rehabilitation medicine; 2015; vol. 47 (no. 10); 901-909

Appendix E – Forest plots

E.1 Self-management compared to inactive control

Figure 2: Person/Participant Generic Health-Related Quality of Life (EQ-VAS, EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Intervention

	Self-management			Inactive control				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Maulet 2021	71.6	17.9	17	68.2	23.6	16	39.8%	3.40 [-10.96, 17.76]
Minshall 2020	68.67	20.34	29	65.45	23.01	25	60.2%	3.22 [-8.45, 14.89]
Total (95% CI)			**46**			**41**	**100.0%**	**3.29 [-5.76, 12.35]**

Heterogeneity: Chi² = 0.00, df = 1 (P = 0.98); I² = 0%

Test for overall effect: Z = 0.71 (P = 0.48)

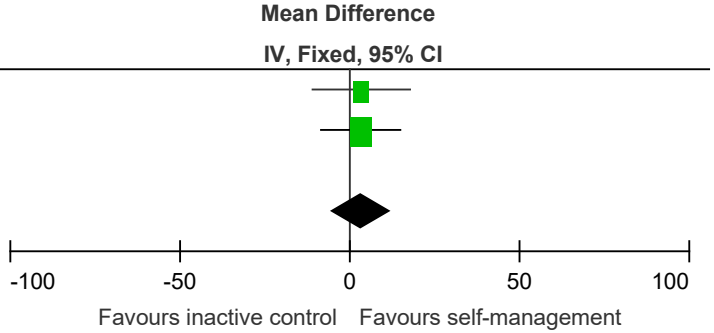


Figure 3: Person/Participant Generic Health-Related Quality of Life (SF-36 Bodily Pain, 0-100, higher values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Lund 2012	64.1	27.8	39	61.6	29	47	2.50 [-9.54, 14.54]

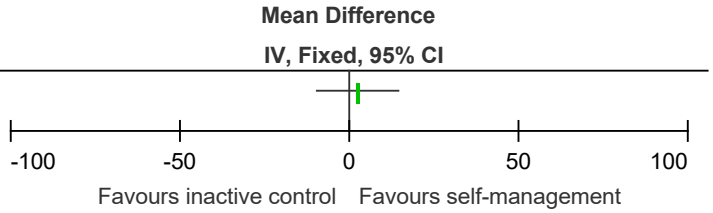


Figure 4: Person/Participant Generic Health-Related Quality of Life (SF-36 General Health, 0-100, higher values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Lund 2012	57.4	21.7	39	60.6	20.6	47	-3.20 [-12.20, 5.80]	

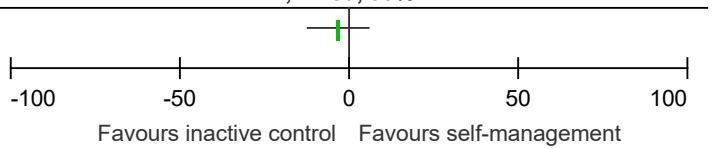


Figure 5: Person/Participant Generic Health-Related Quality of Life (SF-36 Mental Health, 0-100, higher values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Lund 2012	79.7	15	39	77.9	17.8	47	1.80 [-5.13, 8.73]	

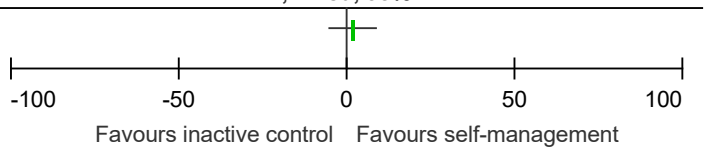


Figure 6: Person/Participant Generic Health-Related Quality of Life (SF-12 Mental Component, 0-100, higher values are better, final values) at End of Intervention

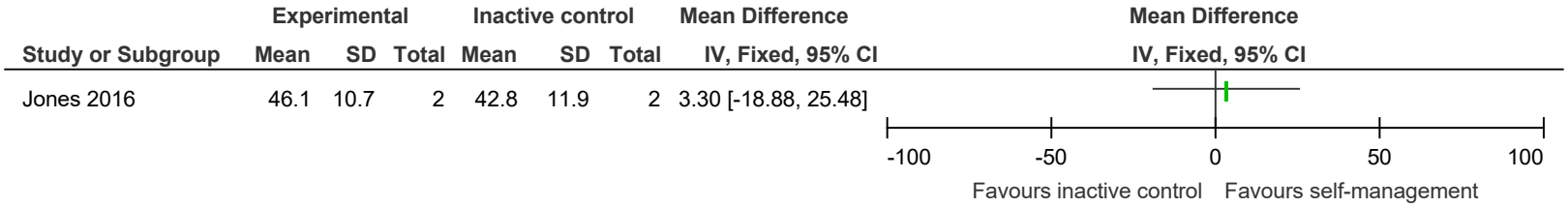


Figure 7: Person/Participant Generic Health-Related Quality of Life (SF-36 Physical Functioning, 0-100, higher values are better, final values) at End of Intervention

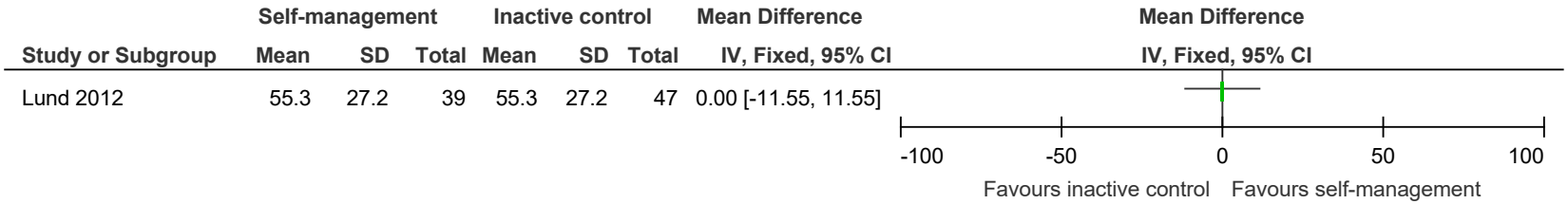


Figure 8: Person/Participant Generic Health-Related Quality of Life (SF-12 Physical Component, 0-100, higher values are better, final values) at End of Intervention

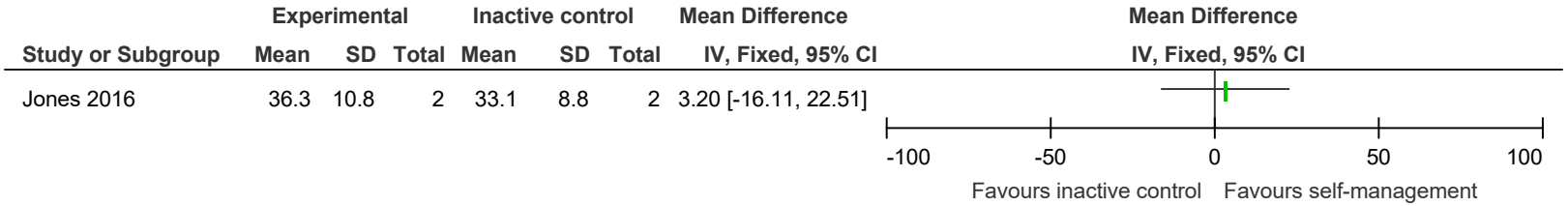


Figure 9: Person/Participant Generic Health-Related Quality of Life (SF-36 Role Emotional, 0-100, higher values are better, final values) at End of Intervention

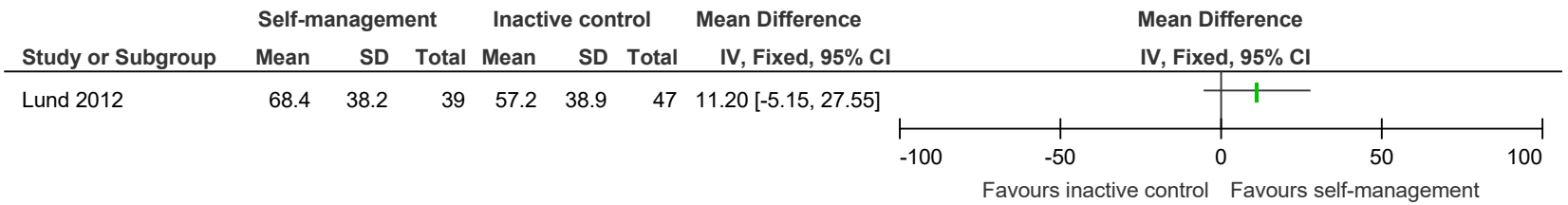


Figure 10: Person/Participant Generic Health-Related Quality of Life (SF-36 Role Physical, 0-100, higher values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Lund 2012	33.3	39.5	39	38.8	38.6	47	-5.50 [-22.10, 11.10]	

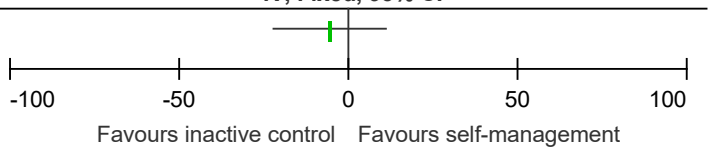


Figure 11: Person/Participant Generic Health-Related Quality of Life (SF-36 Social Functioning, 0-100, higher values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Lund 2012	69.2	25.3	39	71.8	25.2	47	-2.60 [-13.32, 8.12]	

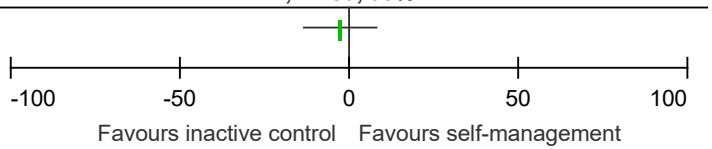


Figure 12: Person/Participant Generic Health-Related Quality of Life (SF-36 Vitality, 0-100, higher values are better, final values) at End of Intervention

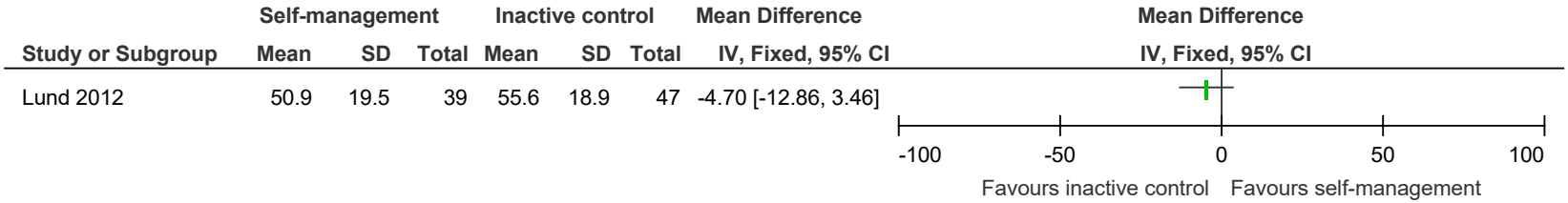


Figure 13: Person/Participant Generic Health-Related Quality of Life (EQ-5D, -0.11-1, higher values are better, change scores) at End of Intervention

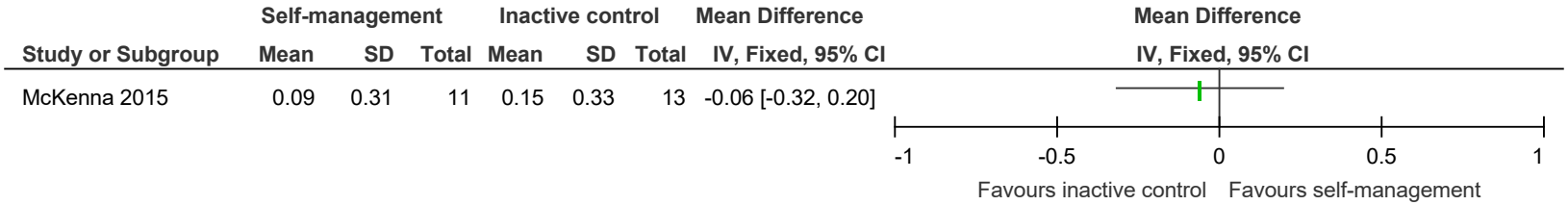


Figure 14: Person/Participant Generic Health-Related Quality of Life (EQ-VAS, EQ-5D-3L, 0-100, higher values are better, final values) at End of Scheduled Follow-up

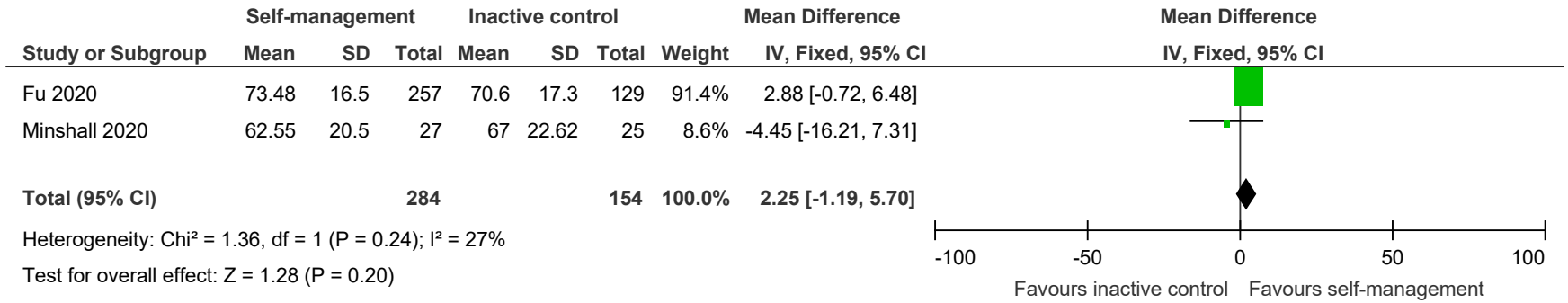


Figure 15: Person/Participant Generic Health-Related Quality of Life (SF-36 Mental Component, 0-100, higher values are better, final values) at End of Scheduled Follow-up

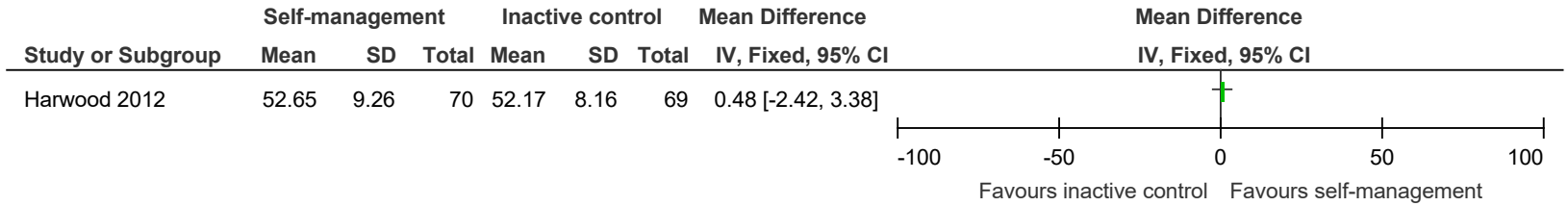


Figure 16: Person/Participant Generic Health-Related Quality of Life (SF-36 Physical Component, 0-100, higher values are better, final values) at End of Scheduled Follow-up

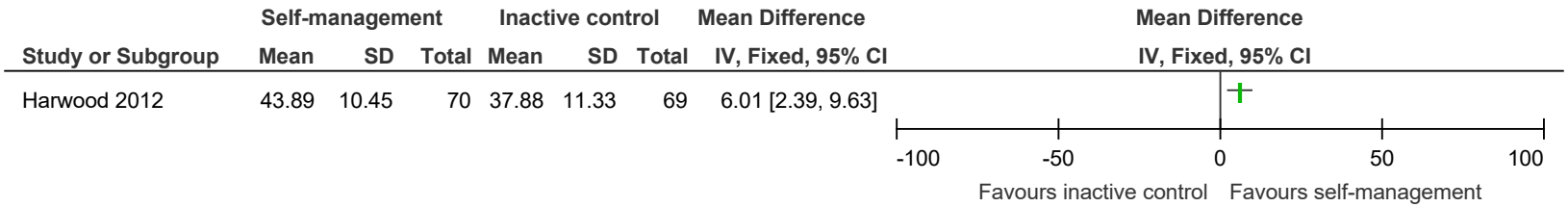


Figure 17: Person/Participant Generic Health-Related Quality of Life (EQ-5D, -0.11-1, higher values are better, change scores) at End of Scheduled Follow-up

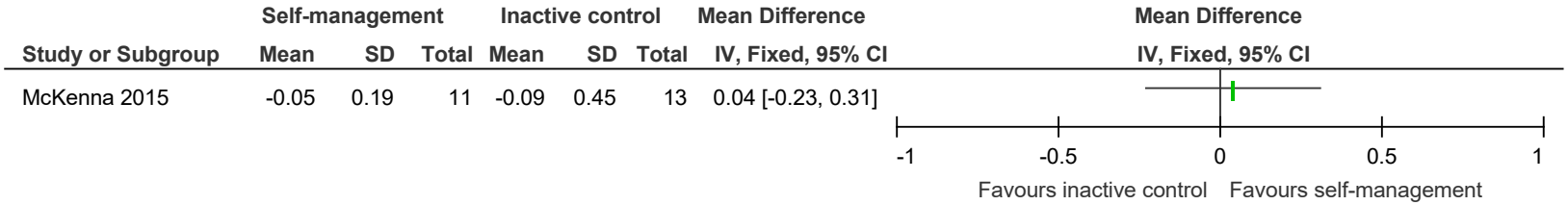


Figure 18: Carer Generic Health-Related Quality of Life (EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Intervention

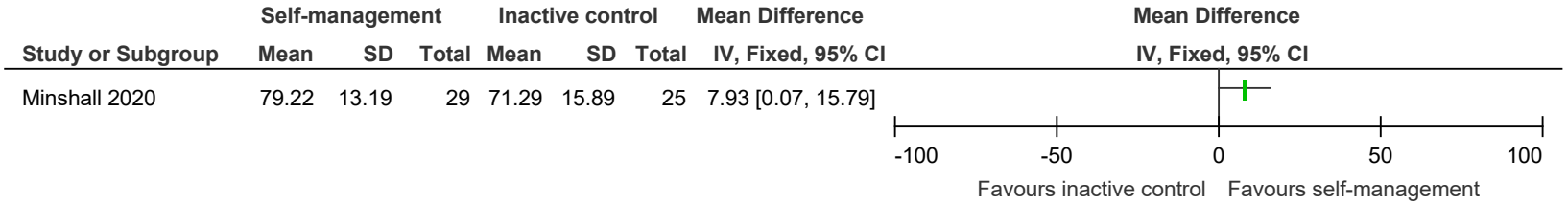


Figure 19: Carer Generic Health-Related Quality of Life (EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Scheduled Follow-up

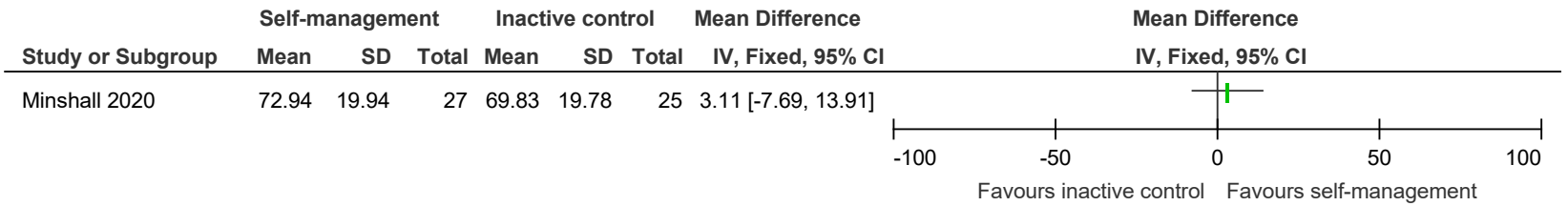


Figure 20: Self-Efficacy (Recovery Locus of Control, Self-Efficacy Questionnaire, Self-Efficacy Scale, Sense of Control - Mastery, General Self-Efficacy Questionnaire, Stroke Self-Efficacy Questionnaire, Stroke Self-Management Behaviour Rating Scale [different scale ranges], higher values are better, final values) at End of Intervention

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Frank 2000	36.42	5.56	19	37.55	4.08	20	14.2%	-0.23 [-0.86, 0.40]
Hoffmann 2015	71.7	4.16	12	70.3	4.11	10	13.5%	0.33 [-0.52, 1.17]
Johnston 2007	35.87	4.31	74	35.53	5.21	84	14.9%	0.07 [-0.24, 0.38]
Jones 2016	26.4	9	2	21.5	10.6	2	7.2%	0.28 [-2.25, 2.82]
Kendall 2007	68.46	15.31	58	61.45	14.93	42	14.7%	0.46 [0.06, 0.86]
Kim 2013	19.8	3.7	18	17.6	4.1	18	14.1%	0.55 [-0.12, 1.22]
Li 2021	221.36	3.27	33	154.65	5.54	34	7.1%	14.44 [11.88, 17.01]
Minshall 2020	29.51	5.97	29	29.64	7.21	25	14.4%	-0.02 [-0.55, 0.52]
Total (95% CI)			**245**			**235**	**100.0%**	**1.21 [0.27, 2.15]**

Heterogeneity: Tau² = 1.52; Chi² = 123.84, df = 7 (P < 0.00001); I² = 94%

Test for overall effect: Z = 2.53 (P = 0.01)

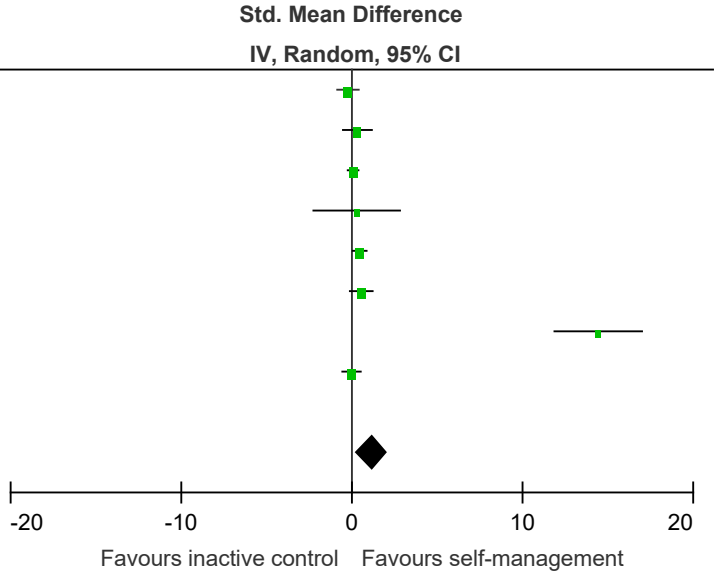


Figure 21: Self-Efficacy (Stroke Self-Efficacy Questionnaire [different scale ranges] higher values are better, change scores) at End of Intervention

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Kalav 2021	0.07	0.38	34	0.22	0.5	34	58.5%	-0.33 [-0.81, 0.14]
McKenna 2015	1.04	0.97	11	0.65	0.56	13	41.5%	0.49 [-0.33, 1.30]
Total (95% CI)			**45**			**47**	**100.0%**	**0.01 [-0.79, 0.80]**

Heterogeneity: Tau² = 0.22; Chi² = 2.88, df = 1 (P = 0.09); I² = 65%

Test for overall effect: Z = 0.02 (P = 0.99)

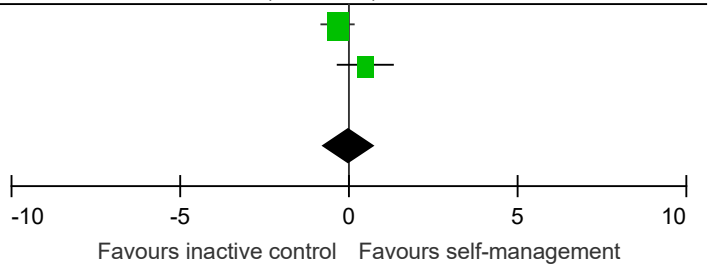


Figure 22: Self-Efficacy (Self-Efficacy Questionnaire, Self-Efficacy Scale, General Self-Efficacy Questionnaire [different scale ranges], higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Hoffmann 2015	71.7	3.81	12	69.7	3.79	10	12.5%	0.51 [-0.35, 1.36]
Kendall 2007	69.42	15.16	58	61.68	18.16	42	56.5%	0.47 [0.06, 0.87]
Minshall 2020	29.81	4.87	27	30.4	8.04	25	30.9%	-0.09 [-0.63, 0.46]
Total (95% CI)			**97**			**77**	**100.0%**	**0.30 [-0.00, 0.60]**

Heterogeneity: Chi² = 2.83, df = 2 (P = 0.24); I² = 29%

Test for overall effect: Z = 1.94 (P = 0.05)

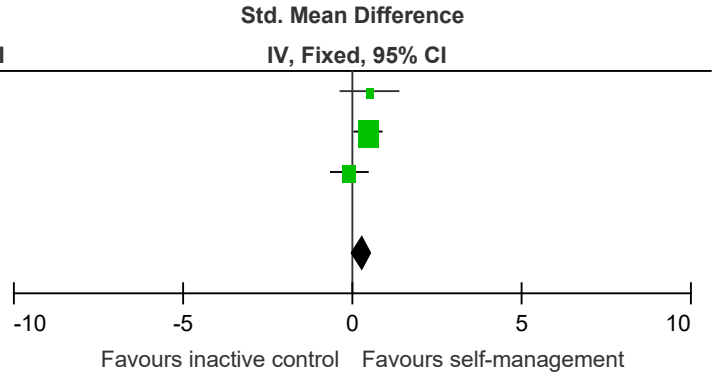


Figure 23: Self-Efficacy (Stroke Self-Efficacy Questionnaire, 0-10, higher values are better, change scores) at End of Scheduled Follow-up

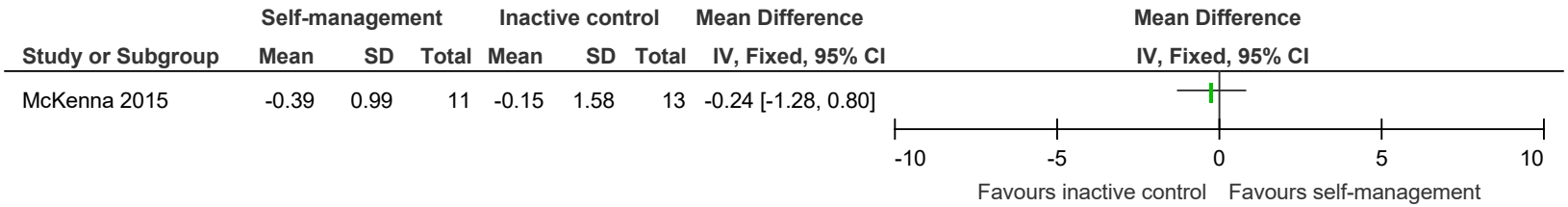


Figure 24: Activities of Daily Living (Barthel Index, Functional Limitations Profile, Extended Activities of Daily Living [different scale ranges], higher values are better, final values) at End of Intervention

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Fixed, 95% CI**
Chang 2011	116.47	25.19	34	119.63	23.08	32	20.7%	-0.13 [-0.61, 0.35]
Frank 2000	-64.03	20.96	19	-66.89	22.87	20	12.3%	0.13 [-0.50, 0.76]
Hoffmann 2015	75.4	8.66	12	69.2	8.22	10	6.4%	0.70 [-0.17, 1.57]
Jones 2016	35.5	16.9	2	32.1	19	2	1.1%	0.11 [-1.95, 2.16]
Sit 2016	86.6	19.5	97	84.5	19	92	59.5%	0.11 [-0.18, 0.39]
Total (95% CI)			**164**			**156**	**100.0%**	**0.10 [-0.12, 0.32]**

Heterogeneity: Chi² = 2.73, df = 4 (P = 0.60); I² = 0%

Test for overall effect: Z = 0.89 (P = 0.37)

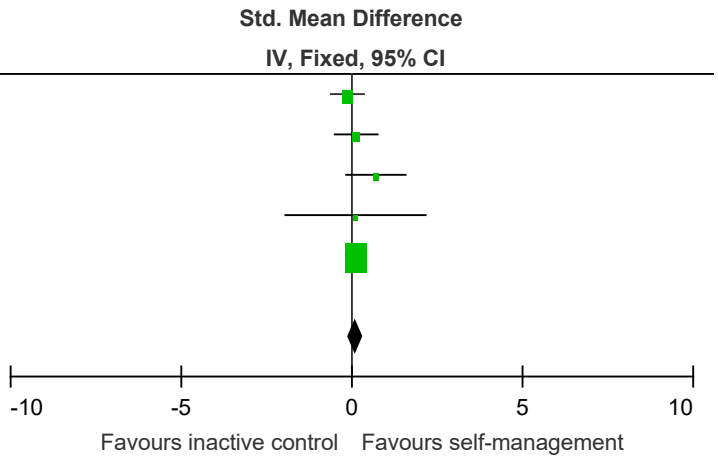


Figure 25: Activities of Daily Living (Barthel Index, Functional Independence Measure [different scale ranges], higher values are better, change scores) at End of Intervention

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Fixed, 95% CI**
Bishop 2014	-23	24	23	-13.2	16	26	16.2%	-0.48 [-1.05, 0.09]
Johnston 2007	1.43	0.68	74	1.39	0.61	84	53.9%	0.06 [-0.25, 0.37]
Kalav 2021	2.44	5.57	34	9.29	11.41	34	21.7%	-0.75 [-1.25, -0.26]
McKenna 2015	1.7	1.73	11	1.4	1.65	13	8.1%	0.17 [-0.63, 0.98]
Total (95% CI)			**142**			**157**	**100.0%**	**-0.19 [-0.42, 0.04]**

Heterogeneity: Chi² = 9.29, df = 3 (P = 0.03); I² = 68%

Test for overall effect: Z = 1.66 (P = 0.10)

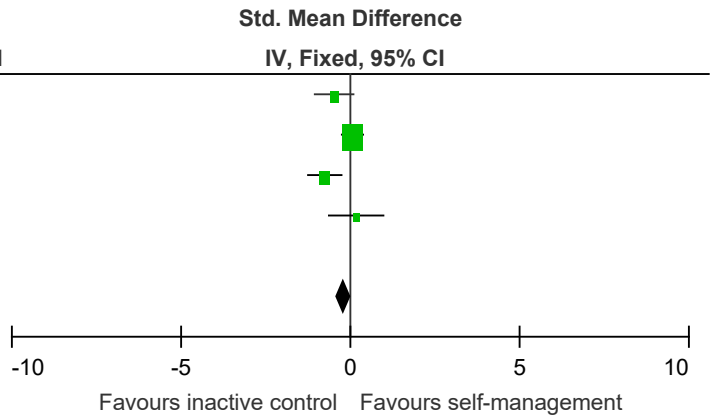


Figure 26: Activities of Daily Living (Canadian Occupational Performance Measure - Satisfaction Subscale, 0-10, higher values are better, final values) at End of Intervention

	Self-management			Inactive control				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Kessler 2017	6.2	2.8	6	6.2	2.3	11	12.3%	0.00 [-2.62, 2.62]
Lund 2012	6	2.4	39	6	2.2	47	87.7%	0.00 [-0.98, 0.98]
Total (95% CI)			**45**			**58**	**100.0%**	**0.00 [-0.92, 0.92]**

Heterogeneity: Chi² = 0.00, df = 1 (P = 1.00); I² = 0%

Test for overall effect: Z = 0.00 (P = 1.00)

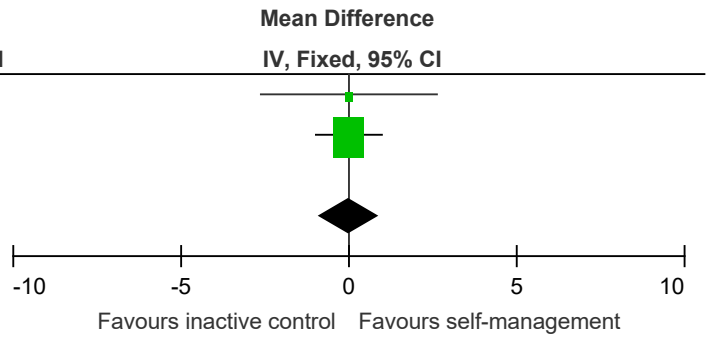


Figure 27: Activities of Daily Living (Canadian Occupational Performance Measure - Performance Subscale, 0-10, higher values are better, final values) at End of Intervention

	Self-management			Inactive control				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Kessler 2017	6.3	3.1	6	6.3	2.3	11	8.3%	0.00 [-2.83, 2.83]
Lund 2012	6.2	2	39	6	2	47	91.7%	0.20 [-0.65, 1.05]
Total (95% CI)			**45**			**58**	**100.0%**	**0.18 [-0.63, 1.00]**

Heterogeneity: Chi² = 0.02, df = 1 (P = 0.89); I² = 0%

Test for overall effect: Z = 0.44 (P = 0.66)

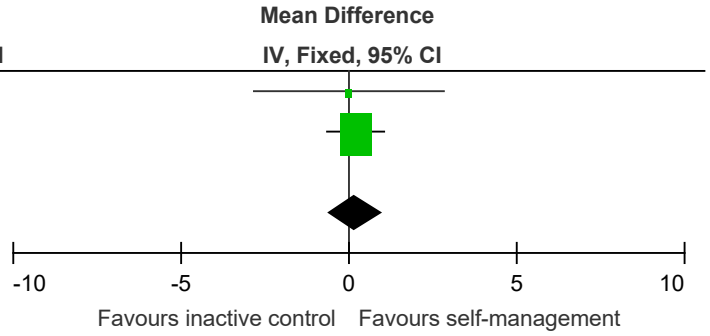


Figure 28: Activities of Daily Living (Barthel Index, 0-100, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control				Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Fixed, 95% CI**
Fu 2020	19.2	2	257	18.7	2.8	129	85.2%	0.50 [-0.04, 1.04]
Harwood 2012	18.27	3.82	70	17.39	4.23	69	13.9%	0.88 [-0.46, 2.22]
Hoffmann 2015	81.7	9.01	12	80.9	8.54	10	0.5%	0.80 [-6.55, 8.15]
Sit 2016	86.3	24.9	93	82.2	26.3	82	0.4%	4.10 [-3.52, 11.72]
Total (95% CI)			**432**			**290**	**100.0%**	**0.57 [0.07, 1.07]**

Heterogeneity: Chi² = 1.10, df = 3 (P = 0.78); I² = 0%

Test for overall effect: Z = 2.23 (P = 0.03)

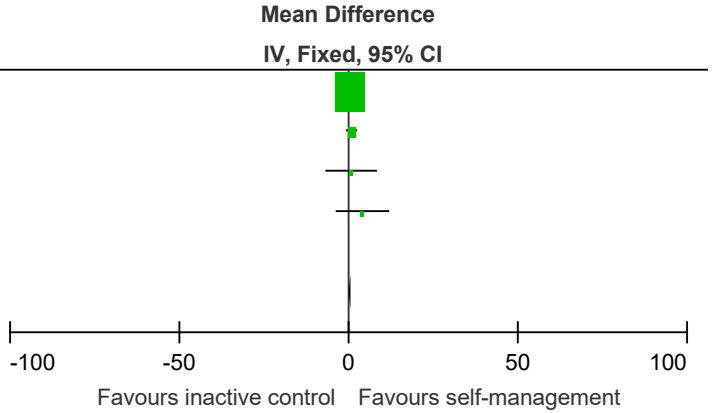


Figure 29: Activities of Daily Living (Barthel Index, scale range, Functional Independence Measure [different scale ranges], higher values are better, change scores) at End of Scheduled Follow-up

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Bishop 2014	-15.9	22	23	-14.6	22	26	67.9%	-0.06 [-0.62, 0.50]
McKenna 2015	0.73	1.3	11	-0.08	1.85	13	32.1%	0.48 [-0.33, 1.30]
Total (95% CI)			**34**			**39**	**100.0%**	**0.12 [-0.35, 0.58]**

Heterogeneity: Chi² = 1.14, df = 1 (P = 0.29); I² = 12%

Test for overall effect: Z = 0.49 (P = 0.63)

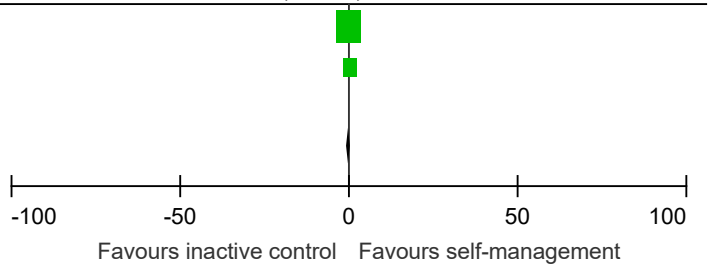


Figure 30: Activities of Daily Living (Canadian Occupational Performance Measure - Performance Subscale, 0-10, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Kessler 2017	6.1	2.4	6	6.1	3.2	11	0.00 [-2.70, 2.70]

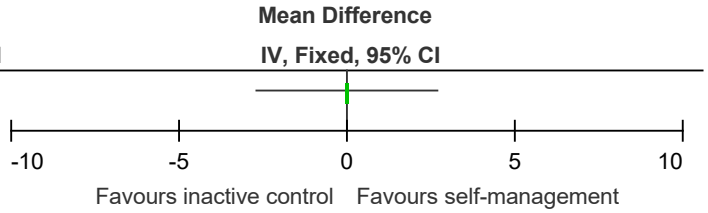


Figure 31: Activities of Daily Living at End of Scheduled Follow-up (Canadian Occupational Performance Measure - Satisfaction Subscale, 0-10, higher better, final values)

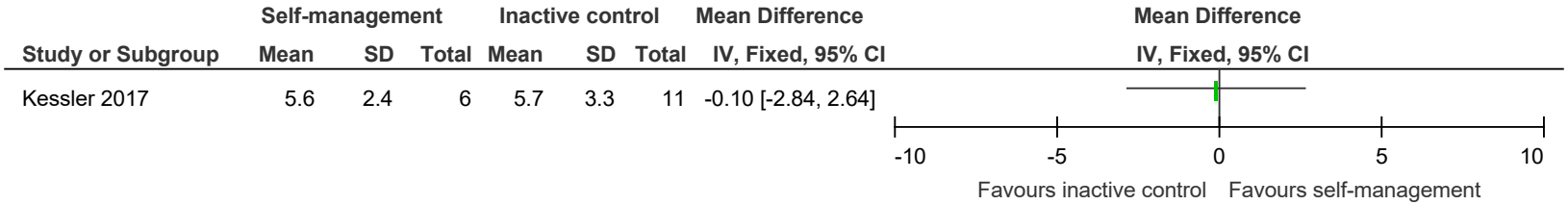


Figure 32: Participation Restrictions (Reintegration to Normal Living Index, 1-110, higher values are better, final values) at End of Intervention

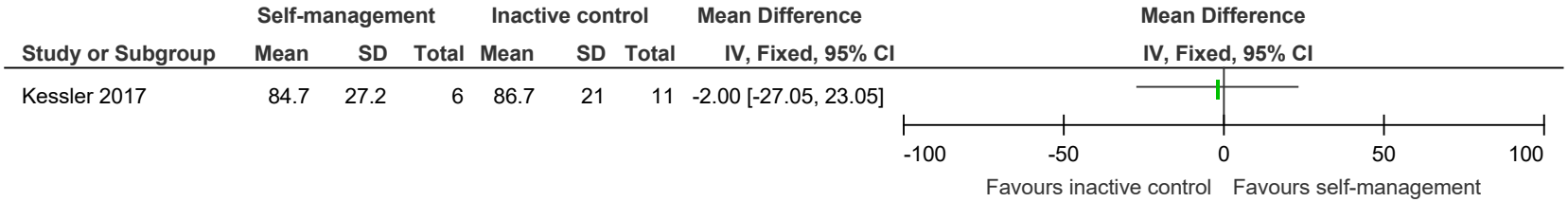


Figure 33: Participation Restrictions (Complex WHODAS score, 0-100, lower values are better, change score) at End of Intervention

Study or Subgroup	Mean Difference	SE	Self-management Total	Inactive control Total	Mean Difference IV, Fixed, 95% CI
Forster 2021	2.07	4.8623	4	5	2.07 [-7.46, 11.60]

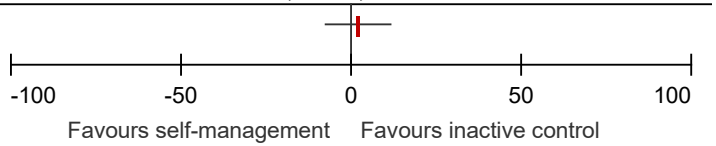


Figure 34: Participation Restrictions (Reintegration to Normal Living Index, 1-110, higher values are better, final values) at End of Scheduled Follow-up

Study or Subgroup	Self-management Mean	SD	Total	Inactive control Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Kessler 2017	95.2	18.7	6	88.7	13.5	11	6.50 [-10.46, 23.46]

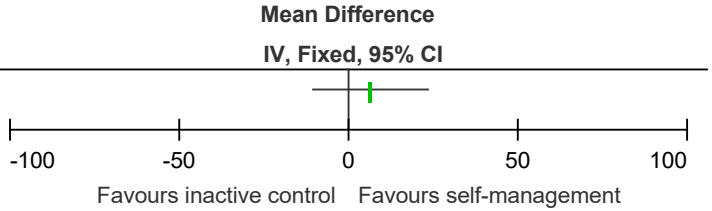


Figure 35: Participation Restrictions (Complex WHODAS score, 0-100, lower values are better, change score) at End of Scheduled Follow-up

Study or Subgroup	Mean Difference	SE	Self-management Total	Inactive control Total	Mean Difference IV, Fixed, 95% CI
Forster 2021	-0.16	4.9287	4	5	-0.16 [-9.82, 9.50]

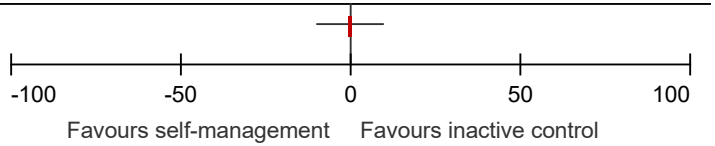


Figure 36: Psychological Distress - Depression (Hospital Anxiety and Depression Scale, Hospital Anxiety and Depression Scale - Depression Subscale, Hamilton Depression Scale [different scale ranges], lower values are better, final values) at End of Intervention

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Fixed, 95% CI**
Chang 2011	21.26	9.69	34	27.91	5.79	32	13.9%	-0.82 [-1.32, -0.31]
Frank 2000	6.05	3.57	19	5.55	4.03	20	8.9%	0.13 [-0.50, 0.76]
Hoffmann 2015	6.6	1.39	12	6.4	1.58	10	5.0%	0.13 [-0.71, 0.97]
Johnston 2007	10.67	7.89	74	9.67	7.34	84	36.1%	0.13 [-0.18, 0.44]
Jones 2016	7.1	4.3	2	8.1	4.1	2	0.8%	-0.14 [-2.24, 1.97]
Kessler 2017	7.7	6.8	6	10	7.8	11	3.5%	-0.29 [-1.29, 0.71]
Lund 2012	3.4	2.7	39	4.2	3.4	47	19.4%	-0.26 [-0.68, 0.17]
Minshall 2020	6.19	4.44	29	6.88	5.09	25	12.3%	-0.14 [-0.68, 0.39]
Total (95% CI)			**215**			**231**	**100.0%**	**-0.13 [-0.32, 0.06]**

Heterogeneity: Chi² = 11.28, df = 7 (P = 0.13); I² = 38%

Test for overall effect: Z = 1.33 (P = 0.18)

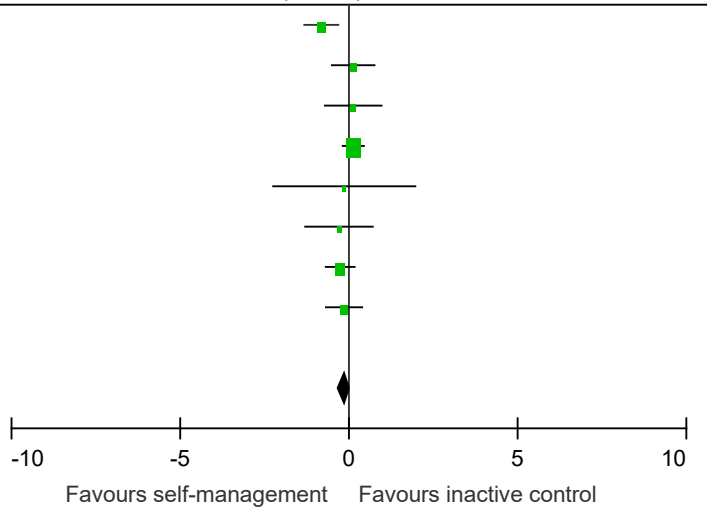


Figure 37: Psychological Distress - Depression (Geriatric Depression Scale Short Form, General Health Questionnaire-28 [different scale ranges], lower values are better, change scores) at End of Intervention

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Fixed, 95% CI**
Bishop 2014	0	2.8	23	-1.27	2.3	26	66.7%	0.49 [-0.08, 1.06]
McKenna 2015	-8.45	6.7	11	-11.31	13.11	13	33.3%	0.26 [-0.55, 1.07]
Total (95% CI)			**34**			**39**	**100.0%**	**0.41 [-0.05, 0.88]**

Heterogeneity: Chi² = 0.21, df = 1 (P = 0.64); I² = 0%

Test for overall effect: Z = 1.74 (P = 0.08)

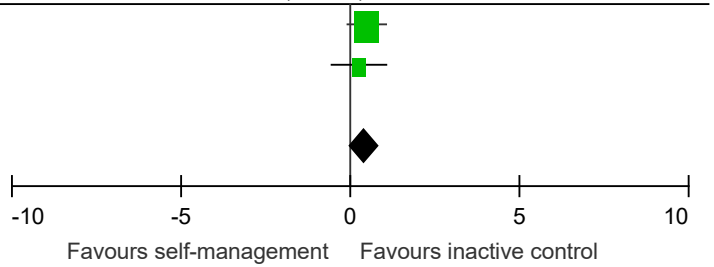


Figure 38: Psychological Distress - Depression (Hospital Anxiety and Depression Scale, Hospital Anxiety and Depression Scale - Depression Subscale [different scale ranges], lower values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Fixed, 95% CI**
Hoffmann 2015	6.4	2.08	12	7	2.21	10	24.3%	-0.27 [-1.11, 0.57]
Kessler 2017	7.8	7.8	6	9.6	6	11	17.3%	-0.26 [-1.26, 0.74]
Minshall 2020	6.57	5.07	27	6.72	5.51	25	58.4%	-0.03 [-0.57, 0.52]
Total (95% CI)			**45**			**46**	**100.0%**	**-0.13 [-0.54, 0.29]**

Heterogeneity: Chi² = 0.30, df = 2 (P = 0.86); I² = 0%

Test for overall effect: Z = 0.60 (P = 0.55)

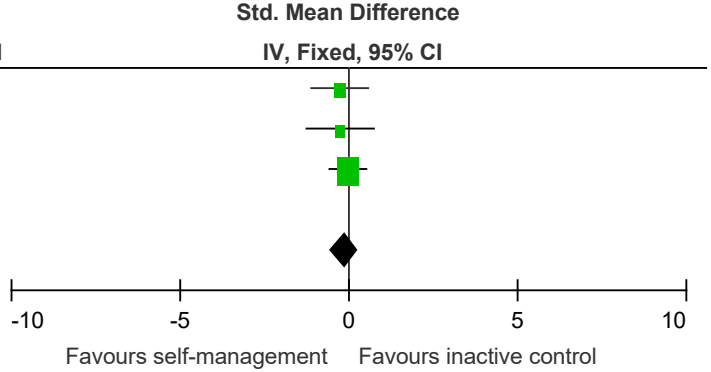


Figure 39: Psychological Distress - Depression (Geriatric Depression Scale Short Form, General Health Questionnaire [different scale ranges], lower values are better, change scores) at End of Scheduled Follow-up

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Fixed, 95% CI**
Bishop 2014	0.69	3.5	23	-1.12	2.8	26	38.2%	0.57 [-0.01, 1.14]
McKenna 2015	0.45	7.16	11	2.77	18.47	13	19.4%	-0.15 [-0.96, 0.65]
Minshall 2020	6.57	5.07	27	6.72	5.51	25	42.4%	-0.03 [-0.57, 0.52]
Total (95% CI)			**61**			**64**	**100.0%**	**0.17 [-0.18, 0.53]**

Heterogeneity: Chi² = 2.97, df = 2 (P = 0.23); I² = 33%

Test for overall effect: Z = 0.96 (P = 0.33)

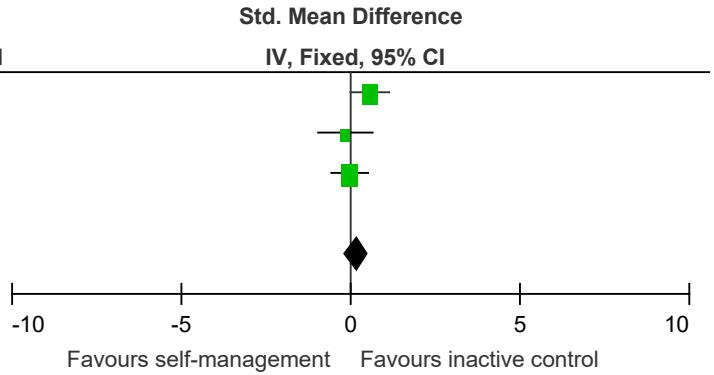


Figure 40: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life, Stroke and Aphasia Quality of Life - General [different scale ranges], higher values are better, final values) at End of Intervention

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Chang 2011	124.41	33.5	34	107.84	30.9	32	26.5%	0.51 [0.02, 1.00]
Hoffmann 2015	3.9	0.35	12	3.7	0.32	10	26.0%	0.57 [-0.29, 1.43]
Li 2021	221.36	3.27	33	154.65	5.54	34	21.5%	14.44 [11.88, 17.01]
McKenna 2015	15.38	3.4	11	16.68	3.5	13	26.1%	-0.36 [-1.17, 0.45]
Total (95% CI)			**90**			**89**	**100.0%**	**3.29 [0.60, 5.99]**

Heterogeneity: Tau² = 7.10; Chi² = 117.36, df = 3 (P < 0.00001); I² = 97%

Test for overall effect: Z = 2.39 (P = 0.02)

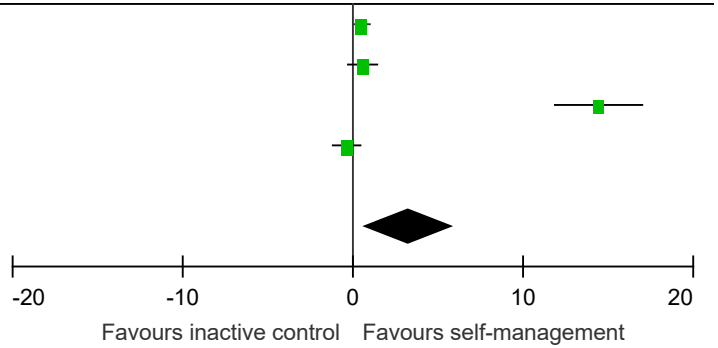


Figure 41: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life, 1-5, higher values are better, change scores) at End of Intervention

	Self-management			Inactive control			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Kalav 2021	0.44	0.67	34	0.54	0.79	34	-0.10 [-0.45, 0.25]

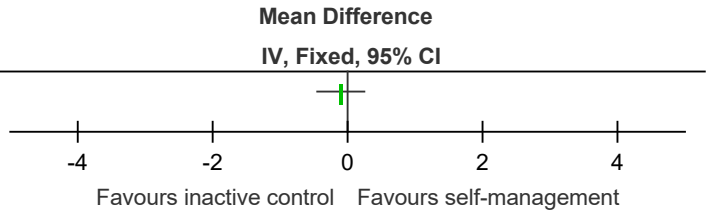


Figure 42: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Energy subscale, 3-15, higher values are better, final values) at End of Intervention

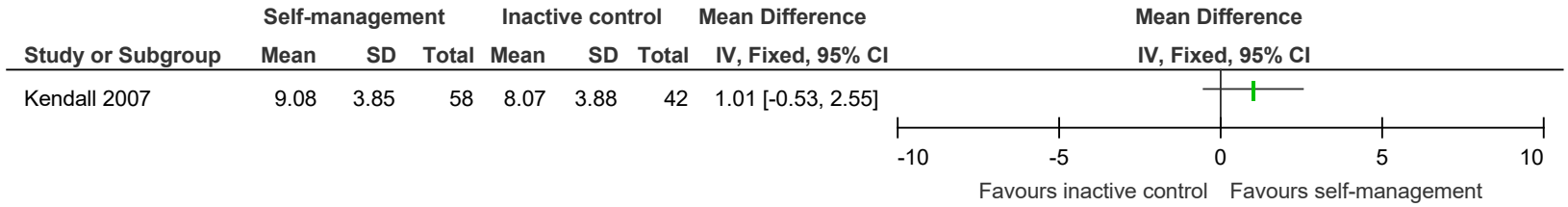


Figure 43: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Family Roles subscale, 3-15, higher values are better, final values) at End of Intervention

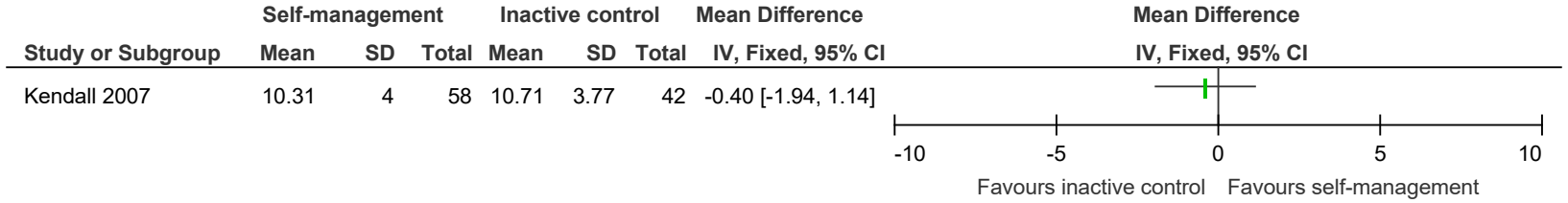


Figure 44: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Fine Motor Tasks subscale, 5-25, higher values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Kendall 2007	20.46	4.5	58	20.23	4.77	42	0.23 [-1.62, 2.08]	

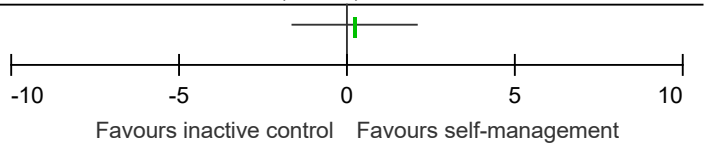


Figure 45: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Language subscale, 5-25, higher values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Kendall 2007	21.96	3.88	58	21.9	3.79	42	0.06 [-1.46, 1.58]	

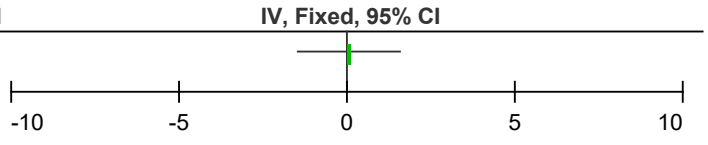


Figure 46: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Mobility subscale, 12-60, higher values are better, final values) at End of Intervention

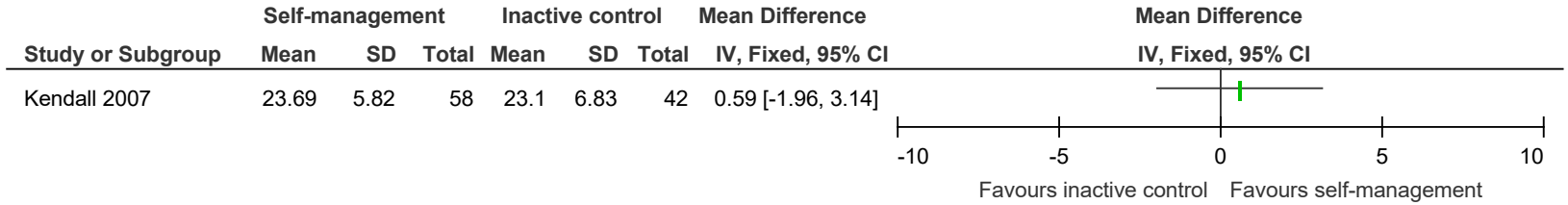


Figure 47: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Mood subscale, 5-25, higher values are better, final values) at End of Intervention

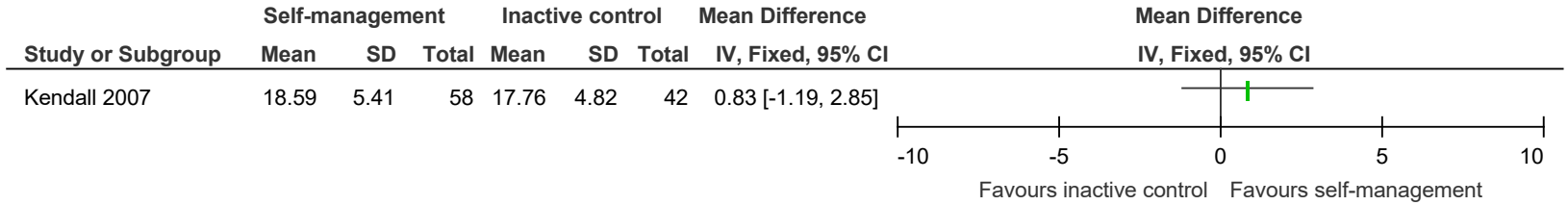


Figure 48: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Personality subscale, 3-15, higher values are better, final values) at End of Intervention

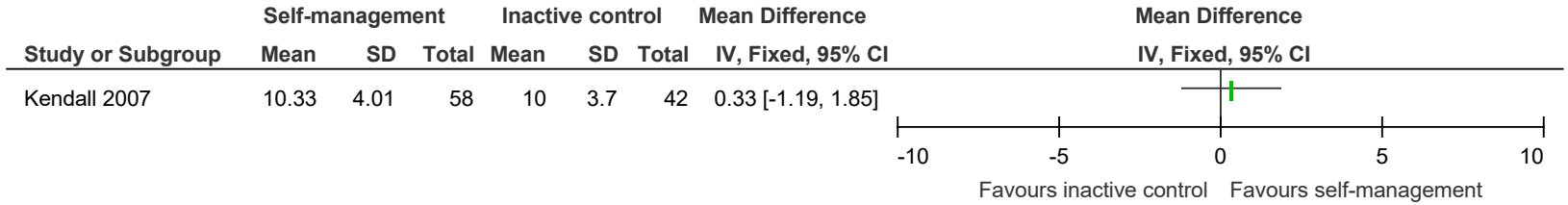


Figure 49: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Self-Care subscale, 5-25, higher values are better, final values) at End of Intervention

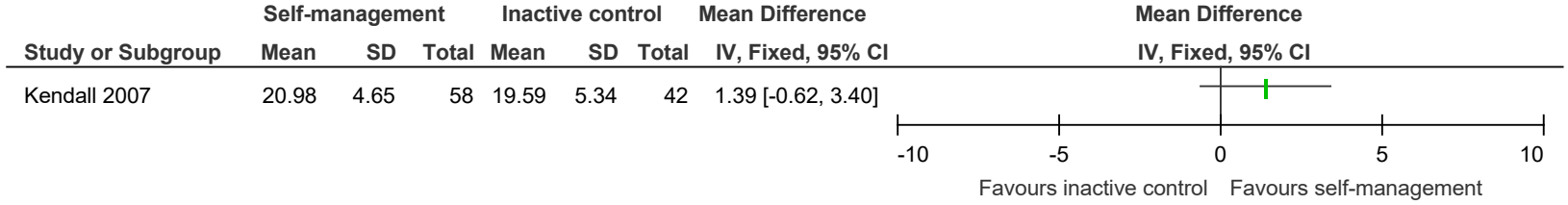


Figure 50: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Social Roles subscale, 5-25, higher values are better, final values) at End of Intervention

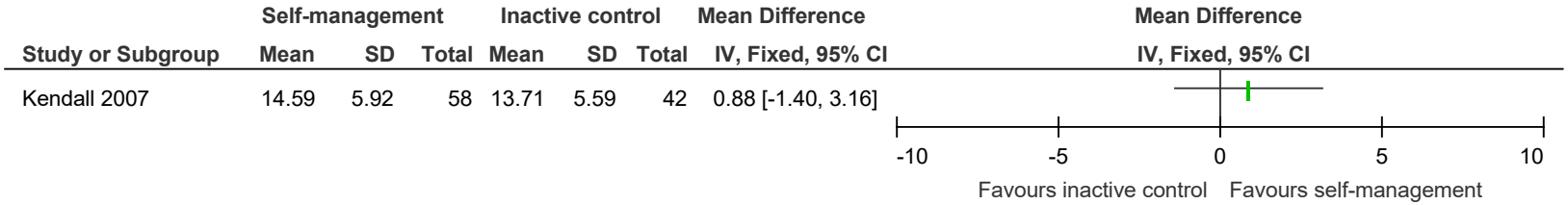


Figure 51: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Thinking subscale, 3-15, higher values are better, final values) at End of Intervention

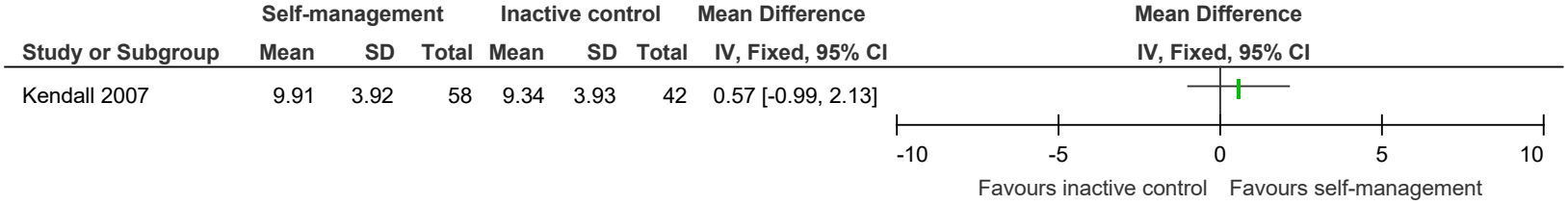


Figure 52: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Vision subscale, 3-15, higher values are better, final values) at End of Intervention

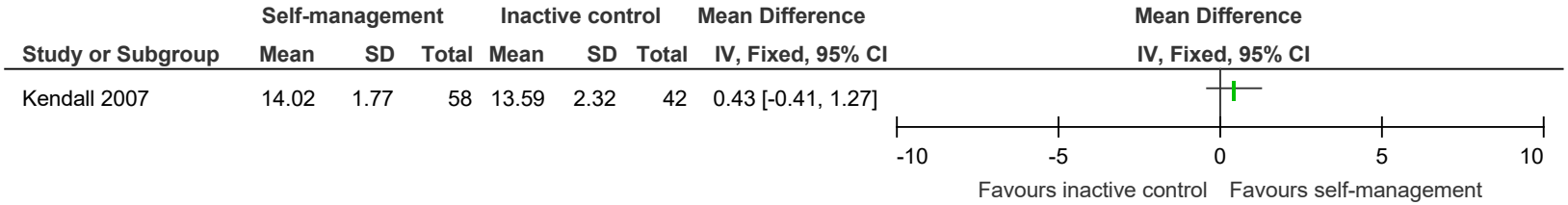


Figure 53: Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Work Productivity subscale, 3-15, higher values are better, final values) at End of Intervention

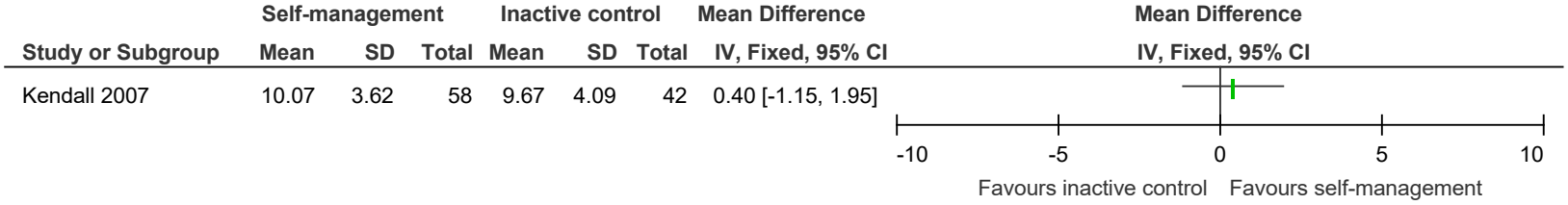


Figure 54: Stroke-Specific Patient Reported Outcome Measures (Stroke Aphasia Quality of Life - General, Stroke Specific Quality of Life [different scale ranges], higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control				Std. Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**Weight**	**IV, Fixed, 95% CI**
Hoffmann 2015	4	0.35	12	3.9	0.32	10	48.0%	0.29 [-0.56, 1.13]
McKenna 2015	15.38	3.4	11	16.68	3.5	13	52.0%	-0.36 [-1.17, 0.45]
Total (95% CI)			**23**			**23**	**100.0%**	**-0.05 [-0.64, 0.53]**

Heterogeneity: Chi² = 1.18, df = 1 (P = 0.28); I² = 15%

Test for overall effect: Z = 0.17 (P = 0.86)

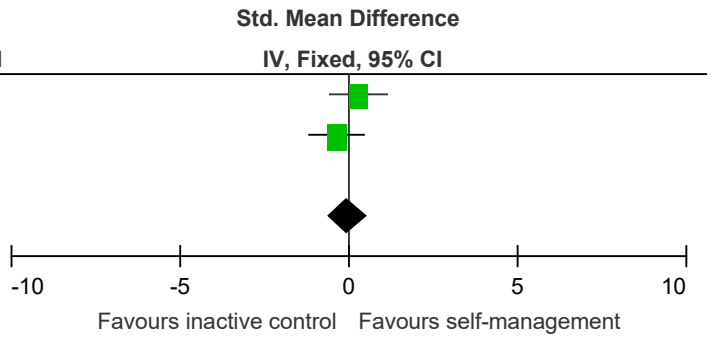


Figure 55: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Energy subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference
Study or Subgroup	**Mean**	**SD**	**Total**	**Mean**	**SD**	**Total**	**IV, Fixed, 95% CI**
Kendall 2007	9.91	3.72	58	9.64	3.36	42	0.27 [-1.13, 1.67]

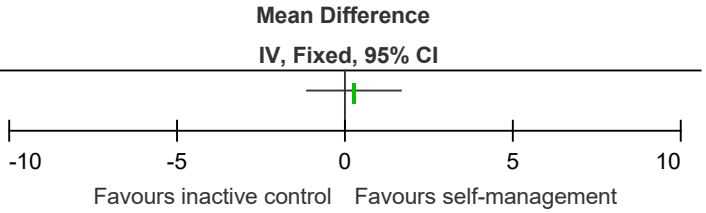


Figure 56: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Family Roles subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up

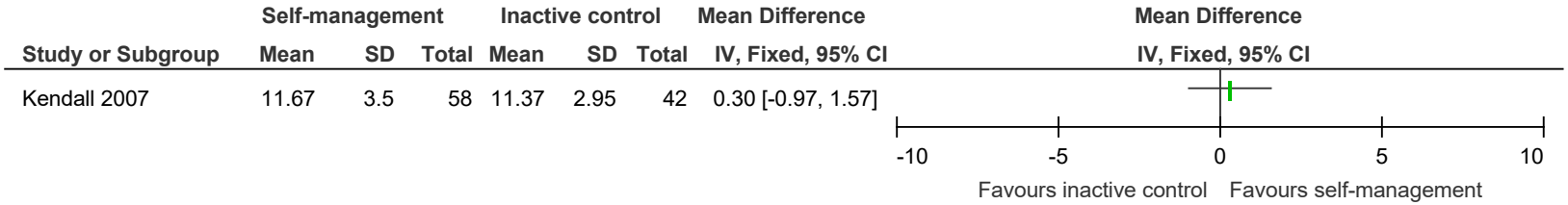


Figure 57: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Fine Motor Tasks subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up

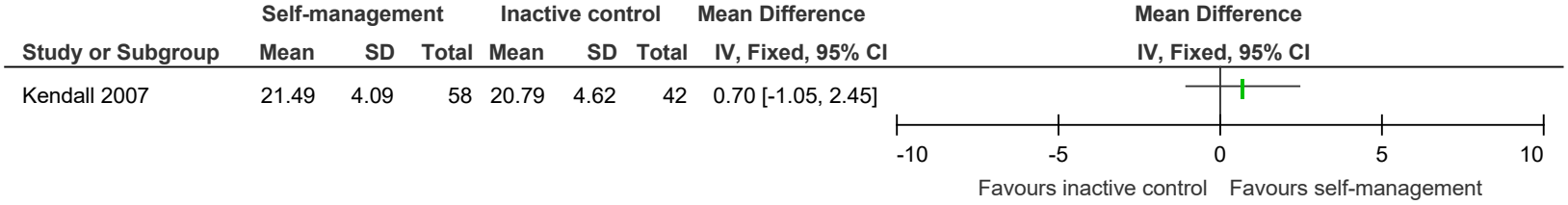


Figure 58: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Language subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Kendall 2007	22.18	3.52	58	21.32	4.04	42	0.86 [-0.66, 2.38]

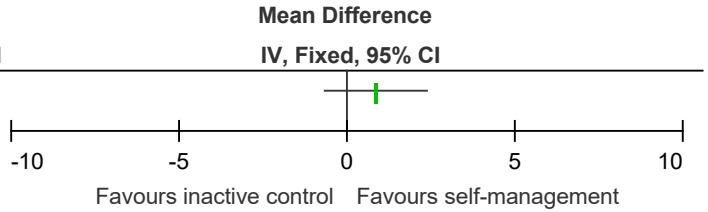


Figure 59: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Mobility subscale, 12-60, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Kendall 2007	24.87	5.15	58	24.87	5.15	42	0.00 [-2.05, 2.05]

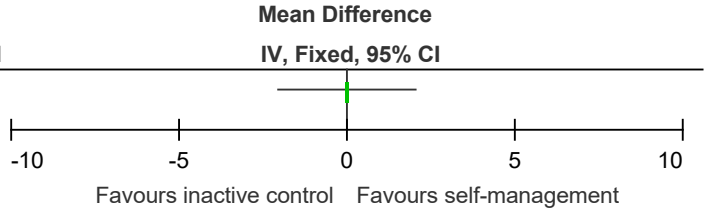


Figure 60: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Mood subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up

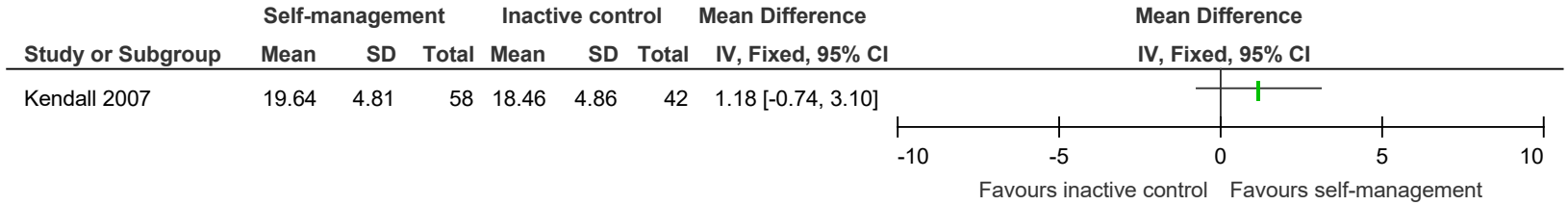


Figure 61: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Personality subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up

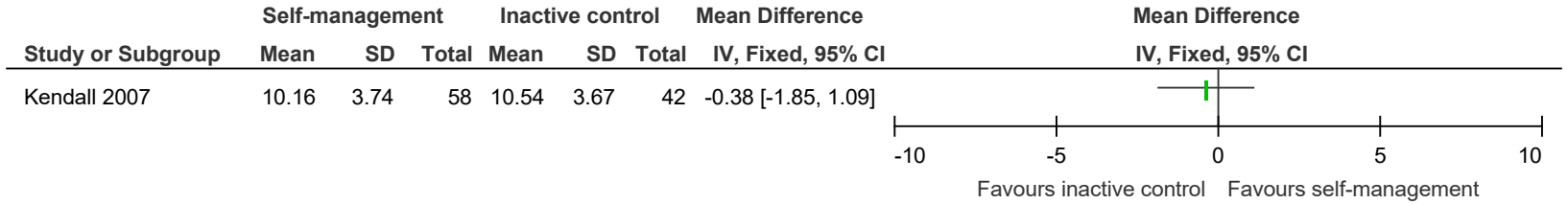


Figure 62: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Self-Care subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Kendall 2007	22.2	3.41	58	21.22	4.45	42	0.98 [-0.63, 2.59]

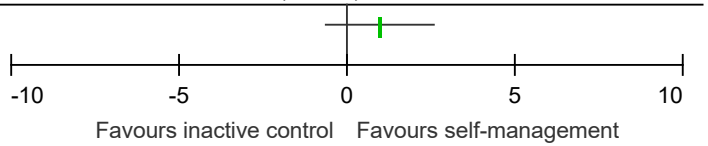


Figure 63: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Social Roles subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Kendall 2007	17.4	6.22	58	14.89	5.79	42	2.51 [0.14, 4.88]

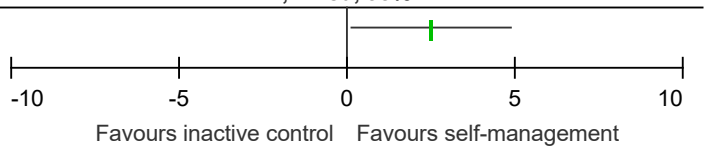


Figure 64: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Thinking subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up

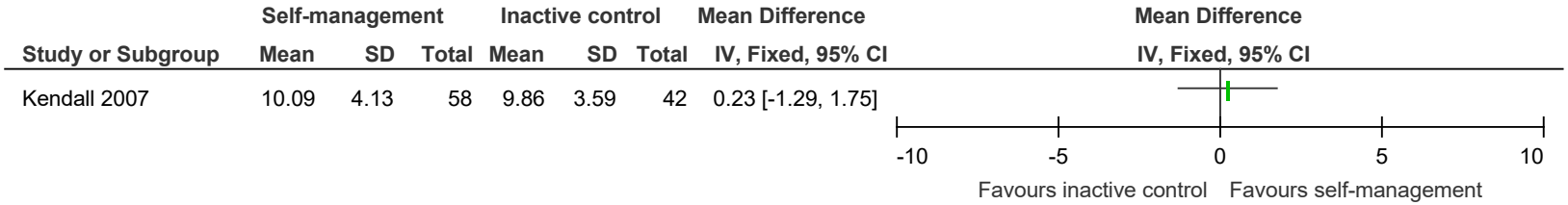


Figure 65: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Vision subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up

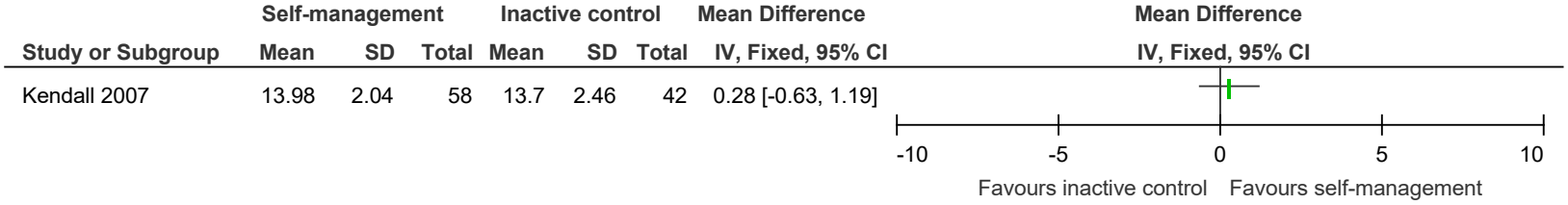


Figure 66: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Work Productivity subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Kendall 2007	11.62	3.67	58	11.14	3.36	42	0.48 [-0.91, 1.87]	

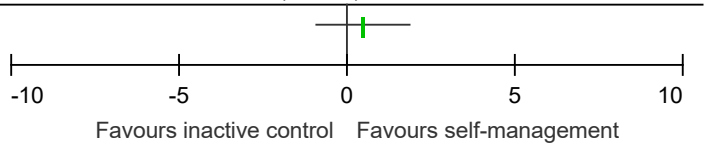


Figure 67: Health Service Usage (rehospitalisation) at End of Intervention

	Self-management		Inactive control			Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Bishop 2014	0	23	0	26	33.8%	0.00 [-0.08, 0.08]	
Cadilhac 2011	0	95	0	48	37.6%	0.00 [-0.03, 0.03]	
Chen 2018	7	72	17	72	28.7%	-0.14 [-0.26, -0.02]	
Total (95% CI)		**190**		**146**	**100.0%**	**-0.04 [-0.17, 0.09]**	
Total events	7		17				

Heterogeneity: Tau² = 0.01; Chi² = 19.11, df = 2 (P < 0.0001); I² = 90%

Test for overall effect: Z = 0.61 (P = 0.54)

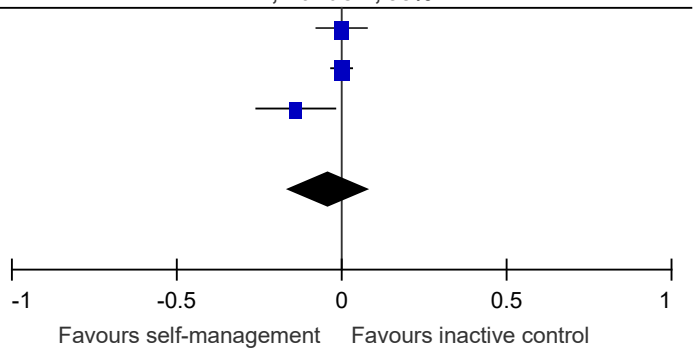


Figure 68: Health Service Usage (rehospitalisation) at End of Scheduled Follow-up

	Self-management		Inactive control			Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI
Bishop 2014	6	23	12	26	13.0%	0.57 [0.25, 1.26]
Cadilhac 2011	11	95	3	48	4.6%	1.85 [0.54, 6.33]
Fu 2020	95	270	53	130	82.4%	0.86 [0.66, 1.12]
Total (95% CI)		**388**		**204**	**100.0%**	**0.87 [0.68, 1.11]**
Total events	112		68			

Heterogeneity: Chi² = 2.56, df = 2 (P = 0.28); I² = 22%

Test for overall effect: Z = 1.11 (P = 0.27)

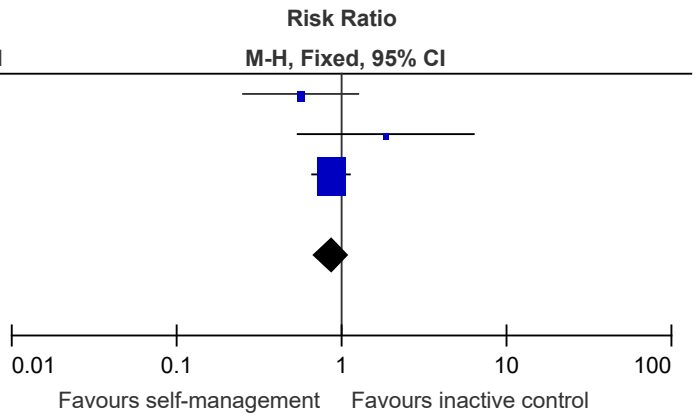


Figure 69: Health Service Usage (Days Hospitalised, frequency, lower values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Bishop 2014	0.87	2.1	23	2.73	6.1	26	-1.86 [-4.36, 0.64]

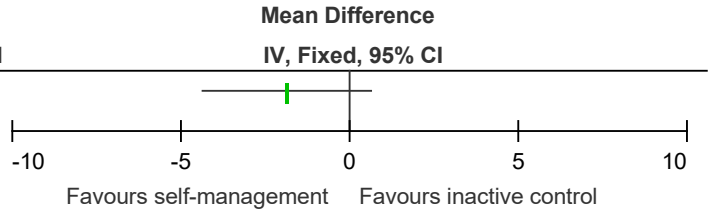


Figure 70: Health Service Usage (Days hospitalised, frequency, lower values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Bishop 2014	1.6	3.2	23	5.32	9.7	26	-3.72 [-7.67, 0.23]	

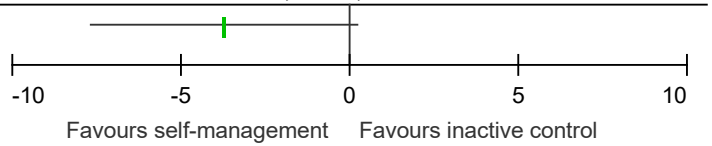


Figure 71: Health Service Usage (Therapy Hours, frequency, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Bishop 2014	-8.65	12.3	23	-15.1	20.1	26	6.45 [-2.77, 15.67]	

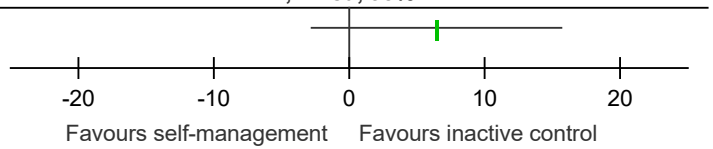


Figure 72: Health Service Usage (Therapy Hours, frequency, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Bishop 2014	-2.57	6.6	23	-10.5	20.1	26	7.93 [-0.25, 16.11]	

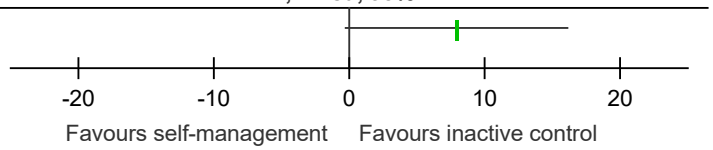


Figure 73: Health Service Usage (Physician Visits, frequency, lower values are better, final values) at End of Intervention

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Bishop 2014	0.14	2.3	23	-0.8	2.1	26	0.94 [-0.30, 2.18]	

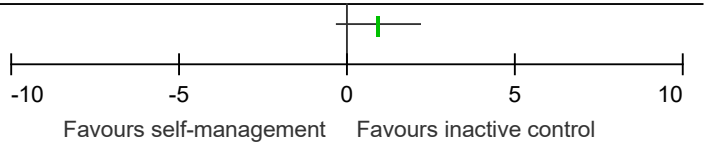


Figure 74: Health Service Usage (Physician Visits, frequency, lower values are better, final values) at End of Scheduled Follow-up

	Self-management			Inactive control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Bishop 2014	0.21	2.6	23	-0.8	2.4	26	1.01 [-0.40, 2.42]	

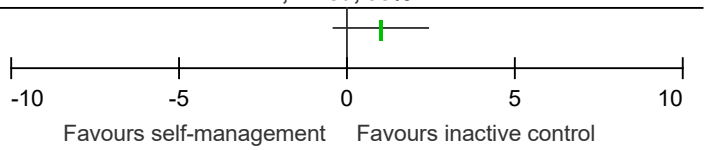


Figure 75: Adverse Events at End of Intervention

	Favours Self-management		Inactive control			Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Cadilhac 2011	0	95	0	48	38.6%	0.00 [-0.03, 0.03]	
Johnston 2007	5	103	3	100	61.4%	0.02 [-0.03, 0.07]	
Total (95% CI)		**198**		**148**	**100.0%**	**0.01 [-0.02, 0.05]**	
Total events	5		3				

Heterogeneity: Chi² = 0.57, df = 1 (P = 0.45); I² = 0%

Test for overall effect: Z = 0.64 (P = 0.52)

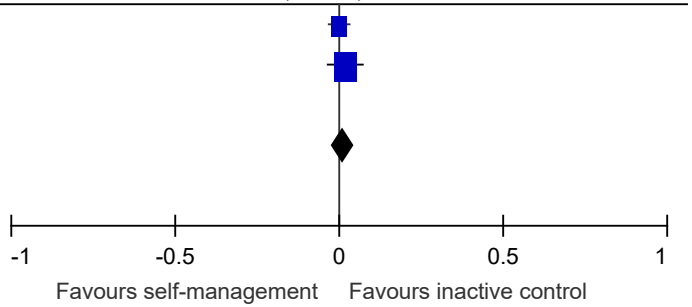


Figure 76: Adverse Events at End of Scheduled Follow-up

	Self-management		Inactive control			Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI
Cadilhac 2011	28	95	8	48	36.3%	1.77 [0.87, 3.58]
Fu 2020	8	270	10	130	31.6%	0.39 [0.16, 0.95]
Harwood 2012	8	85	10	87	32.2%	0.82 [0.34, 1.97]
Total (95% CI)		**450**		**265**	**100.0%**	**0.85 [0.35, 2.07]**
Total events	44		28			

Heterogeneity: Tau² = 0.44; Chi² = 6.91, df = 2 (P = 0.03); I² = 71%

Test for overall effect: Z = 0.35 (P = 0.73)

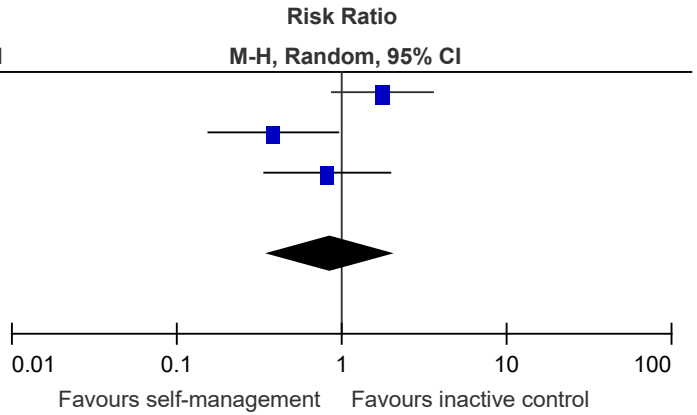
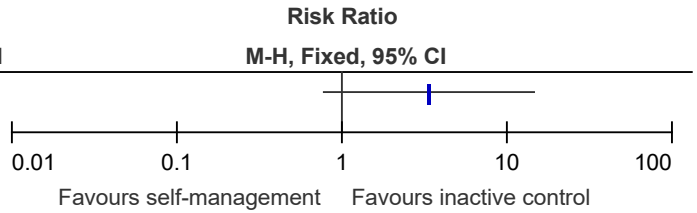


Figure 77: Adverse Events (Recurrent Stroke) at End of Scheduled Follow-up

	Self-management		Inactive control		Risk Ratio
Study or Subgroup	Events	Total	Events	Total	M-H, Fixed, 95% CI
Fu 2020	14	270	2	130	3.37 [0.78, 14.61]



E.2 Self-management compared to active control

Figure 78: Person/Participant Generic Health-Related Quality of Life (EQ-VAS, 0-100, higher values are better, final values) at End of Intervention

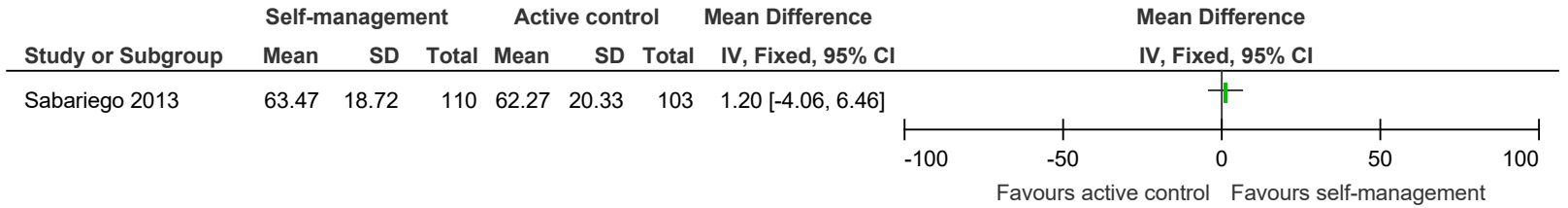


Figure 79: Person/Participant Generic Health-Related Quality of Life (EQ-VAS, 0-100, higher values are better, final values) at End of Scheduled Follow-up

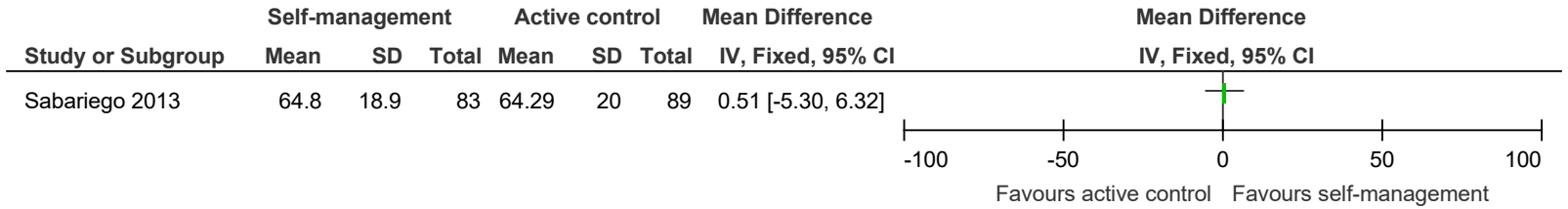


Figure 80: Self-Efficacy (Liverpool Self-Efficacy Scale, 11-44, higher values are better, final values) at End of Intervention

	Self-management			Active control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Sabariego 2013	29.29	6.03	110	29.83	6.06	103	-0.54 [-2.16, 1.08]	

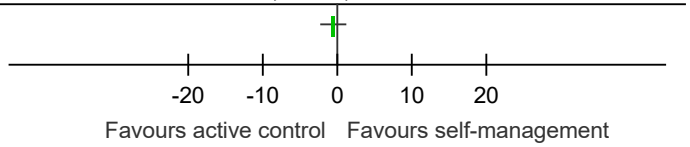


Figure 81: Self-Efficacy (Liverpool Self-Efficacy Scale, 11-44, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Active control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Sabariego 2013	30.58	5.67	83	30.91	6.13	89	-0.33 [-2.09, 1.43]	

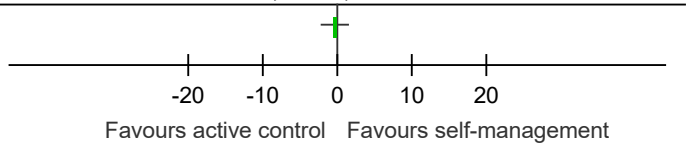


Figure 82: Psychological Distress - Depression (Hospital Anxiety Depression Scale, Hospital Anxiety Depression Scale - Depression Subscale [different scale ranges] lower values are better, final values) at End of Intervention

	Self-management			Active control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Sabariego 2013	5.01	3.72	110	5.75	3.94	103	65.4%	-0.19 [-0.46, 0.08]
Tielemans 2015	12.1	7.4	58	14	6.8	55	34.6%	-0.27 [-0.64, 0.11]
Total (95% CI)			**168**			**158**	**100.0%**	**-0.22 [-0.44, 0.00]**

Heterogeneity: Chi² = 0.10, df = 1 (P = 0.76); I² = 0%

Test for overall effect: Z = 1.96 (P = 0.05)

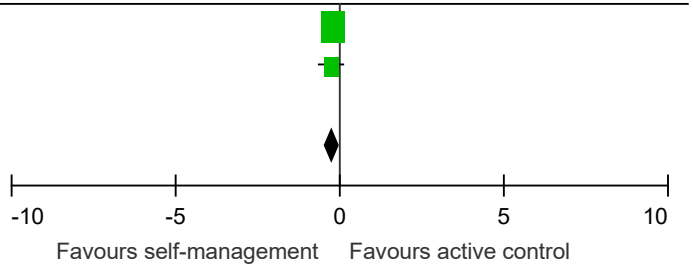


Figure 83: Psychological Distress - Depression (Hospital Anxiety Depression Scale, Hospital Anxiety Depression Scale - Depression Subscale [different scale ranges] lower values are better, final values) at End of Scheduled Follow-up

	Self-management			Active control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Sabariego 2013	6.45	4.74	83	6.48	4.69	89	60.6%	-0.01 [-0.31, 0.29]
Tielemans 2015	11.6	7	58	13.6	6.7	55	39.4%	-0.29 [-0.66, 0.08]
Total (95% CI)			**141**			**144**	**100.0%**	**-0.12 [-0.35, 0.11]**

Heterogeneity: Chi² = 1.36, df = 1 (P = 0.24); I² = 26%

Test for overall effect: Z = 0.99 (P = 0.32)

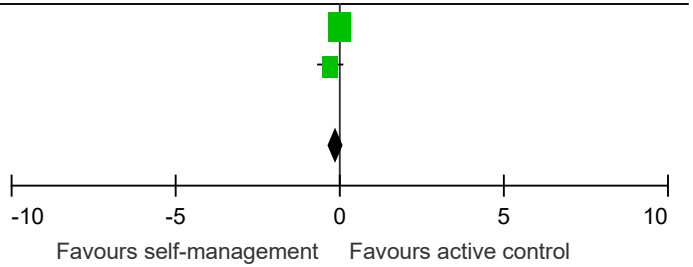


Figure 84: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Communication Subscale, 0-100, higher values are better, final values) at End of Intervention

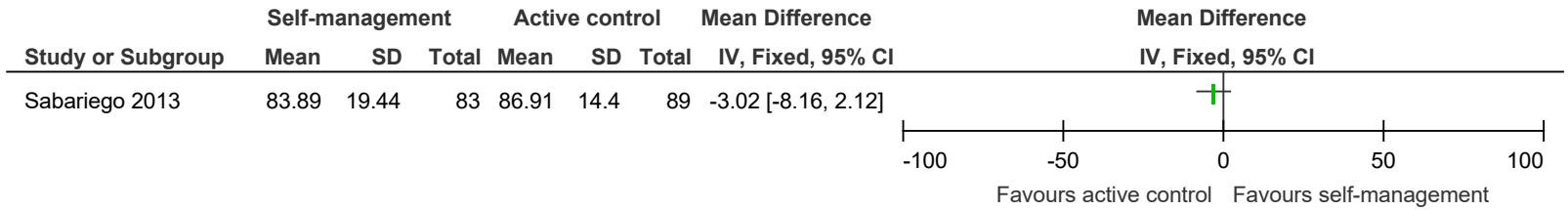


Figure 85: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Emotion Subscale, 0-100, higher values are better, final values) at End of Intervention

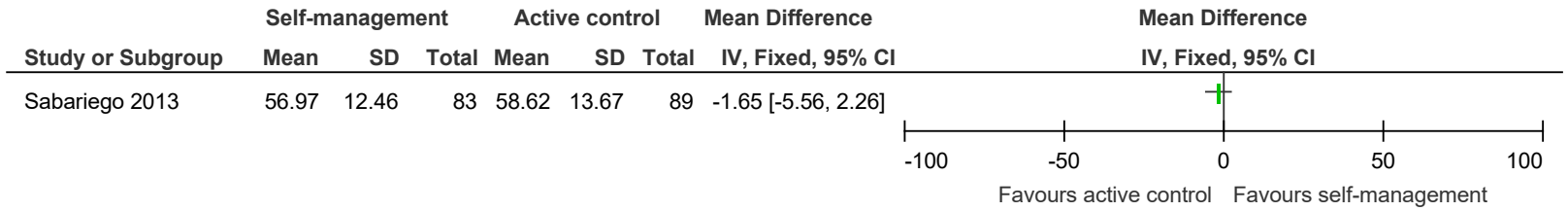


Figure 86: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Memory Subscale, 0-100, higher values are better, final values) at End of Intervention

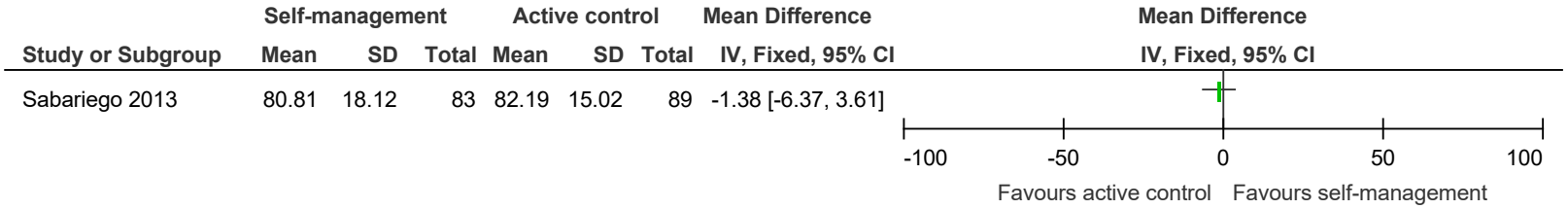


Figure 87: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Physical Functioning Subscale, 0-100, higher values are better, final values) at End of Intervention

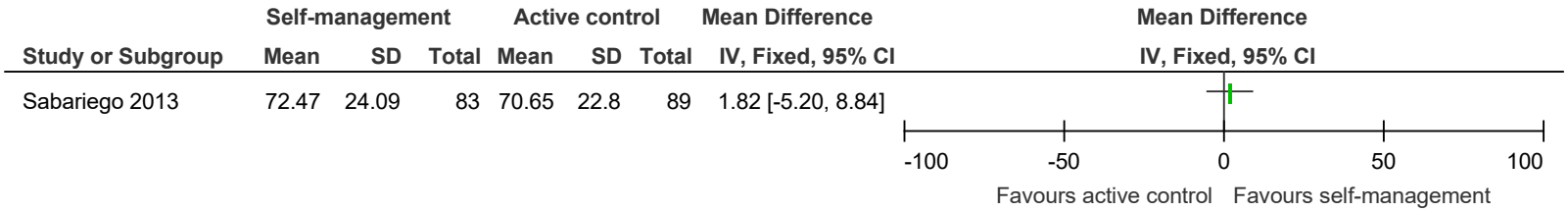


Figure 88: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Social Participation Subscale, 0-100, higher values are better, final values) at End of Intervention

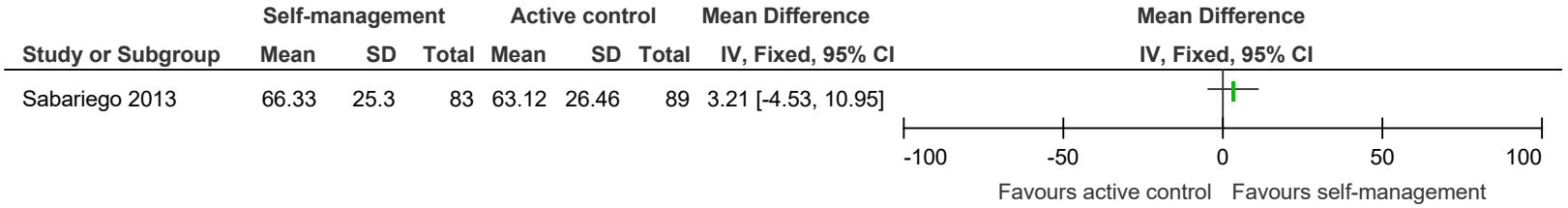


Figure 89: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Communication Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up

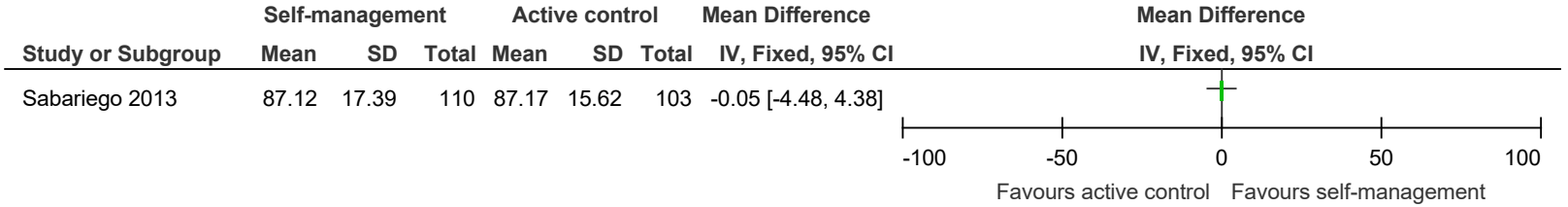


Figure 90: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Emotion Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Active control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Sabariego 2013	60.44	12.64	110	59.84	11.31	103	0.60 [-2.62, 3.82]	

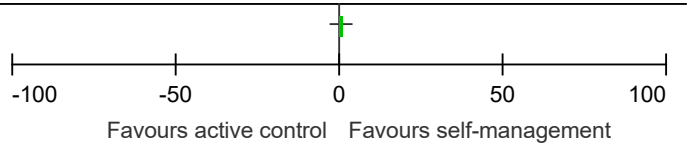


Figure 91: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Memory Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up

	Self-management			Active control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Sabariego 2013	84.91	16.65	110	83.32	16.6	103	1.59 [-2.88, 6.06]	

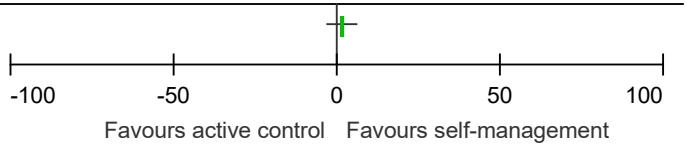


Figure 92: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Physical Functioning Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up

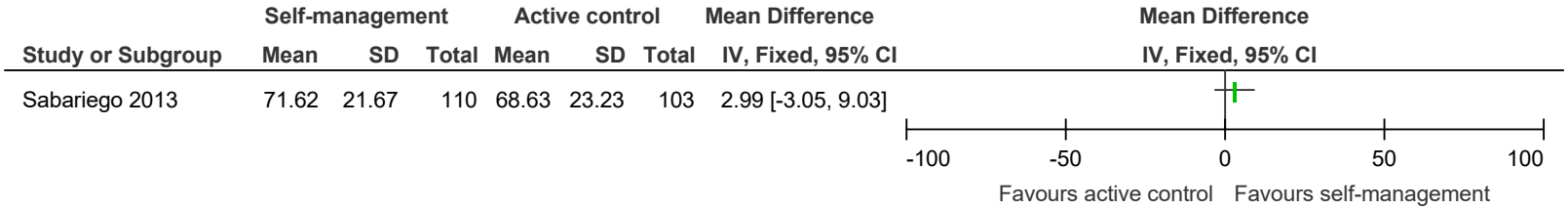


Figure 93: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Social Participation Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up

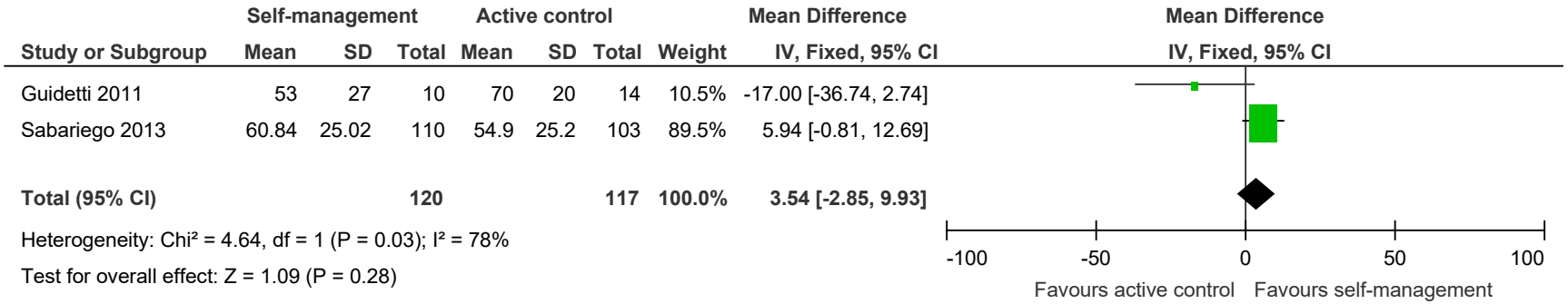


Figure 94: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Self-Assessed Recovery Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up

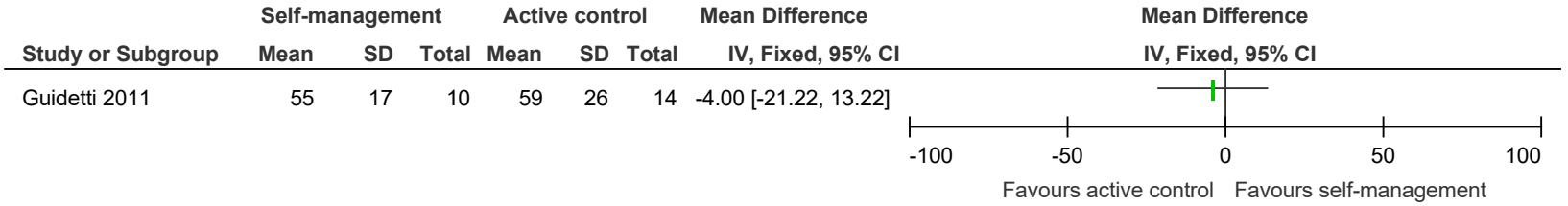


Figure 95: Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Activities of Daily Living, 0-100, higher values are better, final values) at End of Scheduled Follow-up

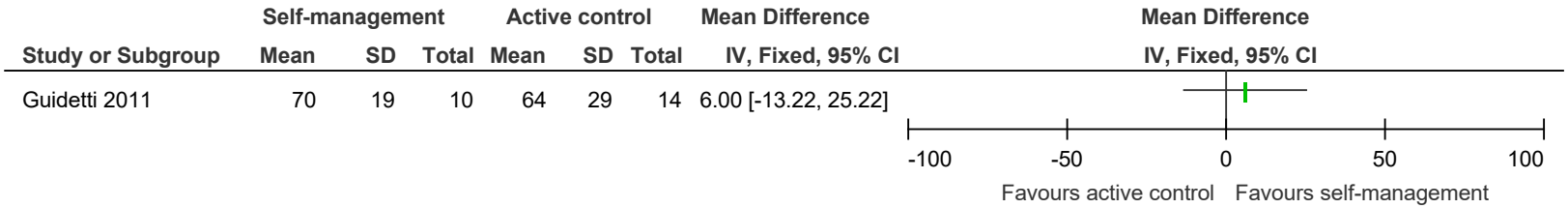


Figure 96: Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life, 1-5, higher values are better, final values) at End of Scheduled Follow-up

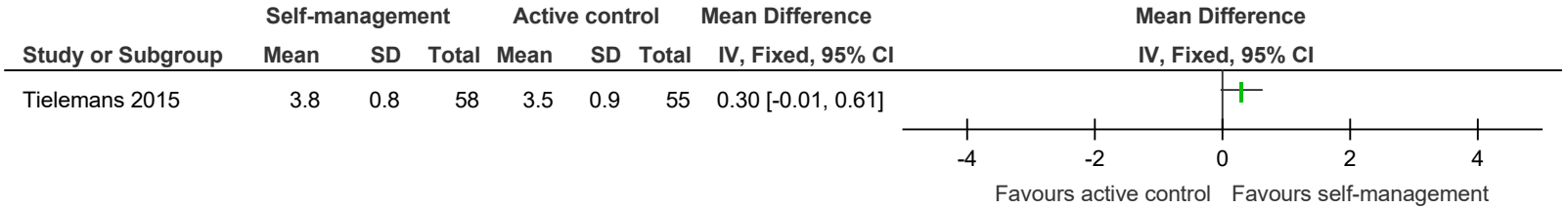


Figure 97: Health Service Usage (Hospital readmissions, frequency, lower values are better, final values) at End of Scheduled Follow-up

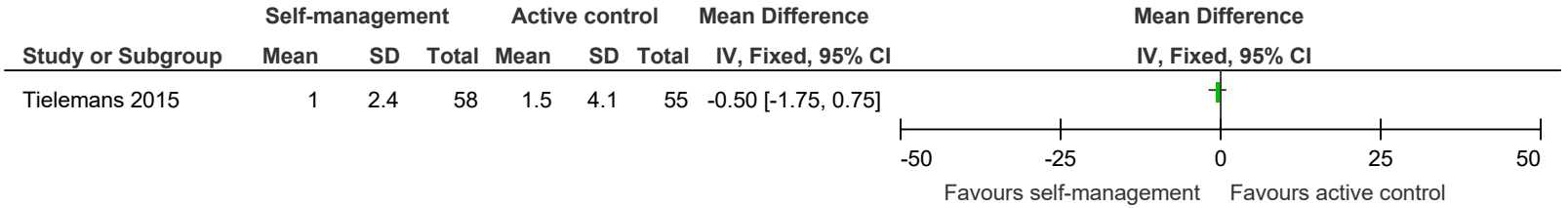


Figure 98: Health Service Usage (General Practitioner Attendance, frequency, final values) at End of Scheduled Follow-up

	Self-management			Active control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Tielemans 2015	13.3	17	58	11	11	55	2.30 [-2.95, 7.55]	

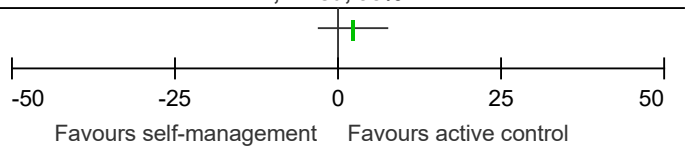


Figure 99: Adverse Events at End of Intervention

	Self-management		Active control		Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Sabariego 2013	0	130	0	130	0.00 [-0.01, 0.01]	

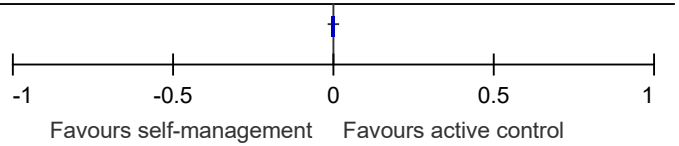
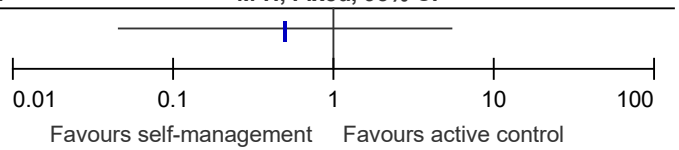


Figure 100: Adverse Events at End of Scheduled Follow-up

	Self-management		Active control		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Sabariego 2013	1	130	2	130	0.50 [0.05, 5.45]	



Appendix F – GRADE tables

Table 9: Clinical evidence profile: self-management compared to inactive control

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
Person/Participant Generic Health-Related Quality of Life (EQ-VAS, EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Intervention (follow-up: mean 2 months)												
2	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	46	41	-	MD **3.29 higher** (5.76 lower to 12.35 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 Bodily Pain, 0-100, higher values are better, final values) at End of Intervention (follow-up: 9 months)												
1	randomised trials	very serious[c]	not serious	not serious	very serious[b]	none	39	47	-	MD **2.5 higher** (9.54 lower to 14.54 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 General Health, 0-100, higher values are better, final values) at End of Intervention (follow-up: 9 months)												
1	randomised trials	very serious[c]	not serious	not serious	very serious[b]	none	39	47	-	MD **3.2 lower** (12.2 lower to 5.8 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 Mental Health, 0-100, higher values are better, final values) at End of Intervention (follow-up: 9 months)												
1	randomised trials	very serious[d]	not serious	not serious	very serious[b]	none	39	47	-	MD **1.8 higher** (5.13 lower to 8.73 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-12 Mental Component, 0-100, higher values are better, final values) (follow-up: 12 weeks)												
1	randomised trials	very serious[d]	not serious	not serious	very serious[b]	none	2[e]	2[e]	-	MD **3.3 higher** (18.88 lower to 25.48 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
Person/Participant Generic Health-Related Quality of Life (SF-36 Physical Functioning, 0-100, higher values are better, final values) at End of Intervention (follow-up: 9 months)												
1	randomised trials	very serious[d]	not serious	not serious	very serious[b]	none	39	47	-	MD **0** (11.55 lower to 11.55 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-12 Physical Component, 0-100, higher values are better, final values) (follow-up: 12 weeks)												
1	randomised trials	very serious[d]	not serious	not serious	very serious[b]	none	2[e]	2[e]	-	MD **3.2 higher** (16.11 lower to 22.51 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 Role Emotional, 0-100, higher values are better, final values) at End of Intervention (follow-up: 9 months)												
1	randomised trials	very serious[c]	not serious	not serious	very serious[b]	none	39	47	-	MD **11.2 higher** (5.15 lower to 27.55 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 Role Physical, 0-100, higher values are better, final values) at End of Intervention (follow-up: 9 months)												
1	randomised trials	very serious[c]	not serious	not serious	very serious[b]	none	39	47	-	MD **5.5 lower** (22.1 lower to 11.1 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 Social Functioning, 0-100, higher values are better, final values) at End of Intervention (follow-up: 9 months)												
1	randomised trials	very serious[c]	not serious	not serious	very serious[b]	none	39	47	-	MD **2.6 lower** (13.32 lower to 8.12 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 Vitality, 0-100, higher values are better, final values) at End of Intervention (follow-up: 9 months)												
1	randomised trials	very serious[c]	not serious	not serious	very serious[b]	none	39	47	-	MD **4.7 lower** (12.86 lower to 3.46 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (EQ-5D, -0.11-1, higher values are better, change scores) at End of Intervention (follow-up: 6 weeks)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[f]	not serious	not serious	very serious[b]	none	11	13	-	MD **0.06 lower** (0.32 lower to 0.2 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (EQ-VAS, EQ-5D-3L, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
2	randomised trials	not serious	not serious	not serious	not serious	none	284	154	-	MD **2.25 higher** (1.19 lower to 5.7 higher)	⨁⨁⨁⨁ High	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 Mental Component, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[d]	not serious	not serious	serious[b]	none	70	69	-	MD **0.48 higher** (2.42 lower to 3.38 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (SF-36 Physical Component, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[d]	not serious	not serious	very serious[b]	none	70	69	-	MD **6.01 higher** (2.39 higher to 9.63 higher)	⨁◯◯◯ Very low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (EQ-5D, -0.11-1, higher values are better, change scores) at End of Scheduled Follow-up (follow-up: 4.5 months)												
1	randomised trials	very serious[f]	not serious	not serious	very serious[b]	none	11	13	-	MD **0.04 higher** (0.23 lower to 0.31 higher)	⨁◯◯◯ Very low	CRITICAL
Carer Generic Health-Related Quality of Life (EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[d]	not serious	not serious	serious[b]	none	29	25	-	MD **7.93 higher** (0.07 higher to 15.79 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
Carer Generic Health-Related Quality of Life (EQ-5D-3L-VAS, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[d]	not serious	not serious	serious[b]	none	27	25	-	MD **3.11 higher** (7.69 lower to 13.91 higher)	⨁◯◯◯ Very low	CRITICAL
Self-Efficacy (Recovery Locus of Control, Self-Efficacy Questionnaire, Self-Efficacy Scale, Sense of Control - Mastery, General Self-Efficacy Questionnaire, Stroke Self-Effiacy Questionnaire, Stroke Self-Management Behaviour Rating Scale [different scale ranges], higher values are better, final values) at End of Intervention (follow-up: mean 9 weeks)												
8	randomised trials	very serious[g]	very serious[h]	not serious	serious[b]	none	245[e]	235[e]	-	SMD **1.21 SD higher** (0.27 higher to 2.15 higher)	⨁◯◯◯ Very low	CRITICAL
Self-Efficacy (Stroke Self-Efficacy Questionnaire [different scale ranges], higher values are better, change scores) at End of Intervention (follow-up: 9 weeks)												
2	randomised trials	serious[i]	serious[h]	not serious	very serious[b]	none	45	47	-	SMD **0.01 SD higher** (0.79 lower to 0.8 higher)	⨁◯◯◯ Very low	CRITICAL
Self-Efficacy (Self-Efficacy Questionnaire, Self-Efficacy Scale, General Self-Efficacy Questionnaire [different scale ranges], higher values are better, final values) at End of Scheduled Follow-up (follow-up: 10 months)												
3	randomised trials	very serious[j]	not serious	not serious	serious[b]	none	97	77	-	SMD **0.3 SD higher** (0 to 0.6 higher)	⨁◯◯◯ Very low	CRITICAL
Self-Efficacy (Stroke Self-Efficacy Questionnaire, 0-10, higher values are better, change scores) at End of Scheduled Follow-up (follow-up: 4.5 months)												
1	randomised trials	very serious[f]	not serious	not serious	serious[b]	none	11	13	-	MD **0.24 lower** (1.28 lower to 0.8 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of Daily Living (Barthel Index, Functional Limitations Profile, Extended Activities of Daily Living [different scale ranges], higher values are better, final values) at End of Intervention (follow-up: mean 6 weeks)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
5	randomised trials	serious[i]	not serious	not serious	not serious	none	164[e]	156[e]	-	SMD **0.1 SD higher** (0.12 lower to 0.32 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Activities of Daily Living (Barthel Index, Functional Independence Measure [different scale ranges], higher values are better, change scores) at End of Intervention (follow-up: mean 9 weeks)												
4	randomised trials	very serious[k]	serious[h]	not serious	not serious	none	142	157	-	SMD **0.19 SD lower** (0.42 lower to 0.04 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of Daily Living (Canadian Occupational Performance Measure - Satisfaction Subscale, 0-10, higher values are better, final values) at End of Intervention (follow-up: mean 25 weeks)												
2	randomised trials	very serious[l]	not serious	not serious	not serious	none	45	58	-	MD **0** (0.92 lower to 0.92 higher)	⨁⨁◯◯ Low	CRITICAL
Activities of Daily Living (Canadian Occupational Performance Measure - Performance Subscale, 0-10, higher values are better, final values) at End of Intervention (follow-up: mean 25 weeks)												
2	randomised trials	very serious[l]	not serious	not serious	not serious	none	45	58	-	MD **0.18 higher** (0.63 lower to 1 higher)	⨁⨁◯◯ Low	CRITICAL
Activities of Daily Living (Barthel Index [different scale ranges] higher values are better, final values) at End of Scheduled Follow-up (follow-up: mean 9 months)												
4	randomised trials	not serious	not serious	not serious	not serious	none	432	290	-	SMD **0.2 higher** (0.05 higher to 0.35 higher)	⨁⨁⨁⨁ High	CRITICAL
Activities of Daily Living (Barthel Index, scale range, Functional Independence Measure [different scale ranges], higher values are better, change scores) at End of Scheduled Follow-up (follow-up: mean 5 months)												
2	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	34	39	-	SMD **0.12 SD higher** (0.35 lower to 0.58 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
Activities of Daily Living (Canadian Occupational Performance Measure - Performance Subscale, 0-10, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												
1	randomised trials	very serious[d]	not serious	not serious	very serious[b]	none	6	11	-	MD **0** (2.7 lower to 2.7 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of Daily Living at End of Scheduled Follow-up (Canadian Occupational Performance Measure - Satisfaction Subscale, 0-10, higher better, final values) (follow-up: 6 months)												
1	randomised trials	very serious[d]	not serious	not serious	very serious[b]	none	6	11	-	MD **0.1 lower** (2.84 lower to 2.64 higher)	⨁◯◯◯ Very low	CRITICAL
Participation Restrictions (Reintergration to Normal Living Index, 1-110, higher values are better, final values) at End of Intervention (follow-up: 14 weeks)												
1	randomised trials	very serious[a]	not serious	not serious	very serious[b]	none	6	11	-	MD **2 lower** (27.05 lower to 23.05 higher)	⨁◯◯◯ Very low	CRITICAL
Participation Restrictions (Complex WHODAS score, 0-100, lower values are better, change score) at End of Intervention (follow-up: 6 months)												
1	randomised trials	serious[n]	not serious	not serious	very serious[b]	none	4[o]	5[o]	-	MD **2.07 higher** (7.46 lower to 11.6 higher)	⨁◯◯◯ Very low	CRITICAL
Participation Restrictions (Reintergration to Normal Living Index, 1-110, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												
1	randomised trials	very serious[a]	not serious	not serious	very serious[b]	none	6	11	-	MD **6.5 higher** (10.46 lower to 23.46 higher)	⨁◯◯◯ Very low	CRITICAL
Participation Restrictions (Complex WHODAS score, 0-100, lower values are better, change score) at End of Scheduled Follow-up (follow-up: 9 months)												
1	randomised trials	serious[n]	not serious	not serious	very serious[b]	none	4[o]	5[o]	-	MD **0.16 lower** (9.82 lower to 9.5 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological Distress - Depression (Hospital Anxiety and Depression Scale, Hospital Anxiety and Depression Scale - Depression Subscale, Hamilton Depression Scale [different scale ranges], lower values are better, final values) at End of Intervention (follow-up: mean 12 weeks)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
8	randomised trials	very serious[k]	not serious	not serious	not serious	none	215[e]	231[e]	-	SMD **0.13 SD lower** (0.32 lower to 0.06 higher)	⨁⨁◯◯ Low	CRITICAL
Psychological Distress - Depression (Geriatric Depression Scale Short Form, General Health Questionnaire-28 [different scale ranges], lower values are better, change scores) at End of Intervention (follow-up: mean 9 weeks)												
2	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	34	39	-	SMD **0.41 SD higher** (0.05 lower to 0.88 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological Distress - Depression (Hospital Anxiety and Depression Scale, Hospital Anxiety and Depression Scale - Depression Subscale [different scale ranges], lower values are better, final values) at End of Scheduled Follow-up (follow-up: mean 7.5 months)												
3	randomised trials	very serious[d]	not serious	not serious	serious[b]	none	45	46	-	SMD **0.13 SD lower** (0.54 lower to 0.29 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological Distress - Depression (Geriatric Depression Scale Short Form, General Health Questionnaire [different scale ranges], lower values are better, change scores) at End of Scheduled Follow-up (follow-up: mean 5 months)												
2	randomised trials	very serious[d]	not serious	not serious	serious[b]	none	38	38	-	SMD **0.07 SD lower** (0.52 lower to 0.38 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological Distress - Depression (Geriatric Depression Scale Short Form, General Health Questionnaire [different scale ranges] lower values are better, change scores) at End of Scheduled Follow-up (follow-up: mean 7.5 months)												
3	randomised trials	very serious[d]	not serious	not serious	serious[b]	none	61	64	-	SMD **0.17 higher** (0.18 lower to 0.53 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life, Stroke and Aphasia Quality of Life - General [different scale ranges], higher values are better, final values) at End of Intervention (follow-up: mean 6 weeks)												
4	randomised trials	very serious[p]	very serious[h]	not serious	not serious	none	90	89	-	SMD **3.29 SD higher** (0.6 higher to 5.99 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life, 1-5, higher values are better, change scores) at End of Intervention (follow-up: 3 months)												
1	randomised trials	serious[i]	not serious	not serious	serious[b]	none	34	34	-	MD **0.1 lower** (0.45 lower to 0.25 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Energy subscale, 3-15, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **1.01 higher** (0.53 lower to 2.55 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Family Roles subscale, 3-15, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.4 lower** (1.94 lower to 1.14 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Fine Motor Tasks subscale, 5-25, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0.23 higher** (1.62 lower to 2.08 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Language subscale, 5-25, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0.06 higher** (1.46 lower to 1.58 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Mobility subscale, 12-60, higher values are better, final values) at End of Intervention (follow-up: 3 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0.59 higher** (1.96 lower to 3.14 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Mood subscale, 5-25, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.83 higher** (1.19 lower to 2.85 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Personality subscale, 3-15, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0.33 higher** (1.19 lower to 1.85 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Self-Care subscale, 5-25, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **1.39 higher** (0.62 lower to 3.4 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Social Roles subscale, 5-25, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.88 higher** (1.4 lower to 3.16 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Thinking subscale, 3-15, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.57 higher** (0.99 lower to 2.13 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Vision subscale, 3-15, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.43 higher** (0.41 lower to 1.27 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke-Specific Quality of Life - Work Productivity subscale, 3-15, higher values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0.4 higher** (1.15 lower to 1.95 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Aphasia Quality of Life - General, Stroke Specific Quality of Life [different scale ranges], higher values are better, final values) at End of Scheduled Follow-up (follow-up: mean 5 months)												
2	randomised trials	very serious[f]	not serious	not serious	very serious[b]	none	23	23	-	SMD **0.05 SD lower** (0.64 lower to 0.53 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Energy subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0.27 higher** (1.13 lower to 1.67 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Family Roles subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.3 higher** (0.97 lower to 1.57 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Fine Motor Tasks subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.7 higher** (1.05 lower to 2.45 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Language subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.86 higher** (0.66 lower to 2.38 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Mobility subscale, 12-60, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0** (2.05 lower to 2.05 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Mood subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **1.18 higher** (0.74 lower to 3.1 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Personality subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.38 lower** (1.85 lower to 1.09 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Self-Care subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.98 higher** (0.63 lower to 2.59 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Social Roles subscale, 5-25, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **2.51 higher** (0.14 higher to 4.88 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Thinking subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0.23 higher** (1.29 lower to 1.75 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Vision subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	58	42	-	MD **0.28 higher** (0.63 lower to 1.19 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life - Work Productivity subscale, 3-15, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[b]	none	58	42	-	MD **0.48 higher** (0.91 lower to 1.87 higher)	⨁◯◯◯ Very low	CRITICAL
Health Service Usage (rehospitalisation) at End of Intervention (follow-up: mean 4 months)												
3	randomised trials	very serious[m]	very serious[h]	not serious	not serious	none	7/190 (3.7%)	17/146 (11.6%)	**RD -0.04** (-0.17 to 0.09)	**40 fewer per 1,000** (from 170 fewer to 90 more)[q]	⨁◯◯◯ Very low[q]	CRITICAL
Health Service Usage (rehospitalisation) at End of Scheduled Follow-up (follow-up: mean 6.5 months)												
3	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	112/388 (28.9%)	68/204 (33.3%)	**RR 0.87** (0.68 to 1.11)	**43 fewer per 1,000** (from 107 fewer to 37 more)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
Health Service Usage (Days Hospitalised, frequency, lower values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	23	26	-	MD **1.86 lower** (4.36 lower to 0.64 higher)	⨁◯◯◯ Very low	CRITICAL
Health Service Usage (Days Rehospitalised, frequency, lower values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												
1	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	23	26	-	MD **3.72 lower** (7.67 lower to 0.23 higher)	⨁◯◯◯ Very low	CRITICAL
Health Service Usage (Therapy Hours, frequency, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	23	26	-	MD **6.45 higher** (2.77 lower to 15.67 higher)	⨁◯◯◯ Very low	CRITICAL
Health Service Usage (Therapy Hours, frequency, final values) at End of Scheduled Follow-up (follow-up: 6 months)												
1	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	23	26	-	MD **7.93 higher** (0.25 lower to 16.11 higher)	⨁◯◯◯ Very low	CRITICAL
Health Service Usage (Physician Visits, frequency, lower values are better, final values) at End of Intervention (follow-up: 3 months)												
1	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	23	26	-	MD **0.94 higher** (0.3 lower to 2.18 higher)	⨁◯◯◯ Very low	CRITICAL
Health Service Usage (Physician Visits, frequency, lower values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	inactive control	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[m]	not serious	not serious	serious[b]	none	23	26	-	MD **1.01 higher** (0.4 lower to 2.42 higher)	⨁◯◯◯ Very low	CRITICAL
Adverse Events at End of Intervention (follow-up: mean 6.5 weeks)												
2	randomised trials	very serious[k]	not serious	not serious	serious[q,r]	none	5/198 (2.5%)	3/148 (2.0%)	**RD 0.01** (-0.02 to 0.05)	**10 more per 1,000** (from 20 fewer to 50 more)[q]	⨁◯◯◯ Very low	CRITICAL
Adverse Events at End of Scheduled Follow-up (follow-up: mean 10 months)												
3	randomised trials	very serious[d]	very serious[h]	not serious	very serious[b]	none	44/450 (9.8%)	28/265 (10.6%)	**RR 0.85** (0.35 to 2.07)	**16 fewer per 1,000** (from 69 fewer to 113 more)	⨁◯◯◯ Very low	CRITICAL
Adverse Events (Recurrent Stroke) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	not serious	not serious	not serious	very serious[b]	none	14/270 (5.2%)	2/130 (1.5%)	**RR 3.37** (0.78 to 14.61)	**36 more per 1,000** (from 3 fewer to 209 more)	⨁⨁◯◯ Low	CRITICAL

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio; **SMD:** standardised mean difference

Explanations

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

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

c. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to deviations from the intended intervention, missing outcome data and bias in selection of the reported results)

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

e. Includes a study with a cluster randomised design, the number of participants includes the number of clusters (in this study, the total number of participants was 78. 40 in the intervention arm, 38 in the control arm).

f. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to deviations from the intended intervention and bias in selection of the reported result)

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

h. Downgraded by 1 or 2 increments due to heterogeneity, subgroup analysis not possible

i. Downgraded by 1 increment as the majority of the evidence was at high risk of bias (due to bias due to deviations from the intended interventions)

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

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

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

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

n. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias due to missing outcome data)

o. Includes a study with a cluster randomised design, the number of participants includes the number of clusters (in this study, the total number of participants was 269. 145 in the intervention arm, 124 in the control arm).

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

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

r. Downgraded by 1 to 2 increments for imprecision due to zero events and small sample size

Table 10: Clinical evidence profile: self-management compared to active control

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	active control	Relative (95% CI)	Absolute (95% CI)		
Person/Participant Generic Health-Related Quality of Life (EQ-VAS, 0-100, higher values are better, final values) at End of Intervention (follow-up: 5 days)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	110	103	-	MD **1.2 higher** (4.06 lower to 6.46 higher)	⨁⨁◯◯ Low	CRITICAL
Person/Participant Generic Health-Related Quality of Life (EQ-VAS, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	active control	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	83	89	-	MD **0.51 higher** (5.3 lower to 6.32 higher)	⨁⨁◯◯ Low	CRITICAL
Self-Efficacy (Liverpool Self-Efficacy Scale, 11-44, higher values are better, final values) at End of Intervention (follow-up: 5 days)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	110	103	-	MD **0.54 lower** (2.16 lower to 1.08 higher)	⨁⨁◯◯ Low	CRITICAL
Self-Efficacy (Liverpool Self-Efficacy Scale, 11-44, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	83	89	-	MD **0.33 lower** (2.09 lower to 1.43 higher)	⨁⨁◯◯ Low	CRITICAL
Psychological Distress - Depression (Hosptial Anxiety Depression Scale, Hosptial Anxiety Depression Scale - Depression Subscale [different scale ranges] lower values are better, final values) at End of Intervention (follow-up: mean 6 weeks)												
2	randomised trials	very serious[a]	not serious	not serious	not serious	none	168	158	-	SMD **0.22 lower** (0.44 lower to 0)	⨁⨁◯◯ Low	CRITICAL
Psychological Distress - Depression (Hosptial Anxiety Depression Scale, Hosptial Anxiety Depression Scale - Depression Subscale [different scale ranges] lower values are better, final values) at End of Scheduled Follow-up (follow-up: mean 7.5 months)												
2	randomised trials	very serious[a]	not serious	not serious	not serious	none	141	144	-	SMD **0.12 lower** (0.35 lower to 0.11 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Communication Subscale, 0-100, higher values are better, final values) at End of Intervention (follow-up: 5 days)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	83	89	-	MD **3.02 lower** (8.16 lower to 2.12 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Emotion Subscale, 0-100, higher values are better, final values) at End of Intervention (follow-up: 5 days)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	active control	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	83	89	-	MD **1.65 lower** (5.56 lower to 2.26 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Memory Subscale, 0-100, higher values are better, final values) at End of Intervention (follow-up: 5 days)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	83	89	-	MD **1.38 lower** (6.37 lower to 3.61 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Physical Functioning Subscale, 0-100, higher values are better, final values) at End of Intervention (follow-up: 5 days)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	83	89	-	MD **1.82 higher** (5.2 lower to 8.84 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Social Participation Subscale, 0-100, higher values are better, final values) at End of Intervention (follow-up: 5 days)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	83	89	-	MD **3.21 higher** (4.53 lower to 10.95 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Communication Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	110	103	-	MD **0.05 lower** (4.48 lower to 4.38 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Emotion Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	110	103	-	MD **0.6 higher** (2.62 lower to 3.82 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Memory Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	active control	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[a]	not serious	not serious	not serious	none	110	103	-	MD **1.59 higher** (2.88 lower to 6.06 higher)	⨁⨁◯◯ Low	CRITICAL

Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Physical Functioning Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 6 months)

1	randomised trials	very serious[a]	not serious	not serious	not serious	none	110	103	-	MD **2.99 higher** (3.05 lower to 9.03 higher)	⨁⨁◯◯ Low	CRITICAL

Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Social Participation Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: mean 9 months)

2	randomised trials	very serious[b]	very serious[c]	not serious	not serious	none	120	117	-	MD **3.54 higher** (2.85 lower to 9.93 higher)	⨁◯◯◯ Very low	CRITICAL

Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Self-Assessed Recovery Subscale, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)

1	randomised trials	very serious[d]	not serious	not serious	very serious[e]	none	10	14	-	MD **4 lower** (21.22 lower to 13.22 higher)	⨁◯◯◯ Very low	CRITICAL

Stroke-Specific Patient Reported Outcome Measures (Stroke Impact Scale - Activities of Daily Living, 0-100, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)

1	randomised trials	very serious[d]	not serious	not serious	very serious[e]	none	10	14	-	MD **6 higher** (13.22 lower to 25.22 higher)	⨁◯◯◯ Very low	CRITICAL

Stroke-Specific Patient Reported Outcome Measures (Stroke Specific Quality of Life, 1-5, higher values are better, final values) at End of Scheduled Follow-up (follow-up: 9 months)

1	randomised trials	very serious[f]	not serious	not serious	serious[e]	none	58	55	-	MD **0.3 higher** (0.01 lower to 0.61 higher)	⨁◯◯◯ Very low	CRITICAL

Health Service Usage (Hospital readmissions, frequency, lower values are better, final values) at End of Scheduled Follow-up (follow-up: 12 months)

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	self-management	active control	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[f]	not serious	serious	not serious[i]	none	58	55	-	MD **0.5 lower** (1.75 lower to 0.75 higher)	⨁◯◯◯ Very low	CRITICAL
Health Service Usage (General Practitioner Attendance, frequency, final values) at End of Scheduled Follow-up (follow-up: 12 months)												
1	randomised trials	very serious[f]	not serious	not serious	serious[e]	none	58	55	-	MD **2.3 higher** (2.95 lower to 7.55 higher)	⨁◯◯◯ Very low	CRITICAL
Adverse Events at End of Intervention (follow-up: 5 days)												
1	randomised trials	very serious[a]	not serious	not serious	serious[g]	none	0/130 (0.0%)	0/130 (0.0%)	**RD 0.00** (-0.01 to 0.01)	**0 fewer per 1,000** (from 10 fewer to 10 more)[h]	⨁◯◯◯ Very low	CRITICAL
Adverse Events at End of Scheduled Follow-up (follow-up: 6 months)												
1	randomised trials	very serious[a]	not serious	not serious	very serious[e]	none	1/130 (0.8%)	2/130 (1.5%)	**RR 0.50** (0.05 to 5.45)	**8 fewer per 1,000** (from 15 fewer to 68 more)	⨁◯◯◯ Very low	CRITICAL

CI: confidence interval; **MD:** mean difference; **RR:** risk ratio; **SMD:** standardised mean difference

Explanations

a. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to missing outcome data and bias in measurement of the outcome)

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

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

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

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

f. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias arising from the randomisation process and bias in the selection of the reported result)

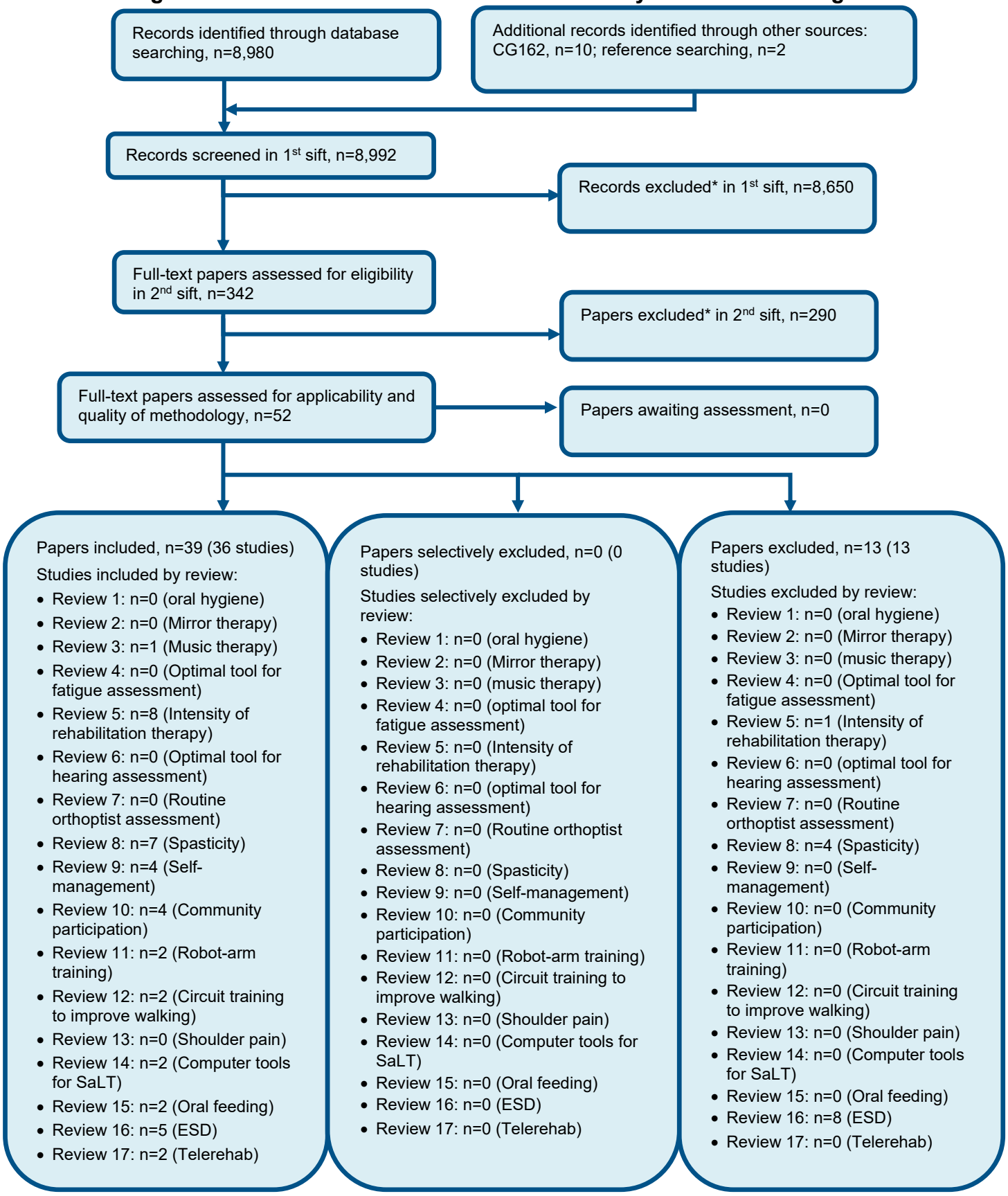
g. Downgraded by 1 to 2 increments for imprecision due to zero events and small sample size

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

i. Downgraded by 1 or 2 increments due to the outcome not directly matching the protocol

Appendix G – Economic evidence study selection

Figure 1: Flow chart of health economic study selection for the guideline



* Non-relevant population, intervention, comparison, design or setting; non-English language

1 Appendix H – Economic evidence tables

H.12 Self-management versus inactive control

Study	Jones 2016[17]			
Study details	**Population & interventions**	**Costs**	**Health outcomes**	**Cost effectiveness**
Economic analysis: CCA (various health outcomes) **Study design:** Within-trial analysis (feasibility cluster-RCT) **Approach to analysis:** Analysis of individual level data for health outcomes and healthcare resource use. Unit costs applied. **Perspective:** UK NHS **Follow-up**: 12 weeks **Treatment effect duration:**[(a)] n/a **Discounting:** Costs: n/a Outcomes: n/a	**Population:** Patients referred for community stroke rehab who could follow a two-stage command such as close your eyes and nod your head and read simple text and/or have a carer to assist. **Patient characteristics:** N = 78 Mean age: 65.2 years (SD: 13.9) Male: 57.7% **Intervention 1:** Inactive control intervention (n=38). Community stroke rehabilitation (CSR); including access to physiotherapy, occupational therapy, and speech and language therapy (if required).	**Total costs (mean per patient[(b)(c)]):** Intervention 1: £1,599 to £2,339 Intervention 2: £2,205 to £2,841 Incremental (2-1): £606 to £711 (95% CI: NR; p=NR) **Incremental (2-1) cost breakdown:** • Rehabilitation:[(b)(c)] £288 to £393 • Other stroke-related health and social service use:[(b)] £318 **Rehabilitation costs details:**[(b)(c)] Intervention 1 – weighted average (cluster 3/4) • High estimate: £1,459 (£1479/£1438) • Medium estimate: £1,109 (£1121/£1095) • Low estimate: £930 (£940/£921) Intervention 2 = weighted average (cluster 1/2) • High estimate: £1,857 (£3,012/£1,103) • Medium estimate: £1,438 (£2,339/£851) • Low estimate: £1,221 (£1,987/£721) **Currency & cost year:** 2012 UK pounds **Cost components incorporated:**	From clinical review (2 vs 1 at 12 weeks) – Jones 2016[17] SF-12 physical Intervention 1: 33.1 Intervention 2: 36.3 Incremental (2−1): 3.2 (95% CI: -16.11, 22.51) SF-12 mental Intervention 1: 42.8 Intervention 2: 46.1 Incremental (2−1): 3.3 (95% CI: -18.88, 25.48) NEADL Intervention 1: 32.1 Intervention 2: 30.8 Incremental (2−1): 3.4 (95% CI: -31.84,36.64) HADS-D[(d)] Intervention 1: 8.1 Intervention 2: 7.1	**ICER (Intervention 2 versus Intervention 1):** n/a Probability Intervention 2 is cost effective (£20K threshold): n/a **Analysis of uncertainty:** None It was noted that rehabilitation costs varied substantially between the two cluster units within the self-management program group.

	Intervention 2: Self-management program (n=40) revolving around principles such as goal setting, problem solving and self-discovery. Clinicians were trained to integrate seven defined key principles of self-management into existing CSR sessions, supported by a patient-held workbook.	Total hours of face to face and non-face to face contact (including training) for occupational therapists (OT), physiotherapists (PT), speech and language therapists (SLT) and therapy assistants (TA); other stroke-related health and social service use (for example GP, practice nurse or other professionals and social care). Note that other health and social care resource use was also collected but only that deemed to be stroke-related is included in the cost above as overall costs were not reported. It is noted that the resource use questionnaire included help from family and friends, but it is unclear if this is included in the cost calculations.	Incremental (2−1): -1 (95% CI: -9.23, 7.23) SSEQ Intervention 1: 21.5 Intervention 2: 26.4 Incremental (2−1): 4.9 (95% CI: -14.37 to 24.17)	
Data sources				
Health outcomes: Within-trial analysis of feasibility cluster-RCT included in clinical review (Jones 2016[17]). **Quality-of-life weights:** n/a. **Cost sources:** Within-trial analysis of resource use identified from therapists' records on the number of CSR sessions and face-to-face contact time in minutes (collected in 2013) and self-reported questionnaires administer to patients. Patient-related non-face-to-face time was estimated using three alternative assumptions on the ratio of face-to-face to non-face-to-face time[(c)]. National unit costs applied.				
Comments				
Source of funding: National Institute for Health Research (Research for Patient Benefit Programme). **Limitations:** 2013 UK resource use and 2012 costs may not reflect current UK NHS context. QALYs and cost per QALY gained were not calculated. Within-trial analysis of costs and clinical outcomes and so only reflects this study and not the wider evidence base identified in the clinical review. Feasibility trial was not designed to evaluate intervention effects with certainty nor long enough to estimate the duration of treatment effect. 12-week trial with no long-term follow-up data may be too short to show much change in healthcare resource use between groups. Results of the analysis of health and social care resource use are not presented, and it is not clear which items have been allocated as stroke-related. Assumptions were used to estimate patient-related non-face-to-face time. Sensitivity analyses were not conducted for the results due to the study design aims seeking to assess the feasibility of a definitive RCT. **Other:** Patient level use of other health and social services was collected using a bespoke self-report questionnaire 6-week and 12-week follow-up, but results were not shown. The questionnaires found that the only services used by more than 10% of respondents were GPs, nurses, and hospital outpatient and emergency departments; all other services, including social care, were not accessed by more than 90% of participants.				
Overall applicability:[(e)] Partially applicable **Overall quality:**[(f)] Potentially serious limitations				

Abbreviations: CCA= cost–consequences analysis; 95% CI= 95% confidence interval; EQ-5D= Euroqol 5 dimensions (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); HADS-D= Hospital Anxiety and Depression Scale – Depression subscale; ICER= incremental cost-effectiveness ratio; ; NEALD= Nottingham Extended Activities of Daily Living scale; NR= not reported; QALYs= quality-adjusted life years; RCT= randomised controlled trial; SF-12= Short form 12; SSEQ= Stroke Self-efficacy Questionnaire.

(a) For studies where the time horizon is longer than the treatment duration, an assumption needs to be made about the continuation of the study effect. For example, does a difference in utility between groups during treatment continue beyond the end of treatment and if so for how long.
(b) The study reported costs by cluster. Here a weighted average cost for each comparator has been calculated using the average cost per patient and the number of patients with therapy records in each cluster (intervention 1: cluster 3 = 22; cluster 4 = 13. Intervention 2: cluster 1 = 15; cluster 2 = 23).
(c) Rehabilitation costs are reported based on 3 different assumptions about the ratio of face-to-face to non-face-face time: high = 1:1 for therapists (OT, PT, SLT) and 1:0.5 for therapy assistants; medium = 1:0.5 for therapists and 1:0.25 for assistants; low = 1:0.25 for therapists and assistants.
(d) High scores on HADS indicate worse morbidity, for all other scales this is reversed.
(e) Directly applicable / Partially applicable / Not applicable
(f) Minor limitations / Potentially serious limitations / Very serious limitations

Study	**Te Ao 2022[32]**			
Study details	**Population & interventions**	**Costs**	**Health outcomes**	**Cost effectiveness**
Economic analysis: CUA (health outcome: QALYs). **Study design:** Within-trial analysis of the Taking Charge after Stroke (TaCAS)[12] RCT included in the clinical review. **Approach to analysis:** Analysis of treatment costs, healthcare resource use and EQ-5D associated with the 1 or 2 sessions of the 'Take Charge' intervention compared to those receiving usual care, for stroke survivors. QALYs were estimated using an area under the curve approach using baseline	**Population:** Adults who experienced a stroke (<16 weeks prior), living in the community. **Patient characteristics:** Mean age (SD): 72.1 (12.4) years N = 400 **Intervention 1:** Inactive control group (n=130) received usual care, including acute inpatient stroke care and early stroke rehabilitation care along with inpatient and community stroke rehabilitation.	**Total costs (mean per patient):** Intervention 1: £4,037 (95% CI: £2834, £5331) Intervention 2: £2,864 (95% CI: £2257, £3646) Incremental (2−1): Saves £1,173 (95% CI: £2257, £3646; p=NR)[(c)] **Currency & cost year:** US dollars ($) converted to UK pounds (£)[(d)] **Cost components incorporated:** Cost per 'Take Charge' session, outpatient rehabilitation services, home and hospital-level	**QALYs (mean per patient):** Intervention 1: 0.71 Intervention 2: 0.75 Incremental (2−1): 0.04[(e)] (95% CI: 0.0-0.08; p>0.05) From clinical review (2 vs 1): **Activities of Daily Living (Barthel Index, 0-100, higher values are better, final values) at 12 months post-stroke[(f)]:** 0.5 (95% CI: -0.04, 1.04; p=0.033)	**ICER (Intervention 2 versus Intervention 1):** Results suggested that the 'Take Charge' intervention dominates usual care (lower costs and higher QALYs), however QALY gains were not statistically significant between groups. Probability Intervention 2 cost effective (£20K/30K threshold): NR/NR **Analysis of uncertainty:** The primary analysis results were based on a societal perspective, which also suggested that the 'Take Charge' intervention dominates usual care. Therefore, the results of the sensitivity analyses do not assess the level of uncertainty of the intervention's cost-effectiveness for a healthcare perspective.

and 12-month EQ-5D responses. **Perspective:** New Zealand healthcare system[(a)] **Follow-up:** 1 year **Treatment effect duration:**[(b)] NA **Discounting:** NA	**Intervention 2:** Two 'Take Charge' groups (n=270) received sessions which were one-to-one explorations of the individuals' views on what is important in their lives and what they wanted to prioritise over the following year. Group 1 received a single session, while group 2 received a second session 6 weeks after the first. Each session lasted 30-60 minutes).	residential care, home help and personal care.		
Data sources				
Health outcomes: Within-trial analysis of an open, parallel-group, randomised trial (n=400). EQ-5D-5L scores collected at 12 months post-stroke were used to estimate QALYs. Baseline and 12-month Barthel Index scores were also reported for both groups. **Quality-of-life weights:** EQ-5D-5L (New Zealand version with UK population tariff applied). **Cost sources:** Resource use for outpatient evaluations at 6 and 12 months were measured from self-reported questionnaire from the participants. The cost per session is based on 1.5 hours' time including travel for a New Zealand nurse on a middle-grade salary and an allowance for travel costs. New Zealand National unit costs applied.				
Comments				
Source of funding: The study was funded by a grant from the Health Research Council of New Zealand (15/297). **Limitations:** New Zealand version of the EQ-5D-5L questionnaire was used to estimate QALYs when NICE reference case specifies that EQ-5D-3L is preferred. New Zealand 2018-unit costs and 2017 resource use estimates may not reflect current UK NHS context. Within-trial analysis of costs and outcomes based on a single RCT included in clinical review and so only reflects this study and not the wider evidence base identified in the clinical review. Probabilistic analysis and sensitivity analyses were performed for the societal perspective only and so are not available for results presented here. One author declared a potential conflict of interest with respect to the research, authorship, and/or publication of this article. **Other:** Base case analysis was performed from a societal perspective, but healthcare perspective was reported here as this is preferred by NICE.[28]				
Overall applicability:[(g)] Partially applicable		**Overall quality:**[(h)] Potentially serious limitations		

Abbreviations: 95% CI= 95% confidence interval; CUA= cost–utility analysis; EQ-5D-5L= EuroQol 5 dimensions 5 levels (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); ICER= incremental cost-effectiveness ratio; NA= not applicable; NR= not reported; QALYs= quality-adjusted life years; RCT= randomised controlled trial.

a) Costs have been recalculated to reflect an NHS and PSS perspective to be consistent with NICE reference case; reported analysis uses societal perspective for the base case that included non-healthcare costs (short-term loss of income and informal care costs).

b) For studies where the time horizon is longer than the treatment duration, an assumption needs to be made about the continuation of the study effect. For example, does a difference in utility between groups during treatment continue beyond the end of treatment and if so for how long.

c) Bootstrap results are based on 1000 bootstrap samples.

d) Converted using 2018 purchasing power parities.[29] US dollars were converted from 2017/18 New Zealand dollars ($NZ).

e) There were no statistically significant differences at 12 months after stroke for EQ-5D-5L (p>0.05).

f) Mean difference taken from Appendix E of guideline clinical review.

g) Directly applicable / Partially applicable / Not applicable

h) Minor limitations / Potentially serious limitations / Very serious limitations

Study	**Forster 2021[9]**			
Study details	**Population & interventions**	**Costs**	**Health outcomes**	**Cost effectiveness**
Economic analysis: CUA (health outcome: QALYs) **Study design:** Exploratory within-trial analysis of the LoTS2Care cluster feasibility RCT included in the clinical review (same paper). **Approach to analysis:** Analysis of individual level healthcare resource use and EQ-5D to produce preliminary estimates of costs and QALYs associated with the New Start intervention	**Population:** Adults between 4 and 6 months since confirmed primary diagnosis of stroke, resident in the community and their carers, and health and social care professionals in the included stroke services. **Patient characteristics:** N=269 Mean age: 72.5 years Male: 55.8% **Intervention 1:** Usual care (n=124). Stroke services randomised to usual care (control) continued to deliver care	**Total costs (mean per patient (SD)):** Intervention 1: £3,608.59 (£2,351.40) Intervention 2: £3,088.31 (£1,767.74) Incremental (2−1): saves £520.28 (95% CI: NR; p=NR) **Currency & cost year:** 2017 UK pounds (£) **Cost components incorporated:** Interventions costs, community health and social services (e.g., GP/Nurse/Rehabilitation MDT consultations, home	**QALYs (mean per patient(SD):** Intervention 1: 0.504 (0.011) Intervention 2: 0.502 (0.015) Incremental (2−1): 0.002 fewer QALYs (95% CI: NR; p=NR)	**ICER (Intervention 2 versus Intervention 1):** £260,140 per QALY lost [(c)] (95% CI: NR; p=NR) Probability Intervention 2 cost effective (£20K threshold): NR **Analysis of uncertainty:** The primary analysis results were based on a societal perspective, which produced an ICER of £65,835 per QALY lost. Sensitivity analyses were conducted from a societal perspective and so do not assess the level of uncertainty of the intervention's cost-effectiveness for a healthcare perspective. Of note, a Markov model was also conducted from a societal perspective to analyse future costs and benefits beyond

compared to those receiving usual care, for stroke survivors. Unit costs applied. **Perspective:** UK NHS and PSS[(a)] **Follow-up:** 9 months **Treatment effect duration:**[(b)] NA **Discounting:** NA	as determined by local policy and practices. **Intervention 2:** New Start intervention (n=145). Key components were problem-solving, self-management with survivors and carers, help with obtaining usable information, and helping survivors and their carers build sustainable, flexible support networks. The average duration of delivery of New Start intervention by facilitator was 58.6 minutes.	help/care worker appointments and family support groups) and hospital services (e.g., inpatient days, day centre, outpatient and A&E visits and residential care).		the trial time horizon. Over a lifetime horizon, this analysis found that intervention 2 (New Start) was dominated by usual care (more costly and less effective). This analysis was uncertain and driven by small differences in total costs and total QALYs.
Data sources				
Health outcomes: Exploratory within-trial analysis of the LoTS2Care cluster feasibility RCT (n=269) included in the clinical review (same paper). QALYs were calculated using EQ-5D scores from patients and carers collected at baseline and at 3, 6 and 9 months. When there were missing QoL or cost follow-up data, multiple imputation methods were used to generate estimates of missing values based on the distribution of observed data. **Quality-of-life weights:** Patient and carer EQ-5D-5L scores (UK tariff). **Cost sources:** Information on all health-care resource use during the trial was collected using patient- and carer-completed questionnaires at 3, 6 and 9 months. The mean (SD) cost of the New Start intervention (£67.80 (£185.22)) was estimated as the cost of the 6-month review meeting along with any associated follow-ups, each calculated based on the duration of the appointment, where it took place and the health-care professional seen. Total costs for each patient were calculated as the sum of costs assigned from hospital, community health and social services and the intervention cost. National unit costs applied.				
Comments				
Source of funding: National Institute of Health Research (NIHR). **Limitations:** EQ-5D-5L was used to estimate QALYs when NICE reference case specifies that EQ-5D-3L is preferred. Exploratory within-trial analysis of a single RCT, therefore results only reflect this study and not the wider evidence base identified in the clinical review. Furthermore, the primary purpose of the analysis was to assess the feasibility of conducting an economic evaluation as part of a definitive trial and was therefore not designed to evaluate intervention effects with certainty. Probabilistic analysis and sensitivity analyses were performed for the societal perspective only and so are not available for the ICER of interest presented here. **Other:** Base case analysis was performed from a societal perspective, but healthcare perspective was reported here as this is preferred by NICE.[28]				
Overall applicability:[(d)] Partially applicable	**Overall quality:**[(e)] Potentially serious limitations			

Abbreviations: 95% CI= 95% confidence interval; CUA= cost-utility analysis; EQ-5D-5L= EuroQol-5 Dimensions, five-level version (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); ICER= incremental cost-effectiveness ratio; MDT= Multidisciplinary team; NA= not applicable; NR= not reported; QALYs= quality-adjusted life years; QoL= quality of life; RCT= randomised controlled trial; SD= standard deviation.

a) Costs have been presented to reflect an NHS and PSS perspective to be consistent with NICE reference case; reported analysis uses societal perspective for the base case that included non-healthcare costs (Patient and carer out-of-pocket expenses and time off work).

b) For studies where the time horizon is longer than the treatment duration, an assumption needs to be made about the continuation of the study effect. For example, does a difference in utility between groups during treatment continue beyond the end of treatment and if so for how long.

c) When the ICER is over £20,000 per QALY lost, intervention 2 is considered the cost-effective option.

d) Directly applicable / Partially applicable / Not applicable

e) Minor limitations / Potentially serious limitations / Very serious limitations

H.13.2 Self-management versus active control

Study	**Van Mastrigt 2020[35]**			
Study details	**Population & interventions**	**Costs**	**Health outcomes**	**Cost effectiveness**
Economic analysis: CUA (health outcome: QALYs) **Study design:** Within-trial analysis (Restore4Stroke RCT included in the clinical review, Tielemans 2015[34]). **Approach to analysis:** Analysis of individual level health resource use and EQ-5D to estimate QALYs. Regression analysis was used to correct for baseline differences in utility values.	**Population:** Adults who suffered a first or recurrent symptomatic stroke at least six weeks prior to recruitment, reporting problems in social reintegration represented by at least two scores indicating experienced participation in society restrictions in activities in daily life on the Utrecht Scale for Evaluation of Rehabilitation-participation's restriction scale (USER-P). **Cohort settings:** N= 113	**Total costs (mean per patient):** Intervention 1: £5,569 Intervention 2: £5,983 Incremental (2−1): £414 (95% CI: NR; p=NR) **Incremental (2-1) cost breakdown:** • Intervention costs: £461 • Healthcare costs: £204 • Tools: saves £107 • Home adjustments: saves £144 **Informal care costs (mean per patient)** Intervention 1: £996 Intervention 2: £1,605	**QALYs (mean per patient):** Intervention 1: NR[(d)] Intervention 2: NR[(d)] Incremental (2−1): 0.05 (95% CI: NR; p=NR)	**ICER (Intervention 2 versus Intervention 1):** £8,284 per QALY gained 95% CI: NR Probability Intervention 2 cost effective (£20K/30K threshold): NR/NR Probabilistic analysis was undertaken but is not available for the ICER above which has been calculated to be consistent with the NICE reference case. **Analysis of uncertainty:** Results were reported from a societal perspective only and so are not included here.

Perspective: Dutch healthcare system[a] **Follow-up:** 12 months **Treatment effect duration:**[b] 12 months **Discounting:** Costs: n/a Outcomes: n/a	Start age: 57 years Male: 52.2% **Intervention 1:** Active control intervention. Stroke-specific education only (EDU) (N=55); 10 weeks of three 1-hour sessions in the first 6 weeks and one 1-hour booster session in the 10th week. Treatment was provided by one rehabilitation medicine professional (i.e., a psychologist or a social worker) following 1.5 hours of training. **Intervention 2:** Self-management intervention (SMI) based on proactive coping action planning (n=58); 10 weeks of 2-hour sessions for the 6 weeks and one 2-hour booster session in the 10th week. Group-based treatment (4-8 per group) by two rehabilitation staff who received one-day training on SMI content.	Incremental (2−1): £609 (95% CI: NR; p=NR) **Currency & cost year:** 2012 Euros converted to UK pounds (£)[c] **Cost components incorporated:** Intervention costs (including psychologist and social worker wages for training and delivery of care and workbooks for professionals and patients); healthcare costs (GP and medical consultants, alternative care, prescription drugs, and home care); tools (for example: braces and special glasses); and home adjustments (for example: toilet or shower adjustment).[a]		
Data sources				

Health outcomes: Within-trial analysis of Restore4Stroke RCT included in the clinical review (Tielemans 2015[25]). EQ-5D-3L collected at baseline, 3, 6, and 12 months after treatment. QALYs were calculated by means of the area under the curve method. **Quality-of-life weights:** EQ-5D-3L, with UK population valuation tariff (the Dutch tariff was used in base case but QALY gain from sensitivity analysis using UK tariff are reported here). **Cost sources:** Healthcare resource use was collected within-trial using self-reported questionnaire. Dutch national unit cost applied. Cost of prescription drugs were taken from price per dosage for drugs costs in the Netherlands, medical and personal aids were calculated per user within the aid category provided by Dutch care institute.[36]	
Comments	
Source of funding: This work was supported by the VSBfund (Dutch organization for supporting Dutch society with money, knowledge and networks) and the Dutch Heart Foundation, and coordinated bij Zon-Mw (Dutch Organisation for Health Research and Development). **Limitations:** Dutch 2012-2014 resource use and 2012-unit costs may not reflect current UK NHS context. Within-trial analysis of costs and outcomes based on Tielemans 2015 RCT included in clinical review and so only reflects this study and not the wider evidence base identified in the clinical review. Baseline differences between intervention groups were not corrected for gender and stroke characteristics (number of months post-stroke, type of stroke and stroke history). Probabilistic analysis and sensitivity analyses were performed for the societal perspective only and so are not available for the ICER of interest presented here. **Other:** Base case analysis was performed from a societal perspective, but healthcare perspective was reported here as this is preferred by NICE.[28] with an active control as the comparator[17, 35] This study was also included as part of the community participation review for this guideline.	
Overall applicability:(e) Partially applicable	**Overall quality:**(f) Potentially serious limitations

Abbreviations: 95% CI= 95% confidence interval; CUA= cost–utility analysis; EQ-5D= Euroqol 5 dimensions (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); ICER= incremental cost-effectiveness ratio; NR= not reported; QALYs= quality-adjusted life years; RCT= randomised controlled trial

(a) Costs have been recalculated to reflect an NHS and PSS perspective to be consistent with NICE reference case; reported analysis uses societal perspective for the base case that includes productivity costs; a sensitivity analysis with a healthcare perspective is presented but this excludes costs considered to be relevant including intervention costs, tools and home adaptations.

(b) For studies where the time horizon is longer than the treatment duration, an assumption needs to be made about the continuation of the study effect. For example, does a difference in utility between groups during treatment continue beyond the end of treatment and if so for how long.

(c) Converted using 2012 purchasing power parities[29]

(d) Totals only available for primary analysis using Dutch tariff (0.715 and 0.672); UK tariff incremental QALYs are presented here in line with NICE reference case.

(e) Directly applicable / Partially applicable / Not applicable

(f) Minor limitations / Potentially serious limitations / Very serious limitations

Appendix I – Health economic model

Modelling was not prioritised for this question.

1 Appendix J – Excluded studies

2 Clinical studies

3 Table 11: Studies excluded from the clinical review

Study	Code [Reason]
Aben, Laurien, Heijenbrok-Kal, Majanka H, van Loon, Ellen MP et al. (2013) Training memory self-efficacy in the chronic stage after stroke: a randomized controlled trial. Neurorehabilitation and Neural Repair 27(2): 110-117	- Comparator in study does not match that specified in this review protocol
Ahn, S. N., Yoo, E. Y., Jung, M. Y. et al. (2017) Comparison of Cognitive Orientation to daily Occupational Performance and conventional occupational therapy on occupational performance in individuals with stroke: A randomized controlled trial. NeuroRehabilitation 40(3): 285-292	- Data not reported in an extractable format or a format that can be analysed
Allen, Kyle, Hazelett, Susan, Jarjoura, David et al. (2009) A randomized trial testing the superiority of a postdischarge care management model for stroke survivors. Journal of Stroke and Cerebrovascular Diseases 18(6): 443-452	- Data not reported in an extractable format or a format that can be analysed
Appalasamy, J. (2018) Investigating the effectiveness of health belief constructs incorporated as video narratives on medication understanding and use self-efficacy among stroke patients.	- Full text paper not available
Bonnyaud, C., Gallien, P., Decavel, P. et al. (2018) Effects of a 6-month self-rehabilitation programme in addition to botulinum toxin injections and conventional physiotherapy on limitations of patients with spastic hemiparesis following stroke (ADJU-TOX): protocol study for a randomised controlled, investigator blinded study. BMJ Open 8(8): e020915	- study protocol
Bosomworth, H., Rodgers, H., Shaw, L. et al. (2021) Evaluation of the enhanced upper limb therapy programme within the Robot-Assisted Training for the Upper Limb after Stroke trial: descriptive analysis of intervention fidelity, goal selection and goal achievement. Clinical Rehabilitation 35(1): 119-134	- Study does not contain an intervention relevant to this review protocol - Study design not relevant to this review protocol
Brauer, S. G., Kuys, S. S., Paratz, J. D. et al. (2018) Improving physical activity after stroke via treadmill training and self management	- study protocol

Study	Code [Reason]
(IMPACT): a protocol for a randomised controlled trial. BMC Neurology 18(1): 13	
Brauer, Sandra G, Kuys, Suzanne S, Ada, Louise et al. (2022) IMproving Physical ACtivity after stroke via Treadmill training (IMPACT) and self-management: A randomized trial. International journal of stroke : official journal of the International Stroke Society: 17474930221078121	- Study does not contain an intervention relevant to this review protocol *People received treadmill training in addition to self management rather than a self management program, which the comparator group did not receive making it difficult to see the effect of the self management program alone*
Brkic, L., Shaw, L., van Wijck, F. et al. (2016) Repetitive arm functional tasks after stroke (RAFTAS): a pilot randomised controlled trial. Pilot & Feasibility Studies 2: 50	- Study does not contain an intervention relevant to this review protocol
Broderick, M., Bentley, P., Burridge, J. et al. (2020) Self-administered gaming exercises for stroke arm disability increase exercise duration by more than two-fold and repetitions more than ten-fold compared to standard care. International journal of stroke 15(suppl1): 255	- Conference abstract
Brouwer, B.; Bryant, D.; Garland, S. J. (2018) Effectiveness of Client-Centered "Tune-Ups" on Community Reintegration, Mobility, and Quality of Life After Stroke: A Randomized Controlled Trial. Archives of Physical Medicine & Rehabilitation 99(7): 1325-1332	- Study does not contain an intervention relevant to this review protocol
Cadilhac, D. A., Andrew, N. E., Busingye, D. et al. (2020) Pilot randomised clinical trial of an eHealth, self-management support intervention (iVERVE) for stroke: feasibility assessment in survivors 12–24 months post-event. Pilot and feasibility studies 6(1)	- Data not reported in an extractable format or a format that can be analysed
Cadilhac, D. A., Andrew, N. E., Busingye, D. et al. (2020) Pilot randomised clinical trial of an eHealth, self-management support intervention (iVERVE) for stroke: feasibility assessment in survivors 12-24 months post-event. Pilot & Feasibility Studies 6(1): 172	- Duplicate reference
Cadilhac, D. A., Kilkenny, M. F., Srikanth, V. et al. (2016) Do cognitive, language, or physical impairments affect participation in a trial of self-management programs for stroke?. International Journal of Stroke 11(1): 77-84	- Data not reported in an extractable format or a format that can be analysed

Study	Code [Reason]
Chen, L., Wang, F., Iv, L. et al. (2019) The efficacy of a patient-centered self-management empowerment intervention program (PCSMEI) for first-time stroke survivors: a randomized controlled trial. Stroke; a journal of cerebral circulation 50(suppl1)	- Full text paper not available
Chen, Lu; Wang, Fang; Shen, Xiaofang (2016) Analysis of application effect of self management model based on empowerment theory in discharge preparation of patients with stroke. Chinese nursing research 30(10b): 3613-3616	- Study not reported in English
Chen, Y., Wei, Y., Lang, H. et al. (2021) Effects of a Goal-Oriented Intervention on Self-Management Behaviors and Self-Perceived Burden After Acute Stroke: A Randomized Controlled Trial. Frontiers in neurology [electronic resource]. 12: 650138	- No relevant outcomes
Cheng, E. M., Cunningham, W. E., Towfighi, A. et al. (2018) Efficacy of a Chronic Care-Based Intervention on Secondary Stroke Prevention Among Vulnerable Stroke Survivors: A Randomized Controlled Trial. Circulation. Cardiovascular Quality & Outcomes 11(1): e003228	- No relevant outcomes
Cheng, H. Y.; Chair, S. Y.; Chau, J. P. C. (2018) Effectiveness of a strength-oriented psychoeducation on caregiving competence, problem-solving abilities, psychosocial outcomes and physical health among family caregiver of stroke survivors: A randomised controlled trial. International Journal of Nursing Studies 87: 84-93	- Population not relevant to this review protocol
Chin, L. F., Hayward, K. S., Chai, A. L. M. et al. (2021) A Self-Empowered Upper Limb Repetitive Engagement Program to Improve Upper Limb Recovery Early Post-Stroke: Phase II Pilot Randomized Controlled Trial. Neurorehabilitation and Neural Repair 35(9): 836-848	- Data not reported in an extractable format or a format that can be analysed
Chu, K., Bu, X., Sun, Z. et al. (2020) Feasibility of a Nurse-Trained, Family Member-Delivered Rehabilitation Model for Disabled Stroke Patients in Rural Chongqing, China. Journal of Stroke & Cerebrovascular Diseases 29(12): 105382	- Study does not contain an intervention relevant to this review protocol

Study	Code [Reason]
Clark, E. (2018) Investigating the feasibility of a group self-management program after stroke.	- study protocol
Clark, E., MacCrosain, A., Ward, N. S. et al. (2020) The key features and role of peer support within group self-management interventions for stroke? A systematic review. Disability & Rehabilitation 42(3): 307-316	- Systematic review used as source of primary studies
Clark, E., Ward, N. S., Baio, G. et al. (2018) Research protocol: investigating the feasibility of a group self-management intervention for stroke (the GUSTO study). Pilot & Feasibility Studies 4: 31	- study protocol - Duplicate reference
Coombes, J. A., Rowett, D., Whitty, J. A. et al. (2018) Use of a patient-centred educational exchange (PCEE) to improve patient's self-management of medicines after a stroke: a randomised controlled trial study protocol. BMJ Open 8(8): e022225	- study protocol
Da Silva, R., Rodgers, H., Shaw, L. et al. (2018) Wristband accelerometers to motivate arm exercise after stroke (WAVES): activity data from a pilot randomised controlled trial. Annals of physical and rehabilitation medicine	- Full text paper not available
Da-Silva, R. H.; Moore, S. A.; Price, C. I. (2018) Self-directed therapy programmes for arm rehabilitation after stroke: a systematic review. Clinical Rehabilitation 32(8): 1022-1036	- No relevant outcomes
Da-Silva, R. H., Moore, S. A., Rodgers, H. et al. (2019) Wristband Accelerometers to motiVate arm Exercises after Stroke (WAVES): a pilot randomized controlled trial. Clinical Rehabilitation 33(8): 1391-1403	- Data not reported in an extractable format or a format that can be analysed
Damush, T. M., Mackey, J., Saha, C. et al. (2018) Stroke self-management effectiveness trial. Stroke; a journal of cerebral circulation 49(suppl1)	- Conference abstract
Damush, T. M., Myers, L., Anderson, J. A. et al. (2016) Erratum to: "The effect of a locally adapted, secondary stroke risk factor self-management program on medication adherence among veterans with stroke/TIA". Translational behavioral medicine (TBM) 6(3): 469	- Population not relevant to this review protocol

Study	Code [Reason]
Damush, T. M., Myers, L., Anderson, J. A. et al. (2016) The effect of a locally adapted, secondary stroke risk factor self-management program on medication adherence among veterans with stroke/TIA. Translational Behavioral Medicine 6(3): 457-68	- Duplicate reference
Damush, Teresa M, Ofner, Susan, Yu, Zhangsheng et al. (2011) Implementation of a stroke self-management program: a randomized controlled pilot study of veterans with stroke. Translational behavioral medicine 1(4): 561-572	- Data not reported in an extractable format or a format that can be analysed
Davison, W. J., Myint, P. K., Clark, A. B. et al. (2018) Does self-monitoring and self-management of blood pressure after stroke or transient ischemic attack improve control? TEST-BP, a randomized controlled trial. American Heart Journal 203: 105-108	- No relevant outcomes
Deyhoul, N., Vasli, P., Rohani, C. et al. (2020) The effect of family-centered empowerment program on the family caregiver burden and the activities of daily living of Iranian patients with stroke: a randomized controlled trial study. Aging-Clinical & Experimental Research 32(7): 1343-1352	- Full text paper not available
Doussoulin, A., Arancibia, M., Saiz, J. et al. (2017) Recovering functional independence after a stroke through Modified Constraint-Induced Therapy. Neurorehabilitation 40(2): 243-249	- Comparator in study does not match that specified in this review protocol
Duncan, P. W., Bushnell, C. D., Jones, S. B. et al. (2020) Randomized Pragmatic Trial of Stroke Transitional Care: The COMPASS Study. Circulation. Cardiovascular Quality & Outcomes 13(6): e006285	- Population not relevant to this review protocol
Feigin, V., Jones, K., Bhattacharjee, R. et al. (2016) Stroke self-management rehabilitation trial. International journal of stroke 11(suppl3): 16	- Conference abstract
Fishman, K. N.; Ashbaugh, A. R.; Swartz, R. H. (2021) Goal Setting Improves Cognitive Performance in a Randomized Trial of Chronic Stroke Survivors. Stroke	- Data not reported in an extractable format or a format that can be analysed

Study	Code [Reason]
Flemming, Kelly D, Allison, Thomas G, Covalt, Jody L et al. (2013) Utility of a post-hospitalization stroke prevention program managed by nurses. Hospital practice 41(3): 70-79	- Population not relevant to this review protocol
Freund, M., Carey, M., Dilworth, S. et al. (2021) Effectiveness of information and communications technology interventions for stroke survivors and their support people: a systematic review. Disability & Rehabilitation: 1-16	- Systematic review used as source of primary studies - Study does not contain an intervention relevant to this review protocol
Fryer, C. E., Luker, J. A., McDonnell, M. N. et al. (2016) Self-Management Programs for Quality of Life in People With Stroke. Stroke 47(12): e266-e267	- Duplicate reference
Fryer, C. E., Luker, J. A., McDonnell, M. N. et al. (2016) Self management programmes for quality of life in people with stroke (Cochrane review) [with consumer summary]. Cochrane Database of Systematic Reviews 2016;Issue 8	- Duplicate reference
Fugazzaro, S., Denti, M., Accogli, M. A. et al. (2021) Self-Management in Stroke Survivors: Development and Implementation of the Look after Yourself (LAY) Intervention. International Journal of Environmental Research & Public Health [Electronic Resource] 18(11): 31	- Study design not relevant to this review protocol
Fukuoka, Y., Hosomi, N., Hyakuta, T. et al. (2019) Effects of a disease management program for preventing recurrent ischemic stroke: A randomized controlled study. Stroke 50(3): 705-712	- No relevant outcomes
Fukuoka, Y., Hosomi, N., Hyakuta, T. et al. (2019) Effects of a Disease Management Program for Preventing Recurrent Ischemic Stroke. Stroke 50(3): 705-712	- Duplicate reference
Geng, G., He, W., Ding, L. et al. (2019) Impact of transitional care for discharged elderly stroke patients in China: an application of the Integrated Behavioral Model. Topics in Stroke Rehabilitation 26(8): 621-629	- Study design not relevant to this review protocol
Golding, K.; Fife-Schaw, C.; Kneebone, I. (2018) A pilot randomized controlled trial of self-help	- Study design not relevant to this review protocol

Study	Code [Reason]
relaxation to reduce post-stroke depression. Clinical Rehabilitation 32(6): 747-751	
Golding, K.; Kneebone, I.; Fife-Schaw, C. (2016) Self-help relaxation for post-stroke anxiety: a randomised, controlled pilot study. Clinical Rehabilitation 30(2): 174-80	- No relevant outcomes *Only reports HADS-A instead of HADS-D. Therefore, no protocol outcomes* - Study design not relevant to this review protocol
Gordon MF, Brashear A, Elovic E et al. (2004) Repeated dosing of botulinum toxin type A for upper limb spasticity following stroke. Neurology 63(10): 1971-1973	- Study does not contain an intervention relevant to this review protocol
Gracies, J. M., Pradines, M., Ghedira, M. et al. (2019) Guided Self-rehabilitation Contract vs conventional therapy in chronic stroke-induced hemiparesis: NEURORESTORE, a multicenter randomized controlled trial. BMC Neurology 19(1): 39	- study protocol
Graven, C., Brock, K., Hill, K. D. et al. (2016) First Year After Stroke: An Integrated Approach Focusing on Participation Goals Aiming to Reduce Depressive Symptoms. Stroke 47(11): 2820-2827	- No relevant outcomes
Guidetti, S.; Ranner, M.; Tham, K. (2016) A client-centred ADL intervention for persons with stroke: one-year follow-up of a randomized controlled tria. Clinical rehabilitation 29(10): 1019-1020	- Data not reported in an extractable format or a format that can be analysed
Guidetti, Susanne, Andersson, Karin, Andersson, Magnus et al. (2010) Client-centred self-care intervention after stroke: a feasibility study. Scandinavian journal of occupational therapy 17(4): 276-285	- Secondary publication of an included study that does not provide any additional relevant information
Gustafsson, L., Cornwell, P., Hodson et al. (2020) Effectiveness of a telehealth self-management program for people with mild stroke: results of a randomised controlled trial with longitudinal follow-up. International journal of stroke 15(suppl1): 157	- Conference abstract
Han, D. S.; Chuang, P. W.; Chiu, E. C. (2020) Effect of home-based reablement program on improving activities of daily living for patients	- Study does not contain an intervention relevant to this review protocol

Study	Code [Reason]
with stroke: a pilot study. Medicine 99(49): e23512	
Harel-Katz, H., Adar, T., Milman, U. et al. (2020) Examining the feasibility and effectiveness of a culturally adapted participation-focused stroke self-management program in a day-rehabilitation setting: A randomized pilot study. Topics in Stroke Rehabilitation 27(8): 577-589	- No relevant outcomes
Hedman, A., Eriksson, G., von Koch, L. et al. (2019) Five-year follow-up of a cluster-randomized controlled trial of a client-centred activities of daily living intervention for people with stroke. Clinical Rehabilitation 33(2): 262-276	- Study does not contain an intervention relevant to this review protocol
Hill, K., House, A., Knapp, P. et al. (2019) Prevention of mood disorder after stroke: a randomised controlled trial of problem solving therapy versus volunteer support. BMC Neurology 19(1): 128	- Data not reported in an extractable format or a format that can be analysed
Hill, V. A., Vickrey, B. G., Cheng, E. M. et al. (2017) A Pilot Trial of a Lifestyle Intervention for Stroke Survivors: Design of Healthy Eating and Lifestyle after Stroke (HEALS). Journal of Stroke & Cerebrovascular Diseases 26(12): 2806-2813	- No relevant outcomes
Hjelle EG, Bragstad LK, Kirkevold M et al. (2019) Effect of a dialogue-based intervention on psychosocial well-being 6 months after stroke in Norway: A randomized controlled trial. Journal of rehabilitation medicine 51(8): 557-565	- Study does not contain an intervention relevant to this review protocol
Hwang, N. K.; Park, J. S.; Chang, M. Y. (2021) Telehealth Interventions to Support Self-Management in Stroke Survivors: A Systematic Review. Healthcare 9(4): 15	- Systematic review used as source of primary studies
Jones, Kelly M, Bhattacharjee, Rohit, Krishnamurthi, Rita et al. (2015) Methodology of the stroke self-management rehabilitation trial: an international, multisite pilot trial. Journal of Stroke and Cerebrovascular Diseases 24(2): 297-303	- study protocol
Kaddumukasa, M., Najjuma, J., Mbalinda, S. N. et al. (2021) Reducing stroke burden through a targeted self-management intervention for reducing stroke risk factors in high-risk Ugandans: A protocol for a randomized	- study protocol

Study	Code [Reason]
controlled trial. PLoS ONE [Electronic Resource] 16(6): e0251662	
Kamwesiga, J. T., Eriksson, G. M., Tham, K. et al. (2018) A feasibility study of a mobile phone supported family-centred ADL intervention, F@ce TM, after stroke in Uganda. Global Health 14(1): 82	- Data not reported in an extractable format or a format that can be analysed
Kang, Hyun-Sook, Kim, Won-Ock, Kim, Jeong-Wha et al. (2004) Development and effect of east-west self-help group program for rehabilitation of post-stroke clients: A preliminary study. Korean Journal of Adult Nursing 16(1): 37-48	- Study not reported in English
Kang, Kaining and Li, Shurui (2022) A WeChat-based caregiver education program improves satisfaction of stroke patients and caregivers, also alleviates poststroke cognitive impairment and depression: A randomized, controlled study. Medicine 101(27): e29603	- Study does not contain an intervention relevant to this review protocol *Telerehabilitation intervention that was not strictly self management*
Kersey, J.; Juengst, S. B.; Skidmore, E. (2019) Effect of Strategy Training on Self-Awareness of Deficits After Stroke. American Journal of Occupational Therapy 73(3): 7303345020p1-7303345020p7	- Comparator in study does not match that specified in this review protocol
Kessler, D. and Liddy, C. (2017) An integrative literature review to examine the provision of self-management support following transient ischaemic attack. Journal of Clinical Nursing 26(2122): 3256-3270	- Study design not relevant to this review protocol
Kristine Stage Pedersen, S., Lillelund Sorensen, S., Holm Stabel, H. et al. (2020) Effect of Self-Management Support for Elderly People Post-Stroke: A Systematic Review. Geriatrics 5(2): 18	- Systematic review used as source of primary studies
Lennon, O., Blake, C., Booth, J. et al. (2018) Interventions for behaviour change and self-management in stroke secondary prevention: protocol for an overview of reviews. Systematic Reviews 7(1): 231	- study protocol
Lewthwaite, R., Winstein, C. J., Lane, C. J. et al. (2018) Accelerating Stroke Recovery: Body Structures and Functions, Activities, Participation, and Quality of Life Outcomes From a Large Rehabilitation Trial.	- Study does not contain an intervention relevant to this review protocol

Study	Code [Reason]
Neurorehabilitation & Neural Repair 32(2): 150-165	
Lin, A. M., Vickrey, B. G., Barry, F. et al. (2020) Factors Associated With Participation in the Chronic Disease Self-Management Program: Findings From the SUCCEED Trial. Stroke 51(10): 2910-2917	- Secondary publication of an included study that does not provide any additional relevant information - No relevant outcomes
Lindley, R. I., Anderson, C. S., Billot, L. et al. (2017) Family-led rehabilitation after stroke in India (ATTEND): a randomised controlled trial. The Lancet 390(10094): 588-599	- Study does not contain an intervention relevant to this review protocol
Lo, S. H. S. (2016) A self-efficacy enhancing stroke self-management program for community-dwelling stroke survivors (SESSMP).	- Full text paper not available
Lo, S. H. S.; Chang, A. M.; Chau, J. P. C. (2018) Stroke Self-Management Support Improves Survivors' Self-Efficacy and Outcome Expectation of Self-Management Behaviors. Stroke 49(3): 758-760	- Data not reported in an extractable format or a format that can be analysed
Lo, S. H. S., Chau, J. P. C., Chang, A. M. et al. (2019) Coaching Ongoing Momentum Building On stroKe rEcovery journeY ('COMBO-KEY'): a randomised controlled trial protocol. BMJ Open 9(4): e027936	- study protocol
Lo, S. H.; Chang, A. M.; Chau, J. P. (2016) Study protocol: a randomised controlled trial of a nurse-led community-based self-management programme for improving recovery among community-residing stroke survivors. BMC Health Services Research 16(a): 387	- study protocol
Lo, S. H.; Chang, A. M.; Chau, J. P. (2018) A stroke self-management program to enhance self-efficacy and outcome expectation: a randomized controlled trial. Stroke; a journal of cerebral circulation 49(suppl1)	- Conference abstract
Lu, Chen (2017) Effectiveness of a Patient-Centered Self-Management Empowerment Intervention during Transition Care on Stroke Survivors. Dissertation/ thesis: 1-1	- Not a peer-reviewed publication
Mansfield, A., Brooks, D., Tang, A. et al. (2017) Promoting Optimal Physical Exercise for Life	- study protocol

Study	Code [Reason]
(PROPEL): aerobic exercise and self-management early after stroke to increase daily physical activity-study protocol for a stepped-wedge randomised trial. BMJ Open 7(6): e015843	
Mansfield, A., Knorr, S., Poon, V. et al. (2016) Promoting Optimal Physical Exercise for Life: An Exercise and Self-Management Program to Encourage Participation in Physical Activity after Discharge from Stroke Rehabilitation-A Feasibility Study. Stroke Research and Treatment 2016: 9476541	- No relevant outcomes
Maulet, T., Pouplin, S., Bensmail, D. et al. (2020) Self-rehabilitation combined with botulinum toxin to improve arm function in people with chronic stroke. A randomized controlled trial. Annals of physical and rehabilitation medicine	- Duplicate reference
McNaughton, H. (2017) Self-directed rehabilitation randomised controlled trial after stroke: a practical, low cost programme. The Taking Charge after Stroke (TaCAS) study.	- Duplicate reference
McNaughton, H. and Fu, V. (2019) Taking charge after stroke: cost effectiveness analysis of a randomised controlled trial of a person-centred intervention to promote self-rehabilitation. European stroke journal 4(suppl1): 93	- Duplicate reference
McNaughton, H., Weatherall, M., McPherson, K. et al. (2021) The effect of the Take Charge intervention on mood, motivation, activation and risk factor management: Analysis of secondary data from the Taking Charge after Stroke (TaCAS) trial. Clinical Rehabilitation 35(7): 1021-1031	- Secondary publication of an included study that does not provide any additional relevant information
Natta, D. D. N., Lejeune, T., Detrembleur, C. et al. (2020) Effectiveness of a self-rehabilitation program to improve upper-extremity function after stroke in developing countries: a randomized controlled trial. Annals of physical and rehabilitation medicine	- Study does not contain an intervention relevant to this review protocol
Natta, D. D. N., Lejeune, T., Detrembleur, C. et al. (2018) A randomized controlled trial assessing the efficacy of an upper limb self-rehabilitation programme among chronic	- Conference abstract

Study	Code [Reason]
Beninese stroke patients. Annals of physical and rehabilitation medicine	
Niama Natta, D. D., Lejeune, T., Detrembleur, C. et al. (2021) Effectiveness of a self-rehabilitation program to improve upper-extremity function after stroke in developing countries: A randomized controlled trial. Annals of Physical & Rehabilitation Medicine 64(1): 101413	- Full text paper not available
Nichol, L., Hill, A. J., Wallace, S. J. et al. (2019) Self-management of aphasia: a scoping review. Aphasiology 33(8): 903-942	- Population not relevant to this review protocol
Oh, H. X., De Silva, D. A., Toh, Z. A. et al. (2021) The effectiveness of self-management interventions with action-taking components in improving health-related outcomes for adult stroke survivors: a systematic review and meta-analysis. Disability & Rehabilitation: 1-16	- Systematic review used as source of primary studies
Ortiz-Fernandez, L., Sagastagoya Zabala, J., Gutierrez-Ruiz, A. et al. (2019) Efficacy and Usability of eHealth Technologies in Stroke Survivors for Prevention of a New Stroke and Improvement of Self-Management: Phase III Randomized Control Trial. Methods and Protocols 2(2): 13	- study protocol
Pallesen, H., Naess-Schmidt, E. T., Kjeldsen, S. S. et al. (2018) "Stroke - 65 Plus. Continued Active Life": a study protocol for a randomized controlled cross-sectoral trial of the effect of a novel self-management intervention to support elderly people after stroke. Trials [Electronic Resource] 19(1): 639	- study protocol
Palmer, R., Dimairo, M., Cooper, C. et al. (2019) Self-managed, computerised speech and language therapy for patients with chronic aphasia post-stroke compared with usual care or attention control (Big CACTUS): a multicentre, single-blinded, randomised controlled trial. Lancet Neurology 18(9): 821-833	- Study does not contain an intervention relevant to this review protocol
Palmer, R., Dimairo, M., Latimer, N. et al. (2020) Computerised speech and language therapy or attention control added to usual care for people with long-term post-stroke aphasia: the Big CACTUS three-arm RCT. Health Technology Assessment (Winchester, England) 24(19): 1-176	- Duplicate reference

Study	Code [Reason]
Paul, L., Wyke, S., Brewster, S. et al. (2016) Increasing physical activity in stroke survivors using STARFISH, an interactive mobile phone application: A pilot study. Topics in Stroke Rehabilitation 23(3): 170-177	- Study design not relevant to this review protocol
Picelli, A., Filippetti, M., Del Piccolo, L. et al. (2020) Rehabilitation and Biomarkers of Stroke Recovery: Study Protocol for a Randomized Controlled Trial. Frontiers in neurology [electronic resource]. 11: 618200	- study protocol
Potter, J. (2016) Effectiveness of self-monitoring and treatment of blood pressure following stroke or transient ischaemic attack (TEST-BP).	- Full text paper not available
Poulin, V., Korner-Bitensky, N., Bherer, L. et al. (2017) Comparison of two cognitive interventions for adults experiencing executive dysfunction post-stroke: a pilot study. Disability & Rehabilitation 39(1): 1-13	- Study design not relevant to this review protocol
Pradines, M., Ghedira, M., Portero, R. et al. (2019) Ultrasound Structural Changes in Triceps Surae After a 1-Year Daily Self-stretch Program: A Prospective Randomized Controlled Trial in Chronic Hemiparesis. Neurorehabilitation & Neural Repair 33(4): 245-259	- Study does not contain an intervention relevant to this review protocol - No relevant outcomes
Preston, E. (2016) Promoting physical activity after stroke via self-management: a pilot randomised trial.	- Duplicate reference
Preston, E., Dean, C. M., Ada, L. et al. (2017) Promoting physical activity after stroke via self-management: a feasibility study. Topics in Stroke Rehabilitation 24(5): 353-360	- Study design not relevant to this review protocol *Single arm study*
Rajendran, V., Jeevanantham, D., Lariviere, C. et al. (2021) Effectiveness of self-administered mirror therapy on upper extremity impairments and function of acute stroke patients: study protocol. Trials [Electronic Resource] 22(1): 439	- study protocol
Rand, D., Weingarden, H., Weiss, R. et al. (2017) Self-training to improve UE function at the chronic stage post-stroke: a pilot randomized controlled trial. Disability & Rehabilitation 39(15): 1541-1548	- Comparator in study does not match that specified in this review protocol

Study	Code [Reason]
Reistetter, T. and Hreha, K. P. (2020) Feasibility of a stroke specific self-management program.	- Full text paper not available
Rouche, N. (2018) The effect of a self-rehabilitation program in addition to usual treatment for spasticity on impairment and activity limitation in patients with spastic hemiparesis following stroke (ADJU-TOX).	- Full text paper not available
Ruksakulpiwat, S. and Zhou, W. (2021) Self-management interventions for adults with stroke: A scoping review. Chronic Diseases & Translational Medicine 7(3): 139-148	- Systematic review used as source of primary studies
Sahebalzamani, Mohammad; Aliloo, Leila; Shakibi, Ali (2009) The efficacy of self-care education on rehabilitation of stroke patients. Saudi medical journal 30(4): 550-4	- No relevant outcomes
Sajatovic, M., Tatsuoka, C., Welter, E. et al. (2016) A targeted self-management approach for reducing stroke risk factors in young African-American men who have experienced stroke or transient ischemic attack. Stroke; a journal of cerebral circulation 47(suppl1)	- Population not relevant to this review protocol
Sajatovic, M., Tatsuoka, C., Welter, E. et al. (2018) A Targeted Self-Management Approach for Reducing Stroke Risk Factors in African American Men Who Have Had a Stroke or Transient Ischemic Attack. American Journal of Health Promotion 32(2): 282-293	- Population not relevant to this review protocol *Includes people who had a TIA (>20%)* - Duplicate reference
Sakakibara, B. M.; Kim, A. J.; Eng, J. J. (2017) A Systematic Review and Meta-Analysis on Self-Management for Improving Risk Factor Control in Stroke Patients. International Journal of Behavioral Medicine 24(1): 42-53	- No relevant outcomes
Sakakibara, B. M., Lear, S. A., Barr, S. I. et al. (2021) Telehealth coaching to improve self-management for secondary prevention after stroke: A randomized controlled trial of Stroke Coach. International Journal of Stroke: 17474930211017699	- Comparator in study does not match that specified in this review protocol
Shaw, L., Bhattarai, N., Cant, R. et al. (2020) An extended stroke rehabilitation service for people who have had a stroke: the EXTRAS RCT. Health Technology Assessment (Winchester, England) 24(24): 1-202	- Study does not contain an intervention relevant to this review protocol

Study	Code [Reason]
Shimada, S. (2017) Effect of the self-monitoring of accelerometer-based feedback on physical activity in hospitalized patients with ischemic stroke: a randomized controlled trial.	- Full text paper not available
Sit, J. W., Chair, S. Y., Chan Yip, C. W. et al. (2018) Effect of health empowerment intervention for stroke self-management on behaviour and health in stroke rehabilitation patients. Hong Kong Medical Journal 24suppl2(1): 12-15	- Data not reported in an extractable format or a format that can be analysed
Sit, J. W., Chair, S. Y., Choi, K. C. et al. (2017) Strategies for enhancing stroke self-management among older stroke survivors: a mixed methods inquiry. Stroke; a journal of cerebral circulation 48(suppl1)	- Conference abstract
Skidmore, E. R., Swafford, M., Juengst, S. B. et al. (2018) Self-Awareness and Recovery of Independence With Strategy Training. American Journal of Occupational Therapy 72(1): 7201345010p1-7201345010p5	- Comparator in study does not match that specified in this review protocol
Slenders, J. P. L., Van den Berg-Vos, R. M., van Heugten, C. M. et al. (2020) Screening and patient-tailored care for emotional and cognitive problems compared to care as usual in patients discharged home after ischemic stroke (ECO-stroke): a protocol for a multicenter, patient-blinded, cluster randomized controlled trial. BMC Health Services Research 20(1): 1049	- study protocol
Swank, C., Trammell, M., Callender, L. et al. (2020) The impact of a patient-directed activity program on functional outcomes and activity participation after stroke during inpatient rehabilitation-a randomized controlled trial. Clinical Rehabilitation 34(4): 504-514	- No relevant outcomes
Taft, K., Laing, B., Wensley, C. et al. (2021) Health promotion interventions post-stroke for improving self-management: A systematic review. JRSM Cardiovascular Disease 10: 20480040211004416	- Systematic review used as source of primary studies - No relevant outcomes
Te Ao, B., Harwood, M., Fu, V. et al. (2021) Economic analysis of the 'Take Charge' intervention for people following stroke: Results from a randomised trial. Clinical Rehabilitation: 2692155211040727	- No relevant outcomes

Study	Code [Reason]
Terrill, A. L., Reblin, M., MacKenzie, J. J. et al. (2018) Development of a novel positive psychology-based intervention for couples post-stroke. Rehabilitation Psychology 63(1): 43-54	- No relevant outcomes
Tielemans, N. S., Schepers, V. P., Visser-Meily, J. M. et al. (2016) Process evaluation of the Restore4stroke Self-Management intervention 'Plan Ahead!': a stroke-specific self-management intervention. Clinical rehabilitation 30(12): 1175-1185	- No relevant outcomes
Ting, Z. H. U., Yalian, H. U. A. N. G., Yanchun, F. A. N. G. et al. (2020) Effect of positive psychological intervention based on PERMA model on disability acceptance and self-care disability in stroke patients. Chinese nursing research 34(6): 965-970	- Full text paper not available
Towfighi, A., Cheng, E. M., Ayala-Rivera, M. et al. (2017) Randomized controlled trial of a coordinated care intervention to improve risk factor control after stroke or transient ischemic attack in the safety net: Secondary stroke prevention by Uniting Community and Chronic care model teams Early to End Disparities (SUCCEED). BMC Neurology 17(1): 24	- No relevant outcomes *Study investigates self management but only aimed at secondary prevention rather than stroke rehabilitation* - study protocol
Towfighi, A., Cheng, E. M., Hill, V. A. et al. (2020) Results of a Pilot Trial of a Lifestyle Intervention for Stroke Survivors: Healthy Eating and Lifestyle after Stroke. Journal of Stroke & Cerebrovascular Diseases 29(12): 105323	- Study does not contain an intervention relevant to this review protocol
van Mastrigt, G. A. P. G., van Eeden, M., van Heugten, C. M. et al. (2019) A trial-based economic evaluation of the Restore4Stroke self-management intervention compared to an education based intervention for stroke patients and their partners. BMC health services research 20: 294	- Secondary publication of an included study that does not provide any additional relevant information *Economic information that may be relevant in the health economic portion of the review*
Visser, M. M., Heijenbrok-Kal, M. H., Van't Spijker, A. et al. (2016) Problem-Solving Therapy During Outpatient Stroke Rehabilitation Improves Coping and Health-Related Quality of Life: Randomized Controlled Trial. Stroke 47(1): 135-42	- No relevant outcomes *Study reports outcomes for all participants together using a mixed model analysis instead of providing a comparison* - Data not reported in an extractable format or a format that can be analysed

Study	Code [Reason]
Vluggen, Tpmm, van Haastregt, J. C. M., Tan, F. E. et al. (2021) Effectiveness of an integrated multidisciplinary geriatric rehabilitation programme for older persons with stroke: a multicentre randomised controlled trial. BMC Geriatrics 21(1): 134	- Study does not contain an intervention relevant to this review protocol
Wan, L. H., Zhang, X. P., Mo, M. M. et al. (2016) Effectiveness of Goal-Setting Telephone Follow-Up on Health Behaviors of Patients with Ischemic Stroke: A Randomized Controlled Trial. Journal of Stroke & Cerebrovascular Diseases 25(9): 2259-70	- No relevant outcomes
Wang, S., Li, Y., Tian, J. et al. (2020) A randomized controlled trial of brain and heart health manager-led mHealth secondary stroke prevention. Cardiovascular Diagnosis & Therapy 10(5): 1192-1199	- No relevant outcomes
Wichowicz, H. M., Puchalska, L., Rybak-Korneluk, A. M. et al. (2017) Application of Solution-Focused Brief Therapy (SFBT) in individuals after stroke. Brain Injury 31(11): 1507-1512	- Data not reported in an extractable format or a format that can be analysed
Willeit, P., Toell, T., Boehme, C. et al. (2020) STROKE-CARD care to prevent cardiovascular events and improve quality of life after acute ischaemic stroke or TIA: A randomised clinical trial. EClinicalMedicine 25: 100476	- Study does not contain an intervention relevant to this review protocol
Wolf, T. J., Baum, C. M., Lee, D. et al. (2016) The Development of the Improving Participation after Stroke Self-Management Program (IPASS): An Exploratory Randomized Clinical Study. Topics in Stroke Rehabilitation 23(4): 284-92	- Data not reported in an extractable format or a format that can be analysed
Wolf, T. J., Spiers, M. J., Doherty, M. et al. (2017) The effect of self-management education following mild stroke: an exploratory randomized controlled trial. Topics in Stroke Rehabilitation 24(5): 345-352	- Data not reported in an extractable format or a format that can be analysed
Wray, F.; Clarke, D.; Forster, A. (2018) Post-stroke self-management interventions: a systematic review of effectiveness and investigation of the inclusion of stroke survivors with aphasia. Disability & Rehabilitation 40(11): 1237-1251	- More recent systematic review included that covers the same topic

Study	Code [Reason]
Xing, L. and Wei, J. (2021) The effect of self-management on the knowledge, beliefs, behavior and subjective well-being in stroke patients during the rehabilitation phase. American Journal of Translational Research 13(7): 8337-8343	- Study design not relevant to this review protocol
Yacoby, A., Zeilig, G., Weingarden, H. et al. (2019) Feasibility of, Adherence to, and Satisfaction With Video Game Versus Traditional Self-Training of the Upper Extremity in People With Chronic Stroke: A Pilot Randomized Controlled Trial. American Journal of Occupational Therapy 73(1): 7301205080p1-7301205080p14	- Comparator in study does not match that specified in this review protocol
Zhang, Z. (2016) A randomized controlled multicenter study of behavior interventions on prognosis of patients with ischemic stroke.	- Full text paper not available
Zhou, B., Zhang, J., Zhao, Y. et al. (2019) Caregiver-Delivered Stroke Rehabilitation in Rural China: The RECOVER Randomized Controlled Trial. Stroke 50(7): 1825-1830	- Duplicate reference
Zhou, B., Zhang, J., Zhao, Y. et al. (2019) Caregiver-Delivered Stroke Rehabilitation in Rural China. Stroke 50(7): 1825-1830	- Study does not contain an intervention relevant to this review protocol

Health Economic studies

Published health economic studies that met the inclusion criteria (relevant population, comparators, economic study design, published 2006 or later and not from non-OECD country or USA) but that were excluded following appraisal of applicability and methodological quality are listed below. See the health economic protocol for more details.

Table 12: Studies excluded from the health economic review

Reference	Reason for exclusion
None	

Appendix K – Research recommendations – full details

K.1 Research recommendation

What is the clinical and cost-effectiveness of self-management interventions for people after stroke?

K.1.1 Why this is important

Self-management interventions are commonly a part of the care that people after stroke participate in. Self-management skills are important for after a person has been discharged from inpatient care to living at home. This review did not find clinically important benefits after the provision of self-management interventions but it was identified that there was significant heterogeneity in the type of self-management intervention provided and the intensity at which they were provided. More information about this may help to determine what sort of self-management interventions are helpful for people after stroke.

K.1.2 Rationale for research recommendation

Importance to 'patients' or the population	Self management interventions can help to empower stroke survivors and enable them to be more independent and promote shared decision making. They can encompass a range of different components and it is important to determine which ones are more effective at improving important patient focussed outcomes such as health related quality of life.
Relevance to NICE guidance	The evidence reported in this review encompassed such a heterogenous mix of interventions it was impossible to determine if any specific components of self management interventions are effective. Interventions also varied greatly in the frequency they were delivered. It is therefore important to determine what frequencies of delivery are most effective as this will greatly affect the cost of delivering these intervention.
Relevance to the NHS	This research will be relevant to the NHS as self-management interventions aim to enhance patient empowerment and shared decision making which are part of the NHS Long Term Plan to make care more personalised. Self-management interventions may also result in cost savings for the NHS if they improve independence and health related quality of life.
National priorities	Promoting patient choice and shared decision making is part of the NHS long term plan to make care more personalised.
Current evidence base	The evidence identified in this review comprised of a number of different self-management interventions delivered at varying frequencies and reported no difference for the majority of the outcomes. Evidence from a previous Cochrane review showed benefits in health-related quality of life and self efficacy with self-management interventions but also concluded that further research was required to determine the key

	features of the programmes which affect their effectiveness.
Equality considerations	No specific equality considerations were identified.

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K.123 Modified PICO table

Population	Inclusion: • Adults (age ≥16 years) who have had a first or recurrent stroke (including people after subarachnoid haemorrhage). • 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
Intervention	Quantitative data • Self-management interventions delivered in sessions five days a week • Self-management interventions delivered in sessions one day a week Qualitative data • Views, opinions and experiences relating to self management interventions and specifically the components which people find particularly helpful (including the potential barriers and facilitators)
Comparator	Quantitative data • Comparing the two ways of delivering the self-management intervention • No treatment Qualitative data N/A
Outcome	Quantitative data • Person/participant generic health-related quality of life • Carer generic health-related quality of life • Self-efficacy • Activities of daily living

	• Participation restrictions • Psychological distress • Stroke-specific Patient-Reported Outcome Measures • Health service usage • Participant satisfaction • Adverse events (type and frequency) Qualitative data • Views, opinions and experiences relating to self management interventions and specifically the components which people find particularly helpful (including the potential barriers and facilitators)
Study design	• Randomised controlled trial • Qualitative interview (either individual or through focus groups)
Timeframe	3 months
Additional information	Subgroup analyses for quantitative data: • Severity (NIHSS mild, moderate, severe, very severe) • Gender (male, female, non-binary) • Presence of communication difficulties (aphasia, dysphasia, no communication difficulties)

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