National Institute for Health and Care Excellence

Final

Stroke rehabilitation in adults

[H] Evidence reviews for community participation interventions

NICE guideline NG236

Evidence review underpinning recommendations 1.16.5 and 1.17.6 in the NICE guideline

October 2023

Final

These evidence reviews were developed by NICE

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ISBN: 978-1-4731-5457-5

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1.1 Review question

In people after stroke, what is the clinical and cost-effectiveness of Community Participation Interventions compared with no intervention?

1.1.1 Introduction

Rehabilitation immediately following a stroke revolves around therapies supervised by healthcare professionals. In the longer term the potential exists to aid rehabilitation by providing access to community based activities which aim to help stroke survivors regain their former roles at home, socially and, if applicable, at their work. Options for these community programmes are numerous and could include stroke education and secondary prevention, community leisure activities, exercise classes, speech and language classes and peer-led support groups for survivors and informal carers. These can be provided by the third sector in partnership with NHS primary and secondary care pathways.

The aim of this review was to assess the benefits of community participation programmes of all types in enhancing the physical and psychological wellbeing of stroke survivors.

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 have had a transient ischaemic attack
Intervention	• Community participation interventions (active involvement in activities that are intrinsically social and either occur outside the home or are part of a nondomestic role). • Based on this definition, the intervention must have a focus on at least 1 of the following participation areas through education, support, or practice: (1) social participation; (2) social role participation and role management; (3) political participation and civic engagement (including volunteering); (4) leisure participation including exercise programs held in a social setting; (5) religious participation; (6) education and learning; (7) community mobility and transportation; (8) instrumental ADLs, such as communication management and shopping; and (9) vocational participation (including employment).
Comparisons	• Compared to other types of community participation intervention • No participation Confounding factors: • Age/frailty (either age or frailty scores should be accounted for within an analysis) • Presence of communication difficulties • Presence of sensory difficulties (for example: vision, hearing etc.)
Outcomes	At time period:

	• <6 months
	• ≥6 months
	
	• 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])
	• Return to work (dichotomous outcome)
	• Wellbeing scores (continuous outcomes will be prioritised)
	• Participation in leisure activities/social groups scores (continuous outcomes will be prioritised)
	• Psychological distress (continuous outcomes will be prioritised, where people with communication difficulties are present communication-specific psychological distress scores will be considered a priority for this outcome)
	  ○ Depression
	  ○ Anxiety
	  ○ Distress
	• Activities of daily living (continuous outcomes will be prioritised)
	• Stroke-specific Patient-Reported Outcome Measures (continuous outcomes will be prioritised, where people with communication difficulties are present communication-specific quality of life scores will be considered a priority for this outcome)
	• Discontinuation (dichotomous outcome)

Study design	• Systematic reviews of RCTs • Parallel RCTs If insufficient RCT evidence is available, non-randomised studies will be considered if they adjust for key confounders (e.g. age, presence of communication difficulties, presence of sensory difficulties), including: 1. Prospective and retrospective cohort studies 2. Case control studies (if no other evidence identified)

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

Twenty nine randomised controlled trial (thirty three papers) studies were included in the review;[1-4, 6-11, 14, 17, 19, 21-26, 29, 30, 32-43] these are summarised in Table 2 below. Evidence from these studies is summarised in the clinical evidence summary below (Table 3).

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.

Meta analysis of interventions

Community participation interventions is a term used for a group of interventions that could lead to increased community participation. The committee acknowledged when designing the protocol that this definition could include a range of different interventions that work in different ways. The committee, after discussing other literature investigating community participation including a systematic review by Lee, et al.[20] that provided the basis for the definition, agreed the following should be included in the review:

- Interventions that lead to active involvement in activities that are intrinsically social and either occur outside the home or are part of a nondomestic role.
- Based on this definition, the intervention must have a focus on at least 1 of the following participation areas through education, support, or practice: (1) social participation; (2) social role participation and role management; (3) political participation and civic engagement (including volunteering); (4) leisure participation including exercise programs held in a social setting; (5) religious participation; (6) education and learning; (7) community mobility and transportation; (8) instrumental ADLs, such as communication management and shopping; and (9) vocational participation (including employment).

This resulted in the inclusion of a selection of different interventions, including:

- Community group discussion meetings[24]
- Community based exercise programs with or without lifestyle education (including yoga and Tai Chi)[1, 8, 17, 19, 22, 23, 25, 26, 34, 35, 37, 38, 42]
- Other leisure activities (such as horseback riding)[6]
- Home-based leisure education programs (see Indirectness section below)[9, 29, 32, 43]
- Self-management programs that included at least a component regarding education about community participation (see Indirectness section below)[7, 14, 39]
- Practice of outdoor mobility and transportation[21]
- Occupational therapy programs aiming to set goals and help enable community participation[3, 10, 33, 36]
- Occupation based interventions aiming to support access to work[4, 30]

No studies were identified that discussed: political participation and civic engagement (including volunteering), religious participation and instrumental activities of daily living, such as communication management and shopping.

The committee agreed that all interventions could be pooled together for inclusion in a meta-analysis. However, they reflected on the different groupings of intervention when considering the evidence and making recommendations.

Indirectness

Several studies had features that were considered as sources of indirectness. To the most part, this was due to intervention indirectness where there was uncertainty if the interventions included would fulfil the inclusion criteria. This was due to either the intervention being a self-management intervention that included community participation as a component of the program, but not as the main component and it was unclear how much weighting this received (including: Cadilhac 2011[7], Harel-Katz 2020[14] and Tielemans 2015[39]), or as the program was a home-based intervention and it was unclear if the intervention led to community participation (including: Desrosiers 2007[9], Marsden 2016[23], Nour K 2002[29], Parker 2001[33] and Wang 2015[43]). In one study (Taylor-Piliae 2012[37]) the control intervention was deemed to be indirect as it an intervention that could be considered a community participation intervention could have been available to some participants, but it appeared that the majority of options would not have been community participation interventions and so was included. As community participation interventions are an intervention with a complex definition that could include a range of interventions that are not necessarily labelled as community participation interventions, this indirectness likely reflects the challenge involved in defining what is entailed by the intervention.

Some studies had elements of outcome indirectness. This was either because of reporting outcomes defined in the protocol as needing to be continuous outcomes in a dichotomous form (Drummond 1996[10]) or including the total score for a scale rather than the subscales for different components (Tielemans 2015[39]). In the latter case, the outcome reported for a psychological distress outcome that could have been classified as reporting depression or anxiety. This was included in the depression outcome only for this analysis. However, the committee were informed that the data could apply to anxiety as well.

Inconsistency

Several outcomes were downgraded for inconsistency that was not explained by subgroup analysis. Looking at the evidence as a whole, the reporting of variables that the committee agreed were important to include in a subgroup analysis was limited. Some interventions appeared to be tailored for people presenting with specific difficulties after a stroke (for example: Marshall, et al.[24] investigated a community discussion group for people with aphasia) but the majority was unclear as to whether people had communication, sensory or cognitive difficulties, psychological distress and whether they had mobility problems at the start of the trial. The committee considered this when making a recommendation.

A sensitivity analysis was conducted to investigate the effect of removing study outcomes rated as having some concerns or high risk of bias. This found that for some outcomes (specifically related to Stroke-specific Patient Reported Outcome Measures at <6 months that included the Stroke Impact Scale) that removing the studies with some concerns or high risk of bias resolved the heterogeneity. However, it was noted that this was not consistent with other outcomes and that removing these studies would limit the data significantly. Given that heterogeneity was only resolved in a limited number of outcomes, mostly including the same studies, the absence of data for agreed subgroup analyses that may explain the heterogeneity and the wider concerns with heterogeneity from the complexity of the intervention, the committee agreed to include studies with some concerns or high risk of bias in their interpretation of the evidence.

1.1.4.2 Excluded studies

Two Cochrane reviews were excluded from the analysis. Barclay 2015[5] was excluded as it did not necessarily include community participation interventions as defined by the protocol (as interventions may not have been inherently social and only looked at community ambulation). George 2014[13] was excluded as it did not specifically investigate social participation (focussing more of parameters for driving, which were not inherently social in

design). As these studies may have included relevant studies, they were used as sources for citations, which were checked against the inclusion criteria for this review.

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
Ada 2013[1] Subsidiary paper: Ada 2009[2]	**Community participation intervention** (n=34) Four month treadmill training, three times a week for 30 minutes. Individual training with a physiotherapist with an opportunity for social interaction with other participants who were training at the same time. **Other community participation intervention** (n=34) Two month treadmill training, three times a week for 30 minutes. **No participation** (n=34) No intervention. **Concomitant therapy:** No additional information	**People after a first or recurrent stroke** Mean age (SD): 65.7 (12.4) years N = 102 Mean time after stroke (SD): 20 (15) months Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Person/participant generic health-related quality of life at <6 months and ≥6 months Participation in leisure activities/social groups at <6 months and ≥6 months Discontinuation at <6 months and ≥6 months	Setting: Community-based in Australia Sources of funding: This study was supported by the Heart Foundation of Australia and the University of Sydney.
Adamit 2021[3]	**Community participation intervention** (n=33) Functional and cognitive occupational therapy program consisting of 10 x 1 hour weekly individualised sessions. Including goal setting, coping	**People after a first or recurrent stroke** Mean age (SD): 64.5 (9.6) years N = 66 Mean time after stroke (SD): Not stated/unclear Ethnicity: Not stated/unclear	Participation in leisure activities/social groups at <6 months Activities of daily living at <6 months Discontinuation at <6 months	Setting: Community-based health care service in Israel Sources of funding: The study was supported by the Kahn-Sagol-Maccabi Research and Innovation research grant and Steyer Family for their support

Study	Intervention and comparison	Population	Outcomes	Comments
	strategies and education regarding symptoms of stroke. Goals could include social participation. **No participation** (n=33) The same assessments with no intervention afterwards. **Concomitant therapy:** No additional information	Severity: Mild (or NIHSS 1-5) Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: No psychological distress present Presence of cognitive difficulties: Mixed Baseline mobility: Not stated/unclear		
Ahn 2019[4]	**Community participation intervention** (n=23) Occupation-based interventions providing goal-based support to apply to the occupation. Sessions twice per week for 60 minutes per session, with 10 sessions over 6 weeks. **No participation** (n=20) Action focussed intervention (individual exercise program). **Concomitant therapy:** No additional information	**People after a first or recurrent stroke** Mean age (SD): 65.6 (3.2) years N = 43 Mean time after stroke (SD): 43.1 (31.5) months Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: No communication difficulties Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Activities of daily living at <6 months Discontinuation at <6 months	Setting: Community-based in the Republic of Korea Sources of funding: No additional information

Study	Intervention and comparison	Population	Outcomes	Comments
Beinotti 2013[6]	**Community participation intervention** (n=12) Horseback riding therapy for 30 minutes, once a week. **No participation** (n=12) No horseback riding therapy. **Concomitant therapy:** All people participated in a conventional physiotherapy program (50 minutes, 3 times a week for 16 weeks). This concentrated on specific kinesotherapeutic exercises that stimulated strength, balance and cognition such as concentrated attention, working memory and praxis.	**People after a first or recurrent stroke** Mean age: 56 years N = 24 Mean time after stroke: 71 months Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: No cognition difficulties present Baseline mobility: Not stated/unclear	Person/participant generic health-related quality of life at <6 months Discontinuation at <6 months	Setting: Outpatient basis in Brazil Sources of funding: The study was supported by FAPESP (Sao Paulo State foundation for Research).
Cadilhac 2011[7]	**Community participation intervention** (n=48) Stroke-specific self-management program for 8 weeks that included education on community participation. **Other community participation intervention** (n=47) Generic self-management program for 8 weeks that included education on community participation.	**People after a first or recurrent stroke** Mean age (SD): 69 (12) years N = 143 Mean time after stroke (SD): Not stated/unclear Ethnicity: Majority Australian Severity: Not stated/unclear Presence of communication difficulties: Mixed Presence of sensory difficulties: Not stated/unclear	Person/participant generic health-related quality of life at ≥6 months Participation in leisure activities/social groups scores at ≥6 months Psychological distress – depression at ≥6 months Psychological distress – anxiety at ≥6 months Discontinuation at ≥6 months	The interventions in this study were considered indirect as while they discuss social group integration, the program does not necessarily lead to community participation. Setting: Outpatient follow-up in Australia Sources of funding: Primary author supported by a NHMRC/National Heart Foundation postdoctoral fellowship. The research was supported by a grant

Study	Intervention and comparison	Population	Outcomes	Comments
	No participation (n=48) Usual care only. **Concomitant therapy:** Usual care included access to information and education provided by the hospital team or their local general practitioner.	Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Mixed Baseline mobility: Mixed		from the J.O. and J.R. Wicking Trust and in-kind support from the National Stroke Foundation.
Chan 2012[8]	**Community participation intervention** (n=9) Once a week yoga program for 6 weeks (with 90 minute classes) and 24 individual home-practice sessions. **No participation** (n=8) Exercise program only. **Concomitant therapy:** People in both groups attended six weekly 50-minute exercise classes. The program consisted of resistance exercises for the upper and lower body, and cardiovascular type exercise on a bicycle or ergometer.	**People after a first or recurrent stroke** Mean age (SD): 69.1 (14.5) years N = 17 Mean time after stroke (SD): 8.5 (5.0) years Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Psychological distress – depression at <6 months Psychological distress – anxiety at <6 months Discontinuation at <6 months	Setting: Community based in Australia Sources of funding: No grants or other financial supported was received
Desrosiers 2007[9]	**Community participation intervention** (n=33) Leisure education program delivered at home in 60	**People after a first or recurrent stroke** Mean age (SD): 70 (11.1) years N = 62	Wellbeing scores at <6 months Participation in leisure activities/social groups scores at <6 months	The intervention in this study was downgraded for indirectness because while it discusses social group participation, the program does not

Study	Intervention and comparison	Population	Outcomes	Comments
	minute sessions once per week for 8-12 weeks. **No participation** (n=29) Same number of visits but discussing non-leisure related topics. **Concomitant therapy:** No additional information	Mean time after stroke (SD): 28.5 (32.4) months Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: No cognition difficulties present Baseline mobility: Not stated/unclear	Psychological distress – depression at <6 months Stroke-specific Patient-Reported Outcome Measures at <6 months Discontinuation at <6 months	necessarily lead to community participation. Setting: Home-based in Canada Sources of funding: Supported by the Canadian Institutes of Health Research (grant no. MOP-49526).
Drummond 1996[10] Subsidiary paper: Drummond 1995[11]	**Community participation intervention** (n=21) Occupational therapy for 30 minutes a week for the first 3 months following discharge from hospital where leisure pursuits and the methods to achieve them were discussed. **No participation** (n=44) Combination of two groups. One group (n=21) received the same amount of occupational therapy but was not focussed on leisure. The other group (n=23) received no additional input.	**People after a first or recurrent stroke** Mean age (SD): 66.0 (11.4) years N = 65 Mean time after stroke (SD): Not stated/unclear Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: No communication difficulties Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear	Person/participant generic health-related quality of life at <6 months and ≥6 months Participation in leisure activities/social groups scores at <6 months and ≥6 months Psychological distress – depression at <6 months and ≥6 months* Activities of daily living at <6 months and ≥6 months Discontinuation at <6 months and ≥6 months *This outcome was downgraded for indirectness as it was reported as a dichotomous	Setting: Outpatient-based in the United Kingdom Sources of funding: Funding from the Stroke Association and the Nottingham Fights Stroke Association.

Study	Intervention and comparison	Population	Outcomes	Comments
	Concomitant therapy: All people received usual care from hospital and social services.	Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	outcome (when the protocol specified it should be reported as a continuous outcome)	
Harel-Katz 2020[14]	**Community participation intervention** (n=31) IPASS self-management program including 12 weekly group sessions, lasting 2.5 hours each. Sessions included content aimed at improving community participation and social activities. **No participation** (n=29) Standard care only (no additional information provided). **Concomitant therapy:** No additional information	**People after a first or recurrent stroke** Age range: 45 to 87 years N = 60 Mean time after stroke: 128 days Ethnicity: Not stated/unclear Severity: Mild (or NIHSS 1-5) Presence of communication difficulties: No communication difficulties Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Participation in leisure activities/social groups scores at <6 months Activities of daily living at <6 months Discontinuation at <6 months	The interventions in this study were considered indirect as while they discuss social group integration, the program does not necessarily lead to community participation. Setting: Community-based outpatient setting in Israel Sources of funding: This study was partly sponsored by a scholarship from the "Foundation for promoting the Research of Aging" of University of Haifa and JDC Israel, and by an excellence scholarship for PhD candidates from the Graduate Research Authority of University of Haifa, Israel.
Immink 2014[17]	**Community participation intervention** (n=12) 10-week yoga intervention with 90 minute group classes once a week, and daily 40-minute home-based practice. **No participation** (n=13) Wait list control.	**People after a first or recurrent stroke** Mean age (SD): 59.8 (16.1) years N = 25 Mean time after stroke (SD): 51.3 (61.8) months Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of	Psychological distress – depression at <6 months Psychological distress – anxiety at <6 months Stroke-specific Patient-Reported Outcome Measures at <6 months	Setting: Community-based in Australia Sources of funding: Funded by the National Stroke Foundation (Australia)

Study	Intervention and comparison	Population	Outcomes	Comments
	Concomitant therapy: All people were advised to maintain their usual treatment and lifestyle behaviour where possible during the period of their participation.	communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Mixed		
Kim 2014[19]	**Community participation intervention** (n=13 Community walking training program for 30 minutes a day, 5 days a week for 4 weeks. **No participation** (n=13) Standard rehabilitation program only. **Concomitant therapy:** Standard rehabilitation program consisting of physical and occupational therapy for 60 minutes per day, 5 times a week for 4 weeks.	**People after a first or recurrent stroke** Mean age (SD): 50.5 (8.9) years N = 26 Mean time after stroke (SD): 231.64 (115.67) days Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Mobility difficulties present	Stroke-specific Patient-Reported Outcome Measures at <6 months Discontinuation at <6 months	Setting: Inpatient rehabilitation hospital in the Republic of Korea Sources of funding: No additional information
Logan 2014[21]	**Community participation intervention** (n=287)	**People after a first or recurrent stroke** Mean age (SD):	Person/participant generic health-related quality of life at ≥6 months	Setting: 15 sites across England, Scotland and Wales including primary

Study	Intervention and comparison	Population	Outcomes	Comments
	Practice of outdoor mobility through repeated practice intervention. Sessions to encourage people to use community mobility opportunities (including public transport, walking and mobility devices). A maximum of 12 visits. **No participation** (n=281) Usual care only. **Concomitant therapy:** All people received control information during the baseline visit. This included information about bus times, local community transport, taxi services, wheelchair services, disabled persons' car badges, wheelchair borrowing schemes and mobility equipment.	71.6 (12.1) years N = 526 Mean time after stroke (SD): 40.1 (52.8) years Ethnicity: Mixed (majority white) Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Psychological distress – depression at ≥6 months Activities of daily living at ≥6 months Discontinuation at ≥6 months	care, secondary care community services and secondary care stroke services. Sources of funding: Funding for this study was provided by the Health Technology Assessment programme of the National Institute for Health Research.
Lund 2012[22]	**Community participation intervention** (n=48) Lifestyle course and physical activity completed over 36 sessions, once a week for 2 hours each session. **No participation** (n=51) Physical activity only. **Concomitant therapy:**	**People after a first or recurrent stroke** Mean age (SD): 77.1 (7.1) years N = 99 Mean time after stroke (SD): 149 (153) days Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not	Person/participant generic health-related quality of life at ≥6 months Psychological distress – depression at ≥6 months Psychological distress – anxiety at ≥6 months Activities of daily living at ≥6 months Discontinuation at ≥6 months	Setting: Outpatients from six hospitals in Norway Sources of funding: The Eastern Health Region in Norway, the Department of Geriatric Medicine at Oslo University Hospital and the Norwegian Women's Public Health Association have funded this study. This study was also supported by grants from Oslo University College and the Norwegian

Study	Intervention and comparison	Population	Outcomes	Comments
	Usual care was a physical activity program because senior centres usually provide physical activity. These groups were led by volunteers and offered once a week, lasting from 30 minutes up to 1 hour.	stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear		Association for Occupational Therapists.
Marsden 2016[23]	**Community participation intervention** (n=10) Home and community-based exercise program delivered over 12 weeks. **No participation** (n=10) Usual care only. **Concomitant therapy:** Usual care consisted of any required medical or therapy appointments.	**People after a first or recurrent stroke** Mean age (SD): 58.2 (20.0) years N = 20 Mean time after stroke (SD): 4.7 (4.0) months Ethnicity: Not stated/unclear (majority country of birth Australia) Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Psychological distress – depression at <6 months Stroke-specific Patient-Reported Outcome Measures at <6 months	The intervention in this study was downgraded for indirectness because while the majority of participants likely completed a community participation intervention, some may have only completed a home based intervention that did not aim to increase community participation. Setting: Outpatient, home and community settings in Australia Sources of funding: The research has been supported by small project grants from the National Stroke Foundation, the John Hunter Hospital Charitable Trust, the Hunter New England Allied Health Research Committee Research Fund, and Hunt Medical Research Institute: Estate of the late Stephen James Fairfax Award (HMRI 13-55).
Marshall 2020[24]	**Community participation**	**People after a first or recurrent**	Wellbeing scores at ≥6 months	Setting: Online based meetings in

Study	Intervention and comparison	Population	Outcomes	Comments
	intervention (n=16) Community group sessions, 14 sessions delivered over 6 months with sessions occurring once a fortnight. Virtual reality platform where topics that included community participation were discussed. **No participation** (n=18) Waiting list control. **Concomitant therapy:** No additional information	**stroke** Median age (IQR): Community participation intervention: 51 (46.5 to 57.5) years No participation: 65 (51.5 to 71.25) years N = 34 Median time after stroke (IQR): Community participation intervention: 48 (29.75 to 85.25) months No participation: 26.5 (11.75 to 79) months Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Communication difficulties present (all participants had mild or moderate aphasia) Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Participation in leisure activities/social groups scores at ≥6 months Activities of daily living at ≥6 months Stroke-specific Patient Reported Outcome Measures at ≥6 months Discontinuation at ≥6 months	the United Kingdom Sources of funding: Funded by the Stroke Association.
Mayo 2015[25]	**Community participation intervention** (n=93) Exercise and	**People after a first or recurrent stroke** Mean age (SD): 63 (12) years	Person/participant generic health-related quality of life at <6 months Participation in	Setting: Community based in 11 sites across 7 cities in Canada

Study	Intervention and comparison	Population	Outcomes	Comments
	education program, where the education promoted learning, leisure and social activities. **No participation** (n=93) Waiting list control. **Concomitant therapy:** No additional information	N = 186 Mean time after stroke (SD): 2.8 (2.7) years Ethnicity: Not stated/unclear (majority born in Canada) Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	leisure activities/social groups scores at <6 months Psychological distress – depression at <6 months Stroke-specific Patient-Reported Outcome Measures at <6 months Discontinuation at <6 months	Sources of funding: No additional funding
Moore 2015[26]	**Community participation intervention** (n=20) Leisure-center structured exercise classes for 19 weeks (3 times per week, 45-60 minutes per class). **No participation** (n=20) A matched-duration home stretching program. **Concomitant therapy:** No additional information.	**People after a first or recurrent stroke** Mean age (SD): 69 (10) years N = 40 Mean time after stroke (SD): 19 (26) months Ethnicity: Not stated/unclear Severity: Mild (or NIHSS 1-5) Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological	Stroke-specific Patient-Reported Outcome Measures at <6 months Discontinuation at <6 months	Setting: People attending stroke services in the North East of the United Kingdom Sources of funding: Funded by Research Councils UK Newcastle Centre for Brain Ageing and Vitality; the National Institute for Health Research (Senior Fellowship Award to MIT, Senior Investigator award to GAF); The Medical Research Council (ref: G0802536); National Institute for Health Research Newcastle Biomedical Research Centre for Ageing and Age Related Disease based at

Study	Intervention and comparison	Population	Outcomes	Comments
		distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear		Newcastle upon Tyne Hospitals NHS Foundation Trust and Newcastle University; The NIHR North East Stroke Research Network.
Nour K 2002[29]	**Community participation intervention** (n=7) A home-based leisure educational program delivered in 12 steps over 10 intervention sessions. **No participation** (n=7) A flexible 'social' program including weekly hour friendly home visits with the therapist. **Concomitant therapy:** No additional information	**People after a first or recurrent stroke** Mean age (SD): N = 14 Mean time after stroke (SD): Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Mixed Presence of sensory difficulties: Mixed Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Psychological distress – depression at <6 months Stroke-specific Patient-Reported Outcome Measures at <6 months Discontinuation at <6 months	The interventions in this study were considered indirect as while they discuss social group integration, the program does not necessarily lead to community participation. Setting: Outpatients in Canada Sources of funding: This research was done as a master's thesis in gerontology and was partially supported by a grant from the Centre de recherche en gerontologic et geriatrie, Institut universitaire de geriatrie de Sherbrooke.
Ntsiea 2015[30]	**Community participation intervention** (n=40) Workplace intervention program with sessions once per week for one hour except for work skills assessment sessions which took a minimum of four hours. **No participation** (n=40) Usual care only.	**People after a first or recurrent stroke** Mean age (SD): 44.5 (8.7) years N = 80 Mean time after stroke (SD): 4.6 (1.7) weeks Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not	Return to work at <6 months and ≥6 months Activities of daily living at <6 months and ≥6 months Stroke-specific Patient-Reported Outcome Measures at <6 months and ≥6 months Discontinuation at <6 months and ≥6 months	Setting: Workplaces in South Africa Sources of funding: This research was partially funded by the Carnegie Large research grant and the African Doctoral Dissertation Research Fellowship offered by the African Population and Health Research Centre in partnership with the International Development Research Centre.

Study	Intervention and comparison	Population	Outcomes	Comments
		stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear		
Ostwald 2014[32]	**Community participation intervention** (n=80) Home-based interventions with home visits for the first 6 months post-discharge. Included training on community networks and accessing community resources. On average 16 visits of 70 minutes each. **No participation** (n=79) No home-based interventions. **Concomitant therapy:** All people received mailed monthly personalized letters with information on signs and symptoms of stroke, stroke prevention, stress reduction strategies, diet and exercise guidelines, links to support groups and advocacy organisations, and tips for leisure activity adaptations.	**People after a first or recurrent stroke** Mean age (SD): N = 159 Mean time after stroke (SD): Ethnicity: Mixture of races. Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Psychological distress – depression at <6 months and ≥6 months Activities of daily living at <6 months and ≥6 months Stroke-specific Patient-Reported Outcome Measures at <6 months and ≥6 months Discontinuation at ≥6 months	Setting: Home based in the United States of America Sources of funding: The study was supported by a grant from the National Institute of Health, National Institute for Nursing Research (R01, NR005316, Sharon K. Ostwald, PI). Additional funding was provided by the Isla Carroll Turner Friendship Trust, Houston, Texas.

Study	Intervention and comparison	Population	Outcomes	Comments
Parker 2001[33]	**Community participation intervention** (n=153) Occupational therapy intervention at home focussing on leisure tasks for up to 6 months for a minimum of 10 sessions not less than 30 minutes each. **No participation** (n=313) Combination of two groups. One (n=156) received an occupational therapy intervention at home for up to 6 months that did not focus on social integration. One (n=157) that received no treatment. **Concomitant therapy:** All people were eligible for any existing rehabilitation services provided in their area, such as day hospital visits.	**People after a first or recurrent stroke** Median age (IQR): 72 (65 to 79) years N = 466 Mean time after stroke (SD): Not stated/unclear Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Psychological distress – depression at ≥6 months Activities of daily living at ≥6 months Discontinuation at ≥6 months	The interventions in this study were considered indirect as while they discuss leisure activities, the program does not necessarily lead to community participation. Setting: Inpatients who were recently discharged or outpatients in the United Kingdom Sources of funding: Financial support provided by the NHS Research and Development Programme (Cardiovascular Disease and Stroke), by the NHS R&D Programme for Health Technology Assessment, and by Lothian Health. The COSTAR collaboration was supported by a grant from NHS R&D (Cardiovascular Disease and Stroke).
Schmid 2012[34]	**Community participation intervention** (n=37) Group yoga and yoga plus group completed over 8 weeks, including seated and standing yoga. **No participation** (n=10) Waiting list control. **Concomitant therapy:** No additional	**People after a first or recurrent stroke** Mean age (SD): 63.1 (8.9) years N = 47 Mean time after stroke (SD): 51.0 (40.6) months Ethnicity: Unclear, information given states that the majority were white (60%) Severity: Not stated/unclear	Stroke-specific Patient-Reported Outcome Measures at <6 months Discontinuation at <6 months	Setting: Outpatient setting in the United States of America Sources of funding: No additional information

Study	Intervention and comparison	Population	Outcomes	Comments
	information	Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear		
Song 2021[35]	**Community participation intervention** (n=18) Adapted form of Tai Chi for health programs completed twice a week for 6 months. **No participation** (n=16) Weekly text messages from a research assistant. **Concomitant therapy:** All people received a symptom management program.	**People after a first or recurrent stroke** Mean age (SD): 58.0 (14.5) years N = 34 Mean time after stroke (SD): 9.2 (7.5) months Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Activities of daily living at <6 months and ≥6 months Stroke-specific Patient-Reported Outcome Measures at <6 months and ≥6 months Discontinuation at ≥6 months	Setting: Outpatient rehabilitation center in Korea Sources of funding: The study was supported by Basic Science Research Program through the National Research Foundation of Korea (2013R-1A-1A-2065536).
Stark 2018[36]	**Community participation intervention** (n=9) COMPASS	**People after a first or recurrent stroke** Mean age (SD):	Participation in leisure activities/social groups scores at ≥6 months	Setting: Home and community based in the United States of America

Study	Intervention and comparison	Population	Outcomes	Comments
	intervention including home adaptations, interventions to reduce barriers to community participation and self-management strategies. **No participation** (n=6) Evidence-based stroke education based on evidence-based guidelines and literature review only. **Concomitant therapy:** No additional information	66.0 (8.1) years N = 15 Mean time after stroke (SD): Not stated/unclear Ethnicity: Not stated/unclear Severity: Moderate (or NIHSS 5-14) Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Stroke-specific Patient-Reported Outcome Measures at ≥6 months Discontinuation at ≥6 months	Sources of funding: Funding through the National Center for Medical Rehabilitation Research (NCMRR), 1 R03 HD079841-01A1.
Taylor-Piliae 2012[37]	**Community participation intervention** (n=16) Tai Chi, 60-minute classes three times a week for 12 weeks. **No participation** (n=12) Usual care subjects in community-based physical activity suitable for older adults. **Concomitant therapy:** No additional information	**People after a first or recurrent stroke** Mean age (SD): 69.2 (11.2) years N = 28 Mean time after stroke (SD): 53.8 (45.2) months Ethnicity: Mixed, majority white/European-American. Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear	Person/participant generic health-related quality of life at <6 months Psychological distress – depression at <6 months Discontinuation at <6 months	The interventions in this study were downgraded for indirectness as the usual care comparison group could include a community participation. Given that this is unclear it has been included as no participation. Setting: Outpatient follow up in the United States of America Sources of funding: Supported by the American Heart Association (National Scientist Development Grant #0930324N (Taylor-Piliae, PI)); and the

Study	Intervention and comparison	Population	Outcomes	Comments
		Presence of psychological distress: Mixed Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Mixed		Robert Wood Johnson Foundation (Nurse Faculty Scholars Grant #66527 (Taylor-Piliae, PI)).
Taylor-Piliae 2014[38]	**Community participation intervention** (n=53) Tai chi 1-hour class 3 times a week for 12 weeks. **Other community participation intervention** (n=44) 1-hour class 3 times a week for 12 weeks including exercise programs. **No participation** (n=48) Written materials and resources regarding participating in community-based physical activity. **Concomitant therapy:** No additional information.	**People after a first or recurrent stroke** Mean age (SD): 69.8 (10.1) years N = 145 Mean time after stroke (SD): 37.1 (48.6) months Ethnicity: Mixed (majority white/European-American) Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Mixed Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Mixed	Person/participant generic health-related quality of life at <6 months Psychological distress – depression at <6 months Discontinuation at <6 months	Setting: Community-based in the United States of America Sources of funding: Supported by an American Heart Association Scientist Development Grant (no. 0930324N; Taylor-Piliae, principal investigator) and a Robert Wood Johnson Foundation Nurse Faculty Scholars Grant (no. 66527; Taylor-Piliae, principal investigator).
Tielemans 2015[39] Subsidiary papers: Tielemans 2014[40] van Mastrigt 2020[41]	**Community participation intervention** (n=58) Self-management intervention over 10 weeks (6 x 2-hour sessions in the first 6 weeks, then a 2-hour booster session on week 10). Including education on	**People after a first or recurrent stroke** Mean age (SD): 57.0 (9.0) years N = 113 Mean time after stroke (SD): 18.7 (28.3) months Ethnicity: Majority Dutch nationality	Person/participant generic health-related quality of life at <6 months and ≥6 months Psychological distress – depression at <6 months* Stroke-specific Patient-Reported Outcome Measures at ≥6	The interventions in this study were considered indirect as while they discuss social group integration, the program does not necessarily lead to community participation. Setting: Outpatient follow up in the

Study	Intervention and comparison	Population	Outcomes	Comments
	participation in society. **No participation** (n=55) Education intervention for the same time that did not discuss social participation. **Concomitant therapy:**	Severity: Not stated/unclear Presence of communication difficulties: Mixed Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Mixed Baseline mobility: Not stated/unclear	months Discontinuation at ≥6 months *This outcome was downgraded for indirectness as they reported the total score rather than the subscales for depression and anxiety. It was included in the depression outcome for the purposes of this review.	Netherlands Sources of funding: Supported by the Dutch VSBFonds (#89000004) and the Dutch Heart Foundation.
Wang 2013[42]	**Community participation intervention** (n=85) Community nursing education and rehabilitation program including education on social activities. **No participation** (n=85) Normal care, people who received hospital-based poststroke education and rehabilitation programs. **Concomitant therapy:** No additional information	**People after a first or recurrent stroke** Mean age (SD): 67.3 (11.7) years N = 170 Mean time after stroke (SD): Not stated/unclear Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	Participation in leisure activities/social groups scores at <6 months and ≥6 months Discontinuation at <6 months and ≥6 months	Setting: People from communities in Taiwan Sources of funding: No additional information
Wang 2015[43]	**Community participation intervention**	**People after a first or recurrent**	Activities of daily living at <6	The interventions in this study were considered indirect

Study	Intervention and comparison	Population	Outcomes	Comments
	(n=25) Caregiver-mediated home-based intervention which included involvement in restorative outdoor leisure activities. **No participation** (n=26) Maintained everyday routines but also received weekly visits or telephone calls to talk about current rehabilitation progress. **Concomitant therapy:** No additional information	**stroke** Mean age (SD): 63.7 (10.2) years N = 51 Median time after stroke (IQR): Community participation intervention: 18.5 (8.75 to 31.75) months No participation: 18 (11.5 to 32) months Ethnicity: Not stated/unclear Severity: Not stated/unclear Presence of communication difficulties: Not stated/unclear Presence of sensory difficulties: Not stated/unclear Presence of psychological distress: Not stated/unclear Presence of cognitive difficulties: Not stated/unclear Baseline mobility: Not stated/unclear	months Stroke-specific Patient-Reported Outcome Measures at <6 months Discontinuation at <6 months	as while they discuss social group integration, the program is home-based and does not necessarily lead to community participation. Setting: Home-dwelling people in Southern Taiwan Sources of funding: Funding for this study was provided by a grant from the National Science Council of Taiwan (NSC99-2314-B-468-001).

See Appendix D for full evidence tables.

1.1.6 Summary of the effectiveness evidence

Table 3: Clinical evidence summary: community participation intervention compared to other types of community participation intervention

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with other types of community participation interventions	Risk difference with community participation interventions	
Person/participant generic health-related quality of life (EQ-5D VAS, 0-100, higher values are better, change score) at <6 months	68 (1 RCT) follow-up: 4 months	⊕⊕◯◯ Low[a,b]	-	The mean person/participant generic health-related quality of life at <6 months was -1	MD **11 higher** (1.49 higher to 20.51 higher)	MID = 10.25 (0.5 x median baseline SD)
Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final value) at <6 months	97 (1 RCT) follow-up: 12 weeks	⊕◯◯◯ Very low[b,c]	-	The mean person/participant generic health-related quality of life at <6 months was 38.8	MD **0.5 lower** (4.18 lower to 3.18 higher)	MID = 2 (SF-36 established value)
Person/participant generic health-related quality of life (SF-36 mental component summary, 0-100, higher values are better, final value) at <6 months	97 (1 RCT) follow-up: 12 weeks	⊕◯◯◯ Very low[b,c]	-	The mean person/participant generic health-related quality of life at <6 months was 54	MD **1.2 lower** (5.02 lower to 2.62 higher)	MID = 3 (SF-36 established value)
Person/participant generic health-related quality of life (EQ-5D VAS, AQoL [different scale ranges], higher values are better, change scores) at ≥6 months	163 (2 RCTs) follow-up: mean 9 months	⊕◯◯◯ Very low[b,d,e]	-	-	SMD **0.77 SD higher** (0.13 higher to 1.41 higher)	MID = 0.5 SD (SMD))
Participation in leisure activities/social	68 (1 RCT) follow-up: 4	⊕⊕⊕◯ Moderate[a]	-	The mean participation in leisure	MD **0** (3.1 lower to 3.1 higher)	MID = 5.25 (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 other types of community participation interventions	Risk difference with community participation interventions	
groups (Adelaide Activities Profile, 0-63, higher values are better, change score) at <6 months	months			activities/social groups at <6 months was 1		baseline SD)
Participation in leisure activities/social groups (Adelaide Activities Profile, Health Education Impact Scale - Positive and active engagement in life domain [different scale ranges], higher values are better, change scores) at ≥6 months	163 (2 RCTs) follow-up: mean 9 months	⊕◯◯◯ Very low[b,d,e]	-	-	SMD **0.21 SD lower** (0.84 lower to 0.41 higher)	MID = 0.5 SD (SMD)
Psychological distress - Depression (CES-D, 0-60, lower values are better, final value) at <6 months	97 (1 RCT) follow-up: 12 weeks	⊕◯◯◯ Very low[b,c]	-	The mean psychological distress - Depression at <6 months was 11.4	MD **2.6 higher** (1.24 lower to 6.44 higher)	MID = 4.8 (0.5 x median baseline SD)
Psychological distress - Depression (Irritability, depression and anxiety scale - depression subscale, 0-20, lower values are better, change score) at ≥6 months	95 (1 RCT) follow-up: 6 months	⊕⊕◯◯ Low[b,e]	-	The mean psychological distress - Depression at ≥6 months was 0	MD 0.1 lower (0.24 lower to 0.03 higher)	MID = 0.17 (0.5 x median baseline SD)
Psychological distress - Anxiety (Irritability,	95 (1 RCT) follow-up: 6	⊕⊕◯◯ Low[b,e]	-	The mean psychological distress - Anxiety at ≥6	MD 0.1 lower (0.24 lower to 0.03	MID = 0.16 (0.5 x median baseline

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with other types of community participation interventions	Risk difference with community participation interventions	
depression and anxiety scale - anxiety subscale, 0-20, lower values are better, change score) at ≥6 months	months			months was 0	higher)	SD)
Discontinuation at <6 months	165 (2 RCTs) follow-up: mean 14 weeks	⨁◯◯◯ Very low[a,b,f]	RR 0.63 (0.22 to 1.78)	90 per 1,000	**33 fewer per 1,000** (70 fewer to 70 more)	MID (precision) = RR 0.80 – 1.25.
Discontinuation at ≥6 months	163 (2 RCTs) follow-up: mean 9 months	⨁◯◯◯ Very low[b,f]	RR 0.87 (0.35 to 2.16)	99 per 1,000	**13 fewer per 1,000** (64 fewer to 115 more)	MID (precision) = RR 0.80 – 1.25.

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

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 interventions and bias in measurement of the outcome)

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

e. Downgraded by 1 increment due to intervention indirectness (home-based program where community participation after the intervention is unclear)

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

Table 4: Clinical evidence summary: community participation intervention compared to no participation

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
Person/participant generic health-related quality of life (EQ-5D-3L, -0.11-1, higher values are better,	113 (1 RCT) follow-up: 3 months	⨁◯◯◯ Very low[a,b,c]	-	The mean person/participant generic health-related quality of life at <6 months was	MD **0.02 higher** (0.05 lower to 0.09 higher)	MID = 0.03 (EQ-5D established value)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
final values) at <6 months				0.69		
Person/participant generic health-related quality of life (EQ-5D VAS, 0-100, higher values are better, change scores) at <6 months	284 (2 RCTs) follow-up: mean 14 weeks	⊕◯◯◯ Very low[c,d,e]	-	The mean person/participant generic health-related quality of life at <6 months was 2.6	MD **4.13 higher** (2.51 lower to 10.78 higher)	MID = 9.53 (0.5 x median baseline SD)
Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final values) at <6 months	170 (2 RCTs) follow-up: mean 12 weeks	⊕◯◯◯ Very low[c,f]	-	The mean person/participant generic health-related quality of life at <6 months was 52.2	MD **1.87 higher** (0.71 lower to 4.46 higher)	MID = 2 (SF-36 established value)
Person/participant generic health-related quality of life (SF-36 mental component summary, 0-100, higher values are better, final values) at <6 months	170 (2 RCTs) follow-up: mean 12 weeks	⊕◯◯◯ Very low[c,f]	-	The mean person/participant generic health-related quality of life at <6 months was 38.4	MD **0.35 higher** (2.84 lower to 3.53 higher)	MID = 3 (SF-36 established value)
Person/participant generic health-related quality of life (SF-36 physical function, 0-100, higher values are better, final value) at <6 months	20 (1 RCT) follow-up: 16 weeks	⊕◯◯◯ Very low[c,g]	-	The mean person/participant generic health-related quality of life at <6 months was 40	MD **11.5 higher** (6.89 lower to 29.89 higher)	MID = 3 (SF-36 established value)
Person/participant generic health-related quality of life (SF-36 bodily pain, 0-100, higher values are better, final value) at <6 months	20 (1 RCT) follow-up: 16 weeks	⊕◯◯◯ Very low[c,g]	-	The mean person/participant generic health-related quality of life at <6 months was 70.6	MD **21.3 higher** (0.86 higher to 41.74 higher)	MID = 3 (SF-36 established MID)
Person/participant generic health-	20 (1 RCT)	⊕⊕◯◯ Low[g]	-	The mean person/participa	MD **25 higher**	MID = 3 (SF-36

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
related quality of life (SF-36 role physical, 0-100, higher values are better, final value) at <6 months	follow-up: 16 weeks			nt generic health-related quality of life at <6 months was 75	(3.06 higher to 46.94 higher)	established MID)
Person/participant generic health-related quality of life (SF-36 vitality, 0-100, higher values are better, final value) at <6 months	20 (1 RCT) follow-up: 16 weeks	⊕◯◯◯ Very low[c,g]	-	The mean person/participant generic health-related quality of life at <6 months was 61	MD **16.5 higher** (1.49 lower to 34.49 higher)	MID = 2 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 general health, 0-100, higher values are better, final value) at <6 months	20 (1 RCT) follow-up: 16 weeks	⊕◯◯◯ Very low[c,g]	-	The mean person/participant generic health-related quality of life at <6 months was 77.7	MD **8.2 higher** (7.93 lower to 24.33 higher)	MID = 2 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 mental health, 0-100, higher values are better, final value) at <6 months	20 (1 RCT) follow-up: 16 weeks	⊕◯◯◯ Very low[c,g]	-	The mean person/participant generic health-related quality of life at <6 months was 68.8	MD **14.4 higher** (1.13 lower to 29.93 higher)	MID = 3 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 role emotional, 0-100, higher values are better, final value) at <6 months	20 (1 RCT) follow-up: 16 weeks	⊕◯◯◯ Very low[c,g]	-	The mean person/participant generic health-related quality of life at <6 months was 70	MD **26.7 higher** (1.13 higher to 52.27 higher)	MID = 4 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 social function, 0-100, higher values are better, final value) at <6 months	20 (1 RCT) follow-up: 16 weeks	⊕⊕◯◯ Low[g]	-	The mean person/participant generic health-related quality of life at <6 months was 58.8	MD **31.2 higher** (7.03 higher to 55.37 higher)	MID = 3 (SF-36 established MID)
Person/participant generic health-related quality of	677 (3 RCTs) follow-up:	⊕⊕⊕◯ Moderate[h]	-	The mean person/participant generic	MD **0.03 lower** (0.04 lower	MID = 0.15 (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 no participation	Risk difference with community participation intervention	
life (EQ-5D-3L, AQoL, -0.11-1, higher values are better, change scores and final value) at ≥6 months	mean 9 months			health-related quality of life at ≥6 months was 0.24	to 0.01 lower)	baseline SD)
Person/participant generic health-related quality of life (EQ-5D VAS, Nottingham Health Profile, 0-100, higher values are better, change score and final value) at ≥6 months	167 (2 RCTs) follow-up: mean 9 months	⊕◯◯◯ Very low[c,e,i]	-	The mean person/participant generic health-related quality of life at ≥6 months was 19	MD **6.09 lower** (19.95 lower to 7.78 higher)	MID = 10.9 (0.5 x median baseline SD)
Person/participant generic health-related quality of life (SF-36 physical function, 0-100, higher values are better, change score) at ≥6 months	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean person/participant generic health-related quality of life at ≥6 months was 1.5	MD **1.2 higher** (6.46 lower to 8.86 higher)	MID = 3 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 bodily pain, 0-100, higher values are better, change score) at ≥6 months	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean person/participant generic health-related quality of life at ≥6 months was -4.9	MD **4.3 higher** (8.34 lower to 16.94 higher)	MID = 3 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 role physical, 0-100, higher values are better, change score) at ≥6 months	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean person/participant generic health-related quality of life at ≥6 months was 20.4	**MD 8.9 lower** (25.85 lower to 8.05 higher)	MID = 3 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 vitality, 0-100, higher	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean person/participant generic health-related quality of life at	**MD 1.6 lower** (9.22 lower to 6.02 higher)	MID = 2 (SF-36 established MID)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
values are better, change score) at ≥6 months				≥6 months was 8.3		
Person/participant generic health-related quality of life (SF-36 general health, 0-100, higher values are better, change score) at ≥6 months	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean person/participant generic health-related quality of life at ≥6 months was 0	**MD 0.6 lower** (8.48 lower to 7.28 higher)	MID = 2 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 mental health, 0-100, higher values are better, change score) at ≥6 months	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean person/participant generic health-related quality of life at ≥6 months was 5.3	**MD 1.9 higher** (4.84 lower to 8.64 higher)	MID = 3 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 role emotional, 0-100, higher values are better, change score) at ≥6 months	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean person/participant generic health-related quality of life at ≥6 months was 11.6	**MD 13.6 higher** (6.05 lower to 33.25 higher)	MID = 4 (SF-36 established MID)
Person/participant generic health-related quality of life (SF-36 social function, 0-100, higher values are better, change score) at ≥6 months	86 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean person/participant generic health-related quality of life at ≥6 months was 8.8	**MD 2.4 lower** (15.94 lower to 11.14 higher)	MID = 3 (SF-36 established MID)
Return to work at <6 months	80 (1 RCT) follow-up: 3 months	⊕⊕⊕◯ Moderate[c]	RR 2.20 (0.84 to 5.76)	125 per 1,000	**150 more per 1,000** (20 fewer to 595 more)	MID (precision) = RR 0.80 – 1.25
Return to work at ≥6 months	80 (1 RCT) follow-up: 6 months	⊕⊕⊕⊕ High	RR 3.00 (1.54 to 5.86)	200 per 1,000	**400 more per 1,000** (108 more to 972 more)	MID (precision) = RR 0.80 – 1.25
Wellbeing scores (General Well-	56 (1 RCT)	⊕◯◯◯ Very	-	The mean wellbeing	MD **2.2 higher**	MID = 8.4 (0.5 x

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
Being Schedule, 0-110, higher values are better, change score) at <6 months	follow-up: 12 weeks	low[c,h,k]		scores at <6 months was 4.4	(5.44 lower to 9.84 higher)	median baseline SD)
Wellbeing scores (Warwick Edinburgh Mental wellbeing scale, 14-70, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⨁◯◯◯ Very low[a,c]	-	The mean wellbeing scores at ≥6 months was 49.94	MD **4.75 higher** (2.84 lower to 12.34 higher)	MID = 5.0 (0.5 x median baseline SD)
Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Adelaide Activities Profile [different scale ranges], higher values are better, change scores) at <6 months	293 (3 RCTs) follow-up: mean 13 weeks	⨁⨁◯◯ Low[f]	-	-	SMD **0.23 SD higher** (0 to 0.46 higher)	MID = 0.5 SD (SMD)
Participation in leisure activities/social groups scores (number of different activities, higher values are better, change score) at <6 months	56 (1 RCT) follow-up: 12 weeks	⨁◯◯◯ Very low[c,h,k]	-	The mean participation in leisure activities/social groups scores at <6 months was -0.7	MD **2.9 higher** (1.09 higher to 4.71 higher)	MID = 1.54 (0.5 x median baseline SD)
Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Total leisure score, Social participation scale [different scale ranges], higher values are better, final values) at <6	280 (3 RCTs) follow-up: mean 3 months	⨁◯◯◯ Very low[c,e,l]	-	-	SMD **0.73 SD higher** (0.2 higher to 1.26 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 no participation	Risk difference with community participation intervention	
months						
Participation in leisure activities/social groups scores (Adelaide Activities Profile, Health Education Impact scale - positive and active engagement in life domain [different scale ranges], higher values are better, change scores) at ≥6 months	245 (2 RCTs) follow-up: mean 9 weeks	⨁⨁⨁◯ Moderate[h]	-	-	SMD **0.2 SD higher** (0.06 lower to 0.47 higher)	MID = 0.5 SD (SMD)
Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Nottingham Leisure Questionnaire, Social Connectedness Scale, Total leisure score, Social participation scale [different scale ranges], higher values are better, final values) at ≥6 months	729 (5 RCTs) follow-up: mean 8 months	⨁◯◯◯ Very low[c,e,l]	-	-	SMD **0.3 SD higher** (0.07 lower to 0.67 higher)	MID = 0.5 SD (SMD)
Psychological distress - Depression (PHQ-9, Stroke specific Geriatric Depression Scale, Geriatric Depression Scale 15, CES-D [different scale ranges], lower values are better, change scores) at	276 (4 RCTs) follow-up: 11 weeks	⨁⨁◯◯ Low[f]	-	-	SMD **0.23 SD lower** (0.46 lower to 0.01 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 no participation	Risk difference with community participation intervention	
<6 months						
Psychological distress - Depression (HADS total score, Beck Depression Scale, Geriatric Depression Scale, CES-D [different scale ranges], lower values are better, final values) at <6 months	477 (6 RCTs) follow-up: mean 11 weeks	⊕◯◯◯ Very low[e,l,m]	-	-	SMD **0.02 SD lower** (0.33 lower to 0.28 higher)	MID = 0.5 SD (SMD)
Psychological distress - Depression (people with 'definite depression') at <6 months	65 (1 RCT) follow-up: 3 months	⊕◯◯◯ Very low[c,n,o]	RR 0.52 (0.20 to 1.37)	364 per 1,000	**175 fewer per 1,000** (291 fewer to 135 more)	MID (precision) = RR 0.80 – 1.25
Psychological distress - Depression (GHQ-12, HADS depression, Irritability, depression and anxiety scale depression subscale [different scale ranges], lower values are better, change scores) at ≥6 months	665 (3 RCTs) follow-up: mean 9 months	⊕⊕◯◯ Low[e]	-	-	**SMD 0.35 SD** higher (0.19 higher to 0.5 higher)	MID = 0.5 SD (SMD)
Psychological distress - Depression (GHQ, Geriatric Depression Scale [different scale ranges], lower values are better, final values) at ≥6 months	625 (2 RCTs) follow-up: mean 12 months	⊕◯◯◯ Very low[b,c,p]	-	-	SMD **0.1 SD higher** (0.44 lower to 0.63 higher)	MID = 0.5 SD (SMD)
Psychological distress - Depression	65 (1 RCT) follow-up: 6	⊕◯◯◯ Very low[c,n,o]	RR 0.42 (0.14 to	341 per 1,000	**198 fewer per 1,000** (293 fewer	MID (precision) = RR 0.80

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
(people with 'definite depression') at ≥6 months	months		1.29)		to 99 more)	– 1.25
Psychological distress - Anxiety (State Trait Anxiety Inventory - State subscale, 20-80, lower values are better, change score and final value) at <6 months	36 (2 RCTs) follow-up: mean 8 weeks	⨁⨁◯◯ Low[c,q]	-	The mean psychological distress - Anxiety at <6 months was 21.6	MD **4.64 lower** (8.92 lower to 0.36 lower)	MID = 5.6 (0.5 x median baseline SD)
Psychological distress - Anxiety (State Trait Anxiety Inventory - Trait subscale, 20-80, lower values are better, change score and final value) at <6 months	36 (2 RCTs) follow-up: mean 8 weeks	⨁⨁◯◯ Low[c,q]	-	The mean psychological distress - Anxiety at <6 months was 22.4	MD **5.4 lower** (9.98 lower to 0.82 lower)	MID = 5.1 (0.5 x median baseline SD)
Psychological distress - Anxiety (HADS-A, Irritability, depression and anxiety scale anxiety subscale [different scale ranges], lower values are better, change scores) at ≥6 months	229 (2 RCTs) follow-up: mean 8 months	⨁◯◯◯ Very low[c,e,h]	-	-	SMD **0.15 SD higher** (0.56 lower to 0.87 higher)	MID = 0.5 SD (SMD)
Activities of daily living (Barthel index, Functional Independence Measure motor subscale [different scale ranges], higher values are better, change scores) at <6 months	90 (2 RCTs) follow-up: mean 12 weeks	⨁⨁◯◯ Very low[c,e,h,r]	-	-	SMD **0.96 SD higher** (0.23 lower to 2.14 higher)	MID = 0.5 SD (SMD)
Activities of daily living (Barthel index, Korean	273 (3 RCTs) follow-up:	⨁⨁⨁◯ Moderate[e]	-	-	SMD **0.08 SD higher** (0.32 lower	MID = 0.5 SD (SMD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
modified Barthel index, Functional Independence Measure [different scale ranges], higher values are better, final values) at <6 months	mean 3 months				to 0.47 higher)	
Activities of daily living (Canadian Occupational Performance Measure - Performance subscale, 0-10, higher values are better, final values) at <6 months	109 (2 RCTs) follow-up: mean 9 weeks	⊕◯◯◯ Very low[c,e,f]	-	The mean activities of daily living at <6 months was 4.6	MD **0.73 higher** (0.52 lower to 1.98 higher)	MID = 0.53 (0.5 x median baseline SD)
Activities of daily living (Canadian Occupational Performance Measure - Satisfaction subscale, 0-10, higher values are better, final values) at <6 months	109 (2 RCTs) follow-up: mean 9 weeks	⊕◯◯◯ Very low[c,e,f]	-	The mean activities of daily living at <6 months was 4.5	MD **0.72 higher** (1.62 lower to 3.07 higher)	MID = 1.1 (0.5 x median baseline SD)
Activities of daily living (Nottingham Activities of Daily Living - Domestic subscale, scale range unclear, higher values are better, final value) at <6 months	65 (1 RCT) follow-up: 3 months	⊕◯◯◯ Very low[c,n]	-	The mean activities of daily living at <6 months was 4.34	MD **0.47 higher** (1.88 lower to 2.82 higher)	MID = 1.96 (0.5 x median control group SD)
Activities of daily living (Nottingham Activities of Daily Living - Kitchen subscale, scale range unclear, higher values are better, final value) at <6 months	65 (1 RCT) follow-up: 3 months	⊕◯◯◯ Very low[c,n]	-	The mean activities of daily living at <6 months was 8.88	MD **1.55 higher** (0.86 lower to 3.96 higher)	MID = 2.73 (0.5 x median control group SD)
Activities of daily	65	⊕◯◯◯	-	The mean	MD **2.03**	MID = 1.3

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
living (Nottingham Activities of Daily Living - Leisure subscale, scale range unclear, higher values are better, final value) at <6 months	(1 RCT) follow-up: 3 months	Very low[c,n]		activities of daily living at <6 months was 6.83	**higher** (0.15 higher to 3.91 higher)	(0.5 x median control group SD)
Activities of daily living (Nottingham Activities of Daily Living - Mobility subscale, scale range unclear, higher values are better, final value) at <6 months	65 (1 RCT) follow-up: 3 months	⊕◯◯◯ Very low[c,n]	-	The mean activities of daily living at <6 months was 6.54	MD **4.13 higher** (1.47 higher to 6.79 higher)	MID = 2.4 (0.5 x median baseline SD)
Activities of daily living (Barthel index, 0-20, higher values are better, change score) at ≥6 months	80 (1 RCT) follow-up: 6 months	⊕⊕⊕◯ Moderate[c]	-	The mean activities of daily living at ≥6 months was 3.6	MD **0.7 lower** (1.84 lower to 0.44 higher)	MID = 1.4 (0.5 x median baseline SD)
Activities of daily living (Korean modified Barthel index, Functional Independence Measure, Nottingham Extended Activities of Daily Living [different scale ranges], higher values are better, final values) at ≥6 months	1097 (4 RCTs) follow-up: mean 11 months	⊕⊕⊕◯ Moderate[h]	-	-	SMD **0.01 SD higher** (0.11 lower to 0.13 higher)	MID = 0.5 SD (SMD)
Activities of daily living (Communication Activities of Daily Living, 0-100, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⊕◯◯◯ Very low[a,c]	-	The mean activities of daily living at ≥6 months was 83	MD **6.81 higher** (1.4 higher to 12.22 higher)	MID = 3.9 (0.5 x median baseline SD)
Activities of daily living (Canadian Occupational	74 (1 RCT) follow-up: 9	⊕◯◯◯ Very low[c,j]	-	The mean activities of daily living at ≥6	MD **0.5 higher** (0.83 lower	MID = 1.1 (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 no participation	Risk difference with community participation intervention	
Performance Measure - Performance subscale, 0-10, higher values are better, change score) at ≥6 months	months			months was 1.7	to 1.83 higher)	baseline SD)
Activities of daily living (Canadian Occupational Performance Measure - Satisfaction subscale, 0-10, higher values are better, change score) at ≥6 months	75 (1 RCT) follow-up: 9 months	⊕◯◯◯ Very low[c,j]	-	The mean activities of daily living at ≥6 months was 1.8	MD **0.7 lower** (1.92 lower to 0.52 higher)	MID = 1.1 (0.5 x median baseline SD)
Activities of daily living (Nottingham Activities of Daily Living - Domestic subscale, scale range unclear, higher values are better, final value) at ≥6 months	65 (1 RCT) follow-up: 6 months	⊕◯◯◯ Very low[c,n]	-	The mean activities of daily living at ≥6 months was 4.38	MD **0.67 higher** (1.52 lower to 2.86 higher)	MID = 1.8 (0.5 x median baseline SD)
Activities of daily living (Nottingham Activities of Daily Living - Kitchen subscale, scale range unclear, higher values are better, final value) at ≥6 months	65 (1 RCT) follow-up: 6 months	⊕◯◯◯ Very low[c,n]	-	The mean activities of daily living at ≥6 months was 10.68	MD **1.72 higher** (1.57 lower to 5.01 higher)	MID = 3.7 (0.5 x median baseline SD)
Activities of daily living (Nottingham Activities of Daily Living - Leisure subscale, scale range unclear, higher values are better, final value) at ≥6 months	65 (1 RCT) follow-up: 6 months	⊕◯◯◯ Very low[c,n]	-	The mean activities of daily living at ≥6 months was 6.9	MD **3.3 higher** (1.56 higher to 5.04 higher)	MID = 1.8 (0.5 x median baseline SD)
Activities of daily living (Nottingham Activities of Daily Living - Mobility	65 (1 RCT) follow-up: 6 months	⊕◯◯◯ Very low[c,n]	-	The mean activities of daily living at ≥6 months was 7.5	MD **4.8 higher** (2.3 higher to 7.3	MID = 2.7 (0.5 x median baseline

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
subscale, scale range unclear, higher values are better, final value) at ≥6 months					higher)	SD)
Stroke-specific Patient-Reported Outcome Measures (SAQoL, SS-SIP30, Preference-based Stroke Index [different scale ranges], higher values are better, change scores) at <6 months	262 (3 RCTs) follow-up: mean 12 weeks	⊕⊕◯◯ Low[s]	-	-	SMD **0.03 SD higher** (0.21 lower to 0.27 higher)	MID = 0.5 SD (SMD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life, Sickness Impact Profile [different scale ranges], higher values are better, final values) at <6 months	140 (3 RCTs) follow-up: mean 11 weeks	⊕◯◯◯ Very low[c,e]	-	-	SMD **0.15 SD higher** (0.22 lower to 0.51 higher)	MID = 0.5 SD (SMD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Communication subscale, 0-100, higher values are better, change scores and final values) at <6 months	272 (4 RCTs) follow-up: mean 13 weeks	⊕◯◯◯ Very low[c,e,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 44.3	MD **2.64 higher** (4.29 lower to 9.56 higher)	MID = 7.4 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Emotion/Mood subscale, 0-100, higher values are better, change	272 (4 RCTs) follow-up: mean 13 weeks	⊕◯◯◯ Very low[c,e,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 37.9	MD **2.63 higher** (5.34 lower to 10.61 higher)	MID = 8.7 (0.5 x median baseline SD)

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
scores and final values) at <6 months						
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Memory subscale, 0-100, higher values are better, change scores and final values) at <6 months	272 (4 RCTs) follow-up: mean 13 weeks	⊕◯◯◯ Very low[c,e,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 40.3	MD **0.91 higher** (7.75 lower to 9.56 higher)	MID = 9.5 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Physical subscale, 0-100, higher values are better, final values) at <6 months	181 (2 RCTs) follow-up: mean 11 weeks	⊕◯◯◯ Very low[c,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 69.8	MD **8.31 lower** (14.52 lower to 2.1 lower)	MID = 10.2 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Strength subscale, 0-100, higher values are better, change scores) at <6 months	91 (2 RCTs) follow-up: mean 16 weeks	⊕◯◯◯ Very low[c,e,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 3.2	MD **7.67 higher** (6.1 lower to 21.43 higher)	MID = 10.2 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Hand function subscale, 0-100, higher values are better, change scores) at <6 months	91 (2 RCTs) follow-up: mean 16 weeks	⊕◯◯◯ Very low[c,e]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 5.4	MD **5.7 higher** (14.08 lower to 25.47 higher)	MID = 18.3 (0.5 x median baseline SD)
Stroke-specific Patient-Reported	91 (2 RCTs)	⊕◯◯◯ Very	-	The mean stroke-specific	MD **9.11 higher**	MID = 10.6 (0.5 x

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	
Outcome Measures (Stroke Impact Scale - Mobility/Community mobility subscale, 0-100, higher values are better, change scores) at <6 months	follow-up: mean 16 weeks	low[c,e]		Patient-Reported Outcome Measures at <6 months was 0.75	(1.36 lower to 19.59 higher)	median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Activities of daily living subscale, 0-100, higher values are better, change scores) at <6 months	91 (2 RCTs) follow-up: mean 16 weeks	⨁◯◯◯ Very low[c,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was -0.1	MD **6.08 higher** (1.15 higher to 11.01 higher)	MID = 10.1 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Social participation subscale, 0-100, higher values are better, change scores and final values) at <6 months	294 (5 RCTs) follow-up: mean 11 weeks	⨁◯◯◯ Very low[c,e,u]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 25.5	MD **4.87 higher** (3.69 lower to 13.44 higher)	MID = 10.8 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Stroke recovery/general recovery subscale, 0-100, higher values are better, change scores and final values) at <6 months	272 (4 RCTs) follow-up: 13 weeks	⨁◯◯◯ Very low[c,e,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 32.8	MD **5.38 higher** (8.44 lower to 19.21 higher)	MID = 10.8 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome	34 (1 RCT) follow-up:	⨁⨁⨁◯ Moderate	-	The mean stroke-specific Patient-	MD **0.44 lower** (2.44 lower	MID = 1.6 (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 no participation	Risk difference with community participation intervention	
Measures (Stroke specific Quality of Life - Energy subscale, 3-15, higher values are better, final value) at <6 months	12 weeks	[c]		Reported Outcome Measures at <6 months was 10	to 1.56 higher)	baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Family roles subscale, 3-15, higher values are better, final value) at <6 months	34 (1 RCT) follow-up: 12 weeks	⨁⨁⨁◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 9.56	MD **0.88 higher** (1.25 lower to 3.01 higher)	MID = 1.4 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Language subscale, 5-25, higher values are better, final value) at <6 months	34 (1 RCT) follow-up: 12 weeks	⨁⨁⨁◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 17.25	MD **2.47 higher** (0.82 lower to 5.76 higher)	MID = 2.9 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mobility subscale, 6-30, higher values are better, final value) at <6 months	34 (1 RCT) follow-up: 12 weeks	⨁⨁⨁◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 18.81	MD **3.08 higher** (0.66 lower to 6.82 higher)	MID = 2.47 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mood subscale, 5-25, higher values are better, final value) at <6 months	34 (1 RCT) follow-up: 12 weeks	⨁⨁⨁◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 15.69	MD **1.87 higher** (0.82 lower to 4.56 higher)	MID = 2.5 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome	34 (1 RCT) follow-up:	⨁⨁◯◯ Low [c]	-	The mean stroke-specific Patient-	MD **0.2 higher** (2.19 lower	MID = 2.0 (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 no participation	Risk difference with community participation intervention	
Measures (Stroke specific Quality of Life - Personality subscale, 3-15, higher values are better, final value) at <6 months	12 weeks			Reported Outcome Measures at <6 months was 9.69	to 2.59 higher)	baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Self-care subscale, 5-25, higher values are better, final value) at <6 months	34 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[c]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 12.06	MD **0.5 higher** (1.79 lower to 2.79 higher)	MID = 1.6 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Social roles subscale, 5-25, higher values are better, final value) at <6 months	34 (1 RCT) follow-up: 12 weeks	⊕⊕◯◯ Low[c]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 14.63	MD **0.35 lower** (3.63 lower to 2.93 higher)	MID = 2.3 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Thinking subscale, 3-15, higher values are better, final value) at <6 months	34 (1 RCT) follow-up: 12 weeks	⊕⊕⊕◯ Moderate[c]	-	The mean stroke-specific Patient-Reported Outcome Measures at <6 months was 9.38	MD **1.06 higher** (0.74 lower to 2.86 higher)	MID = 1.52 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life, 0-245, higher values are better, change score) at ≥6 months	80 (1 RCT) follow-up: 6 months	⊕⊕⊕◯ Moderate[c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 51.8	MD **7.5 lower** (26.76 lower to 11.76 higher)	MID = 17.1 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke	209 (3 RCTs) follow-up: 9 months	⊕◯◯◯ Very low[c,e,r]	-	-	SMD **0.26 SD higher** (0.14 lower to 0.65	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 no participation	Risk difference with community participation intervention	
and Aphasia Quality of Life-39, Stroke specific Quality of Life, Stroke Impact Scale [different scale ranges], higher values are better, final values) at ≥6 months					higher)	
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Communication subscale, 0-100, higher values are better, final value) at ≥6 months	159 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[c,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 92.05	MD **6.8 lower** (12.4 lower to 1.2 lower)	MID = 8.9 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Emotion/Mood subscale, 0-100, higher values are better, final value) at ≥6 months	159 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[c,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 82.77	MD **3.74 lower** (8.85 lower to 1.37 higher)	MID = 8.2 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Memory subscale, 0-100, higher values are better, final value) at ≥6 months	159 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[c,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 87.43	MD **4.43 lower** (9.93 lower to 1.07 higher)	MID = 8.8 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Physical subscale, 0-100, higher values are better, final value)	159 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[c,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 72.86	MD **7.22 lower** (14.37 lower to 0.07 lower)	MID = 11.5 (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 no participation	Risk difference with community participation intervention	
at ≥6 months						
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Social participation subscale, 0-100, higher values are better, final value) at ≥6 months	159 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[c,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 76.25	MD **6.93 lower** (13.37 lower to 0.49 lower)	MID = 10.3 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Stroke recovery/general recovery subscale, 0-100, higher values are better, final value) at ≥6 months	159 (1 RCT) follow-up: 12 months	⨁◯◯◯ Very low[c,h,t]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 73.84	MD **5.43 lower** (11.61 lower to 0.75 higher)	MID = 9.9 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Energy subscale, 3-15, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⨁⨁◯◯ Low[c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 9	MD **0** (1.78 lower to 1.78 higher)	MID = 1.6 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Family roles subscale, 3-15, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⨁⨁◯◯ Low[c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 9.88	MD **0.34 higher** (1.83 lower to 2.51 higher)	MID = 1.4 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Language	34 (1 RCT) follow-up: 6 months	⨁⨁⨁◯ Moderate[c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6	MD **1.98 higher** (1.1 lower to 5.06 higher)	MID = 2.9 (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 no participation	Risk difference with community participation intervention	
subscale, 5-25, higher values are better, final value) at ≥6 months				months was 16.69		
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mobility subscale, 6-30, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⊕⊕⊕◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 17.38	MD **3.34 higher** (0.55 lower to 7.23 higher)	MID = 2.47 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mood subscale, 5-25, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⊕⊕⊕◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 14.69	MD **3.09 higher** (0.18 higher to 6 higher)	MID = 2.5 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Personality subscale, 3-15, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⊕⊕⊕◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 10.38	MD **0.79 higher** (1.44 lower to 3.02 higher)	MID = 2.0 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Self-care subscale, 5-25, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⊕⊕⊕◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 16	MD **2.78 higher** (0.25 lower to 5.81 higher)	MID = 1.6 (0.5 x median baseline SD)
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Social roles	34 (1 RCT) follow-up: 6 months	⊕⊕⊕◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6	MD **0.92 higher** (2.18 lower to 4.02 higher)	MID = 2.3 (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 no participation	Risk difference with community participation intervention	
subscale, 5-25, higher values are better, final value) at ≥6 months				months was 15.19		
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Thinking subscale, 3-15, higher values are better, final value) at ≥6 months	34 (1 RCT) follow-up: 6 months	⨁⨁⨁◯ Moderate [c]	-	The mean stroke-specific Patient-Reported Outcome Measures at ≥6 months was 9.06	MD **2.27 higher** (0.46 higher to 4.08 higher)	MID = 1.52 (0.5 x median baseline SD)
Discontinuation at <6 months	1403 (20 RCTs) follow-up: mean 11 weeks	⨁◯◯◯ Very low [r,v,w]	RD 0.00 (-0.03 to 0.03)	101 per 1,000	**0 fewer per 1,000** (30 fewer to 30 more) [x]	Precision calculated through Optimal Information Size (OIS) due to zero events in some studies. OIS determined power for the sample size = 0.04 (0.8-0.9 = serious, <0.8 = very serious).
Discontinuation at ≥6 months	2040 (13 RCTs) follow-up: mean 9 months	⨁⨁⨁◯ Moderate [c]	RR 0.89 (0.74 to 1.06)	224 per 1,000	**25 fewer per 1,000** (58 fewer to 13 more)	MID (precision) = RR 0.80 – 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 the randomisation process and bias due to deviations from the intended interventions)

b. Downgraded by 1 or 2 increments because of intervention indirectness (as the intervention is a self management program that educates on but may not necessarily lead to community participation)

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

d. 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 the randomisation process, bias due to deviations from the intended

Outcomes	№ of participants (studies) Follow-up	Certainty of the evidence (GRADE)	Relative effect (95% CI)	Anticipated absolute effects		Comments
				Risk with no participation	Risk difference with community participation intervention	

interventions and bias in measurement of the outcome)

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

f. 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 the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data and bias in measurement of the outcome)

g. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to the randomisation process)

h. Downgraded by 1 or 2 increments because of intervention indirectness (as the intervention is a home-based program that may not necessarily lead to community participation)

i. 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 the randomisation process, bias in measurement of the outcome and bias in selection of the reported result)

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

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

l. 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 the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data, bias in measurement of the outcome and bias in selection of the reported result)

m. Downgraded by 1 or 2 increments because of a mixture of intervention indirectness (as the intervention is a home-based program that may not necessarily lead to community participation) and outcome indirectness (using HADS-total scale instead of the depression subscale)

n. 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 the randomisation process, bias due to deviations from the intended interventions, bias in measurement of the outcome and bias in selection of the reported result)

o. Downgraded by 1 or 2 increments because of outcome indirectness (reporting an outcome defined in the protocol as continuous in a dichotomous form)

p. 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 the randomisation process, bias due to missing outcome data, and bias in measurement of the outcome)

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

r. 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 the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data and bias in selection of the reported result)

s. 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 the randomisation process and bias in measurement of the outcome)

t. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias due to the randomisation process)

u. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to a mixture of bias due to the randomisation process and bias in selection of the reported result)

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

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

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

See Appendix F for full GRADE tables.

1.1.7 Economic evidence

1.1.7.1 Included studies

Four health economic studies with relevant comparisons were included in this review. [12, 15, 21, 41] The first study compared a community exercise and education scheme to standard care and was also included as part of the circuit-class training review for this guideline.[15] The second study compared a community-based outdoor mobility and transportation intervention to usual care only.[21] The third study compared a self-management intervention (including an educational component regarding community participation) to an active control group, who received stroke-specific education only.[41] Note that this study was also included as part of the self-management review for this guideline. The fourth study compared peer-befriending visits plus usual care to usual care alone.[12] These are summarised in the health economic evidence profile below (Table 5) and the health economic evidence tables in Appendix H.

No health economic studies were included that compared the following interventions: political participation and civic engagement (including volunteering); religious participation; instrumental activities of daily living such as communication management and shopping; and occupation-based interventions aiming to support access to work.

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: community participation interventions compared to no participation

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
Harrington 2010[15] (UK)	Partially applicable[(a)]	Potentially serious limitations[(b)]	• Within-RCT analysis (Harrington 2010[15]) • Cost-consequence analysis (CC) (various health outcomes). • Population: Adults with stroke living in the community for at least three months • Comparators: 1. Standard care plus an information sheet detailing local groups and contact numbers (n=124) In all areas stroke survivors were invited to a six-month review. 2. Community exercise and education scheme in addition to standard care (n=119) held twice weekly for eight weeks, facilitated by volunteers and qualified exercise instructors (supported by a physiotherapist), each with nine participants plus carers or family members. Sessions were held in leisure and community centres and consisted of 1 hour of exercise followed by a short break, and 1 hour of interactive education. • Follow-up: 12 months	£746[(c)]	2-1:[(d)] SIPSO physical change score at 12 months (median): 1 (95% CI: NR) WHOQol-Bref psychological change score at 6 months (median): 6.2 (95% CI: NR)	n/a	No sensitivity analyses undertaken.
Logan 2014[21] (UK)	Partially applicable[(e)]	Potentially serious limitations[(f)]	• Within-RCT analysis (n=568) (Logan 2014[21]) • Cost-utility analysis (QALYs) • Population: Adults with stroke at least six weeks prior to recruitment, wishing to get	£3,414[(g)]	0.027 fewer QALYs	Dominated by usual care (higher costs and fewer QALYs)	The probability that the intervention was cost-effective,

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty
			out of the house more often. • Comparators: 1. Usual care only (n=281) Provision of verbal and written local mobility and transport information during baseline visit. This included information about bus times, local community transport, taxi services, wheelchair services, disabled persons' car badges, wheelchair borrowing schemes and mobility equipment. 2. Practice of outdoor mobility (n=287). Up to 12 sessions to encourage use of community mobility opportunities (including public transport, walking and mobility devices). • Follow-up: 12 months				compared with the control, was 5.2% at a threshold of £20,000 per QALY. Study conclusions were supported by the results of the sensitivity analyses.
Van Mastrigt 2020[41] (Netherlands)	Partially applicable[(h)]	Potentially serious limitations[(i)]	• Within-RCT analysis (Restore4Stroke, Tielemans 2015[39]) • 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 based	£414[(j)]	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
			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 content. • Follow-up: 12 months				
Flood 2022[41] (UK)	Directly applicable	Potentially serious limitations[(k)]	• Exploratory within-trial analysis of the SUPERB feasibility RCT[16] excluded from the clinical review. • Cost-utility analysis (QALYs) • Population: Adults with aphasia (mostly mild (66%)) due to stroke and low levels of emotional distress (score of ≤2 on Depression Intensity Scale Circles (DISCS)). • Comparators: 1. Control group (n=28) received usual care, i.e., all health, social care and voluntary services available to them in their borough. 2. Usual care plus peer befriending (n=28). Participants received 6 1-hour peer-befriending visits over 3 months. The schedule, nature of visits, and goals (for example: discuss concerns; pursue activities) will be agreed between the pair. Visits could include conversation, problem solving, trips out, joint activities. • Follow-up: 10 months	£2,371[(l)]	0.0479 fewer QALYs[(m)]	Peer briefing dominated by usual care (Higher costs and fewer QALYs)	Probability Intervention 2 cost effective (£20K/£30K threshold): NR/35% The ICER at 10 months when using an improvement change in mood (GHQ-12) as the utility value was £373 per QALY gained[(n)]. These results also suggested befriending model of care had a 66% probability of being cost-effective.

Study	Applicability	Limitations	Other comments	Incremental cost	Incremental effects	Cost effectiveness	Uncertainty

Abbreviations: 95% CI= 95% confidence interval; DISCS= Depression Intensity Scale Circles (scale 0-10, lower values are better); EQ-5D-3L (5L)= EuroQol 5 dimensions 3 levels (5 levels) (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); GHQ-12= General health questionnaire-12 (scale 0-12, lower values are better); ICER= incremental cost-effectiveness ratio; NA= not applicable; NR= not reported; PSS= personal social services; QALYs= quality-adjusted life years; RCT= randomised controlled trial; SIPSO= Subjective Index of Physical and Social Outcome (scale: 0 to 20, higher values are better); WHOQol-Bref psychological= World Health Organization Quality-Of-Life Psychological Scale (scale: 0 to 100, higher values are better).

(a) QALYs not used. 2005 resource use and unit costs may not reflect current UK NHS context.

(b) RCT (Harrington 2010[15]) was excluded from the clinical review as the clinical outcomes were reported as medians and 95% CIs (GRADE analysis is designed for mean differences). Within-trial analysis and so only reflects this study and not the wider evidence base identified in the clinical review. Unclear if time horizon (12 months) was sufficient to assess the full costs and benefits. Sensitivity analyses not performed.

(c) 2005 UK pounds. Cost components included: NHS costs (primary care consultations, secondary care, community care and prescribed medication), and social care costs (home care, meals on wheels, use of a day centre and social worker time). See Table 10 for cost breakdown between intervention groups.

(d) The study reports outcomes relevant to the review as median and interquartile range values, that could not be used in the analysis of the clinical evidence and so were not extracted in the clinical review. In the circuit class training review, unpublished data was obtained from a Cochrane review for the outcome of the timed up and go test for this study that included mean and standard deviation values. This outcome was not relevant to the community participation review.

(e) 2011-2012 UK resource use and 2010-2011unit costs may not reflect current UK NHS context.

(f) HTA Economic evaluation that was conducted alongside a rigorously run pragmatic RCT and followed guidelines for best practice throughout. Within-trial analysis of costs and outcomes based on Logan 2014 RCT included in clinical review and so only reflects this study and not the wider evidence base identified in the clinical review. Baseline mobility as well as cognitive, sensory or communication difficulties were either not stated or unclear. A number of assumptions were required in order to estimate some of the cost variables, for example it was unclear (for a few participants) whether they were reporting average times per carer/home help visit or total times for the week.

(g) 2010-2011 UK pounds. Cost components included: Staff time associated with healthcare professional (including training and travel costs), or home help visits; visits to accident and emergency, walk-in centres, outpatients, day centres; and admissions to hospital, residential homes and nursing homes.

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

(i) 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.

(j) 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 (for example braces and special glasses); and home adjustments (for example toilet or shower adjustment).

(k) Exploratory within-trial analysis of a single RCT with a small sample size, 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. Estimates of resource use were based on data from the study population and not a systematic review. Probabilistic sensitivity analyses were reported for £30K threshold when NICE reference case prefers £20,000 threshold.

(l) 2018 UK pounds. No statistically significant differences in health and social care costs between the control and intervention arms at 10-months except for outpatient appointments (higher in control, p=0.04) Intervention costs (Befriender visits, staff training and supervision) and healthcare resource use e.g., inpatient and outpatient hospital visits, GP, PT, OT and SLT visits, community-based HCP visits, residential care, nursing homes and social services i.e., help or support worker NHS/social services.

(m) EQ-5D scores were not reported but incremental QALY was estimated by dividing the incremental cost by the ICER reported in the paper (£2,371/-£49,488). Of note, the study reported a negative ICER, suggesting a QALY loss. When an intervention has higher costs and lower QALYs, it is said to be dominated by the comparator. A negative ICER is not reported.

(n) Hilari 2021[16] reported an estimated mean difference of −1.23 (95% CI: -2.63, 0.17) between peer-friending and usual care arms.

1.1.9 Economic model

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

1.1.10 Unit costs

Community participation 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). This was expected given the inclusion of several distinct interventions. Key differences in resource use were due to:

- Variation in method of 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.
- Significant variation in the frequency and duration of the self-management intervention delivered, with sessions ranging from 10 minutes to 4 hours, occurring 1-7 days per week. In the included clinical studies, the interventions were delivered for between 4 weeks and 12 months and had follow-up periods from 1-12 months.
- Staff who delivered the intervention varied but it was primarily delivered by a member of the rehabilitation team or other healthcare professionals trained to provide stroke-related care such as occupational therapists, nurses, physiotherapists, and psychologists. One study from the clinical review (Lund 2012[22]) and one health economic study (Harrington 2010[15] both used rehabilitation therapists as well as trained volunteers to deliver the intervention. Harrington 2010 also included a qualified exercise instructor, as did two other studies (Mayo 2015[25] and Song 2021[35]) included in the clinical review.
- Additional resource use required to deliver the intervention, such as staff-training costs and information or instructional materials. One study (Marshall 2020[24]) took place online using a virtual reality platform for group sessions, where the average cost per participant was £1,364 for 14 sessions (delivered over 6 months with sessions occurring once a fortnight), or £114 per average cost of online attendance (excluding hardware).

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

Table 6: Unit costs of health care professionals who may be involved in delivering community participation interventions

Resource	Cost per working hour (community)[(a)]	Source
Band 6 PT/OT/SLT	£55	PSRRU 2021[18]
Band 7 PT/OT/SLT	£67	
Band 6 nurse	£58	
Band 7 nurse	£69	
Rehabilitation assistant	£32	PSRRU 2021[18], estimated based on agenda for change band 3 salary[(b)]
Band 6 psychologist	£55	PSRRU 2021[18], assumed to be the same as Dietitian[(c)]
Band 7 psychologist	£67	

Abbreviations: Occupational therapist; PT= physiotherapist; SLT= speech and language therapist.

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

(b) Band 3 PT 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).

(c) Same assumption was used in the NICE chronic pain guideline[27]

1.1.11 Evidence statements

Effectiveness/Qualitative

Economic

- One cost-consequence analysis found that a community exercise and education scheme incurred higher costs (£746 more per participant) compared to usual care for people following stroke. Between-group differences were seen in a measure social and physical integration at one year (median change score of -1 for the control group compared to 0 for the intervention group on the SIPSO physical scale [higher values are better]) and in quality of life at six months (median change score of 0 for the control group compared to 6.2 for the intervention group on the WHOQol-Bref psychological scale [higher values are better]). This analysis was assessed as partially applicable with potentially serious limitations.
- One cost-utility analysis found that a targeted outdoor mobility rehabilitation program (including social aspects of using travel interventions) was dominated (higher costs and lower QALYs) by usual care, costing £3,414 more) and incurring 0.027 fewer QALYs for people following a stroke. This analysis was assessed as partially applicable with potentially serious limitations.
- One cost-utility analysis found that a self-management intervention (which an educational component regarding community participation) was cost-effective (ICER of £8,284 per QALY) compared to an active control for people following stroke. This analysis was assessed as partially applicable with potentially serious limitations.
- One cost-utility analysis found that a peer-befriending was dominated (higher costs and lower QALYs) by usual care, costing £2,371 more and incurring 0.0479 fewer QALYs for people following a stroke. 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 generic health-related quality of life, return to work, wellbeing scores, participation in leisure activities/social group scores, psychological distress (including depression, anxiety and distress scores), activities of daily living, Stroke-specific Patient-Reported Outcome Measures and discontinuation.

All outcomes were considered equally important for decision making and therefore have all been rated as critical. Person/participant health-related quality of life outcomes, were considered particularly important as a holistic measure of the impact on the person's quality of living. Similarly, wellbeing scores and participation in leisure activities/social group scores were thought of as important due to being direct measures of the effects of the intervention. Return to work was thought of as important due to the significant impact this could have on a person's life. Discontinuation was used to understand the tolerability to the intervention, with the committee assuming that the adverse events from these interventions would likely be minimal and any found would be included as reasons for discontinuation.

The committee chose to investigate these outcomes at less than 6 months and more than or equal to 6 months, as they considered that there could be a difference in the short term and long-term effects of the interventions.

There was evidence available for the majority of the outcomes when comparing community participation interventions to no participation with the exception of carer generic health-related quality of life and psychological distress – distress. More limited evidence was

available for community participation interventions compared to other community participation interventions. The most widely reported outcomes were person/participant health-related quality of life, participation in leisure activities/social group scores and discontinuation. Evidence for wellbeing scores and return to work were particularly limited. With regards to return to work, this was an included outcome in only one study that specifically investigated an intervention aiming to support people to return to work; there was no evidence on the benefit of less focused interventions in facilitating return to work.

1.1.12.2 The quality of the evidence

Twenty-nine randomised controlled trial studies were included in the review. All reported a comparison between community participation interventions and no participation with three also reporting a second community participation intervention that could be compared against the first. The quality of the outcomes varied from high to very low quality, with the majority being of low or very low quality. Studies were commonly downgraded for risk of bias, due to a mixture of reasons. Most commonly this included bias due to the randomisation process and bias due to deviations from the intended interventions. In some occasions this included bias in measurement of the outcome, as it is difficult to blind someone as to whether they are receiving the intervention or not with this comparison.

A large number of outcomes were downgraded for imprecision, due to confidence intervals crossing the minimally important differences. This is likely related to the small sample sizes included in the majority of studies. In some outcomes heterogeneity was observed which was not resolved by subgroup analysis, leading to the outcome being downgraded for inconsistency.

Some outcomes were deemed to be affected by intervention indirectness. Due to the difficult to define nature of community participation interventions, some studies reported interventions that had the potential to be relevant but did not explicitly fulfil the protocol criteria (for example: self-management programs where community participation education was a component of the intervention, but it was not clear as to whether this led to practical community participation). Due to this, some outcomes were downgraded for indirectness.

These factors added greater uncertainty in the results. Due to difficulties in blinding participants and caregivers it is possible that there is bias that would favour the intervention being given. However, this is unclear. The committee took these factors into account when interpreting the evidence.

1.1.12.3 Benefits and harms

1.1.12.3.1 Key uncertainties

The complexity of the intervention was highlighted. Community participation interventions are a broad group of interventions that aim to improve people's access to the community after stroke, which may include a variety of different interventions and components that are setting specific. Therefore, it is difficult to understand the full effect of these. Benefits may be seen in qualitative experiences that are not easily or appropriate to quantify and the effects of different components cannot easily be examined. The committee used their expert opinion and knowledge of the qualitative evidence for this area when discussing the use of these programs.

The committee noted that the evidence did not encapsulate all types of community participation. The majority of the evidence investigated community exercise programs with or without education. There was no evidence identified discussing: political participation and civic engagement (volunteering), religious participation and instrumental activities of daily living, such as communication management and shopping. Evidence for other areas such as practice of outdoor mobility and transportation and occupation-based interventions aiming to

support access to work was more limited. Interventions may include more diverse interventions, including art and music interventions.

The committee reflected their experience that, in the United Kingdom, most community participation interventions are led by charity organisations which may be run by people after stroke and/or people involved in the organisation who have not had a stroke. These programs may be commissioned by the NHS, but this does not appear to be consistent across the country with some areas where these services are invested into and others where they are not. These interventions include support groups that can be varied in approach dependent on the need of the person after stroke (including adapted approaches for people with communication difficulties). In contrast, the evidence available mostly presented interventions led by allied health professionals (such as physiotherapists, occupational therapists and speech and language therapists) rather than being led by people from charity organisations,

The committee noted that non-randomised studies were not included in this review due to confounding variables not being adjusted for. These variables were also not frequently reported in the available randomised studies. Further research should consider these factors, including the age/frailty of people, presence of communication difficulties and presence of sensory difficulties (such as vision and hearing problems). Studies did not commonly report ethnicity, baseline mobility and the presence of psychological distress and cognitive difficulties, which should also be considered in further research.

1.1.12.3.2 Community participation interventions compared to other community participation interventions

Limited evidence was available from three trials that compared a more stroke-specific community participation intervention (either a stroke-specific self-management program or stroke-specific exercise program) compared to a less stroke-specific community participation intervention (either a generic self-management program or exercise programs accessible by all people in a community setting). Unclear effects were seen with some outcomes showing a clinically important benefit in person/participant generic health-related quality of life at less than 6 months while others showed no clinically important difference. A clinically important benefit in person/participant generic health-related quality of life was seen in two studies at more than or equal to 6 months. No clinically important difference was seen in participation in leisure activities/social groups, psychological distress – depression and anxiety and discontinuation at less than 6 months and more than or equal to 6 months.

The committee noted that possible benefits were seen with stroke-specific programs for person/participant generic health-related quality of life and that, while the majority of evidence did not show a clinically important change in other outcomes, generally the results were favourable for stroke-specific community participation interventions. The committee agreed that there was value in stroke-specific interventions. However, the evidence was limited to specific types of community participation interventions and not all would necessarily need to be stroke-specific in nature.

1.1.12.3.3 Community participation interventions compared to no participation

More evidence was available for this comparison. Generally, the effects were unclear. Outcomes showed a clinically important benefit in return to work at less than 6 months and more than or equal to 6 months based on 1 study with 80 participants. Outcomes from 1 study including 20 participants showed a clinically important benefit in person/participant generic health-related quality of life (including all subscales of SF-36) at less than 6 months, while 4 outcomes from 5 studies including in total 567 participants showed no clinically important difference. At more than or equal to 6 months, a clinically important difference was seen in 2 outcomes, including 1 study with 86 participants reporting 2 subscales of SF-36 (bodily pain and role emotional). While 7 outcomes, including 930 participants in total, showed no clinically important difference. One outcome showed a clinically important result

in favour of the no participation arm in 1 subscale of SF-36 (role physical). An unclear effect was also seen for participation in leisure activities/social groups with 2 outcomes including 4 studies and in total 336 participants showing a clinically important benefit while 1 outcome including 3 studies and 293 participants showing no clinically important difference at less than 6 months.

For psychological distress – depression, a clinically important benefit was seen in an indirect outcome where a dichotomous reporting of people with depression showed a large decrease at less than 6 months and more than or equal to 6 months. However, direct outcomes including continuous scores showed no clinically important difference at less than 6 months and more than or equal to 6 months. For psychological distress – anxiety, 1 subscale of the State Trait Anxiety Inventory (Trait subscale – indicating that general anxiety levels are lower before the test was completed) showed a clinically important benefit with the other subscale (State subscale – indicating the anxiety at the moment the test is completed) indicated no clinically important difference. There was also an unclear result in activities of daily living, where 4 outcomes including 5 studies and 264 participants in total indicated a clinically important benefit while 4 outcomes including 6 studies and 447 participants in total indicated no clinically important difference at less than 6 months. At more than or equal to 6 months, 3 outcomes indicated a clinically important benefit (including one specifically investigating communication activities of daily living) while 6 indicated no clinically important difference. 1 outcome reporting stroke-specific Patient-Reported Outcome Measures that included 34 participants showed a clinically important benefit in a subscale of stroke-specific quality of life (mobility subscale) while 20 outcomes including 12 studies and 730 participants in total indicated no clinically important difference at less than 6 months. At more than or equal to 6 months, more outcomes from 1 study including 34 participants showed a clinically important benefit, with benefits being seen with the stroke-specific quality of life mobility, mood, self-care and thinking subscales. However, 14 outcomes including 6 studies and 482 participants in total indicated no clinically important difference. No clinically important difference was seen in wellbeing scores at less than 6 months and more than or equal to 6 months, participation in leisure activities/social groups at more than or equal to 6 months, psychological distress – anxiety at more than or equal to 6 months and discontinuation at less than 6 months and more than or equal to 6 months.

The committee acknowledged that clinically important benefits were seen in some outcomes and where clinically important changes had not been achieved, in general, the community participation interventions appeared superior to no participation. The committee discussed the complexity of the nature of community participation programs and the applicability to current practice in the United Kingdom (see Key uncertainties section).

1.1.12.3.4 Weighing up the benefits and harms

The committee discussed the evidence while reflecting on their expert opinion and qualitative experiences. Each committee member agreed that there were benefits to community participation interventions in providing support to people after stroke when they have finished rehabilitation from healthcare services. They reflected that the period after finishing rehabilitation is often associated with worse mental health from the uncertainty of the situation and so providing extra support at this time can have a significant impact on supporting the person to return to normality.

Community participation interventions can allow stroke survivors to make connections with other stroke survivors, which can help for sharing of coping strategies and lived experiences, which can support people to feel connected and to learn better ways to manage the effect of their stroke. When delivered by charity organisations, this supports access to information about strokes and other services which can be useful for extra support after stroke. The committee acknowledged that there are a large number of potential benefits that would not be captured in the quantitative evidence that support the use of community participation interventions.

On examining the quantitative evidence alongside these factors, the committee agreed that there were benefits from community participation interventions with no substantial evidence of harm. Given this the committee agreed to recommend that healthcare professionals should consider referring people to community participation programmes after stroke suited to their rehabilitation goals. The committee agreed that services should be equitable and available across the country. They acknowledged that services may not exist in all parts of the country at this time and in the committee's opinion these services should be invested into to ensure equitable access in the future.

The committee acknowledged the benefits on improving access to work seen in one study where occupation-based programs were used. This was provided by a physiotherapist and an occupational therapist where stroke survivors participated in sessions once a week for one hour sessions over 6 weeks. While the committee agreed that they had limited evidence to make a recommendation with, the evidence they had showed a convincing clinically important benefit in helping people to return to work that, in conjunction with their expert opinion, showed that sessions like this could be beneficial for people after stroke. Due to this they recommended that healthcare professionals should consider referring people who were working before stroke to a return to work programme run by allied health professionals.

1.1.12.4 Cost effectiveness and resource use

The economic evidence review included four published studies with relevant comparisons, two of which were also included in the self-management and circuit-class training evidence reviews, respectively. No health economic studies were included that compared the following interventions: political participation and civic engagement (including volunteering); religious participation; instrumental activities of daily living such as communication management and shopping; and occupation-based interventions aiming to support access to work.

One study included as economic evidence for both this review and the circuit-class training review was a within-trial cost consequence analysis of an RCT which was also included in the clinical review. The analysis compared standard care to a community exercise and education scheme, in which participants carried out a circuit of various exercises adapted to their own capabilities. The circuit class training intervention was held twice weekly for eight weeks, facilitated by volunteers and qualified exercise instructors (supported by a physiotherapist), each with nine participants plus carers or family members. Sessions were held in leisure and community centres and consisted of 1 hour of exercise followed by a short break, and 1 hour of interactive education. Committee members agreed that the educational component described in the study reflected similar schemes available in current practice. NHS costs (primary care consultations, secondary care, community care and prescribed medication), and social care costs (home care, meals on wheels, use of a day centre and social worker time) were included.

The main results found that costs associated with the intervention were £746 higher per participant compared to standard care. The cost breakdown provided in the analysis showed that the increase in the intervention costs only accounted for only a small proportion of overall additional costs (£99), with the rest of difference coming from other resource use required by the intervention group. This was potentially due to the intervention being partly staffed by volunteers. Between-group differences were seen in a measure social and physical integration at one year (median change score of -1 for the control group compared to 0 for the intervention group on the SIPSO physical scale [higher values are better]) and in quality of life at six months (median change score of 0 for the control group compared to 6.2 for the intervention group on the WHOQol-Bref psychological scale [higher values are better]). The study reports outcomes relevant to the review as median and interquartile range values, that could not be used in the analysis of the clinical evidence and so were not extracted in the clinical review. In the circuit class training review, unpublished data was obtained from a Cochrane review for the outcome of the timed up and go test for this study

that included mean and standard deviation values, however this outcome was not relevant to the community participation review.

There was uncertainty towards interpretating the study results as circuit class training intervention incurred additional costs and had clinical outcomes reported as median values. The study was assessed as partially applicable as EQ-5D and QALYs were not reported, as well as the use of 2005 unit costs and resource use estimates, which may not reflect current UK NHS context. Potentially serious limitations were noted for this study, largely due to the within-trial analysis when considering the heterogenous nature of the included evidence. Furthermore, no sensitivity analyses were undertaken.

One study was a UK trial-based cost-utility analysis of a study included in the clinical review (the Getting out of the House Study). This compared a targeted outdoor mobility rehabilitation program (including social aspects of using travel interventions), where participants received up to 12 visits over 4 months to what is considered clinically to be routine intervention for outdoor mobility, such as verbal advice and the provision of transport and outdoor mobility leaflets. The results found that usual care dominated the outdoor mobility program, as usual care incurred lower costs (£3,414 less per participant) and higher QALYs (0.027 more per participant). The probability that the outdoor mobility program was cost-effective was just 5.2% for a £20K threshold, and the study conclusions were supported by the results of the sensitivity analyses. The study was assessed as partially applicable as the use of 2010–2011 unit costs and 2011-2012 resource use estimates may not reflect the current UK NHS context. Potentially serious limitations were identified, including the use of a single RCT included in the clinical review for costs and outcomes which meant the results of the analysis only reflect this study and not the wider evidence base identified in the clinical review. Additionally, baseline mobility as well as cognitive, sensory or communication difficulties were either not stated or unclear. A number of assumptions were also required in order to estimate some of the cost variables, for example it was unclear (for a few participants) whether they were reporting average times per carer/home help visit or total times for the week.

One study included as economic evidence for this review and the self-management review was a Dutch within-trial cost-utility analysis of the Restore4Stroke RCT that was also included in the clinical review.[41] This analysis 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 final study included was a UK exploratory within-trial cost-utility analysis of the SUPERB feasibility RCT. The analysis compared usual care plus peer-befriending (consisting of 6 1-hour visits over 3 months) to usual care alone. The results suggested that peer-befriending was dominated by usual care, as it was more costly (£2,371 more per patient) and less

effective (0.0479 less QALYs), however, no statistically significant differences in health and social care costs between the control and intervention arms at 10-months ($p>0.05$) except for outpatient appointments (higher in control, $p=0.04$). The probability that peer-befriending was cost-effective was 35% for a £30K threshold. The study was assessed as partially applicable with potentially serious limitations as it was an exploratory within-trial analysis of a single RCT with a small sample size, 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. Estimates of resource use were based on data from the study population and not a systematic review and probabilistic sensitivity analyses were reported for £30K threshold when NICE reference case prefers £20,000 threshold.

In addition to published economic studies, relevant unit costs were presented to the committee to aid consideration of cost effectiveness of community participation 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, which was expected given the inclusion of several distinct interventions. Key differences in resource use related included: variation in the delivery of therapy sessions (either individual, group-based or a combination of both – group-based sessions incur lower costs); the frequency and duration of therapy delivered (with sessions ranging from 10 minutes to 4 hours, occurring 1-7 days per week for between 4 weeks and 12 months); additional staff training costs or equipment (for example: workbook and website materials); and staff delivering the intervention, which was usually a rehabilitation team member or a healthcare professional trained to provide stroke-related care, however two studies also included volunteers (which would generate less resource use), while another included a qualified exercise instructor.

One clinical study set in South Africa assessed a workplace intervention programme administered by a physiotherapist and occupational therapist, where stroke survivors were seen for 1 hour weekly for 4 weeks except for the work skill assessment which took a minimum of four hours. The results from this study showed a clinically important benefit from taking part in a focused return to work program compared to usual care. Committee discussion during the previous guideline review for return-to-work interventions considered that typically a band 7 community occupational therapist would deliver this service in the UK and estimated that the resource use per patient to be in the range of 9 to 15 hours.

The committee discussed the evidence and decided that there was uncertainty towards the cost-effectiveness of community participation interventions as the studies reported contrasting conclusions, with the variation attributable to each study using a different trial for their analyses, which meant that type of intervention, clinical outcomes measured, and follow-up periods were not consistent. Providing community participation interventions could have a resource impact as the committee view was that the provision of such programs is highly variable across the UK.

In the clinical review, the evidence generally showed people who have had a stroke benefit from these programs, however the benefits for participants varied due to the differences between the interventions used in the studies. This created uncertainty towards the resource impact in terms of the amount of additional time or equipment that is required to achieve these clinical benefits. While it was agreed that people with higher levels of disability are expected to require the use of schemes that encourage community participation, and those with milder impairments following a stroke are less likely to require such programs, the committee found it difficult to specify the number of people who might be affected by a recommendation due to the heterogenous population comprised in the clinical trials. This creates further uncertainty towards the potential size of the resource impact this would create for the NHS.

Considering the heterogenous nature of the clinical evidence and uncertainty of the cost-effectiveness highlighted by the economic evidence, the committee recommended to refer people and their families to appropriate community participation programs based on their rehabilitation goals. Considering that one study showed benefit from taking part in a focused return to work program, committee therefore recommended referral to return to work programs, where available, for those wishing to resume work after stroke.

1.1.12.5 Other factors the committee took into account

There was considerable personal experience of these programmes within the committee, particularly from the lay members; they were all convinced of the benefits and strongly in favour of recommending referral to them and of increasing their availability.

The committee agreed that community participation interventions will be context specific with certain interventions being more appropriate to specific people. Cultural considerations of the local area should be made when considering the programs to provide. The evidence did not investigate some interventions that may be relevant to this, such as religious participation. Additional considerations should be made around the equitable access to services that allows for people to have appropriate services that can support them to access the community.

Lay member experience also reflected the variety in services provided. This varied from no services to services provided by collaboration between stroke survivors and healthcare professionals. They also noted the opportunities for people to find community participation programmes that are suitable for them. One time highlight was the 6-month review where social prescribing can be provided to allow people to identify other services that can support community participation in the future. Otherwise, this information was more readily available from third sector organisations that may provide such programs, and so providing information about these organisations to people after stroke was highlighted as important. The variety in service availability across the country was highlighted as a problem. The committee agreed that provision of services in areas where there are no current services should be rectified, so that equitable access is available to all people.

1.1.13 Recommendations supported by this evidence review

This evidence review supports recommendation 1.16.5 and 1.17.6.

1.1.14 References

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Appendices

Appendix A – Review protocols

Review protocol for the clinical and cost-effectiveness of community participation interventions

ID	Field	Content
0.	PROSPERO registration number	CRD42021275568
1.	Review title	In people after stroke, what is the clinical and cost-effectiveness of Community Participation Interventions compared with no intervention?
2.	Review question	3.4 In people after stroke, what is the clinical and cost-effectiveness of Community Participation Interventions compared with no intervention?
3.	Objective	To determine the clinical and cost-effectiveness of Community Participation Interventions.
4.	Searches	Key paper: Lee, D. et al. 2019. Content and Effectiveness of Interventions Focusing on Community Participation Poststroke: A Systematic Review. Archives of Physical Medicine and Rehabilitation; 100 (11); 2179-2192.e1. The following databases (from inception) will be searched: • Cochrane Central Register of Controlled Trials (CENTRAL) • Cochrane Database of Systematic Reviews (CDSR) • Embase • MEDLINE • Epistemonikas • CINAHL • AMED Searches will be restricted by: • English language studies • Human studies 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 have had a transient ischaemic attack
7.	Intervention	• Community participation interventions (active involvement in activities that are intrinsically social and either occur outside the home or are part of a nondomestic role). • Based on this definition, the intervention must have a focus on at least 1 of the following participation areas through education, support, or practice: (1) social participation; (2) social role participation and role management; (3) political participation and civic engagement (including volunteering); (4) leisure participation including exercise programs held in a social setting; (5) religious participation; (6) education and learning; (7) community mobility and transportation; (8) instrumental ADLs, such as communication management and shopping; and (9) vocational participation (including employment).
8.	Comparator/Confounding factors	• Compared to other types of community participation intervention • No participation Confounding factors: • Age/frailty (either age or frailty scores should be accounted for within an analysis) • Presence of communication difficulties • Presence of sensory difficulties (for example: vision, hearing etc.)
9.	Types of study to be included	• Systematic reviews of RCTs • Parallel RCTs

		If insufficient RCT evidence is available, non-randomised studies will be considered if they adjust for key confounders (e.g. age, presence of communication difficulties, presence of sensory difficulties), including: 3. Prospective and retrospective cohort studies 4. 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 a hyperacute (<72 hours), an acute (72 hours – 7 days), subacute (7 days – 6 months) or chronic (>6 months) time horizon.

12.	Primary outcomes (critical outcomes)	All outcomes are considered equally important for decision making and therefore have all been rated as critical:
		
		At time period:
		• <6 months
		• ≥6 months
		
		• Person/participant generic health-related quality of life (continuous outcomes will be prioritised [validated measures])
		  ○ EQ-5D
		  ○ SF-6D
		  ○ SF-36
		  ○ SF-12
		  ○ Other utility measures (AQOL, HUI, 15D, QWB)
		• Carer generic health-related quality of life (continuous outcomes will be prioritised [validated measures])
		  ○ EQ-5D
		  ○ SF-6D
		  ○ SF-36
		  ○ SF-12
		  ○ Other utility measures (AQOL, HUI, 15D, QWB)
		• Return to work (dichotomous outcome)
		• Wellbeing scores (continuous outcomes will be

		prioritised) ○ Warwick-Edinburgh Mental wellbeing scale ○ WHO-5 World Health Organisation Wellbeing Index ○ Rosenberg Self Esteem Scale ○ ICEpop CAPability measure for adults • Participation in leisure activities/social groups scores (continuous outcomes will be prioritised) ○ Mayo-Portland Adaptability Inventory 4 (MPAI-4) part C (participation) ○ Frenchay Activities Index • Psychological distress (continuous outcomes will be prioritised, where people with communication difficulties are present communication-specific psychological distress scores will be considered a priority for this outcome) ○ Depression – 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 ○ Anxiety – GAD-7 – Hospital Anxiety and Depression scale - anxiety subscale – The Geriatric Anxiety Inventory – GHQ-28 – Beck Anxiety Inventory ○ Distress – The Distress Management System for Stroke (DMSS) • 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 • Stroke-specific Patient-Reported Outcome Measures (continuous outcomes will be prioritised, where people with communication difficulties are present communication-specific quality of life scores will be considered a priority for this outcome) ○ Stroke-Specific Quality of Life (SS-QOL) ○ Stroke Impact Scale (SIS)

		○ Stroke-specific Sickness Impact Profile (SA-SIP30) ○ Neuro-QOL ○ PROMIS-10 ○ Satisfaction with International Classification of Functioning, Disability and Health – Stroke (SATIS-Stroke) • Discontinuation (dichotomous outcome)
14.	Data extraction (selection and coding)	EndNote will be used for reference management, sifting, citations and bibliographies. All references identified by the searches and from other sources will be screened for inclusion. All references identified by the searches and from other sources will be uploaded into EPPI reviewer and de-duplicated. 10% of the abstracts will be reviewed by two reviewers, with any disagreements resolved by discussion or, if necessary, a third independent reviewer. The full text of potentially eligible studies will be retrieved and will be assessed in line with the criteria outlined above. A standardised form will be used to extract data from studies (see Developing NICE guidelines: the manual section 6.4). 10% of all evidence reviews are quality assured by a senior research fellow. This includes checking: • papers were included /excluded appropriately • a sample of the data extractions • correct methods are used to synthesise data • a sample of the risk of bias assessments Disagreements between the review authors over the risk of bias in particular studies will be resolved by discussion, with involvement of a third review author where necessary. Study investigators may be contacted for missing data where time and resources allow.
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
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) Presence of communication difficulties • Communication difficulties present • No communication difficulties

<table>
<tr><td></td><td></td><td colspan="3">Presence of sensory difficulties
• Sensory difficulties present
• No sensory difficulties

Presence of psychological distress (including anxiety and depression)
• Psychological distress present
• No psychological distress

Presence of cognition difficulties
• Cognition difficulties present
• No cognition difficulties

Baseline mobility
• Mobility difficulties present
• No mobility difficulties

Ethnicity</td></tr>
<tr><td rowspan="7">18.</td><td rowspan="7">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>
<tr><td>19.</td><td>Language</td><td colspan="3">English</td></tr>
<tr><td>20.</td><td>Country</td><td colspan="3">England</td></tr>
<tr><td>21.</td><td>Anticipated or actual start date</td><td colspan="3">24/02/2021</td></tr>
<tr><td>22.</td><td>Anticipated completion date</td><td colspan="3">14/12/2022</td></tr>
<tr><td rowspan="7">23.</td><td rowspan="7">Stage of review at time of this submission</td><td>Review stage</td><td>Started</td><td>Completed</td></tr>
<tr><td>Preliminary searches</td><td>☐</td><td>☐</td></tr>
<tr><td>Piloting of the study selection process</td><td>☐</td><td>☐</td></tr>
<tr><td>Formal screening of search results against eligibility criteria</td><td>☐</td><td>☐</td></tr>
<tr><td>Data extraction</td><td>☐</td><td>☐</td></tr>
<tr><td>Risk of bias (quality)</td><td>☐</td><td>☐</td></tr>
</table>

		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; Community Participation Interventions; Driving; Intervention; Leisure; Rehabilitation; Return to Work; 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	

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.

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 7: Database parameters, filters and limits applied

Database	Dates searched	Search filter used
Medline (OVID)	1946 – 08 January 2023	Randomised controlled trials Systematic review studies Exclusions (animal studies, letters, comments, editorials, case studies/reports) English language
Embase (OVID)	1974 – 08 January 2023	Randomised controlled trials Systematic review studies Exclusions (animal studies, letters, comments, editorials, case studies/reports, conference abstracts) English language
The Cochrane Library (Wiley)	Cochrane Reviews to 2023 Issue 1 of 12 CENTRAL to 2023 Issue 1 of 12	Exclusions (clinical trials, conference abstracts)
Epistemonikos (The Epistemonikos Foundation)	Inception – 08 January 2023	Exclusions (Cochrane reviews) English language
AMED, Allied and Complementary Medicine (OVID)	Inception – 08 January 2023	Randomised controlled trials Exclusions (animal studies, letters, comments, case reports) English language
Current Nursing and Allied Health Literature - CINAHL (EBSCO)	Inception – 08 January 2023	Human Exclusions (Medline records) English Language

Medline (Ovid) search terms

1.	exp Stroke/
2.	Stroke Rehabilitation/
3.	exp Cerebral Hemorrhage/
4.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
5.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
6.	"brain attack*".ti,ab.
7.	or/1-6
8.	letter/
9.	editorial/
10.	news/
11.	exp historical article/
12.	Anecdotes as Topic/
13.	comment/
14.	case report/
15.	(letter or comment*).ti.
16.	or/8-15
17.	randomized controlled trial/ or random*.ti,ab.
18.	16 not 17
19.	animals/ not humans/
20.	exp Animals, Laboratory/
21.	exp Animal Experimentation/
22.	exp Models, Animal/
23.	exp Rodentia/
24.	(rat or rats or mouse or mice or rodent*).ti.
25.	or/18-24
26.	7 not 25
27.	limit 26 to English language
28.	Community Participation/
29.	Social Participation/
30.	((social or communit*) adj2 (participat* or intergrat* or program* or intervention* or engag* or involv* or interact* or role or life)).ti,ab,kf.
31.	(group adj2 (participat* or engag* or involv* or interact*)).ti,ab,kf.
32.	((political* or civic or volunteer*) adj2 (participat* or engag* or involv* or interact*)).ti,ab,kf.
33.	((social or communit*) adj3 (leisure or exerci*)).ti,ab,kf.
34.	(religio* adj2 (participat* or intergrat* or engag* or involv* or interact*)).ti,ab,kf.
35.	((social or communit*) adj2 (educat* or learn or learning)).ti,ab,kf.
36.	(instrumental activities of daily living or IADL or IADLs).ti,ab,kf.
37.	(shopping or shop or housekeep* or housework* or domestic* task* or manag* account* or manag* financ* or manag* money or food prepar* or transportation or driving or taxi* or mini cab*).ti,ab,kf.
38.	"Cell Phone Use"/
39.	((phone* or telephone* or smartphone*) adj2 (using or "uses" or usab* or utili?*)).ti,ab,kf.
40.	Return to work/

41.	((occupation* or employ* or vocation* or job* or work*) adj2 (return* or back or resume* or resuming or retrain* or train* or support* or participat* or intergrat* or engag* or involv* or interacti*)).ti,ab,kf.
42.	or/28-41
43.	27 and 42
44.	randomized controlled trial.pt.
45.	controlled clinical trial.pt.
46.	randomi#ed.ti,ab.
47.	placebo.ab.
48.	randomly.ti,ab.
49.	Clinical Trials as topic.sh.
50.	trial.ti.
51.	or/44-50
52.	Meta-Analysis/
53.	exp Meta-Analysis as Topic/
54.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
55.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
56.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
57.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
58.	(search* adj4 literature).ab.
59.	(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.
60.	cochrane.jw.
61.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
62.	or/52-61
63.	43 and (51 or 62)

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.	community participation/
29.	social participation/
30.	((social or communit*) adj2 (participat* or intergrat* or program* or intervention* or engag* or involv* or interact* or role or life)).ti,ab,kf.
31.	(group adj2 (participat* or engag* or involv* or interact*)).ti,ab,kf.
32.	((political* or civic or volunteer*) adj2 (participat* or engag* or involv* or interact*)).ti,ab,kf.
33.	((social or communit*) adj3 (leisure or exerci*)).ti,ab,kf.
34.	(religio* adj2 (participat* or intergrat* or engag* or involv* or interact*)).ti,ab,kf.
35.	((social or communit*) adj2 (educat* or learn or learning)).ti,ab,kf.
36.	(instrumental activities of daily living or IADL or IADLs).ti,ab,kf.
37.	(shopping or shop or housekeep* or housework* or domestic* task* or manag* account* or manag* financ* or manag* money or food prepar* or transportation or driving or taxi* or mini cab*).ti,ab,kf.
38.	"cell phone use"/
39.	((phone* or telephone* or smartphone*) adj2 (using or "uses" or usab* or utili?*)).ti,ab,kf.
40.	return to work/
41.	((occupation* or employ* or vocation* or job* or work*) adj2 (return* or back or resume* or resuming or retrain* or train* or support* or participat* or intergrat* or engag* or involv* or interacti*)).ti,ab,kf.
42.	or/28-41
43.	random*.ti,ab.
44.	factorial*.ti,ab.
45.	(crossover* or cross over*).ti,ab.
46.	((doubl* or singl*) adj blind*).ti,ab.
47.	(assign* or allocat* or volunteer* or placebo*).ti,ab.
48.	crossover procedure/
49.	single blind procedure/
50.	randomized controlled trial/
51.	double blind procedure/
52.	or/43-51
53.	systematic review/
54.	meta-analysis/
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/72-81
64.	27 and 42
65.	64 and (52 or 63)

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: [Community Participation] explode all trees
#11.	MeSH descriptor: [Social Participation] explode all trees
#12.	((social or communit*) near/2 (participat* or intergrat* or program* or intervention* or engag* or involv* or interact* or role or life)):ti,ab
#13.	(group near/2 (participat* or engag* or involv* or interact*)):ti,ab
#14.	((political* or civic or volunteer*) near/2 (participat* or engag* or involv* or interact*)):ti,ab
#15.	((social or communit*) near/3 (leisure or exerci*)):ti,ab
#16.	(religio* near/2 (participat* or intergrat* or engag* or involv* or interact*)):ti,ab
#17.	((social or communit*) near/2 (educat* or learn or learning)):ti,ab
#18.	(instrumental activities of daily living or IADL or IADLs):ti,ab
#19.	(shopping or shop or housekeep* or housework* or domestic* task* or manag* account* or manag* financ* or manag* money or food prepar* or transportation or driving or taxi* or mini cab*):ti,ab
#20.	MeSH descriptor: [Cell Phone Use] explode all trees
#21.	((phone* or telephone* or smartphone*) near/2 (using or "uses" or usab* or utili?*)):ti,ab
#22.	MeSH descriptor: [Return to Work] explode all trees
#23.	((occupation* or employ* or vocation* or job* or work*) near/2 (return* or back or resume* or resuming or retrain* or train* or support* or participat* or intergrat* or engag* or involv* or interacti*)):ti,ab
#24.	(or #10-#23)
#25.	#9 and #24

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.	(MM "Social Participation")
S7.	((social or communit*) N2 (participat* or intergrat* or program* or intervention* or engag* or involv* or interact* or role or life))
S8.	(group N2 (participat* or engag* or involv* or interact*))
S9.	((political* or civic or volunteer*) N2 (participat* or engag* or involv* or interact*))
S10.	((social or communit*) N3 (leisure or exerci*))
S11.	(religio* N2 (participat* or intergrat* or engag* or involv* or interact*))
S12.	((social or communit*) N2 (educat* or learn or learning))
S13.	(instrumental activities of daily living or IADL or IADLs)
S14.	(shopping or shop or housekeep* or housework* or domestic* task* or manag* account* or manag* financ* or manag* money or food prepar* or transportation or driving or taxi* or mini cab*)
S15.	(MH "Cellular Phone+/UT")
S16.	((phone* or telephone* or smartphone*) N2 (using or "uses" or usab* or utili?*))
S17.	(MM "Job Re-Entry")
S18.	((occupation* or employ* or vocation* or job* or work*) N2 (return* or back or resume* or resuming or retrain* or train* or support* or participat* or intergrat* or engag* or involv* or interacti*))
S19.	S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18
S20.	S5 AND S19

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.	limit 15 to English language
17.	((social or communit*) adj2 (participat* or intergrat* or program* or intervention* or engag* or involv* or interact* or role or life)).ti,ab.
18.	(group adj2 (participat* or engag* or involv* or interact*)).ti,ab.
19.	((political* or civic or volunteer*) adj2 (participat* or engag* or involv* or interact*)).ti,ab.

20.	((social or communit*) adj3 (leisure or exerci*)).ti,ab.
21.	(religio* adj2 (participat* or intergrat* or engag* or involv* or interact*)).ti,ab.
22.	((social or communit*) adj2 (educat* or learn or learning)).ti,ab.
23.	(instrumental activities of daily living or IADL or IADLs).ti,ab.
24.	(shopping or shop or housekeep* or housework* or domestic* task* or manag* account* or manag* financ* or manag* money or food prepar* or transportation or driving or taxi* or mini cab*).ti,ab.
25.	((phone* or telephone* or smartphone*) adj2 (using or "uses" or usab* or utili?*)).ti,ab.
26.	((occupation* or employ* or vocation* or job* or work*) adj2 (return* or back or resume* or resuming or retrain* or train* or support* or participat* or intergrat* or engag* or involv* or interacti*)).ti,ab.
27.	or/17-26
28.	16 and 27
29.	randomized controlled trials/
30.	randomized controlled trial.pt.
31.	controlled clinical trial.pt.
32.	placebo.ab.
33.	random*.ti,ab.
34.	trial.ti,ab.
35.	groups.ab.
36.	or/29-35
37.	28 and 36

Epistemonikos search terms

1.	(title:((title:((title:((rehab* AND (hospital* OR patient* OR program* OR therap* OR assistant*))) OR abstract:((rehab* AND (hospital* OR patient* OR program* OR therap* OR assistant*)))) OR (title:(((intens* OR frequen* OR duration* OR period* OR time* OR timing OR hour* OR week* OR day*) AND (rehab* OR intervention*))) OR abstract:(((intens* OR frequen* OR duration* OR period* OR time* OR timing OR hour* OR week* OR day*) AND (rehab* OR intervention*)))))) OR abstract:((title:((rehab* AND (hospital* OR patient* OR program* OR therap* OR assistant*))) OR abstract:((rehab* AND (hospital* OR patient* OR program* OR therap* OR assistant*)))) OR (title:(((intens* OR frequen* OR duration* OR period* OR time* OR timing OR hour* OR week* OR day*) AND (rehab* OR intervention*))) OR abstract:(((intens* OR frequen* OR duration* OR period* OR time* OR timing OR hour* OR week* OR day*) AND (rehab* OR intervention*)))))) AND (title:((title:((stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack*" OR ((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))) OR abstract:((stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack*" OR ((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))))) OR abstract:((title:((stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack*" OR ((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))) OR abstract:((stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack*" OR ((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*))))))) OR abstract:((title:((title:((rehab* AND (hospital* OR patient* OR program* OR therap* OR assistant*))) OR abstract:((rehab* AND (hospital* OR patient* OR program* OR therap* OR assistant*)))) OR (title:(((intens* OR frequen* OR duration* OR period* OR time* OR timing OR hour* OR week* OR day*) AND (rehab* OR intervention*))) OR abstract:(((intens* OR frequen* OR duration* OR period* OR time* OR timing OR hour* OR week* OR day*) AND (rehab* OR intervention*)))))) OR abstract:((title:((rehab* AND (hospital* OR patient* OR program* OR therap* OR assistant*))) OR abstract:((rehab* AND (hospital* OR patient* OR program* OR therap* OR assistant*)))) OR (title:(((intens* OR frequen* OR duration* OR period* OR time* OR timing OR hour* OR week* OR day*) AND

	(rehab* OR intervention*))) OR abstract:(((intens* OR frequen* OR duration* OR period* OR time* OR timing OR hour* OR week* OR day*) AND (rehab* OR intervention*)))))) AND (title:((title:((stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack*" OR ((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))) OR abstract:((stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack*" OR ((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))))) OR abstract:((title:((stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack*" OR ((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))) OR abstract:((stroke OR strokes OR cva OR poststroke* OR apoplexy OR "cerebrovascular accident" OR "brain attack*" OR ((cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)))))))))
2.	(title:(((social OR communit*) AND (participat* OR intergrat* OR program* OR intervention* OR engag* OR involv* OR interact* OR role OR life))) OR abstract:(((social OR communit*) AND (participat* OR intergrat* OR program* OR intervention* OR engag* OR involv* OR interact* OR role OR life)))) OR (title:((group AND (participat* OR engag* OR involv* OR interact*))) OR abstract:((group AND (participat* OR engag* OR involv* OR interact*)))) OR (title:(((political* OR civic OR volunteer*) AND (participat* OR engag* OR involv* OR interact*))) OR abstract:(((political* OR civic OR volunteer*) AND (participat* OR engag* OR involv* OR interact*)))) OR (title:(((social OR communit*) AND (leisure OR exerci*))) OR abstract:(((social OR communit*) AND (leisure OR exerci*)))) OR (title:((religio* AND (participat* OR intergrat* OR engag* OR involv* OR interact*))) OR abstract:((religio* AND (participat* OR intergrat* OR engag* OR involv* OR interact*)))) OR (title:(((social OR communit*) AND (educat* OR learn OR learning))) OR abstract:(((social OR communit*) AND (educat* OR learn OR learning)))) OR (title:((instrumental activities of daily living OR IADL OR IADLs)) OR abstract:((instrumental activities of daily living OR IADL OR IADLs))) OR (title:((shopping OR shop OR housekeep* OR housework* OR domestic* task* OR manag* account* OR manag* financ* OR manag* money OR food prepar* OR transportation OR driving OR taxi* OR mini cab*)) OR abstract:((shopping OR shop OR housekeep* OR housework* OR domestic* task* OR manag* account* OR manag* financ* OR manag* money OR food prepar* OR transportation OR driving OR taxi* OR mini cab*))) OR (title:(((phone* OR telephone* OR smartphone*) adj2 (using OR "uses" OR usab* OR utili?*))) OR abstract:(((phone* OR telephone* OR smartphone*) adj2 (using OR "uses" OR usab* OR utili?*)))) OR (title:(((occupation* OR employ* OR vocation* OR job* OR work*) adj2 (return* OR back OR resume* OR resuming OR retrain* OR train* OR support* OR participat* OR intergrat* OR engag* OR involv* OR interacti*))) OR abstract:(((occupation* OR employ* OR vocation* OR job* OR work*) adj2 (return* OR back OR resume* OR resuming OR retrain* OR train* OR support* OR participat* OR intergrat* OR engag* OR involv* OR interacti*))))
3.	1 and 2

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

Database	Dates searched	Search filters and limits applied
Medline (OVID)	Health Economics 1 January 2014 – 08 January 2023 Quality of Life 1946 – 08 January 2023	Health economics studies Quality of life studies Exclusions (animal studies, letters, comments, editorials, case studies/reports,) English language
Embase (OVID)	Health Economics 1 January 2014 – 08 January 2023 Quality of Life 1974 – 08 January 2023	Health economics studies Quality of life studies Exclusions (animal studies, letters, comments, editorials, case studies/reports, conference abstracts) English language
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

Medline (Ovid) search terms

1.	exp Stroke/
2.	exp Cerebral Hemorrhage/

3.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
4.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
5.	"brain attack*".ti,ab.
6.	or/1-5
7.	letter/
8.	editorial/
9.	news/
10.	exp historical article/
11.	Anecdotes as Topic/
12.	comment/
13.	case report/
14.	(letter or comment*).ti.
15.	or/7-14
16.	randomized controlled trial/ or random*.ti,ab.
17.	15 not 16
18.	animals/ not humans/
19.	exp Animals, Laboratory/
20.	exp Animal Experimentation/
21.	exp Models, Animal/
22.	exp Rodentia/
23.	(rat or rats or mouse or mice or rodent*).ti.
24.	or/17-23
25.	6 not 24
26.	Economics/
27.	Value of life/
28.	exp "Costs and Cost Analysis"/
29.	exp Economics, Hospital/
30.	exp Economics, Medical/
31.	Economics, Nursing/
32.	Economics, Pharmaceutical/
33.	exp "Fees and Charges"/
34.	exp Budgets/
35.	budget*.ti,ab.
36.	cost*.ti.
37.	(economic* or pharmaco?economic*).ti.
38.	(price* or pricing*).ti,ab.
39.	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
40.	(financ* or fee or fees).ti,ab.
41.	(value adj2 (money or monetary)).ti,ab.

42.	or/26-41
43.	quality-adjusted life years/
44.	sickness impact profile/
45.	(quality adj2 (wellbeing or well being)).ti,ab.
46.	sickness impact profile.ti,ab.
47.	disability adjusted life.ti,ab.
48.	(qal* or qtime* or qwb* or daly*).ti,ab.
49.	(euroqol* or eq5d* or eq 5*).ti,ab.
50.	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
51.	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
52.	(hui or hui1 or hui2 or hui3).ti,ab.
53.	(health* year* equivalent* or hye or hyes).ti,ab.
54.	discrete choice*.ti,ab.
55.	rosser.ti,ab.
56.	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
57.	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
58.	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.
59.	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
60.	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
61.	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
62.	or/43-61
63.	25 and 42
64.	25 and 62
65.	limit 63 to English language
66.	limit 64 to English language

Embase (Ovid) search terms

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

15.	13 not 14
16.	animal/ not human/
17.	nonhuman/
18.	exp Animal Experiment/
19.	exp Experimental Animal/
20.	animal model/
21.	exp Rodent/
22.	(rat or rats or mouse or mice).ti.
23.	or/15-22
24.	7 not 23
25.	health economics/
26.	exp economic evaluation/
27.	exp health care cost/
28.	exp fee/
29.	budget/
30.	funding/
31.	budget*.ti,ab.
32.	cost*.ti.
33.	(economic* or pharmaco?economic*).ti.
34.	(price* or pricing*).ti,ab.
35.	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
36.	(financ* or fee or fees).ti,ab.
37.	(value adj2 (money or monetary)).ti,ab.
38.	or/25-37
39.	quality adjusted life year/
40.	"quality of life index"/
41.	short form 12/ or short form 20/ or short form 36/ or short form 8/
42.	sickness impact profile/
43.	(quality adj2 (wellbeing or well being)).ti,ab.
44.	sickness impact profile.ti,ab.
45.	disability adjusted life.ti,ab.
46.	(qal* or qtime* or qwb* or daly*).ti,ab.
47.	(euroqol* or eq5d* or eq 5*).ti,ab.
48.	(qol* or hql* or hqol* or h qol* or hrqol* or hr qol*).ti,ab.
49.	(health utility* or utility score* or disutilit* or utility value*).ti,ab.
50.	(hui or hui1 or hui2 or hui3).ti,ab.
51.	(health* year* equivalent* or hye or hyes).ti,ab.
52.	discrete choice*.ti,ab.
53.	rosser.ti,ab.
54.	(willingness to pay or time tradeoff or time trade off or tto or standard gamble*).ti,ab.
55.	(sf36* or sf 36* or short form 36* or shortform 36* or shortform36*).ti,ab.
56.	(sf20 or sf 20 or short form 20 or shortform 20 or shortform20).ti,ab.

57.	(sf12* or sf 12* or short form 12* or shortform 12* or shortform12*).ti,ab.
58.	(sf8* or sf 8* or short form 8* or shortform 8* or shortform8*).ti,ab.
59.	(sf6* or sf 6* or short form 6* or shortform 6* or shortform6*).ti,ab.
60.	or/39-59
61.	limit 24 to English language
62.	38 and 61
63.	60 and 61

NHS EED and HTA (CRD) search terms

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

INAHTA search terms

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

CINAHL search terms

1.	MH "Economics+"
2.	MH "Financial Management+"
3.	MH "Financial Support+"
4.	MH "Financing, Organized+"
5.	MH "Business+"
6.	S2 OR S3 or S4 OR S5
7.	S1 not S6
8.	MH "Health Resource Allocation"
9.	MH "Health Resource Utilization"
10.	S8 OR S9
11.	S7 OR S10
12.	(cost or costs or economic* or pharmacoeconomic* or price* or pricing*) OR AB (cost or costs or economic* or pharmacoeconomic* or price* or pricing*)
13.	S11 OR S12
14.	PT editorial
15.	PT letter
16.	PT commentary
17.	S14 or S15 or S16
18.	S13 NOT S17
19.	MH "Animal Studies"
20.	(ZT "doctoral dissertation") or (ZT "masters thesis")
21.	S18 NOT (S19 OR S20)
22.	PY 2014-
23.	S21 AND S22

24.	MW Stroke or MH Cerebral Hemorrhage
25.	stroke* or cva or poststroke* or apoplexy or "cerebrovascular accident"
26.	(cerebro* OR brain OR brainstem OR cerebral*) AND (infarct* OR accident*)
27.	"brain attack*"
28.	S24 OR S25 OR S26 OR S27
29.	S23 AND S28

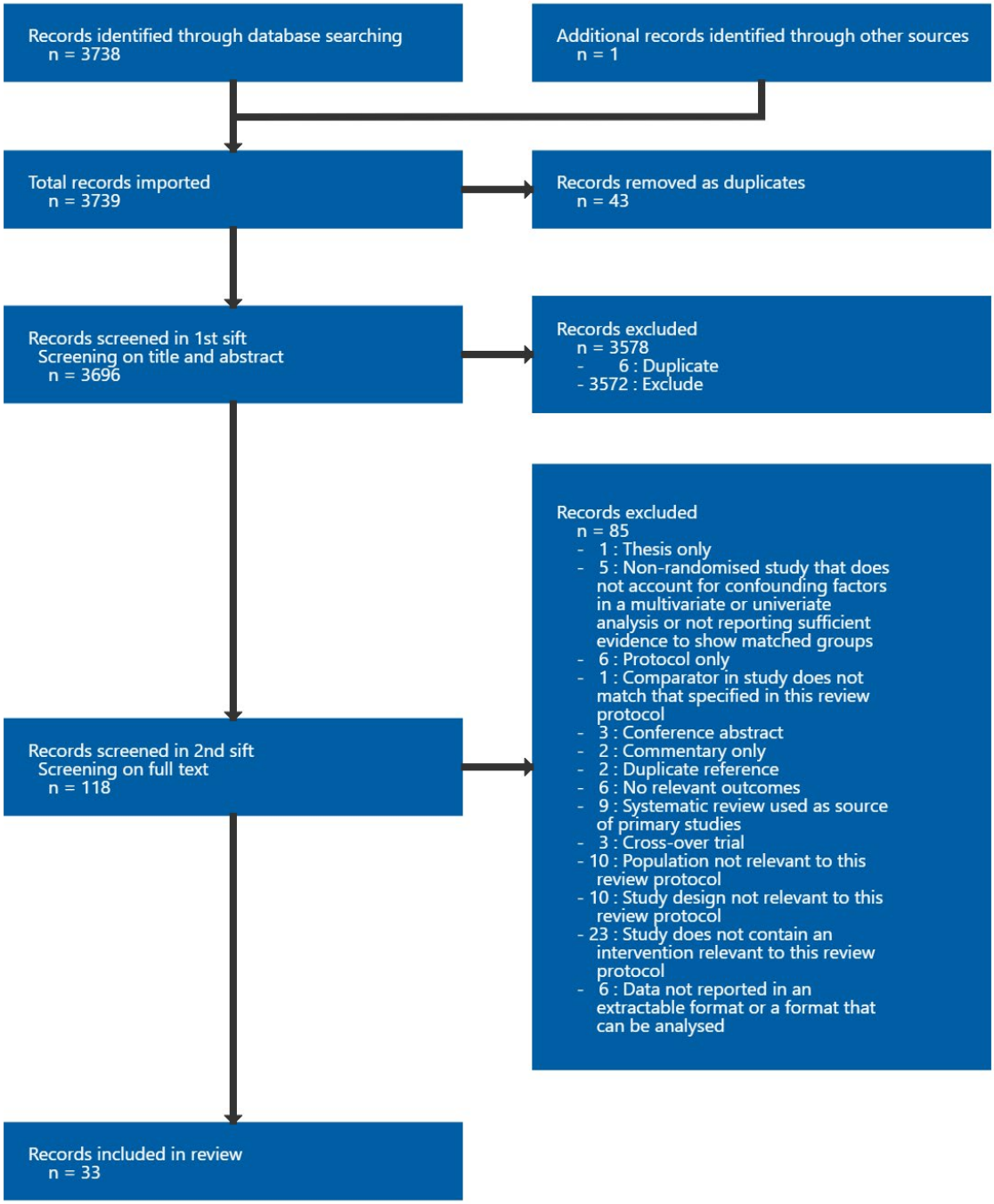
PsycINFO search terms

1.	exp Stroke/
2.	exp Cerebral hemorrhage/
3.	(stroke or strokes or cva or poststroke* or apoplexy or "cerebrovascular accident").ti,ab.
4.	((cerebro* or brain or brainstem or cerebral*) adj3 (infarct* or accident*)).ti,ab.
5.	"brain attack*".ti,ab.
6.	Cerebrovascular accidents/
7.	exp Brain damage/
8.	(brain adj2 injur*).ti.
9.	or/1-8
10.	Letter/
11.	Case report/
12.	exp Rodents/
13.	or/10-12
14.	9 not 13
15.	limit 14 to (human and english language)
16.	First posting.ps.
17.	15 and 16
18.	15 or 17
19	"costs and cost analysis"/
20.	"Cost Containment"/
21.	(economic adj2 evaluation$).ti,ab.
22.	(economic adj2 analy$).ti,ab.
23.	(economic adj2 (study or studies)).ti,ab.
24.	(cost adj2 evaluation$).ti,ab.
25.	(cost adj2 analy$).ti,ab.
26.	(cost adj2 (study or studies)).ti,ab.
27.	(cost adj2 effective$).ti,ab.
28.	(cost adj2 benefit$).ti,ab.
29.	(cost adj2 utili$).ti,ab.
30.	(cost adj2 minimi$).ti,ab.
31.	(cost adj2 consequence$).ti,ab.
32.	(cost adj2 comparison$).ti,ab.
33.	(cost adj2 identificat$).ti,ab.
34.	(pharmacoeconomic$ or pharmaco-economic$).ti,ab.

35.	or/19-34
36.	(0003-4819 or 0003-9926 or 0959-8146 or 0098-7484 or 0140-6736 or 0028-4793 or 1469-493X).is.
37.	35 not 36
38.	18 and 37

Appendix C – Effectiveness evidence study selection

Figure 1: Flow chart of clinical study selection for the review of community participation interventions



Appendix D – Effectiveness evidence

Ada, 2013

Bibliographic Reference	Ada, L.; Dean, C. M.; Lindley, R.; Randomized trial of treadmill training to improve walking in community-dwelling people after stroke: the AMBULATE trial; International Journal of Stroke; 2013; vol. 8 (no. 6); 436-44

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	Ada, L.; Dean, C. M.; Lindley, R.; Lloyd, G.; Improving community ambulation after stroke: the AMBULATE Trial; BMC Neurology; 2009; vol. 9; 8
Trial name / registration number	Australian New Zealand Clinical Trials Registry: ACTRN012607000227493.
Study type	Randomised controlled trial (RCT)
Study location	Australia
Study setting	Community-dwelling people.
Study dates	No additional information.
Sources of funding	This study was supported by the Heart Foundation of Australia and the University of Sydney.
Inclusion criteria	Within five years of their first stroke; adults capable of providing consent (defined as having a mini-mental state exam score

	of >23); discharged from formal rehabilitation; community dwelling; walked slowly (defined as being able to walk 10m across flat ground in bare feet without any aids taking more than nine seconds).
Exclusion criteria	An unstable cardiac status precluding them from participation in a treadmill training program (i.e. permission not granted by their medical practitioner); had severe cognitive and/or language deficits (aphasia) precluding them from participation in the training sessions (i.e. unable to follow two-step commands).
Recruitment / selection of participants	People were recruited from the community via advertisement (newspaper, stroke club and media release) or referral (hospital or community therapists, stroke liaison officer and word of mouth).
Intervention(s)	Community participation intervention (four month treadmill walking program) N=34 The four month treadmill-training group. Treadmill-training three times a week for 30 minutes. People received individual training from a physiotherapist. However, there was an opportunity for social interaction as several participants were trained concurrently. This was gradually increased in intensity by introducing different directions of walking (including sideways and backwards walking), stairs and slopes and asking people to maintain conversation while walking around an outdoor circuit of curbs, slopes, stairs and rough terrain. Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological	Not stated/unclear

distress	
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Not stated/unclear.
Population subgroups	No additional information.
Comparator	Another community participation intervention (two month treadmill walking program) N=34 The two month treadmill-training group. Treadmill-training three times a week for 30 minutes. People received individual training from a physiotherapist. However, there was an opportunity for social interaction as several participants were trained concurrently. This was gradually increased in intensity by introducing different directions of walking (including sideways and backwards walking), stairs and slopes and asking people to maintain conversation while walking around an outdoor circuit of curbs, slopes, stairs and rough terrain. Concomitant therapy: No additional information. No participation N=34 No intervention. Concomitant therapy: No additional information.

Number of participants	102
Duration of follow-up	2 months, 4 months, 6 months and 12 months
Indirectness	No additional information
Additional comments	Intention-to-treat

Study arms

Community participation intervention (four month treadmill walking program) (N = 34)
The four month treadmill-training group. Treadmill-training three times a week for 30 minutes. People received individual training from a physiotherapist. However, there was an opportunity for social interaction as several participants were trained concurrently. This was gradually increased in intensity by introducing different directions of walking (including sideways and backwards walking), stairs and slopes and asking people to maintain conversation while walking around an outdoor circuit of curbs, slopes, stairs and rough terrain. Concomitant therapy: No additional information.

Another community participation intervention (two month treadmill walking program) (N = 34)
The two month treadmill-training group. Treadmill-training three times a week for 30 minutes. People received individual training from a physiotherapist. However, there was an opportunity for social interaction as several participants were trained concurrently. This was gradually increased in intensity by introducing different directions of walking (including sideways and backwards walking), stairs and slopes and asking people to maintain conversation while walking around an outdoor circuit of curbs, slopes, stairs and rough terrain. Concomitant therapy: No additional information.

No participation (N = 34)
No intervention. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (four month treadmill walking program) (N = 34)	Another community participation intervention (two month treadmill walking program) (N = 34)	No participation (N = 34)
% Female Sample size	n = 10 ; % = 29	n = 6 ; % = 18	n = 15 ; % = 45
Mean age (SD) (years) Mean (SD)	70 (11)	64 (12)	63 (13)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	22 (16)	20 (15)	19 (13)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (four month treadmill walking program) (N = 34)	Another community participation intervention (two month treadmill walking program) (N = 34)	No participation (N = 34)
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 4 month (<6 months)
- 12 month (Greater than or equal to 6 months)

Continuous outcomes

Outcome	Community participation intervention (four month treadmill walking program), Baseline, N = 34	Community participation intervention (four month treadmill walking program), 4 month, N = 34	Community participation intervention (four month treadmill walking program), 12 month, N = 34	Another community participation intervention (two month treadmill walking program), Baseline, N = 34	Another community participation intervention (two month treadmill walking program), 4 month, N = 34	Another community participation intervention (two month treadmill walking program), 12 month, N = 34	No participation, Baseline, N = 34	No participation, 4 month, N = 34	No participation, 12 month, N = 34
Person/participant generic health-related quality of life (EQ-5D VAS) Scale range: 0-100. Change scores. Mean (SD)	61 (21)	10 (24)	6 (32)	69 (20)	-1 (15)	-6 (22)	73 (18)	-4 (19)	-1 (18)
Participation in leisure activities/social groups (Adelaide Activities Profile) Scale range: 0-63. Change scores. Mean (SD)	20 (10)	1 (7)	2 (8)	21 (11)	1 (6)	1 (9)	25 (12)	-1 (6)	1 (6)

Person/participant generic health-related quality of life (EQ-5D VAS) - Polarity - Higher values are better
Participation in leisure activities/social groups (Adelaide Activities Profile) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (four month treadmill walking program), Baseline, N = 34	Community participation intervention (four month treadmill walking program), 4 month, N = 34	Community participation intervention (four month treadmill walking program), 12 month, N = 34	Another community participation intervention (two month treadmill walking program), Baseline, N = 34	Another community participation intervention (two month treadmill walking program), 4 month, N = 34	Another community participation intervention (two month treadmill walking program), 12 month, N = 34	No participation, Baseline, N = 34	No participation, 4 month, N = 34	No participation, 12 month, N = 34
Discontinuation Reasons not given. No of events	n = NA ; % = NA	n = 0 ; % = 0	n = 0 ; % = 0	n = NA ; % = NA	n = 1 ; % = 2.9	n = 1 ; % = 2.9	n = NA ; % = NA	n = 3 ; % = 8.8	n = 3 ; % = 8.8

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5DVAS)-4monthsvs.2months-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5DVAS)-4monthsvs.noparticipation-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5DVAS)-2monthsvs.noparticipation-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5DVAS)-4monthsvs.2months-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

Section	Question	Answer

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5DVAS)-4monthsvs.noparticipation-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5DVAS)-2monthsvs.noparticipation-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

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

Continuousoutcomes-Participationinleisureactivities/socialgroups(AdelaideActivitiesProfile)-4monthsvs.2months-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Continuousoutcomes-Participationinleisureactivities/socialgroups(AdelaideActivitiesProfile)-4monthsvs.noparticipation-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Continuousoutcomes-Participationinleisureactivities/socialgroups(AdelaideActivitiesProfile)-2monthsvs.noparticipation-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Continuousoutcomes-Participationinleisureactivities/socialgroups(AdelaideActivitiesProfile)-4monthsvs.2months-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

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

Continuousoutcomes-Participationinleisureactivities/socialgroups(AdelaideActivitiesProfile)-4monthsvs.noparticipation-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

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

Continuousoutcomes-Participationinleisureactivities/socialgroups(AdelaideActivitiesProfile)-2monthsvs.noparticipation-MeanSD-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

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

Dichotomousoutcome-Discontinuation-4monthsvs.2months-NoOfEvents-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Dichotomousoutcome-Discontinuation-4monthsvs.2months-NoOfEvents-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

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

Dichotomousoutcome-Discontinuation-4monthsvs.noparticipation-NoOfEvents-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Dichotomousoutcome-Discontinuation-4monthsvs.noparticipation-NoOfEvents-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

Section	Question	Answer

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

Dichotomousoutcome-Discontinuation-2monthsvs.noparticipation-NoOfEvents-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t4

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

Dichotomousoutcome-Discontinuation-2monthsvs.noparticipation-NoOfEvents-Community participation intervention (four month treadmill walking program)-Another community participation intervention (two month treadmill walking program)-No participation-t12

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

Ada, 2009

Bibliographic Reference	Ada, L.; Dean, C. M.; Lindley, R.; Lloyd, G.; Improving community ambulation after stroke: the AMBULATE Trial; BMC Neurology; 2009; vol. 9; 8

Study details

Secondary publication of another included study- see primary study for details	Ada, L.; Dean, C. M.; Lindley, R.; Randomized trial of treadmill training to improve walking in community-dwelling people after stroke: the AMBULATE trial; International Journal of Stroke; 2013; vol. 8 (no. 6); 436-44
Other publications associated with this study included in review	No additional information

Adamit, 2021

Bibliographic Reference	Adamit, T.; Shames, J.; Rand, D.; Effectiveness of the Functional and Cognitive Occupational Therapy (FaCoT) Intervention for Improving Daily Functioning and Participation of Individuals with Mild Stroke: A Randomized Controlled Trial; International Journal of Environmental Research & Public Health [Electronic Resource]; 2021; vol. 18 (no. 15); 28

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	Clinicaltrials.gov = NCT02925637
Study type	Randomised controlled trial (RCT)
Study location	Isreal
Study setting	Community-dwelling individuals with mild stroke recruited from a community-based Health Care Service
Study dates	March 2017 to February 2020
Sources of funding	The study was supported by the Kahn-Sagol-Maccabi Research and Innovation research grant and Steyer Family for their support
Inclusion criteria	Age >18 years; sustained a stroke in the last 36 months; mild stroke severity (NIHSS no more than 5 and/or independence in BADL); independence in activities of daily living prior to stroke; ability to understand and speak the language (Hebrew)
Exclusion criteria	Other neurological or psychiatric conditions
Recruitment / selection of participants	Recruited from a community-based health care service between March 2017 and February 2020.
Intervention(s)	Community participation intervention (functional and cognitive occupational therapy) N=33 Functional and cognitive occupational therapy program. 10 x 1 hour weekly individualised sessions with an experienced occupational therapist. Sessions included task analysis of two of the person's occupational performance goals (including meeting a friend for coffee) to identify the specific difficulty within the goal (for example: initiating and making the arrangement, planning the use of transportation to arrive on time). Then the therapist taught and practiced the use of cognitive and behavioural strategies via case studies. Strategies focussed on executive functioning (initiation, inhibition, planning and decision-making strategies). The behavioural strategies focussed on self perception, situation interpretation and future prediction. Practicing was done using case studies. This also provided knowledge to increase awareness of symptoms of mild stroke, such as fatigue and hidden symptoms. The use of positive therapeutic language and positive feedback was implemented. Concomitant therapy: No additional information

Subgroup 1: Severity	Mild (or NIHSS 1-5)
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	No psychological distress present Excluded people with psychiatric conditions
Subgroup 5: Presence of cognition difficulties	Mixed People were stratified in the randomisation process between a Montreal Cognitive Assessment score of greater than and equal to 23 points or less than and equal to 22.
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Not stated/unclear
Population subgroups	No additional information
Comparator	No participation (usual care) N=33 People who underwent the same cognitive-functional assessments, including identification of four meaningful occupational performance goals by the Canadian Occupational Performance Measure. Concomitant therapy: No additional information

Number of participants	66
Duration of follow-up	3 months
Indirectness	No additional information
Additional comments	Intention-to-treat analysis using the last point carried forward

Study arms

Community participation intervention (functional and cognitive occupational therapy) (N = 33)
Functional and cognitive occupational therapy program. 10 x 1 hour weekly individualised sessions with an experienced occupational therapist. Sessions included task analysis of two of the person's occupational performance goals (including meeting a friend for coffee) to identify the specific difficulty within the goal (for example: initiating and making the arrangement, planning the use of transportation to arrive on time). Then the therapist taught and practiced the use of cognitive and behavioural strategies via case studies. Strategies focussed on executive functioning (initiation, inhibition, planning and decision-making strategies). The behavioural strategies focussed on self perception, situation interpretation and future prediction. Practicing was done using case studies. This also provided knowledge to increase awareness of symptoms of mild stroke, such as fatigue and hidden symptoms. The use of positive therapeutic language and positive feedback was implemented. Concomitant therapy: No additional information

No participation (usual care) (N = 33)
People who underwent the same cognitive-functional assessments, including identification of four meaningful occupational performance goals by the Canadian Occupational Performance Measure. Concomitant therapy: No additional information

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (functional and cognitive occupational therapy) (N = 33)	No participation (usual care) (N = 33)
% Female Sample size	n = 11 ; % = 33.3	n = 15 ; % = 45.5
Mean age (SD) (years) Mean (SD)	64.6 (8.2)	64.4 (10.8)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity NIHSS (0-46) Mean (SD)	1.2 (1.2)	1.7 (1.6)
Time after stroke Sample size	n = NR ; % = NR	n = NR ; % = NR
Chronic stage Sample size	n = 28 ; % = 84.8	n = 26 ; % = 78.8
Presence of communication difficulties	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (functional and cognitive occupational therapy) (N = 33)	No participation (usual care) (N = 33)
Sample size		
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties MoCA (0-30) Mean (SD)	21.5 (3.9)	21.8 (4.1)
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 3 month (<6 months)

Continuous outcomes

Outcome	Community participation intervention (functional and cognitive occupational therapy), Baseline, N = 33	Community participation intervention (functional and cognitive occupational therapy), 3 month, N = 33	No participation (usual care), Baseline, N = 33	No participation (usual care), 3 month, N = 33
Participation in leisure activities/social groups scores (Reintegration to Normal Living index) Scale range: 0-100. Final values. Mean (SD)	72.1 (14.5)	79.9 (13.9)	64.2 (2.1)	64.9 (19.5)
Activities of daily living (Canadian Occupational Performance Measure) Scale range: 0-10. Final values. Mean (SD)	NR (NR)	NR (NR)	NR (NR)	NR (NR)
Canadian Occupational Performance measure - Performance subscale Scale range: 0-10. Final values. Mean (SD)	3.1 (1.3)	6.2 (2.4)	3.7 (1.3)	4.7 (2.3)
Canadian Occupational Performance measure - Satisfaction subscale Scale range: 0-10. Final values. Mean (SD)	2.4 (1.3)	6.4 (2.6)	3.1 (2.1)	4.4 (2.5)

Participation in leisure activities/social groups scores (Reintegration to Normal Living index) - Polarity - Higher values are better

Activities of daily living (Canadian Occupational Performance Measure) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (functional and cognitive occupational therapy), Baseline, N = 33	Community participation intervention (functional and cognitive occupational therapy), 3 month, N = 33	No participation (usual care), Baseline, N = 33	No participation (usual care), 3 month, N = 33
Discontinuation Intervention: 3 dropped out before starting first session, 2 not willing to continue, 1 hospitalised. No participation: 8 not willing to continue with study, 1 moved away, 1 poor mental status, 1 not reachable. No of events	n = NA ; % = NA	n = 6 ; % = 18	n = NA ; % = NA	n = 11 ; % = 33

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(ReintegrationtoNormalLivingindex)-MeanSD-Community participation intervention (functional and cognitive occupational therapy)-No participation (usual care)-t3

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

Continuousoutcomes-Activitiesofdailyliving(CanadianOccupationalPerformanceMeasure)-CanadianOccupationalPerformancemeasure-Performancesubscale-MeanSD-Community participation intervention (functional and cognitive occupational therapy)-No participation (usual care)-t3

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

Continuousoutcomes-Activitiesofdailyliving(CanadianOccupationalPerformanceMeasure)-CanadianOccupationalPerformancemeasure-Satisfactionsubscale-MeanSD-Community participation intervention (functional and cognitive occupational therapy)-No participation (usual care)-t3

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (functional and cognitive occupational therapy)-No participation (usual care)-t3

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

Ahn, 2019

Bibliographic Reference	Ahn, Si-Nae; Effectiveness of occupation-based interventions on performance's quality for hemiparetic stroke in community-dwelling: A randomized clinical trial study; NeuroRehabilitation; 2019; vol. 44 (no. 2); 275-282

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	Republic of Korea
Study setting	People living in the community.
Study dates	No additional information
Sources of funding	No additional information
Inclusion criteria	People diagnosed with stroke who live in the community; scored above 19 on the Mini-Mental State Examination-Korean; can set a goal for their desired occupational performance; agreed to participate in the study
Exclusion criteria	Problem with verbal communication
Recruitment /	People receiving outpatient occupational therapy who were living in the community

selection of participants	
Intervention(s)	Community participation intervention (occupation-based intervention) N=23 Occupation-based interventions providing direct training, conducted by the therapist to achieve the goal desired by the participant. This was applied to direct occupation. Client-selected occupations were performed using actual tools in an environment similar to reality. Interventions were provided twice per week for 60 minutes per session, and ten intervention sessions were completed over 6 weeks. Concomitant therapy: No additional information
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	No communication difficulties
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear

Subgroup 7: Ethnicity	No additional information
Population subgroups	No additional information
Comparator	No participation N=20 Action focusing intervention was applied training of the emphasis on focusing body functions, to restore and remediate client factors such as strength, range of motion, stability, coordination and endurance. Concomitant therapy: No additional information
Number of participants	43
Duration of follow-up	6 weeks (end of intervention)
Indirectness	No additional information
Additional comments	No additional information

Study arms

Community participation intervention (occupation-based intervention) (N = 23)
Occupation-based interventions providing direct training, conducted by the therapist to achieve the goal desired by the participant. This was applied to direct occupation. Client-selected occupations were performed using actual tools in an environment similar to reality. Interventions were provided twice per week for 60 minutes per session, and ten intervention sessions were completed over 6 weeks. Concomitant therapy: No additional information

No participation (N = 20)
Action focusing intervention was applied training of the emphasis on focusing body functions, to restore and remediate client factors such as strength, range of motion, stability, coordination and endurance. Concomitant therapy: No additional information

Characteristics

Arm-level characteristics

Characteristic	**Community participation intervention (occupation-based intervention) (N = 23)**	**No participation (N = 20)**
% Female Sample size	n = 12 ; % = 52.2	n = 15 ; % = 75
Mean age (SD) (years) Mean (SD)	64.9 (2.9)	66.4 (3.3)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	42.3 (32.8)	44 (29.8)
Presence of communication	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (occupation-based intervention) (N = 23)	No participation (N = 20)
difficulties Sample size		
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 6 week (End of intervention. <6 months.)

Continuous outcome

Outcome	Community participation intervention (occupation-based intervention), Baseline, N = 23	Community participation intervention (occupation-based intervention), 6 week, N = 23	No participation, Baseline, N = 20	No participation, 6 week, N = 20
Activities of daily living (Canadian Occupational Performance Measure) Scale range: 0-10. Final values. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
Canadian Occupational Performance measure - Performance subscale Mean (SD)	3.6 (0.8)	4.7 (0.6)	3.8 (0.4)	4.5 (0.4)
Canadian Occupational Performance measure - Satisfaction subscale Mean (SD)	3.4 (0.6)	4.2 (0.5)	4 (0.1)	4.6 (0.5)

Activities of daily living (Canadian Occupational Performance Measure) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (occupation-based intervention), Baseline, N = 23	Community participation intervention (occupation-based intervention), 6 week, N = 23	No participation, Baseline, N = 20	No participation, 6 week, N = 20
Discontinuation Zero events No of events	n = NA ; % = NA	n = 0 ; % = 0	n = NA ; % = NA	n = 0 ; % = 0

Discontinuation - Polarity - Lower values are better

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

Continuousoutcome-Activitiesofdailyliving(CanadianOccupationalPerformanceMeasure)-CanadianOccupationalPerformancemeasure-Performancesubscale-MeanSD-Community participation intervention (occupation-based intervention)-No participation-t6

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (occupation-based intervention)-No participation-t6

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

Beinotti, 2013

Bibliographic Reference	Beinotti, F.; Christofoletti, G.; Correia, N.; Borges, G.; Effects of horseback riding therapy on quality of life in patients post stroke; Topics in Stroke Rehabilitation; 2013; vol. 20 (no. 3); 226-32

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	Brazil
Study setting	People (followed up as outpatient) at hospitals in the city of Campinas, Sao Paulo, Brazil.
Study dates	No additional information
Sources of funding	The study was supported by FAPESP (Sao Paulo State foundation for Research).
Inclusion criteria	Clinical diagnosis of a first or recurrent unilateral stroke, in the chronic phase (at least 365 days after stroke); age between 50 and 85 years
Exclusion criteria	Serious cognitive deficits (assessed by a clinical neurologist, using the DSM-IV); other neurologic, neuromuscular or orthopedic disease; participation in any experimental rehabilitation or drug studies; stroke relapse or experienced a seizure during the intervention (this happened in no participants)
Recruitment / selection of participants	People who had experienced an ischaemic or haemorrhagic stroke from 2 hospitals in the city of Campinas, Sao Paulo, Brazil.
Intervention(s)	Community participation intervention (horseback riding therapy) N=12 Horseback riding therapy for 30 minutes once a week. A properly trained quarter horse (20-year old gelding, weight 500kg,

	height 1.52m) was used. A drum saddle was used for the fist 5 sessions and then a blanket suitable for hippotherapy was used afterwards. Therapy was assisted with a side walker. The participants performed activities such as touching various parts of the horse's body or reaching for an object, which involved crossing their midline while maintaining appropriate balance and posture. Concomitant therapy: All people participated in a conventional physiotherapy program (50 minutes, 3 times a week for 16 weeks). This concentrated on specific kinesotherapeutic exercises that stimulated strength, balance and cognition such as concentrated attention, working memory and praxis.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	No cognition difficulties present Based on exclusion criteria
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Not stated/unclear

Population subgroups	No additional information
Comparator	No participation (usual care) N=12 No horseback riding therapy. Concomitant therapy: All people participated in a conventional physiotherapy program (50 minutes, 3 times a week for 16 weeks). This concentrated on specific kinesotherapeutic exercises that stimulated strength, balance and cognition such as concentrated attention, working memory and praxis.
Number of participants	24
Duration of follow-up	16 weeks (end of intervention)
Indirectness	No additional information
Additional comments	No additional information

Study arms

Community participation intervention (horseback riding therapy) (N = 12)
Horseback riding therapy for 30 minutes once a week. A properly trained quarter horse (20-year old gelding, weight 500kg, height 1.52m) was used. A drum saddle was used for the fist 5 sessions and then a blanket suitable for hippotherapy was used afterwards. Therapy was assisted with a side walker. The participants performed activities such as touching various parts of the horse's body or reaching for an object, which involved crossing their midline while maintaining appropriate balance and posture. Concomitant therapy: All people participated in a conventional physiotherapy program (50 minutes, 3 times a week for 16 weeks). This concentrated on specific kinesotherapeutic exercises that stimulated strength, balance and cognition such as concentrated attention, working memory and praxis.

No participation (usual care) (N = 12)
No horseback riding therapy. Concomitant therapy: All people participated in a conventional physiotherapy program (50 minutes, 3 times a week for 16 weeks). This concentrated on specific kinesotherapeutic exercises that stimulated strength, balance and cognition such as concentrated attention, working memory and praxis.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (horseback riding therapy) (N = 12)	No participation (usual care) (N = 12)
% Female Sample size	n = 2 ; % = 17	n = 4 ; % = 33
Mean age (SD) (years) Mean (SD)	59 (NR)	52 (NR)
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 after stroke (Months) Mean (SD)	79 (NR)	62 (NR)

Characteristic	Community participation intervention (horseback riding therapy) (N = 12)	No participation (usual care) (N = 12)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 16 week (<6 months)

Continuous outcomes

Outcome	Community participation intervention (horseback riding therapy), Baseline, N = 12	Community participation intervention (horseback riding therapy), 16 week, N = 10	No participation (usual care), Baseline, N = 12	No participation (usual care), 16 week, N = 10
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 Function Noted as functional capacity Mean (SD)	40.5 (15.7)	51.5 (14.3)	50 (19.7)	40 (26)
SF-36 bodily pain Mean (SD)	97.5 (7.9)	91.9 (18.5)	63.9 (30.8)	70.6 (27.3)
SF-36 Role Physical Note as physical aspects Mean (SD)	57.5 (35.5)	100 (0)	70 (28.4)	75 (35.4)
SF-36 vitality Mean (SD)	63 (10.1)	77.5 (18.1)	57.5 (24)	61 (22.7)
SF-36 general health Mean (SD)	75.3 (17.8)	85.9 (15.5)	75 (24.4)	77.7 (20.9)
SF-36 Role Emotional	83.3 (32.4)	96.7 (10.5)	50 (36)	70 (39.9)

Outcome	Community participation intervention (horseback riding therapy), Baseline, N = 12	Community participation intervention (horseback riding therapy), 16 week, N = 10	No participation (usual care), Baseline, N = 12	No participation (usual care), 16 week, N = 10
Noted as emotional aspects Mean (SD)				
SF-36 Mental Health Mean (SD)	73.2 (22.5)	83.2 (16.9)	72.4 (13.7)	68.8 (18.5)
SF-36 Social Function Noted as social aspects Mean (SD)	81.3 (19.3)	90 (12.9)	48.8 (28.5)	58.8 (36.8)

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

Dichotomous outcome

Outcome	Community participation intervention (horseback riding therapy), Baseline, N = 12	Community participation intervention (horseback riding therapy), 16 week, N = 12	No participation (usual care), Baseline, N = 12	No participation (usual care), 16 week, N = 12
Discontinuation 2 withdrew during intervention in both arms No of events	n = NA ; % = NA	n = 2 ; % = 17	n = NA ; % = NA	n = 2 ; % = 17

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36PhysicalFunction-MeanSD-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36bodilypain-MeanSD-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36RolePhysical-MeanSD-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36vitality-MeanSD-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36generalhealth-MeanSD-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36RoleEmotional-MeanSD-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36MentalHealth-MeanSD-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

Section	Question	Answer

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36SocialFunction-MeanSD-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (horseback riding therapy)-No participation (usual care)-t16

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

Cadilhac, 2011

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

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	Australia
Study setting	Metropolitan region of South Australia. Likely outpatient follow up.
Study dates	No additional information
Sources of funding	Primary author supported by a NHMRC/National Heart Foundation postdoctoral fellowship. The research was supported by a grant from the J.O. and J.R. Wicking Trust and in-kind support from the National Stroke Foundation. Richard Osborne was supported by a NHMRC Population Health Fellowship and an infrastructure grant from New South Wales Health.
Inclusion criteria	Stroke survivors, male and female, clinical diagnosis of stroke, to be discharged (or have already been discharged) from hospital and returning to the community or currently living in the community. 18 years and over, at least 3 months post stroke event. People may have cognitive impairment, language difficulties, marked physical disability or have experienced recurrent stroke. Living independently or assisted by a carer (or carers).
Exclusion criteria	Previous participation in a self-management program; lives or will live in an aged care facility before commencement of the study; does not have a reasonable expectation that they will attend a program for 2.5 hours/week for up to 8 weeks; English as their second language.
Recruitment / selection of participants	Recruited from General Practice or community service providers across the metropolitan area of Adelaide in South Australia.

Intervention(s)	Community participation intervention (stroke self-management program) N=48 Stroke-specific self management program for 8 weeks. This was different from the Stanford intervention as: it only included stroke survivors, had greater contact time, was delivered by health professionals and peer leaders skilled in stroke and trained by the National Stroke Foundation, provides targeted stroke-specific information each week; revisits information provided in other weeks to ensure retention of learning and skills. The intervention was performed 5 times by the same stroke educator. Concomitant therapy: Usual care included access to information and education provided by the hospital team or their local general practitioner.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Mixed
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Mixed
Subgroup 6: Baseline mobility	Mixed

Subgroup 7: Ethnicity	Majority Australian
Population subgroups	No additional information
Comparator	Other community participation intervention (generic self-management program) N=47 Generic Stanford self management program. Covers a range of topics such as appropriate use of medicines, communicating effectively with family and friends and nutrition. (For the sake of this protocol, the stroke specific program is treated as the main community participation intervention and will be compared to the usual care arm, while this arm will be used to compare to another community participation intervention only). Concomitant therapy: Usual care included access to information and education provided by the hospital team or their local general practitioner. No participation (usual care) N=48 Usual care only. Concomitant therapy: Usual care included access to information and education provided by the hospital team or their local general practitioner.
Number of participants	143
Duration of follow-up	6 months
Indirectness	Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but

	downgraded for indirectness.
Additional comments	Intention-to-treat and as an "on-program" analysis (people who completed at least 50% of the program sessions).

Study arms

Community participation intervention (stroke self-management program) (N = 48)
Stroke-specific self management program for 8 weeks. This was different from the Stanford intervention as: it only included stroke survivors, had greater contact time, was delivered by health professionals and peer leaders skilled in stroke and trained by the National Stroke Foundation, provides targeted stroke-specific information each week; revisits information provided in other weeks to ensure retention of learning and skills. The intervention was performed 5 times by the same stroke educator. Concomitant therapy: Usual care included access to information and education provided by the hospital team or their local general practitioner.

Other community participation intervention (generic self-management program) (N = 47)
Generic Stanford self management program. Covers a range of topics such as appropriate use of medicines, communicating effectively with family and friends and nutrition. (For the sake of this protocol, the stroke specific program is treated as the main community participation intervention and will be compared to the usual care arm, while this arm will be used to compare to another community participation intervention only). Concomitant therapy: Usual care included access to information and education provided by the hospital team or their local general practitioner.

No participation (usual care) (N = 48)
Usual care only. Concomitant therapy: Usual care included access to information and education provided by the hospital team or their local general practitioner.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (stroke self-management program) (N = 48)	Other community participation intervention (generic self-management program) (N = 47)	No participation (usual care) (N = 48)
% Female Sample size	n = 27 ; % = 56	n = 29 ; % = 62	n = 29 ; % = 60
Mean age (SD) (years) Mean (SD)	68 (12)	71 (12)	69 (11)
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA	n = NA ; % = NA
Australian Sample size	n = 30 ; % = 63	n = 23 ; % = 49	n = 35 ; % = 73
Comorbidities No of events	n = NA ; % = NA	n = NA ; % = NA	n = NA ; % = NA
Hypercholesterolaemia No of events	n = 35 ; % = 73	n = 22 ; % = 47	n = 31 ; % = 65
Hypertension No of events	n = 41 ; % = 85	n = 28 ; % = 61	n = 35 ; % = 73
Diabetes No of events	n = 7 ; % = 15	n = 5 ; % = 11	n = 10 ; % = 21

Characteristic	Community participation intervention (stroke self-management program) (N = 48)	Other community participation intervention (generic self-management program) (N = 47)	No participation (usual care) (N = 48)
Depression No of events	n = 14 ; % = 29	n = 10 ; % = 22	n = 19 ; % = 40
Severity Mean (SD)	NR (NR)	NR (NR)	NR (NR)
Time after stroke Sample size	n = NA ; % = NA	n = NA ; % = NA	n = NA ; % = NA
At least 12 months Sample size	n = 29 ; % = 76	n = 23 ; % = 62	n = 26 ; % = 70
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress No of events	n = 14 ; % = 29	n = 10 ; % = 22	n = 19 ; % = 40
Presence of cognition difficulties	n = NR ; % = NR	n = NR	n = NR ; % = NR

Characteristic	Community participation intervention (stroke self-management program) (N = 48)	Other community participation intervention (generic self-management program) (N = 47)	No participation (usual care) (N = 48)
Sample size			
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 6 month (Greater than and equal to 6 months)

Continuous outcomes

Outcome	Community participation intervention (stroke self-management program), Baseline, N = 48	Community participation intervention (stroke self-management program), 6 month, N = 48	Other community participation intervention (generic self-management program), Baseline, N = 47	Other community participation intervention (generic self-management program), 6 month, N = 47	No participation (usual care), Baseline, N = 48	No participation (usual care), 6 month, N = 48
Person/participant generic health-related quality of life (AQoL) Scale range: 0-1. Change scores	0.51 (0.3)	0.008 (0.03)	0.51 (0.3)	-0.02 (0.02)	0.39 (0.3)	0.02 (0.03)

Outcome	Community participation intervention (stroke self-management program), Baseline, N = 48	Community participation intervention (stroke self-management program), 6 month, N = 48	Other community participation intervention (generic self-management program), Baseline, N = 47	Other community participation intervention (generic self-management program), 6 month, N = 47	No participation (usual care), Baseline, N = 48	No participation (usual care), 6 month, N = 48
Mean (SD)						
Participation in leisure activities/social groups scores (Health Education Impact scale - Positive and active engagement in life domain) Scale range: unclear. Change scores. Mean (SD)	3.8 (0.9)	0.11 (0.09)	3.89 (0.7)	0.16 (0.1)	3.8 (1)	0.11 (0.098)
Psychological distress - depression (Irritability, Depression and Anxiety scale - Depression subscale) Scale range: 0-20? (calculated by looking at scale). Change scores. Mean (SD)	NR (NR)	-0.1 (0.35)	NR (NR)	0 (0.32)	NR (NR)	-0.48 (0.37)
Psychological distress - anxiety (Irritability, Depression and Anxiety scale - Anxiety subscale)	NR (NR)	-0.48 (0.34)	NR (NR)	-0.11 (0.29)	NR (NR)	-0.98 (0.32)

Outcome	Community participation intervention (stroke self-management program), Baseline, N = 48	Community participation intervention (stroke self-management program), 6 month, N = 48	Other community participation intervention (generic self-management program), Baseline, N = 47	Other community participation intervention (generic self-management program), 6 month, N = 47	No participation (usual care), Baseline, N = 48	No participation (usual care), 6 month, N = 48
Scale range: 0-20? (calculated by looking at scale). Change scores. Mean (SD)						

Person/participant generic health-related quality of life (AQoL) - Polarity - Higher values are better
Participation in leisure activities/social groups scores (Health Education Impact scale - Positive and active engagement in life domain) - Polarity - Higher values are better
Psychological distress - depression (Irritability, Depression and Anxiety scale - Depression subscale) - Polarity - Lower values are better
Psychological distress - anxiety (Irritability, Depression and Anxiety scale - Anxiety subscale) - Polarity - Lower values are better

Dichotomous outcome

Outcome	Community participation intervention (stroke self-management program), Baseline, N = 48	Community participation intervention (stroke self-management program), 6 month, N = 48	Other community participation intervention (generic self-management program), Baseline, N = 47	Other community participation intervention (generic self-management program), 6 month, N = 47	No participation (usual care), Baseline, N = 48	No participation (usual care), 6 month, N = 48
Discontinuation SSMP: 7 not assessed at 6 months. Generic: 7 not assessed at 6	n = NA ; % = NA	n = 7 ; % = 15	n = NA ; % = NA	n = 7 ; % = 16	n = NA ; % = NA	n = 7 ; % = 15

Outcome	Community participation intervention (stroke self-management program), Baseline, N = 48	Community participation intervention (stroke self-management program), 6 month, N = 48	Other community participation intervention (generic self-management program), Baseline, N = 47	Other community participation intervention (generic self-management program), 6 month, N = 47	No participation (usual care), Baseline, N = 48	No participation (usual care), 6 month, N = 48
months. Control: 7 not assessed at 6 months. No of events						

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(AQoL)-Communityparticipationinterventioncomparedtoothercommunityparticipationintervention-MeanSD-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(AQoL)-Communityparticipationinterventioncomparedtonoparticipation-MeanSD-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(HealthEducationImpactscale-Positiveandactiveengagementinlifedomain)-Communityparticipationinterventioncomparedtoothercommunityparticipationintervention-MeanSD-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(HealthEducationImpactscale-Positiveandactiveengagementinlifedomain)-Communityparticipationinterventioncomparedtonoparticipation-MeanSD-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Psychologicaldistress-depression(Irritability,DepressionandAnxietyscale-Depressionsubscale)-Communityparticipationinterventioncomparedtoothercommunityparticipationintervention-MeanSD-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Psychologicaldistress-depression(Irritability,DepressionandAnxietyscale-Depressionsubscale)-Communityparticipationinterventioncomparedtonoparticipation-MeanSD-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Psychologicaldistress-anxiety(Irritability,DepressionandAnxietyscale-Anxietysubscale)-Communityparticipationinterventioncomparedtoothercommunityparticipationintervention-MeanSD-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Psychologicaldistress-anxiety(Irritability,DepressionandAnxietyscale-Anxietysubscale)-Communityparticipationinterventioncomparedtonoparticipation-MeanSD-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Dichotomousoutcome-Discontinuation-Communityparticipationinterventioncomparedtoothercommunityparticipationintervention-NoOfEvents-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Dichotomousoutcome-Discontinuation-Communityparticipationinterventioncomparedtonoparticipation-NoOfEvents-Community participation intervention (stroke self-management program)-Other community participation intervention (generic self-management program)-No participation (usual care)-t6

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Chan, 2012

Bibliographic Reference Chan, W.; Immink, M. A.; Hillier, S.; Yoga and exercise for symptoms of depression and anxiety in people with poststroke disability: a randomized, controlled pilot trial; Alternative Therapies in Health & Medicine; 2012; vol. 18 (no. 3); 34-43

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	Australia
Study setting	Community based

Study dates	No additional information
Sources of funding	No grants or other financial support was received
Inclusion criteria	A minimum of 6 months elapsed time since the stroke incidence and the presence of chronic hemiparesis; must have completed acute and postacute stroke rehabilitation; had to be able to ambulate for 10 m or more with or without the use of an assistive walking device.
Exclusion criteria	Other movement disorders in addition to hemiparesis; unable to follow two-step verbal commands; currently research participants in any other studies related to physical activity; were currently practicing any yoga-related activities, including tai chi.
Recruitment / selection of participants	Recruitment annoucements and posted mailings were sent out to people who had been included in a database from previous attendees at group exercise programs.
Intervention(s)	Community participation intervention (Yoga) N=9 A 6 week yoga program involving six once-a-week, 90-minute group classes and 24 individual home-practice sessions scheduled over the 6 weeks, each lasting approximately 40 minutes. The program was based on practices of hatha yoga and on meditation practices from the Satyananda yoga tradition. Delivered by an accredited yoga teacher. Each class started with a 10-minute didactic activity where the teacher presented yoga-relevant topics such as safety, practice modification and aims. After the introduction the class involved a hatha yoga component with approximately 30 minutes of modified asana practice involving gentle and slow movements and 5 minutes of pranayama practice involving gentle breathing with concentrated attention. Following the hatha yoga component, the yoga teacher provided a verbally guided 30-minute meditation practice called Satyananda yoga nidra. People could practice this while seated in a chair or lying supine on a yoga mat. This involved verbally guided stages including brief relaxation, mental awareness of body-region sensations, natural-breath awareness and mental repetition of personally chosen goal. The end of the class involved a 15-minute group discussion on topics related to the yoga program or personal experiences of it. Daily practice at home involved 10 minutes of hatha yoga and 30 minutes of Satyananda yoga with one set of hatha yoga for the first three weeks, to two sets in the last three weeks. Concomitant therapy: People in both groups attended six weekly 50-minute exercise classes that was delivered by the clinical exercise physiology staff. This was individualised based on results of initial exercise testing. The program consisted of resistance exercises for the upper and lower body, and cardiovascular type exercise on a bicycle or ergometer.

Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Not stated/unclear
Population subgroups	No additional information
Comparator	No participation N=8 Exercise program only. Concomitant therapy: People in both groups attended six weekly 50-minute exercise classes that was delivered by the clinical exercise physiology staff. This was individualised based on results of initial exercise testing. The program consisted

	of resistance exercises for the upper and lower body, and cardiovascular type exercise on a bicycle or ergometer.
Number of participants	17
Duration of follow-up	6 weeks (end of intervention)
Indirectness	No additional information
Additional comments	No additional information

Study arms

Community participation intervention (Yoga) (N = 9)
A 6 week yoga program involving six once-a-week, 90-minute group classes and 24 individual home-practice sessions scheduled over the 6 weeks, each lasting approximately 40 minutes. The program was based on practices of hatha yoga and on meditation practices from the Satyananda yoga tradition. Delivered by an accredited yoga teacher. Each class started with a 10-minute didactic activity where the teacher presented yoga-relevant topics such as safety, practice modification and aims. After the introduction the class involved a hatha yoga component with approximately 30 minutes of modified asana practice involving gentle and slow movements and 5 minutes of pranayama practice involving gentle breathing with concentrated attention. Following the hatha yoga component, the yoga teacher provided a verbally guided 30-minute meditation practice called Satyananda yoga nidra. People could practice this while seated in a chair or lying supine on a yoga mat. This involved verbally guided stages including brief relaxation, mental awareness of body-region sensations, natural-breath awareness and mental repetition of personally chosen goal. The end of the class involved a 15-minute group discussion on topics related to the yoga program or personal experiences of it. Daily practice at home involved 10 minutes of hatha yoga and 30 minutes of Satyananda yoga with one set of hatha yoga for the first three weeks, to two sets in the last three weeks. Concomitant therapy: People in both groups attended six weekly 50-minute exercise classes that was delivered by the clinical exercise physiology staff. This was individualised based on results of initial exercise testing. The program consisted of resistance exercises for the upper and lower body, and cardiovascular type exercise on a bicycle or ergometer.

No participation (N = 8)
Exercise program only. Concomitant therapy: People in both groups attended six weekly 50-minute exercise classes that was delivered by the clinical exercise physiology staff. This was individualised based on results of initial exercise testing. The program consisted of resistance exercises for the upper and lower body, and cardiovascular type exercise on a bicycle or ergometer.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (Yoga) (N = 9)	No participation (N = 8)
% Female The baseline values are only provided for 8 people in the yoga arm and 6 people in the no participation arm Sample size	n = 1 ; % = 12.5	n = 1 ; % = 16.7
Mean age (SD) Mean (SD)	67.1 (15.4)	71.7 (12.7)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (years)	6.4 (3)	11.2 (5.8)

Characteristic	Community participation intervention (Yoga) (N = 9)	No participation (N = 8)
Mean (SD)		
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 6 week (<6 months. End of intervention.)

Continuous outcomes

Outcome	Community participation intervention (Yoga), Baseline, N = 8	Community participation intervention (Yoga), 6 week, N = 8	No participation, Baseline, N = 6	No participation, 6 week, N = 6
Psychological distress - Depression (Geriatric Depression Scale 15) Values calculated from individual patient data reported in the study using the change scores. Scale range: 0-15. Change scores. Mean (SD)	4.9 (4.4)	-1.1 (1.4)	3.5 (1.4)	-0.33 (1.3)
Psychological distress - Anxiety (State Trait Anxiety Inventory) Values calculated from individual patient data reported in the study using the change scores. Scale range: 20-80. Change scores. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
STAI Y1-State subscale Mean (SD)	36.9 (10.9)	-4.6 (5.6)	37 (5.3)	-1.3 (3.9)
STAI Y2-Trait subscale Mean (SD)	38.4 (11.9)	-2.1 (5.7)	40.2 (7)	2.8 (4.6)

Psychological distress - Depression (Geriatric Depression Scale 15) - Polarity - Lower values are better
Psychological distress - Anxiety (State Trait Anxiety Inventory) - Polarity - Lower values are better

Dichotomous outcome

Outcome	Community participation intervention (Yoga), Baseline, N = 9	Community participation intervention (Yoga), 6 week, N = 9	No participation, Baseline, N = 8	No participation, 6 week, N = 8
Discontinuation Yoga: 1 injury unrelated to study. Exercise only: 1 personal reasons, 1 declined study. No of events	n = NA ; % = NA	n = 1 ; % = 11	n = NA ; % = NA	n = 2 ; % = 25

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Psychologicaldistress-Depression(GeriatricDepressionScale15)-MeanSD-Community participation intervention (Yoga)-No participation-t6

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

Continuousoutcomes-Psychologicaldistress-Anxiety(StateTraitAnxietyInventory)-STAIY1-Statesubscale-MeanSD-Community participation intervention (Yoga)-No participation-t6

Section	Question	Answer

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

Continuousoutcomes-Psychologicaldistress-Anxiety(StateTraitAnxietyInventory)-STAIY2-Traitsubscale-MeanSD-Community participation intervention (Yoga)-No participation-t6

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (Yoga)-No participation-t6

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

Desrosiers, 2007

Bibliographic Reference Desrosiers J; Noreau L; Rochette A; Carbonneau H; Fontaine L; Viscogliosi C; Bravo G; Effect of a home leisure education program after stroke: a randomized controlled trial.; Archives of physical medicine and rehabilitation; 2007; vol. 88 (no. 9)

Study details

Secondary publication of another included study- see primary study for details	No additional information
Other publications associated with this study included in review	No additional information
Trial name / registration number	No additional information
Study type	Randomised controlled trial (RCT)
Study location	Canada
Study setting	Home-based
Study dates	Between 2002 and 2003.
Sources of funding	Supported by the Canadian Institutes of Health Research (grant no. MOP-49526).
Inclusion criteria	Previously admitted with stroke to a rehabilitation or acute care facility up to 5 years before the study; living in the community; self-report of some problems with leisure participation or satisfaction
Exclusion criteria	Cognitive problems (score no more than 5th percentile on the Modified Mini-Mental State Examination according to age and schooling); language comprehension problems as judged by whether the person could participate in a simple conversation; severe comorbidities (lower-limb amputation; degenerative neurologic conditions such as Parkinson's and multiple sclerosis; cancer; severe hearing or visual loss).
Recruitment / selection of participants	No additional information
Intervention(s)	Community participation intervention (leisure education program) N=33

	A leisure education program delivered at home in 60 minute sessions once per week (for 8-12 weeks). The aim was to enhance the participants' personal empowerment with a view to optimizing leisure experiences. The program was divided into 3 components: leisure awareness (perception and knowledge people have of their own leisure activities and how important they consider them); self awareness (people's perception of themselves, their values, attitudes and capacities in regard to leisure activities; competency development (the perceived and real constraints identified by the person and knowledge of alternatives to achieve autonomy in leisure activities). Divided into 12 steps, with the maximum duration normally not exceeding 12 sessions. The therapist judged that the program had reached an end when 1) the person had gone through all of the steps of the program, 2) the person had integrated significant leisure activities in their life. Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	No cognition difficulties present MMS around 87.
Subgroup 6: Baseline mobility	Not stated/unclear

Subgroup 7: Ethnicity	Not stated/unclear
Population subgroups	No additional information
Comparator	No participation N=29 Same amount of visits, but discussing non-leisure related topics (for example: family, cooking, politics, news, everyday life). Concomitant therapy: No additional information.
Number of participants	62
Duration of follow-up	12 weeks (or end of intervention, which was generally between 8 and 12 weeks).
Indirectness	Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.
Additional comments	No additional information

Study arms

Community participation intervention (leisure education program) (N = 33)
A leisure education program delivered at home in 60 minute sessions once per week (for 8-12 weeks). The aim was to enhance the participants' personal empowerment with a view to optimizing leisure experiences. The program was divided into 3 components: leisure awareness (perception and knowledge people have of their own leisure activities and how important they consider them); self awareness (people's perception of themselves, their values, attitudes and capacities in regard to leisure activities; competency development (the perceived and real constraints identified by the person and knowledge of alternatives to achieve autonomy in leisure activities). Divided into 12 steps, with the maximum duration normally not exceeding 12 sessions. The therapist judged that the

program had reached an end when 1) the person had gone through all of the steps of the program, 2) the person had integrated significant leisure activities in their life. Concomitant therapy: No additional information.

No participation (N = 29)
Same amount of visits, but discussing non-leisure related topics (for example: family, cooking, politics, news, everyday life). Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (leisure education program) (N = 33)	No participation (N = 29)
% Female Only reports baseline values for 29 people in the experimental group, 27 people in the control group. Sample size	n = 13 ; % = 49	n = 15 ; % = 56
Mean age (SD) (years) Mean (SD)	70 (10.2)	70 (12)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Method of analysis unclear Mean (SD)	11 (5.1)	10.7 (5.9)

Characteristic	Community participation intervention (leisure education program) (N = 33)	No participation (N = 29)
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	24.5 (25.7)	32.7 (37.8)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline

- 12 week (<6 months. End of intervention (could be between 8 and 12 weeks))

Continuous outcomes

Outcome	Community participation intervention (leisure education program), Baseline, N = 29	Community participation intervention (leisure education program), 12 week, N = 29	No participation, Baseline, N = 27	No participation, 12 week, N = 27
Wellbeing scores (General Well-Being Schedule) Scale range: 0-110. Change scores. Mean (95% CI)	NA (NA to NA)	6.6 (0.71 to 12.6)	NA (NA to NA)	4.4 (-0.9 to 9.8)
Wellbeing scores (General Well-Being Schedule) Scale range: 0-110. Change scores. Mean (SD)	65.8 (18.2)	NA (NR)	69 (15.4)	NA (NR)
Participation in leisure activities/social groups scores (number of different activities) Change scores. Mean (SD)	8.3 (2.9)	NA (NR)	8.4 (3.2)	NA (NR)
Participation in leisure activities/social groups scores (number of different activities) Change scores. Mean (95% CI)	NA (NA to NA)	2.2 (0.8 to 3.7)	NA (NA to NA)	-0.7 (-1.9 to 0.54)
Psychological distress - Depression	NA (NA to NA)	-8.7 (-13 to -4.3)	NA (NA to NA)	-1.5 (-4.8 to 1.8)

Outcome	Community participation intervention (leisure education program), Baseline, N = 29	Community participation intervention (leisure education program), 12 week, N = 29	No participation, Baseline, N = 27	No participation, 12 week, N = 27
(CES-D) Scale range: 0-60. Change scores. Mean (95% CI)				
Psychological distress - Depression (CES-D) Scale range: 0-60. Change scores. Mean (SD)	18.5 (12.1)	NA (NR)	16.3 (9)	NA (NR)
Stroke-specific Patient-Reported Outcome Measures (Stroke-specific Sickness Impact Profile SS-SIP30) Scale range: 0-30. Change scores. Mean (95% CI)	NA (NA to NA)	-1.2 (-2.4 to -0.02)	NA (NA to NA)	-1.4 (-2.5 to -0.4)
Stroke-specific Patient-Reported Outcome Measures (Stroke-specific Sickness Impact Profile SS-SIP30) Scale range: 0-30. Change scores. Mean (SD)	8.1 (3.6)	NA (NR)	11.6 (4.6)	NA (NR)

Wellbeing scores (General Well-Being Schedule) - Polarity - Higher values are better
Participation in leisure activities/social groups scores (number of different activities) - Polarity - Higher values are better
Psychological distress - Depression (CES-D) - Polarity - Lower values are better
Stroke-specific Patient-Reported Outcome Measures (Stroke-specific Sickness Impact Profile SS-SIP30) - Polarity - Lower values are better

Dichotomous outcome

Outcome	Community participation intervention (leisure education program), Baseline, N = 33	Community participation intervention (leisure education program), 12 week, N = 33	No participation, Baseline, N = 29	No participation, 12 week, N = 29
Discontinuation Experimental: 1 sickness, 1 death, 2 refusals to pursue (4 not available for t2 measurement). Control: No loss to follow up or discontinuation, but 1 not available for t2 measurement and 1 file lost. No of events	n = NA ; % = NA	n = 4 ; % = 12	n = NA ; % = NA	n = 0 ; % = 0

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Wellbeingscores(GeneralWell-BeingSchedule)-MeanNineFivePercentCI-Community participation intervention (leisure education program)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(numberofdifferentactivities)-MeanNineFivePercentCI-Community participation intervention (leisure education program)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Psychologicaldistress-Depression(CES-D)-MeanNineFivePercentCI-Community participation intervention (leisure education program)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(Stroke-specificSicknessImpactProfileSS-SIP30)-MeanNineFivePercentCI-Community participation intervention (leisure education program)-No participation-t12

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (leisure education program)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Drummond, 1995

Bibliographic Reference Drummond, Aer; Walker, MF; A randomized controlled trial of leisure rehabilitation after stroke; Clinical Rehabilitation; 1995; vol. 9 (no. 4); 283-290

Study details

Secondary publication of another included	Drummond, Avril; Walker, Marion; Generalisation of the Effects of Leisure Rehabilitation for Stroke Patients; British Journal of Occupational Therapy; 1996; vol. 59 (no. 7); 330-334

study- see primary study for details	
Other publications associated with this study included in review	No additional information

Drummond, 1996

Bibliographic Reference	Drummond, Avril; Walker, Marion; Generalisation of the Effects of Leisure Rehabilitation for Stroke Patients; British Journal of Occupational Therapy; 1996; vol. 59 (no. 7); 330-334

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	Drummond, Aer; Walker, MF; A randomized controlled trial of leisure rehabilitation after stroke; Clinical Rehabilitation; 1995; vol. 9 (no. 4); 283-290
Trial name / registration number	No additional information.
Study type	Randomised controlled trial (RCT)

Study location	United Kingdom
Study setting	People who received care from the Nottingham Stroke Unit as part of another trial.
Study dates	October 1990 to July 1992.
Sources of funding	Funding from the Stroke Association and the Nottingham Fights Stroke Association.
Inclusion criteria	Stroke survivors who spoke English
Exclusion criteria	Severe comprehension problems; history of dementia; need to be transferred for further medical treatment; people who lived in a nursing home (as the institutions often provide leisure activities and therefore, the intervention was inappropriate).
Recruitment / selection of participants	People at the Nottingham Stroke Unit.
Intervention(s)	Community participation intervention (leisure rehabilitation group) N=21 People were seen by an occupational therapist for a minimum of 30 minutes a week for the first 3 months following discharge from hospital. Thereafter, they were seen for a minimum of 30 minutes a fortnight for the next 3 months. The leisure programme provided was different for each subject, but the advice and help offered fell into the following broad categories: treatment, such as practice of transfers required for leisure pursuits; positioning; provision of equipment; advice on obtaining financial assistance and transport; liaison with specialist organisations; providing physical assistance, such as referral to voluntary agencies. Concomitant therapy: All people received usual care from hospital and social services.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	No communication difficulties Based on exclusion criteria
Subgroup 3: Presence of	Not stated/unclear

sensory difficulties	
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No additional information.
Population subgroups	No additional information.
Comparator	No participation N=44 Combination of two groups. One group (n=21) received the same amount of occupational therapy but it was not focussed on encouraging participation in leisure pursuits. The other group (n=23) received no additional input over that which the group members were receiving from hospital and social services. Concomitant therapy: All people received usual care from hospital and social services.
Number of participants	65
Duration of follow-up	3 months and 6 months
Indirectness	Outcome indirectness for psychological distress - depression (continuous outcome reported as a dichotomous outcome)
Additional	No additional information.

comments	

Study arms

Community participation intervention (leisure rehabilitation group) (N = 21)
People were seen by an occupational therapist for a minimum of 30 minutes a week for the first 3 months following discharge from hospital. Thereafter, they were seen for a minimum of 30 minutes a fortnight for the next 3 months. The leisure programme provided was different for each subject, but the advice and help offered fell into the following broad categories: treatment, such as practice of transfers required for leisure pursuits; positioning; provision of equipment; advice on obtaining financial assistance and transport; liaison with specialist organisations; providing physical assistance, such as referral to voluntary agencies. Concomitant therapy: All people received usual care from hospital and social services.

No participation (N = 44)
Combination of two groups. One group (n=21) received the same amount of occupational therapy but it was not focussed on encouraging participation in leisure pursuits. The other group (n=23) received no additional input over that which the group members were receiving from hospital and social services. Concomitant therapy: All people received usual care from hospital and social services.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (leisure rehabilitation group) (N = 21)	No participation (N = 44)
% Female Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (leisure rehabilitation group) (N = 21)	No participation (N = 44)
Mean age (SD) (years) Mean (SD)	58.95 (13.11)	69.34 (8.58)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (leisure rehabilitation group) (N = 21)	No participation (N = 44)
Sample size		
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 3 month (<6 months)
- 6 month (Greater than and equal to 6 months)

Continuous outcomes

Outcome	Community participation intervention (leisure rehabilitation group), Baseline, N = 21	Community participation intervention (leisure rehabilitation group), 3 month, N = 21	Community participation intervention (leisure rehabilitation group), 6 month, N = 21	No participation, Baseline, N = 44	No participation, 3 month, N = 44	No participation, 6 month, N = 44
Activities of daily living (Nottingham Activities of Daily Living) Scale range: Unclear (the values usually used do not match those provided in	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)

Outcome	Community participation intervention (leisure rehabilitation group), Baseline, N = 21	Community participation intervention (leisure rehabilitation group), 3 month, N = 21	Community participation intervention (leisure rehabilitation group), 6 month, N = 21	No participation, Baseline, N = 44	No participation, 3 month, N = 44	No participation, 6 month, N = 44
this study). Final values. Mean (SD)						
NADL Mobility subscale Mean (SD)	NR (NR)	10.67 (5.21)	12.3 (4.49)	NR (NR)	6.54 (4.89)	7.5 (5.43)
NADL Kitchen subscale Mean (SD)	NR (NR)	10.43 (4.18)	12.4 (5.73)	NR (NR)	8.88 (5.46)	10.68 (7.43)
NADL Domestic subscale Mean (SD)	NR (NR)	4.81 (4.78)	5.05 (4.5)	NR (NR)	4.34 (3.92)	4.38 (3.54)
NADL Leisure subscale Mean (SD)	NR (NR)	8.86 (3.99)	10.2 (3.25)	NR (NR)	6.83 (2.63)	6.9 (3.53)
Person/participant generic health-related quality of life (Nottingham Health Profile) Scale range: 0-100. Final values. Using Total NHP scale (TNHP).	29.48 (24.91)	24.08 (16.18)	23.85 (15.67)	35.1 (22.9)	38.37 (18.18)	37 (19.89)

Outcome	Community participation intervention (leisure rehabilitation group), Baseline, N = 21	Community participation intervention (leisure rehabilitation group), 3 month, N = 21	Community participation intervention (leisure rehabilitation group), 6 month, N = 21	No participation, Baseline, N = 44	No participation, 3 month, N = 44	No participation, 6 month, N = 44
Mean (SD)						
Participation in leisure activities/social groups scores (Total leisure score) Scale range: Unclear. Final values. Mean (SD)	42.14 (12.4)	43.91 (13.54)	48.5 (11.12)	37.23 (12.64)	31.17 (9.77)	32.68 (10.96)

Activities of daily living (Nottingham Activities of Daily Living) - Polarity - Higher values are better
Person/participant generic health-related quality of life (Nottingham Health Profile) - Polarity - Higher values are better
Participation in leisure activities/social groups scores (Total leisure score) - Polarity - Higher values are better

Dichotomous outcomes

Outcome	Community participation intervention (leisure rehabilitation group), Baseline, N = 21	Community participation intervention (leisure rehabilitation group), 3 month, N = 21	Community participation intervention (leisure rehabilitation group), 6 month, N = 21	No participation, Baseline, N = 44	No participation, 3 month, N = 44	No participation, 6 month, N = 44
Psychological distress - depression (definitely depression)	n = NR ; % = NR	n = 4 ; % = 19	n = 3 ; % = 14	n = NR ; % = NR	n = 16 ; % = 36	n = 15 ; % = 34

Outcome	Community participation intervention (leisure rehabilitation group), Baseline, N = 21	Community participation intervention (leisure rehabilitation group), 3 month, N = 21	Community participation intervention (leisure rehabilitation group), 6 month, N = 21	No participation, Baseline, N = 44	No participation, 3 month, N = 44	No participation, 6 month, N = 44
Downgraded for indirectness as dichotomous outcome instead of continuous. Only definitely depressed used (instead of possibly depression). No of events						
Discontinuation Overall reasons given only. 3 could not be assessed at 2 months - 2 withdrew due to deteriorating health, 1 moved into a nursing home permanently. 3 withdrew between 3 and 6 months, 1 died, 1 had another stroke. No of events	n = NA ; % = NA	n = 0 ; % = 0	n = 1 ; % = 5	n = NA ; % = NA	n = 3 ; % = 7	n = 4 ; % = 9

Psychological distress - depression (definitely depression) - Polarity - Lower values are better
Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamActivitiesofDailyLiving)-NADLMobilitysubscale-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t3

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamActivitiesofDailyLiving)-NADLMobilitysubscale-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t6

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamActivitiesofDailyLiving)-NADLKitchensubscale-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t3

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamActivitiesofDailyLiving)-NADLKitchensubscale-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t6

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamActivitiesofDailyLiving)-NADLDomesticsubscale-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t3

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamActivitiesofDailyLiving)-NADLDomesticsubscale-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t6

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamActivitiesofDailyLiving)-NADLLeisuresubscale-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t3

Section	Question	Answer

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamActivitiesofDailyLiving)-NADLLeisuresubscale-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t6

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(NottinghamHealthProfile)-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t3

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(NottinghamHealthProfile)-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t6

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Psychologicaldistress-depression(definitelydepression)-NoOfEvents-Community participation intervention (leisure rehabilitation group)-No participation-t3

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - continuous outcome reported in a dichotomous form)*

Dichotomousoutcomes-Psychologicaldistress-depression(definitelydepression)-NoOfEvents-Community participation intervention (leisure rehabilitation group)-No participation-t6

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Outcome indirectness - continuous outcome reported in a dichotomous form)*

Dichotomousoutcomes-Discontinuation-NoOfEvents-Community participation intervention (leisure rehabilitation group)-No participation-t3

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Dichotomousoutcomes-Discontinuation-NoOfEvents-Community participation intervention (leisure rehabilitation group)-No participation-t6

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

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(Totalleisurescore)-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t3

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

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(Totalleisurescore)-MeanSD-Community participation intervention (leisure rehabilitation group)-No participation-t6

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

Harel-Katz, 2020

Bibliographic Reference	Harel-Katz, H.; Adar, T.; Milman, U.; Carmeli, E.; 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; 2020; vol. 27 (no. 8); 577-589

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	Clinicaltrials.gov registry - NCT02289287
Study type	Randomised controlled trial (RCT)
Study location	Israel
Study setting	Community-based outpatient occupational therapy department sessions
Study dates	January 2016 to September 2018
Sources of funding	This study was partly sponsored by a scholarship from the "Foundation for promoting the Research of Aging" of University of Haifa and JDC Israel, and by an excellence scholarship for PhD candidates from the Graduate Research Authority of University of Haifa, Israel.

Inclusion criteria	Mild cerebrovascular accident diagnosed up to 1.5 years before admission to the rehabilitation center; at least 18-years-old; living at home; capable of basic communication in Hebrew, which is the official language in Israel. People admitted with a recurrent stroke were only included if they were independent in Basic Activities of Daily Living before the last stroke.
Exclusion criteria	Moderate-severe stroke according to the NIHSSS (at least 16); moderate-severe cognitive impairment according to the Montreal Cognitive Assessment (total score at least 16); aphasia or other impairment that impedes verbal communication; diagnosis of mild cognitive impairment, dementia, chronic psychiatric disorder, intellectual disability or other syndromes that prevent informed consent.
Recruitment / selection of participants	People admitted to the rehabilitation center previously
Intervention(s)	Community participation intervention (self-management program) N=31 IPASS intervention - 12 weekly group sessions, each lasting 2.5 hours. The first five sessions were based on the content of the Chronic Disease Self Management Program, which includes learning and practicing self-management skills, such as problem-solving and decision-making, along with elements for improving participants' self-efficacy to manage their medical and emotional condition and participation. These were followed by seven stroke-specific sessions that focussed on applying the self-management skills that were practiced, along with a process of analysing difficulties in performing daily activities and finding strategies, to improve participation at home, community, work and social activities. The intervention was delivered by an occupational therapist experienced in stroke rehabilitation who was a certified facilitator for the Stanford's Chronic Disease Self Management Program, along with a peer facilitator who was a stroke survivor. Each group included 4-6 participants. The sessions were held at the occupational therapy department in the day-rehabilitation center. People organised their own transportation to and from the group sessions. Concomitant therapy: No additional information
Subgroup 1: Severity	Mild (or NIHSS 1-5)
Subgroup 2: Presence of communication difficulties	No communication difficulties Based on inclusion criteria

Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No additional information
Population subgroups	No additional information
Comparator	No participation N=29 Standard care only (no additional information to what this entailed). Concomitant therapy: No additional information
Number of participants	60
Duration of follow-up	12 weeks (end of intervention)
Indirectness	No additional information
Additional	No additional information.

comments	

Study arms

Community participation intervention (self-management program) (N = 31)
IPASS intervention - 12 weekly group sessions, each lasting 2.5 hours. The first five sessions were based on the content of the Chronic Disease Self Management Program, which includes learning and practicing self-management skills, such as problem-solving and decision-making, along with elements for improving participants' self-efficacy to manage their medical and emotional condition and participation. These were followed by seven stroke-specific sessions that focussed on applying the self-management skills that were practiced, along with a process of analysing difficulties in performing daily activities and finding strategies, to improve participation at home, community, work and social activities. The intervention was delivered by an occupational therapist experienced in stroke rehabilitation who was a certified facilitator for the Stanford's Chronic Disease Self Management Program, along with a peer facilitator who was a stroke survivor. Each group included 4-6 participants. The sessions were held at the occupational therapy department in the day-rehabilitation center. People organised their own transportation to and from the group sessions. Concomitant therapy: No additional information

No participation (N = 29)
Standard care only (no additional information to what this entailed). Concomitant therapy: No additional information

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (self-management program) (N = 31)	No participation (N = 29)
% Female Only reports baseline values for 20 in the intervention group and	n = 5 ; % = 25	n = 4 ; % = 21

Characteristic	Community participation intervention (self-management program) (N = 31)	No participation (N = 29)
19 in the control group. Sample size		
Mean age (SD) (years) Range	52 to 75	45 to 87
Mean age (SD) (years) Mean (SD)	65 (NR)	66 (NR)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity NIHSS Range	0 to 7	0 to 7
Severity NIHSS Mean (SD)	2.7 (NR)	3 (NR)
Time after stroke (days) Range	34 to 423	29 to 241

Characteristic	Community participation intervention (self-management program) (N = 31)	No participation (N = 29)
Time after stroke (days) Mean (SD)	136 (NR)	120 (NR)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties MOCA Range	17 to 30	18 to 28
Presence of cognition difficulties MOCA Mean (SD)	22.2 (NR)	21.7 (NR)
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 12 week (<6 months. End of intervention.)

Continuous outcomes

Outcome	Community participation intervention (self-management program), Baseline, N = 20	Community participation intervention (self-management program), 12 week, N = 20	No participation, Baseline, N = 19	No participation, 12 week, N = 19
Participation in leisure activities/social groups scores (Reintegration to Normal Living index) Scale range: 0-100. Change scores. Mean (SD)	NR (NR)	8.45 (18.3)	NR (NR)	2.73 (12.84)
Activities of daily living (Functional Independence Measure Motor Subscale) Scale range: 13-91. Change scores. Mean (SD)	NR (NR)	4.3 (4.9)	NR (NR)	1.05 (6.81)

Participation in leisure activities/social groups scores (Reintegration to Normal Living index) - Polarity - Higher values are better
Activities of daily living (Functional Independence Measure Motor Subscale) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (self-management program), Baseline, N = 31	Community participation intervention (self-management program), 12 week, N = 31	No participation, Baseline, N = 29	No participation, 12 week, N = 29
Discontinuation Community participation intervention: 7 did not receive allocated intervention (not interested, excluded due to deterioration in health status, death, lost contact). 4 discontinued (hospitalised, health issues, no longer interested). Control: 2 did not receive intervention (quit rehabilitation before T0, health issues), 4 discontinued (hospitalisation, death). No of events	n = NR ; % = NR	n = 11 ; % = 35	n = NR ; % = NR	n = 6 ; % = 21

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(ReintegrationtoNormalLivingindex)-MeanSD-Community participation intervention (self-management program)-No participation-t12

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

Continuousoutcomes-Activitiesofdailyliving(FunctionalIndependenceMeasureMotorSubscale)-MeanSD-Community participation intervention (self-management program)-No participation-t12

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (self-management program)-No participation-t12

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

Immink, 2014

Bibliographic Reference Immink, M. A.; Hillier, S.; Petkov, J.; Randomized controlled trial of yoga for chronic poststroke hemiparesis: Motor function, mental health, and quality of life outcomes; Topics in Stroke Rehabilitation; 2014; vol. 21 (no. 3); 256-271

Study details

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

Other publications associated with this study included in review	No additional information
Trial name / registration number	ACTRN12609000666224
Study type	Randomised controlled trial (RCT)
Study location	Australia
Study setting	Community based. Conducted in a recreation room at the University of South Australia campus.
Study dates	No additional information
Sources of funding	Funded by the National Stroke Foundation (Australia)
Inclusion criteria	At least 18 years of age; diagnosis of stroke having taken place at least nine months prior to baseline assessment and resulting in hemiparesis (one sided weakness), completion of post-stroke rehabilitation, ability to follow two-step commands and able to ambulate independently or with supervision, with or without an assistive device.
Exclusion criteria	The presence of other neurological or neuromuscular conditions; current or previous participation in yoga or meditation practice or currently participating in structured exercise programs.
Recruitment / selection of participants	Advertisements were posted in local community newspapers and local television and radio stations announced the study and opportunity for participation. The study was announced on online listings hosted by state and community health and disability organisations and local health providers were informed of the trial and opportunity for participation.
Intervention(s)	Community participation intervention (Yoga) N=12 A standardized 10-week yoga intervention developed for a chronic post-stroke population with the primary aim of facilitating yoga participation and self-efficacy. The selected practices were appropriate for a beginner level participant and included a range of adaptations and modifications to accommodate a range of physical abilities as well as personal needs and preferences. The practices included yoga asana and pranayama practices and Satyananda Yoga Nidra meditation. Options for adapting yoga practices included: performing bilateral or unilateral versions of yoga asana, performing standing yoga asana practices with balance assistive support, performing yoga practices while seated in a chair. In addition, people were instructed on the use of mental imagery to replace physical performance of yoga asana in the event that the person felt that asana was not appropriate or too strenuous for them. 90 minute group classes and daily 40-minute individual home practice.

	The 90-minute group class began with education for 10-minutes (with a lecture on the concepts of yoga and focus theme for that week) followed by 30-minutes of yoga asana, 10-12 minutes of pranayama and 20-30 minutes of Satyananda Yoga Nidra. The class concluded with an 8-10 minute discussion where participants were able to ask questions or relate their yoga participation experiences. All people participated in the same weekly group class. The daily practice was a shortened version with 35-45 minutes including 10-20 minutes for yoga asana and pranayama followed by 25 minutes for Satyananda Yoga Nidra. This was supported by an illustrated guide book and compact disc containing audio recordings. Concomitant therapy: All people were advised to maintain their usual treatment and lifestyle behaviour where possible during the period of their participation.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Mixed
Subgroup 7:	Not stated/unclear

Ethnicity	
Comparator	No participation N=13 Wait list control. Concomitant therapy: All people were advised to maintain their usual treatment and lifestyle behaviour where possible during the period of their participation.
Number of participants	22
Duration of follow-up	10 weeks (end of intervention)
Indirectness	No additional information
Additional comments	No additional information

Study arms

Community participation intervention (Yoga) (N = 12)
A standardized 10-week yoga intervention developed for a chronic post-stroke population with the primary aim of facilitating yoga participation and self-efficacy. The selected practices were appropriate for a beginner level participant and included a range of adaptations and modifications to accommodate a range of physical abilities as well as personal needs and preferences. The practices included yoga asana and pranayama practices and Satyananda Yoga Nidra meditation. Options for adapting yoga practices included: performing bilateral or unilateral versions of yoga asana, performing standing yoga asana practices with balance assistive support, performing yoga practices while seated in a chair. In addition, people were instructed on the use of mental imagery to replace physical performance of yoga asana in the event that the person felt that asana was not appropriate or too strenuous for them. 90 minute group classes and daily 40-minute individual home practice. The 90-minute group class began with education for 10-minutes (with a lecture on the concepts of yoga and focus theme for that week) followed by 30-minutes of yoga asana, 10-12 minutes of pranayama and 20-30 minutes of Satyananda Yoga Nidra. The class concluded with an 8-10 minute discussion where participants were able to ask

questions or relate their yoga participation experiences. All people participated in the same weekly group class. The daily practice was a shortened version with 35-45 minutes including 10-20 minutes for yoga asana and pranayama followed by 25 minutes for Satyananda Yoga Nidra. This was supported by an illustrated guide book and compact disc containing audio recordings. Concomitant therapy: All people were advised to maintain their usual treatment and lifestyle behaviour where possible during the period of their participation.

No participation (N = 13)
Wait list control. Concomitant therapy: All people were advised to maintain their usual treatment and lifestyle behaviour where possible during the period of their participation.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (Yoga) (N = 12)	No participation (N = 13)
% Female Sample size	n = 5 ; % = 42	n = 8 ; % = 62
Mean age (SD) (years) Range	32 to 85	24 to 91
Mean age (SD) (years) Mean (SD)	56.1 (13.6)	63.2 (17.4)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (Yoga) (N = 12)	No participation (N = 13)
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	81.6 (77.5)	23.3 (12.5)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 10 week (<6 months. End of intervention)

Continuous outcomes

Outcome	Community participation intervention (Yoga), Baseline, N = 12	Community participation intervention (Yoga), 10 week, N = 11	No participation, Baseline, N = 13	No participation, 10 week, N = 11
Psychological distress - Depression (Geriatric Depression Scale GDS15) Scale range: 0-15. Final values. Mean (SD)	3.9 (3.3)	2.7 (2.9)	5.8 (2.9)	4.8 (3.3)
Psychological distress - Anxiety (State Anxiety Inventory) Scale range: 20-80. Final values. Mean (SD)	NR (NR)	NR (NR)	NR (NR)	NR (NR)
State Anxiety Inventory State subscale (STAI-Y1) Mean (SD)	40.7 (13.4)	33.4 (7.1)	40.4 (11.5)	41.8 (12.2)
State Anxiety Inventory Trait subscale (STAI-Y2) Mean (SD)	43 (12.3)	35.3 (10.5)	44.2 (8.6)	42 (10.2)
Stroke-specific Patient Reported	NR (NR)	NR (NR)	NR (NR)	NR (NR)

Outcome	Community participation intervention (Yoga), Baseline, N = 12	Community participation intervention (Yoga), 10 week, N = 11	No participation, Baseline, N = 13	No participation, 10 week, N = 11
Outcome Measures (Stroke Impact Scale) Scale range: 0-100. Final values. Mean (SD)				
SIS physical domain Mean (SD)	53.5 (19.4)	64.4 (20)	52.3 (19.4)	54.1 (23.3)
SIS emotion domain Mean (SD)	67.3 (17)	74.3 (15)	67.2 (17.6)	67.5 (21.2)
SIS memory domain Mean (SD)	76 (22.3)	87.5 (11)	74.7 (19.8)	72.2 (21)
SIS communication domain Mean (SD)	90 (8.1)	88 (10.6)	87.3 (13.1)	86.6 (15)
SIS social participation domain Mean (SD)	60.8 (22.3)	70.6 (24.5)	58.4 (18.1)	54.5 (30)
SIS stroke recovery domain Mean (SD)	58.2 (17.9)	65 (22.6)	60.5 (21.1)	63 (24.5)

Psychological distress - Depression (Geriatric Depression Scale GDS15) - Polarity - Lower values are better
Psychological distress - Anxiety (State Anxiety Inventory) - Polarity - Lower values are better
Stroke-specific Patient Reported Outcome Measures (Stroke Impact Scale) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (Yoga), Baseline, N = 12	Community participation intervention (Yoga), 10 week, N = 12	No participation, Baseline, N = 13	No participation, 10 week, N = 13
Discontinuation Yoga: 1 withdrew participation. Control: 2 withdrew participation. No of events	n = NA ; % = NA	n = 1 ; % = 8	n = NA ; % = NA	n = 2 ; % = 15

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Psychologicaldistress-Depression(GeriatricDepressionScaleGDS15)-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Continuousoutcomes-Psychologicaldistress-Anxiety(StateAnxietyInventory)-StateAnxietyInventoryStatesubscale(STAI-Y1)-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Psychologicaldistress-Anxiety(StateAnxietyInventory)-StateAnxietyInventoryTraitsubscale(STAI-Y2)-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Continuousoutcomes-Stroke-specificPatientReportedOutcomeMeasures(StrokeImpactScale)-SISphysicaldomain-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Continuousoutcomes-Stroke-specificPatientReportedOutcomeMeasures(StrokeImpactScale)-SISemotiondomain-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Continuousoutcomes-Stroke-specificPatientReportedOutcomeMeasures(StrokeImpactScale)-SISmemorydomain-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Continuousoutcomes-Stroke-specificPatientReportedOutcomeMeasures(StrokeImpactScale)-SIScommunicationdomain-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Continuousoutcomes-Stroke-specificPatientReportedOutcomeMeasures(StrokeImpactScale)-SISsocialparticipationdomain-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Continuousoutcomes-Stroke-specificPatientReportedOutcomeMeasures(StrokeImpactScale)-SISstrokerecoverydomain-MeanSD-Community participation intervention (Yoga)-No participation-t10

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (Yoga)-No participation-t10

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

Kim, 2014

Bibliographic Reference	Kim, M.; Cho, K.; Lee, W.; Community walking training program improves walking function and social participation in chronic stroke patients; Tohoku Journal of Experimental Medicine; 2014; vol. 234 (no. 4); 281-6

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	Republic of Korea
Study setting	Inpatient rehabilitation hospital
Study dates	No additional information
Sources of funding	No additional information
Inclusion criteria	Hemiparesis from a single stroke occurring at least six months before; sufficient cognition to follow simple instructions and understand the purpose of the study (Korean version of the Mini-Mental State Examination score of at least 24 points); gait speed <0.8m/s; ability to walk 10 m independently without an assistive device; absence of a musculoskeletal condition that could potentially affect the ability to walk 10m independently without an assistive device; absence of a musculoskeletal condition that could potentially affect the ability to walk safely; absence of hemispatial neglect.
Exclusion criteria	Participation in other studies or rehabilitation programs; severe heart disease or uncontrolled hypertension and pain.
Recruitment / selection of participants	People undergoing standard rehabilitation at the inpatient rehabilitation hospital
Intervention(s)	Community participation interventions (Community walking training program) N=13 Additional community walking training program 30 minutes per day, five times a week for four weeks. This used various real community environments, including walking near the hospital setting, walking outside the hospital setting on uneven ground, walking outside the hospital setting on uneven ground with obstacles and visiting a shopping center. Walking near the hospital setting was performed on a 200m route including the lobby, hallway and near the hospital. In the second week, walking outside of the hospital setting on uneven ground was performed near the hospital on a 300m route including pavement, a ramp and stairs. In the third week, walking outside the hospital setting on uneven ground was performed on a 400m route, including a gradual slope, crosswalk, and an unpaved road with obstacles. In the fourth week, subjects visited a

	shopping center near the hospital. Concomitant therapy: Standard rehabilitation program consisting of physical and occupational therapy for 60 minutes per day, five times a week for four weeks. Conventional physical therapy included increased trunk stability, lower-extremity muscle strength, and gait and was performed for 30 minutes, while occupational therapy including an upper-extremity training program for activities of daily living was performed for the other 30 minutes.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Mobility difficulties present
Subgroup 7: Ethnicity	No additional information
Population subgroups	No additional information

Comparator	No participation N=13 Standard rehabilitation program only. Concomitant therapy: Standard rehabilitation program consisting of physical and occupational therapy for 60 minutes per day, five times a week for four weeks. Conventional physical therapy included increased trunk stability, lower-extremity muscle strength, and gait and was performed for 30 minutes, while occupational therapy including an upper-extremity training program for activities of daily living was performed for the other 30 minutes.
Number of participants	26
Duration of follow-up	4 weeks (end of intervention)
Indirectness	No additional information
Additional comments	Method of analysis unclear. Given that people were excluded from the analysis, probably not ITT.

Study arms

Community participation interventions (Community walking training program) (N = 13)
Additional community walking training program 30 minutes per day, five times a week for four weeks. This used various real community environments, including walking near the hospital setting, walking outside the hospital setting on uneven ground, walking outside the hospital setting on uneven ground with obstacles and visiting a shopping center. Walking near the hospital setting was performed on a 200m route including the lobby, hallway and near the hospital. In the second week, walking outside of the hospital setting on uneven ground was performed near the hospital on a 300m route including pavement, a ramp and stairs. In the third week, walking outside the hospital setting on uneven ground was performed on a 400m route, including a gradual slope, crosswalk, and an unpaved road with obstacles. In the fourth week, subjects visited a shopping center near the hospital. Concomitant therapy: Standard rehabilitation program consisting of physical and occupational therapy for 60 minutes per day, five times a week for four weeks. Conventional physical therapy included increased trunk stability, lower-extremity muscle strength, and gait and was performed for 30

minutes, while occupational therapy including an upper-extremity training program for activities of daily living was performed for the other 30 minutes.

No participation (N = 13)
Standard rehabilitation program only. Concomitant therapy: Standard rehabilitation program consisting of physical and occupational therapy for 60 minutes per day, five times a week for four weeks. Conventional physical therapy included increased trunk stability, lower-extremity muscle strength, and gait and was performed for 30 minutes, while occupational therapy including an upper-extremity training program for activities of daily living was performed for the other 30 minutes.

Characteristics

Arm-level characteristics

Characteristic	**Community participation interventions (Community walking training program) (N = 13)**	**No participation (N = 13)**
% Female Sample size	n = 5 ; % = 45.5	n = 4 ; % = 36.4
Mean age (SD) (years) Mean (SD)	50.18 (10.29)	50.73 (7.24)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation interventions (Community walking training program) (N = 13)	No participation (N = 13)
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (days) Mean (SD)	190.45 (108.46)	272.82 (107.71)
Presence of communication difficulties Mean (SD)	NR (NR)	NR (NR)
Presence of sensory difficulties Mean (SD)	NR (NR)	NR (NR)
Presence of psychological distress Mean (SD)	NR (NR)	NR (NR)
Presence of cognition difficulties MMSE-K Mean (SD)	27.36 (1.68)	27.18 (1.77)
Baseline mobility Mean (SD)	NR (NR)	NR (NR)

Outcomes

Study timepoints

- Baseline
- 4 week (End of intervention. <6 months.)

Continuous outcome

Outcome	Community participation interventions (Community walking training program), Baseline, N = 13	Community participation interventions (Community walking training program), 4 week, N = 11	No participation, Baseline, N = 13	No participation, 4 week, N = 11
Stroke-specific Patient Reported Outcome Measures (Stroke Impact Scale Social Participation) Scale range: 0-100. Change scores. Only reports the social participation score. Mean (SD)	42.34 (20.79)	12.49 (10.17)	38.36 (18)	4.25 (3.77)

Stroke-specific Patient Reported Outcome Measures (Stroke Impact Scale Social Participation) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation interventions (Community walking training program), Baseline, N = 13	Community participation interventions (Community walking training program), 4 week, N = 11	No participation, Baseline, N = 13	No participation, 4 week, N = 11
Discontinuation 2 people dropped out from each group due to health conditions, personal	n = NA ; % = NA	n = 2 ; % = 15	n = NA ; % = NA	n = 2 ; % = 15

Outcome	Community participation interventions (Community walking training program), Baseline, N = 13	Community participation interventions (Community walking training program), 4 week, N = 11	No participation, Baseline, N = 13	No participation, 4 week, N = 11
reasons or discharge (specific reasons not given) No of events				

Discontinuation - Polarity - Lower values are better

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

Continuousoutcome-Stroke-specificPatientReportedOutcomeMeasures(StrokeImpactScaleSocialParticipation)-MeanSD-Community participation interventions (Community walking training program)-No participation-t4

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation interventions (Community walking training program)-No participation-t4

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Logan, 2014

Bibliographic Reference Logan, P. A.; Armstrong, S.; Avery, T. J.; Barer, D.; Barton, G. R.; Darby, J.; Gladman, J. R.; Horne, J.; Leach, S.; Lincoln, N. B.; Mehta, S.; Newell, O.; O'Neil, K.; Sach, T. H.; Walker, M. F.; Williams, H. C.; Woodhouse, L. J.; Leighton, M. P.; Rehabilitation aimed at improving outdoor mobility for people after stroke: a multicentre randomised controlled study (the Getting out of the House Study); Health Technology Assessment (Winchester, England); 2014; vol. 18 (no. 29); vii-viii, 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	ISRCTN58683841
Study type	Randomised controlled trial (RCT)
Study location	United Kingdom
Study setting	15 sites across England, Scotland and Wales including 9 primary care community stroke rehabilitation services, 4 secondary

	care community stroke rehabilitation services and 2 secondary care stroke services.
Study dates	November 2009 to August 2011.
Sources of funding	Funding for this study was provided by the Health Technology Assessment programme of the National Institute for Health Research.
Inclusion criteria	People aged at least 18 years; had experienced a stroke at least 6 weeks previously; wished to get out of the house more often.
Exclusion criteria	Not able to comply with the requirements of the protocol and therapy program (in the opinion of the assessor); still in post-stroke intermediate care or active rehabilitation; previously enrolled in this study.
Recruitment / selection of participants	People were identified through searching general practice databases, searching stroke registers in secondary care hospitals, community hospitals or primary care community teams and approaching patients attending post-stroke outpatient clinics as they were discharged from rehabilitation. If the search team also had access to local stroke service rehabilitation records they cross referenced for any active stroke-related rehabilitation that may be ongoing. Other recruitment strategies included placing adverts within local newspapers, local trust publications and relevant websites (e.g. the Stroke Association), establishing a study website, various articles within local trust publications and local press, visiting local stroke groups and widespread distribution of the study poster to relevant areas (e.g. GPs, rehabilitation teams, stroke groups, etc).
Intervention(s)	Community participation intervention (outdoor mobility) N=287 Practice of outdoor mobility through repeated practice. This included buses, taxis, walking, voluntary drivers and mobility scooters until they felt confident to go alone or with a companion. The number of intervention sessions depended entirely on the participant. If they felt they did not require any further intervention, for whatever reason, then the intervention stopped. If they felt they required additional intervention for whatever reason, they could continue the intervention up to a maximum of 12 visits. Concomitant therapy: All people received control information during the baseline visit. This information was provision of verbal and written local mobility and transport information that was site specific. This included information about bus times, local community transport, taxi services, wheelchair services, disabled persons' car badges, wheelchair borrowing schemes and mobility equipment.
Subgroup 1: Severity	Not stated/unclear

Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Majority white (533 people). People who were black (Caribbean, African and from other groups), Pakistani, Indian, Bangladeshi and Mixed.
Population subgroups	No additional information
Comparator	No participation N=281 Usual care only. Concomitant therapy: All people received control information during the baseline visit. This information was provision of verbal and written local mobility and transport information that was site specific. This included information about bus times, local community transport, taxi services, wheelchair services, disabled persons' car badges, wheelchair borrowing schemes and mobility equipment.

Number of participants	526
Duration of follow-up	12 months
Indirectness	No additional information
Additional comments	Intention-to-treat basis with analyses being conducted on available case data and a sensitivity analysis using multiple imputation to replace missing values was performed on the majority of outcomes.

Study arms

Community participation intervention (outdoor mobility) (N = 287)
Practice of outdoor mobility through repeated practice. This included buses, taxis, walking, voluntary drivers and mobility scooters until they felt confident to go alone or with a companion. The number of intervention sessions depended entirely on the participant. If they felt they did not require any further intervention, for whatever reason, then the intervention stopped. If they felt they required additional intervention for whatever reason, they could continue the intervention up to a maximum of 12 visits. Concomitant therapy: All people received control information during the baseline visit. This information was provision of verbal and written local mobility and transport information that was site specific. This included information about bus times, local community transport, taxi services, wheelchair services, disabled persons' car badges, wheelchair borrowing schemes and mobility equipment.

No participation (N = 281)
Usual care only. Concomitant therapy: All people received control information during the baseline visit. This information was provision of verbal and written local mobility and transport information that was site specific. This included information about bus times, local community transport, taxi services, wheelchair services, disabled persons' car badges, wheelchair borrowing schemes and mobility equipment.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (outdoor mobility) (N = 287)	No participation (N = 281)
% Female Sample size	n = 166 ; % = 57.8	n = 149 ; % = 53
Mean age (SD) (years) Mean (SD)	71.7 (12.1)	71.5 (12.1)
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA
White Sample size	n = 270 ; % = 94.1	n = 263 ; % = 93.6
Black Caribbean Sample size	n = 4 ; % = 1.4	n = 7 ; % = 2.5
Black African Sample size	n = 1 ; % = 0.3	n = 2 ; % = 0.7
Black: Other Sample size	n = 3 ; % = 1	n = 1 ; % = 0.4
Pakistani Sample size	n = 0 ; % = 0	n = 0 ; % = 0

Characteristic	Community participation intervention (outdoor mobility) (N = 287)	No participation (N = 281)
Indian Sample size	n = 4 ; % = 1.4	n = 5 ; % = 1.8
Bangladeshi Sample size	n = 2 ; % = 0.7	n = 2 ; % = 0.7
Chinese Sample size	n = 0 ; % = 0	n = 0
Mixed Sample size	n = 1 ; % = 0.3	n = 0 ; % = 0
Not given Sample size	n = 1 ; % = 0.3	n = 1 ; % = 0.4
Other Sample size	n = 1 ; % = 0.3	n = 0 ; % = 0
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Mean (SD)	NR (NR)	NR (NR)
Time after stroke (Months) Mean (SD)	43.2 (60.1)	37 (43.8)

Characteristic	Community participation intervention (outdoor mobility) (N = 287)	No participation (N = 281)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 12 month (Greater than and equal to 6 months)

Continuous outcome (EQ-5D)

Outcome	Community participation intervention (outdoor mobility), Baseline, N = 281	Community participation intervention (outdoor mobility), 12 month, N = 218	No participation, Baseline, N = 280	No participation, 12 month, N = 203
Person/participant generic health-related quality of life (EQ-5D) Scale range: -0.11-1. Change scores. Mean (95% CI)	0.41 (-0.18 to 0.85)	-0.022 (-0.57 to 0.44)	0.42 (-0.12 to 0.85)	0.022 (-0.53 to 0.65)

Person/participant generic health-related quality of life (EQ-5D) - Polarity - Higher values are better

Continuous outcome (GHQ-12)

Outcome	Community participation intervention (outdoor mobility), Baseline, N = 287	Community participation intervention (outdoor mobility), 12 month, N = 208	No participation, Baseline, N = 281	No participation, 12 month, N = 228
Psychological Distress - Depression (GHQ-12 participant) Scale range: 0-36. Final values. Adjusted value used reporting the mean difference between intervention and control. Mean (95% CI)	NA (NA to NA)	1.07 (-0.045 to 2.15)	NA (NA to NA)	NA (NA to NA)
Psychological Distress - Depression (GHQ-12 participant) Scale range: 0-36. Final values. Adjusted value used reporting the mean difference between intervention and control. Mean (SD)	14.9 (6.5)	NA (NA)	15.1 (6.8)	NA (*empty data*)

Psychological Distress - Depression (GHQ-12 participant) - Polarity - Lower values are better

Continuous outcome (NEADL)

Outcome	Community participation intervention (outdoor mobility), Baseline, N = 287	Community participation intervention (outdoor mobility), 12 month, N = 210	No participation, Baseline, N = 281	No participation, 12 month, N = 228
Activities of daily living (NEADL) Scale range: 0-66. Final values. Adjusted value used reporting the mean difference between intervention and control. Mean (95% CI)	NA (NA to NA)	0.49 (-0.22 to 1.17)	NA (NA to NA)	NA (NA to NA)
Activities of daily living (NEADL) Scale range: 0-66. Final values. Adjusted value used reporting the mean difference between intervention and control. Mean (SD)	8.8 (5.2)	NA (NA)	10.1 (5.7)	NA (NA)

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

Dichotomous outcome

Outcome	Community participation intervention (outdoor mobility), Baseline, N = 287	Community participation intervention (outdoor mobility), 12 month, N = 287	No participation, Baseline, N = 281	No participation, 12 month, N = 281
Discontinuation Intervention: 6 did not receive intervention, 8 no follow-up data, 6 lost to follow-up, 31 withdrew, 12	n = NA ; % = NA	n = 63 ; % = 22	n = NA ; % = NA	n = 76 ; % = 27

Outcome	Community participation intervention (outdoor mobility), Baseline, N = 287	Community participation intervention (outdoor mobility), 12 month, N = 287	No participation, Baseline, N = 281	No participation, 12 month, N = 281
deceased. Control: 6 received intervention, 2 no follow-up data, 12 lost to follow-up, 44 withdrew, 12 deceased. No of events				

Discontinuation - Polarity - Lower values are better

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

Continuousoutcome(EQ-5D)-Person/participantgenerichealth-relatedqualityoflife(EQ-5D)-MeanNineFivePercentCI-Community participation intervention (outdoor mobility)-No participation-t12

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

Continuousoutcome(GHQ-12)-PsychologicalDistress-Depression(GHQ-12participant)-MeanNineFivePercentCI-Community participation intervention (outdoor mobility)-No participation-t12

Section	Question	Answer

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

Continuousoutcome(NEADL)-Activitiesofdailyliving(NEADL)-MeanNineFivePercentCI-Community participation intervention (outdoor mobility)-No participation-t12

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (outdoor mobility)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Low
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); 502-12

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	Clinicaltrials.gov: NCT00495248
Study type	Randomised controlled trial (RCT)
Study location	Norway
Study setting	People from six hospitals (after discharge).
Study dates	June 2007 to December 2009.
Sources of funding	The Eastern Health Region in Norway, the Department of Geriatric Medicine at Oslo University Hospital and the Norwegian Women's Public Health Association have funded this study. This study was also supported by grants from Oslo University College and the Norwegian Association for Occupational Therapists.
Inclusion criteria	Age 65 years and above; the ability to give written consent; a clinical diagnosis of stroke or transient ischaemic attack determined by a physician; a Mini Mental Status Examination score above 24 (max 30); a Barthel ADL Index score >14 (max 20).
Exclusion criteria	Severe communication problems, evaluated as a score below 33 (max 52) in the Ullevaal Aphasia Screening Test.
Recruitment / selection of participants	No additional information
Intervention(s)	Community participation intervention (lifestyle group intervention) N=48

	Lifestyle course and physical activity (36 sessions of each). Each session was conducted once a week for 2 hours by an occupational therapist. The intervention was inspired by the Lifestyle Redesign(R) programme for older adults in the USA. Our programme was occupation-based and person-centred and the intervention content was developed continuously through interactions between the participants and the group leaders. Different themes were addressed through peer exchange, self-reflections, discussions, lectures and outings. Concomitant therapy: Usual care was a physical activity program because senior centres usually provide physical activity groups open for all seniors in the community regardless of diagnosis. These groups were led by volunteers and offered once a week, lasting from 30 minutes up to 1 hour. The exercises mainly included sitting, standing, walking, balance and different mobility activities indoors.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear

Subgroup 7: Ethnicity	Not stated/unclear
Population subgroups	No additional information
Comparator	No participation N=51 Physical activity (36 sessions) only. Concomitant therapy: Usual care was a physical activity program because senior centres usually provide physical activity groups open for all seniors in the community regardless of diagnosis. These groups were led by volunteers and offered once a week, lasting from 30 minutes up to 1 hour. The exercises mainly included sitting, standing, walking, balance and different mobility activities indoors.
Number of participants	99
Duration of follow-up	9 months
Indirectness	No additional information
Additional comments	No additional information

Study arms

Community participation intervention (lifestyle group intervention) (N = 48)
Lifestyle course and physical activity (36 sessions of each). Each session was conducted once a week for 2 hours by an occupational therapist. The intervention was inspired by the Lifestyle Redesign(R) programme for older adults in the USA. Our programme was occupation-based and person-centred and the intervention content was developed continuously through interactions between the participants and the group leaders. Different themes were addressed through peer exchange, self-reflections, discussions, lectures and outings. Concomitant therapy: Usual care was a physical activity program because senior centres usually provide physical activity

groups open for all seniors in the community regardless of diagnosis. These groups were led by volunteers and offered once a week, lasting from 30 minutes up to 1 hour. The exercises mainly included sitting, standing, walking, balance and different mobility activities indoors.

No participation (N = 51)
Physical activity (36 sessions) only. Concomitant therapy: Usual care was a physical activity program because senior centres usually provide physical activity groups open for all seniors in the community regardless of diagnosis. These groups were led by volunteers and offered once a week, lasting from 30 minutes up to 1 hour. The exercises mainly included sitting, standing, walking, balance and different mobility activities indoors.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (lifestyle group intervention) (N = 48)	No participation (N = 51)
% Female Only reports baseline values for 39 people in the intervention group and 47 people in the control group. Sample size	n = 17 ; % = 43	n = 27 ; % = 57
Mean age (SD) (years) Mean (SD)	75 (7.2)	79 (6.5)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (lifestyle group intervention) (N = 48)	No participation (N = 51)
Sample size		
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (days) Mean (SD)	161 (178)	137 (124)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 9 month (Greater than or equal to 6 months)

Continuous outcomes

Outcome	Community participation intervention (lifestyle group intervention), Baseline, N = 39	Community participation intervention (lifestyle group intervention), 9 month, N = 39	No participation, Baseline, N = 47	No participation, 9 month, N = 47
Person/participant generic health-related quality of life (SF-36) Scale range: 0-100. Change scores. Mean (95% CI)	NA (NA to NA)	NA (NA to NA)	NA (NA to NA)	NA (NA to NA)
Person/participant generic health-related quality of life (SF-36) Scale range: 0-100. Change scores. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
SF-36 physical functioning Mean (95% CI)	NA (NA to NA)	2.7 (-2.7 to 8.1)	NA (NA to NA)	1.5 (-4.3 to 7.2)
SF-36 physical functioning Mean (SD)	52.6 (25.9)	NA (NA)	53.8 (25.6)	NA (NA)

Outcome	Community participation intervention (lifestyle group intervention), Baseline, N = 39	Community participation intervention (lifestyle group intervention), 9 month, N = 39	No participation, Baseline, N = 47	No participation, 9 month, N = 47
SF-36 bodily pain Mean (95% CI)	NA (NA to NA)	-0.6 (-10.2 to 9.1)	NA (NA to NA)	-4.9 (-13.6 to 3.9)
SF-36 bodily pain Mean (SD)	64.7 (29.6)	NA (NA)	66.4 (26.4)	NA (NA)
SF-36 Role Physical Mean (95% CI)	NA (NA to NA)	11.5 (-2.1 to 25.2)	NA (NA to NA)	20.4 (9.5 to 31.3)
SF-36 Role Physical Mean (SD)	21.8 (33.5)	NA (NA)	18.4 (29.8)	NA (NA)
SF-36 vitality Mean (95% CI)	NA (NA to NA)	6.7 (1.1 to 12.3)	NA (NA to NA)	8.3 (2.8 to 13.8)
SF-36 vitality Mean (SD)	44.2 (20.1)	NA (NA)	47.2 (22.7)	NA (NA)
SF-36 general health Mean (95% CI)	NA (NA to NA)	-0.6 (-7 to 5.8)	NA (NA to NA)	0 (-5 to 5)
SF-36 general health Mean (SD)	58 (24.2)	NA (NA)	60.6 (23.4)	NA (NA)
SF-36 Mental Health	NA (NA to NA)	7.2 (2.8 to 11.5)	NA (NA to NA)	5.3 (-0.1 to 10.7)

Outcome	Community participation intervention (lifestyle group intervention), Baseline, N = 39	Community participation intervention (lifestyle group intervention), 9 month, N = 39	No participation, Baseline, N = 47	No participation, 9 month, N = 47
Mean (95% CI)				
SF-36 Mental Health Mean (SD)	72.5 (17.8)	NA (NA)	72.6 (20.6)	NA (NA)
SF-36 Role Emotional Mean (95% CI)	NA (NA to NA)	25.2 (10.3 to 40.1)	NA (NA to NA)	11.6 (-2.1 to 25.3)
SF-36 Role Emotional Mean (SD)	43.2 (38.9)	NA (NA)	45.7 (36.8)	NA (NA)
SF-36 social functioning Mean (95% CI)	NA (NA to NA)	6.4 (-4 to 16.8)	NA (NA to NA)	8.8 (-0.5 to 18.1)
SF-36 social functioning Mean (SD)	62.8 (28.9)	NA (NA)	63 (29.8)	NA (NA)
Psychological distress - Depression (HADS depression) Scale range: 0-21. Change scores. Mean (SD)	4.1 (3)	NA (NA)	5.3 (3.8)	NA (NA)
Psychological distress - Depression (HADS depression) Scale range: 0-21. Change	NA (NA to NA)	-0.8 (-1.7 to 0.2)	NA (NA to NA)	-1.1 (-2 to 0.2)

Outcome	Community participation intervention (lifestyle group intervention), Baseline, N = 39	Community participation intervention (lifestyle group intervention), 9 month, N = 39	No participation, Baseline, N = 47	No participation, 9 month, N = 47
scores. Mean (95% CI)				
Psychological distress - Anxiety (HADS anxiety) Scale range: 0-21. Change scores. Mean (SD)	4.6 (3.2)	NA (NA)	4.4 (4)	NA (NA)
Psychological distress - Anxiety (HADS anxiety) Scale range: 0-21. Change scores. Mean (95% CI)	NA (NA to NA)	-1.5 (-2.3 to -0.7)	NA (NA to NA)	-0.7 (-1.9 to 0.6)

Person/participant generic health-related quality of life (SF-36) - Polarity - Higher values are better
Psychological distress - Depression (HADS depression) - Polarity - Lower values are better
Psychological distress - Anxiety (HADS anxiety) - Polarity - Lower values are better

Continuous outcomes (COPM)

Outcome	Community participation intervention (lifestyle group intervention), Baseline, N = 36	Community participation intervention (lifestyle group intervention), 9 month, N = 36	No participation, Baseline, N = 38	No participation, 9 month, N = 38
Activities of daily living (Canadian Occupational Performance Measure) Scale range: 0-10. Change	NA (NA)	NA (NA)	NA (NA)	NA (NA)

Outcome	Community participation intervention (lifestyle group intervention), Baseline, N = 36	Community participation intervention (lifestyle group intervention), 9 month, N = 36	No participation, Baseline, N = 38	No participation, 9 month, N = 38
scores. Mean (SD)				
Activities of daily living (Canadian Occupational Performance Measure) Scale range: 0-10. Change scores. Mean (95% CI)	NA (NA to NA)	NA (NA to NA)	NA (NA to NA)	NA (NA to NA)
Canadian Occupational Performance Measure-Performance subscale Mean (SD)	4.1 (2.2)	NA (NA)	4.3 (2)	NA (NA)
Canadian Occupational Performance Measure-Performance subscale Mean (95% CI)	NA (NA to NA)	2.2 (1.2 to 3.1)	NA (NA to NA)	1.7 (0.7 to 2.7)
Canadian Occupational Performance Measure-Satisfaction subscale Mean (SD)	4.9 (2.5)	NA (NA)	4.1 (2)	NA (NA)
Canadian Occupational Performance Measure-	NA (NA to NA)	1.1 (0.2 to 2)	NA (NA to NA)	1.8 (0.9 to 2.7)

Outcome	Community participation intervention (lifestyle group intervention), Baseline, N = 36	Community participation intervention (lifestyle group intervention), 9 month, N = 36	No participation, Baseline, N = 38	No participation, 9 month, N = 38
Satisfaction subscale Mean (95% CI)				

Activities of daily living (Canadian Occupational Performance Measure) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (lifestyle group intervention), Baseline, N = 48	Community participation intervention (lifestyle group intervention), 9 month, N = 48	No participation, Baseline, N = 51	No participation, 9 month, N = 51
Discontinuation Intervention: 4 refused to participate, 2 to ill-health, 1 refused the evaluations, 2 died. Control: 2 to ill-health, 1 refused to evaluations, 1 died. No of events	n = NA ; % = NA	n = 9 ; % = 19	n = NA ; % = NA	n = 4 ; % = 8

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36physicalfunctioning-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

Section	Question	Answer

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36bodilypain-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36RolePhysical-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36vitality-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36generalhealth-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36MentalHealth-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36RoleEmotional-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36socialfunctioning-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes-Psychologicaldistress-Depression(HADSdepression)-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes-Psychologicaldistress-Anxiety(HADSanxiety)-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes(COPM)-Activitiesofdailyliving(CanadianOccupationalPerformanceMeasure)-CanadianOccupationalPerformanceMeasure-Performancesubscale-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Continuousoutcomes(COPM)-Activitiesofdailyliving(CanadianOccupationalPerformanceMeasure)-CanadianOccupationalPerformanceMeasure-Satisfactionsubscale-MeanNineFivePercentCI-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (lifestyle group intervention)-No participation-t9

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

Marsden, 2016

Bibliographic Reference	Marsden, D. L.; Dunn, A.; Callister, R.; McElduff, P.; Levi, C. R.; Spratt, N. J.; A Home- and Community-Based Physical Activity Program Can Improve the Cardiorespiratory Fitness and Walking Capacity of Stroke Survivors; Journal of Stroke & Cerebrovascular Diseases; 2016; vol. 25 (no. 10); 2386-98

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	ACTRN12614000134628
Study type	Randomised controlled trial (RCT)
Study location	Australia
Study setting	Mixture of outpatient, home and community, with the majority being community based
Study dates	No additional information
Sources of funding	The research has been supported by small project grants from the National Stroke Foundation, the John Hunter Hospital Charitable Trust, the Hunter New England Allied Health Research Committee Research Fund, and Hunt Medical Research Institute: Estate of the late Stephen James Fairfax Award (HMRI 13-55). D.L.M. was supported by the Heart Foundation (PB 10S 5518) and the University of Newcastle through the provision of a postgraduate scholarship and by the Hunter Stroke Service. A.D. was supported by the University of Newcastle through an Australian Postgraduate Award Scholarship and through a Hunter Medical Research Institute Emyln and Jennie Thomas Postgraduate Medical Research Scholarship. N.J.S

	was supported by a Career Development Fellowship (APP1035465) from the Australian National Health and Medical Research Council.
Inclusion criteria	Stroke survivors aged 18 years old or above who were within 1 year of their most recent stroke and able to follow basic commands
Exclusion criteria	Inability to attend the center for testing, pregnancy and being determined as medically unfit to participate by a medical practitioner.
Recruitment / selection of participants	People were recruited via clinician referral.
Intervention(s)	Community participation intervention (community-based exercise program) N=10 Home and community-based exercise program delivered over 12 weeks. Individually tailored program was developed based on the person's preferences for activities, including any prestroke activity to participants wished to resume or work toward resuming, their physical capacity to undertake specific activities, and access to resources in their home and community, including pools, gyms, exercise classes and therapy programs. An exercise manual was provided that included written information to reinforce the verbal information provided on exercising safely and overcoming barriers. The exercise manual contained a core home-exercise program. This consisted of task-specific exercises. The people were strongly encouraged to exercise at a level with the potential to improve cardiorespiratory fitness by meeting the exercise recommendations of accruing at least 30 minutes/day of moderate intensity physical activity on most days of the week. They were encouraged to undertake activities using large muscle groups. The concepts of interval training and accruing activity in 10- to 15-minute bouts were included in the discussion. Low-intensity intervals were encouraged to be active rather than complete rest. The activities were community and home based including walking, running, boot camps, aqua-aerobics, ergometers, weights, aerobic class and the individualised home-exercise program in the manual. Concomitant therapy: Usual care consisted of any required medical or therapy appointments.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication	Not stated/unclear

difficulties	
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No information about ethnicity. Majority country of birth was Australia (18 people). 2 were born in another country.
Population subgroups	No additional information.
Comparator	No participation N=10 Usual care only. Concomitant therapy: Usual care consisted of any required medical or therapy appointments.
Number of participants	20
Duration of follow-up	12 weeks (end of intervention)
Indirectness	Intervention indirectness - some of the individuals may have only participated in the home-based exercise program (with this

	not being explicitly stated) or in outpatient physiotherapy only and therefore this will be downgraded for indirectness.
Additional comments	No additional information

Study arms

Community participation intervention (community-based exercise program) (N = 10)
Home and community-based exercise program delivered over 12 weeks. Individually tailored program was developed based on the person's preferences for activities, including any prestroke activity to participants wished to resume or work toward resuming, their physical capacity to undertake specific activities, and access to resources in their home and community, including pools, gyms, exercise classes and therapy programs. An exercise manual was provided that included written information to reinforce the verbal information provided on exercising safely and overcoming barriers. The exercise manual contained a core home-exercise program. This consisted of task-specific exercises. The people were strongly encouraged to exercise at a level with the potential to improve cardiorespiratory fitness by meeting the exercise recommendations of accruing at least 30 minutes/day of moderate intensity physical activity on most days of the week. They were encouraged to undertake activities using large muscle groups. The concepts of interval training and accruing activity in 10- to 15-minute bouts were included in the discussion. Low-intensity intervals were encouraged to be active rather than complete rest. The activities were community and home based including walking, running, boot camps, aqua-aerobics, ergometers, weights, aerobic class and the individualised home-exercise program in the manual. Concomitant therapy: Usual care consisted of any required medical or therapy appointments.

No participation (N = 10)
Usual care only. Concomitant therapy: Usual care consisted of any required medical or therapy appointments.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (community-based exercise program) (N = 10)	No participation (N = 10)
% Female Sample size	n = 7 ; % = 70	n = 5 ; % = 50
Mean age (SD) (years) Mean (SD)	54.4 (22.2)	62 (16.8)
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 after stroke (Months) Mean (SD)	5.6 (5.3)	3.8 (1.2)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (community-based exercise program) (N = 10)	No participation (N = 10)
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 12 week (<6 months. End of intervention.)

Continuous outcomes

Outcome	Community participation intervention (community-based exercise program), Baseline, N = 10	Community participation intervention (community-based exercise program), 12 week, N = 10	No participation, Baseline, N = 10	No participation, 12 week, N = 10
Psychological distress - Depression (PHQ-9) Scale range: 0-27. Change	8.1 (5.7)	-2.4 (4.1)	5.4 (4.6)	-0.7 (3.2)

Outcome	Community participation intervention (community-based exercise program), Baseline, N = 10	Community participation intervention (community-based exercise program), 12 week, N = 10	No participation, Baseline, N = 10	No participation, 12 week, N = 10
scores. Mean (SD)				
Stroke-specific Patient Reported Outcome Measures (SAQoL) Scale range: 0-5. Change scores. Mean (SD)	4.1 (0.5)	-0.1 (0.5)	4.3 (0.6)	0.1 (0.3)

Psychological distress - Depression (PHQ-9) - Polarity - Lower values are better
Stroke-specific Patient Reported Outcome Measures (SAQoL) - Polarity - Higher values are better

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

Continuousoutcomes-Psychologicaldistress-Depression(PHQ-9)-MeanSD-Community participation intervention (community-based exercise program)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - some of the individuals may have only participated in the home-based exercise program (with this not being explicitly stated) or in outpatient physiotherapy only and therefore this will be*

Section	Question	Answer
		downgraded for indirectness.)

Continuousoutcomes-Stroke-specificPatientReportedOutcomeMeasures(SAQoL)-MeanSD-Community participation intervention (community-based exercise program)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - some of the individuals may have only participated in the home-based exercise program (with this not being explicitly stated) or in outpatient physiotherapy only and therefore this will be downgraded for indirectness.)*

Marshall, 2020

Bibliographic Reference Marshall, J.; Devane, N.; Talbot, R.; Caute, A.; Cruice, M.; Hilari, K.; MacKenzie, G.; Maguire, K.; Patel, A.; Roper, A.; Wilson, S.; A randomised trial of social support group intervention for people with aphasia: A Novel application of virtual reality; PLoS ONE [Electronic Resource]; 2020; vol. 15 (no. 9); e0239715

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	Clinicaltrials.gov = NCT03115268
Study type	Randomised controlled trial (RCT)
Study location	United Kingdom
Study setting	Online based meetings.
Study dates	No additional information
Sources of funding	Funded by the Stroke Association.
Inclusion criteria	Moderate or mild aphasia; fluent in English before their stroke
Exclusion criteria	Coexisting diagnosis affecting cognition; severe hearing or visual impairments
Recruitment / selection of participants	No additional information.
Intervention(s)	Community participation intervention (community group) N=16 14 group sessions (21 hours) delivered over 6 months, with sessions occurring once a fortnight. All sessions were run remotely, in EVA Park. Thus participants accessed the intervention on a computer in their own home. Co-ordinators and volunteers worked either from a home computer or from a computer in their community centre. All people were presented by personalised avatars in EVA Park, which were set up before the start of the intervention. The Intervention was defined in a manual that drew on published accounts of support interventions for people with aphasia. The intervention aimed to counter the negative impacts of aphasia on quality of life and to facilitate living well with aphasia. Activities aimed to promote wellbeing, give participants experiences of communicative success and foster social connection between group members. Group members frequently reflected on personal strengths, and how these were applied to living with aphasia. Issues of personal identity were also focussed, given the impact of aphasia on a person's sense of self. Each intervention session was based on a topic, which was chosen with the Advisory Group to address the intervention goals. Several topics enabled group members to share experiences of living and coping with aphasia (e.g. 'You'; 'Aphasia'; 'Resilience'; 'Personal

	Strengths'). Other topics aimed to stimulate social connection and positive communication exchanges. They provided opportunities for group members to express opinions and convey aspects of their personality, thus addressing the theme of identity. These topics included 'Comedy', 'Music', 'Art', 'Literature' and 'Eating Out'. Another element of the intervention was the identification of personal strengths and reflection on how participants used these in their daily lives. Group leadership was provided by the co-ordinators. They introduced each topic and led the activities, for example by assigning roles and turns to group members. They ran group discussions, ensuring that each member had the opportunity to contribute. They managed transitions between activities. Volunteers contributed to group discussions and supported individuals' communication attempts. They supported small groups or pairs of participants in instances when the groups sub-divided. Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Communication difficulties present
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear

Subgroup 7: Ethnicity	No additional information
Population subgroups	No additional information
Comparator	No participation N=18 Waiting list comparison. Concomitant therapy: No additional information.
Number of participants	34
Duration of follow-up	6 months and 12 months. Only the 6 months follow up will be included in the results as the intervention group received the intervention between T1 and T2 (6 months period), and the control group finishing their waiting list and completed the intervention between T2 and T3 (6 months period). Therefore, to investigate the intervention effect against a no participation comparison, the values for T2 (6 months) will be used.
Indirectness	No additional information
Additional comments	Intention to treat and per protocol analyses used.

Study arms

Community participation intervention (community group) (N = 16)
14 group sessions (21 hours) delivered over 6 months, with sessions occurring once a fortnight. All sessions were run remotely, in EVA Park. Thus participants accessed the intervention on a computer in their own home. Co-ordinators and volunteers worked either from a home computer or from a computer in their community centre. All people were presented by personalised avatars in EVA Park, which were set up before the start of the intervention. The Intervention was defined in a manual that drew on published accounts of support interventions for people with aphasia. The intervention aimed to counter the negative impacts of aphasia on quality of life and to facilitate living well with aphasia. Activities aimed to promote wellbeing, give participants experiences of communicative success

and foster social connection between group members. Group members frequently reflected on personal strengths, and how these were applied to living with aphasia. Issues of personal identity were also focussed, given the impact of aphasia on a person's sense of self. Each intervention session was based on a topic, which was chosen with the Advisory Group to address the intervention goals. Several topics enabled group members to share experiences of living and coping with aphasia (e.g. 'You'; 'Aphasia'; 'Resilience'; 'Personal Strengths'). Other topics aimed to stimulate social connection and positive communication exchanges. They provided opportunities for group members to express opinions and convey aspects of their personality, thus addressing the theme of identity. These topics included 'Comedy', 'Music', 'Art', 'Literature' and 'Eating Out'. Another element of the intervention was the identification of personal strengths and reflection on how participants used these in their daily lives. Group leadership was provided by the co-ordinators. They introduced each topic and led the activities, for example by assigning roles and turns to group members. They ran group discussions, ensuring that each member had the opportunity to contribute. They managed transitions between activities. Volunteers contributed to group discussions and supported individuals' communication attempts. They supported small groups or pairs of participants in instances when the groups sub-divided. Concomitant therapy: No additional information.

No participation (N = 18)
Waiting list comparison. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (community group) (N = 16)	No participation (N = 18)
% Female Sample size	n = 4 ; % = 25	n = 13 ; % = 72.2
Mean age (SD) (years) Median (IQR)	51 (46.5 to 57.5)	65 (51.5 to 71.25)
Ethnicity	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (community group) (N = 16)	No participation (N = 18)
Sample size		
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Median (IQR)	48 (29.75 to 85.25)	26.5 (11.75 to 79)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 6 month (Greater than or equal to 6 months)

Continuous outcomes

Outcome	Community participation intervention (community group), Baseline, N = 16	Community participation intervention (community group), 6 month, N = 16	No participation, Baseline, N = 18	No participation, 6 month, N = 18
Wellbeing scores (Warwick Edinburgh Mental wellbeing scale) Scale range: 14-70. Final values. Mean (SD)	53 (9.2)	54.69 (12.3)	46.83 (10.75)	49.94 (9.99)
Participation in leisure activities/social groups scores (Social Connectedness Scale) Scale range: 20-120. Final values. Mean (SD)	83.87 (17.2)	88.12 (17.04)	81.22 (17.77)	85 (17.16)
Activities of daily living (Communication Activities of Daily Living) Scale range: Unclear, assumed 0-100. Final values. Mean (SD)	89.37 (7.02)	89.81 (7.61)	81.28 (8.37)	83 (8.49)
Stroke-specific Patient Reported Outcome Measures (Stroke and	3.78 (0.57)	3.73 (0.72)	3.31 (0.66)	3.35 (0.65)

Outcome	Community participation intervention (community group), Baseline, N = 16	Community participation intervention (community group), 6 month, N = 16	No participation, Baseline, N = 18	No participation, 6 month, N = 18
Aphasia Quality of Life-39 generic version) Scale range: 1-5. Final values. Mean (SD)				

Wellbeing scores (Warwick Edinburgh Mental wellbeing scale) - Polarity - Higher values are better
Participation in leisure activities/social groups scores (Social Connectedness Scale) - Polarity - Higher values are better
Activities of daily living (Communication Activities of Daily Living) - Polarity - Higher values are better
Stroke-specific Patient Reported Outcome Measures (Stroke and Aphasia Quality of Life-39 generic version) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (community group), Baseline, N = 16	Community participation intervention (community group), 6 month, N = 16	No participation, Baseline, N = 18	No participation, 6 month, N = 18
Discontinuation Intervention: 1 did not receive 6 months of intervention. Control: 1 did not receive 6 months of no intervention. No of events	n = NA ; % = NA	n = 1 ; % = 6	n = NA ; % = NA	n = 1 ; % = 6

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Wellbeingscores(WarwickEdinburghMentalwellbeingscale)-MeanSD-Community participation intervention (community group)-No participation-t6

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

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(SocialConnectednessScale)-MeanSD-Community participation intervention (community group)-No participation-t6

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

Continuousoutcomes-Activitiesofdailyliving(CommunicationActivitiesofDailyLiving)-MeanSD-Community participation intervention (community group)-No participation-t6

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

Continuousoutcomes-Stroke-specificPatientReportedOutcomeMeasures(StrokeandAphasiaQualityofLife-39genericversion)-MeanSD-Community participation intervention (community group)-No participation-t6

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (community group)-No participation-t6

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

Mayo, 2015

Bibliographic Reference Mayo, N. E.; Anderson, S.; Barclay, R.; Cameron, J. I.; Desrosiers, J.; Eng, J. J.; Huijbregts, M.; Kagan, A.; MacKay-Lyons, M.; Moriello, C.; Richards, C. L.; Salbach, N. M.; Scott, S. C.; Teasell, R.; Bayley, M.; Getting on with the rest of your life following stroke: a randomized trial of a complex intervention aimed at enhancing life participation post stroke; Clinical Rehabilitation; 2015; vol. 29 (no. 12); 1198-211

Study details

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

study for details	
Other publications associated with this study included in review	No additional information
Trial name / registration number	Clinicaltrials.gov = NCT01085240.
Study type	Randomised controlled trial (RCT)
Study location	Canada
Study setting	11 sites in seven cities across Canada. Community based.
Study dates	Starting in 2009.
Sources of funding	This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.
Inclusion criteria	The target populations were people living in the community who have completed all formal rehabilitative interventions. People within five years of stroke onset were targeted.
Exclusion criteria	Who were already enrolled in existing community-based programs; with cognitive impairment as reflected by a score of less than 14/18 on the Brief Mini-Mental State Examination score (delete 23); unable to toilet independently.
Recruitment / selection of participants	Recruitment was through referral, advertising, stroke recovery associations, community programs, rehabilitation centers and word of mouth.
Intervention(s)	Community participation interventions (exercise and education program) N=93 Getting on with the Rest of Your Life: Mission Possible program. Group based intervention that included exercise and project-based activities promoting learning, leisure and social activities, done as individuals and in groups. The groups met in a community-based setting twice a week for approximately three hours each time for three blocks, each lasting three months. The total duration of the program was 12 months. Group leaders were recreation therapists, educators, exercise therapists, or other personnel with experience in healthcare and with stroke; all participated in a two-day training program. Each site tailored the program to the clientele, respecting the overall philosophy of intervention rather than specific elements that would be influenced by the participants, the leader and the setting. The five key elements were incorporated: aerobic exercise, strength of peripheral and core musculature, balance, flexibility and rapidity of movements. An instruction package

	was developed with specific examples of exercises depending on the ratio of participants to instructors. The exercise component was 45 minutes of continuous exercise with rests when needed, twice a week for the duration of the session (around 3 months). Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Majority born in Canada (119 people) but no information about ethnicity
Population subgroups	No additional information

Comparator	No participation N=93 Waiting list control. Concomitant therapy: No additional information.
Number of participants	186
Duration of follow-up	15 months (three blocks of treatment lasting 3 months each, then follow up at 15 minutes). Only the values at 3 months will be used as the delayed group received therapy after 3 months.
Indirectness	No additional information
Additional comments	No additional information

Study arms

Community participation interventions (exercise and education program) (N = 93)
Getting on with the Rest of Your Life: Mission Possible program. Group based intervention that included exercise and project-based activities promoting learning, leisure and social activities, done as individuals and in groups. The groups met in a community-based setting twice a week for approximately three hours each time for three blocks, each lasting three months. The total duration of the program was 12 months. Group leaders were recreation therapists, educators, exercise therapists, or other personnel with experience in healthcare and with stroke; all participated in a two-day training program. Each site tailored the program to the clientele, respecting the overall philosophy of intervention rather than specific elements that would be influenced by the participants, the leader and the setting. The five key elements were incorporated: aerobic exercise, strength of peripheral and core musculature, balance, flexibility and rapidity of movements. An instruction package was developed with specific examples of exercises depending on the ratio of participants to instructors. The exercise component was 45 minutes of continuous exercise with rests when needed, twice a week for the duration of the session (around 3 months). Concomitant therapy: No additional information.

No participation (N = 93)
Waiting list control. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation interventions (exercise and education program) (N = 93)	No participation (N = 93)
% Female Sample size	n = 36 ; % = 39	n = 37 ; % = 40
Mean age (SD) (years) Mean (SD)	61 (12)	65 (11)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = 41 ; % = 44	n = 36 ; % = 39
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (years) Mean (SD)	2.5 (2.2)	3.1 (3.1)
Presence of communication	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation interventions (exercise and education program) (N = 93)	No participation (N = 93)
difficulties Sample size		
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 3 month (<6 months. Only the values at 3 months will be used as the delayed group received therapy after 3 months.)

Continuous outcomes

Outcome	Community participation interventions (exercise and education program), Baseline, N = 93	Community participation interventions (exercise and education program), 3 month, N = 93	No participation, Baseline, N = 93	No participation, 3 month, N = 93
Person/participant generic health-related quality of life (EQ-5D) Scale range: 0-100. Change scores. Mean (SD)	60.1 (19.3)	2.7 (16.7)	61.4 (18.8)	1.2 (14.9)
Psychological distress - Depression (Stroke Specific Geriatric Depression Scale) Scale range: 0-100. Change scores. Mean (SD)	28.8 (27.6)	-2.6 (20.7)	29.2 (25)	-1.6 (22.5)
Participation in leisure activities/social groups scores (Reintegration of Normal Living) Scale range: 0-100. Change scores. Mean (SD)	72.5 (21)	3.7 (16.1)	75.7 (19.2)	1.2 (12.8)
Stroke-specific Patient-Reported Outcome Measures (Preference-Based Stroke Index) Scale range: 0-100. Change scores. Mean (SD)	65.1 (15.4)	2.9 (11.5)	65.5 (17.6)	1.7 (9.6)

Person/participant generic health-related quality of life (EQ-5D) - Polarity - Higher values are better
Psychological distress - Depression (Stroke Specific Geriatric Depression Scale) - Polarity - Lower values are better
Participation in leisure activities/social groups scores (Reintegration of Normal Living) - Polarity - Higher values are better

Stroke-specific Patient-Reported Outcome Measures (Preference-Based Stroke Index) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation interventions (exercise and education program), Baseline, N = 93	Community participation interventions (exercise and education program), 3 month, N = 93	No participation, Baseline, N = 93	No participation, 3 month, N = 93
Discontinuation Intervention: 13 losses at the end of the first session (reasons included too much of a time commitment, too far to travel, did not like location). Control: 17 losses at the end of session 1 (reasons for losses: hospitalization, too far to travel, away) No of events	n = NA ; % = NA	n = 13 ; % = 14	n = NA ; % = NA	n = 17 ; % = 18

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5D)-MeanSD-Community participation interventions (exercise and education program)-No participation-t3

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

Continuousoutcomes-PsychologicalIdistress-Depression(StrokeSpecificGeriatricDepressionScale)-MeanSD-Community participation interventions (exercise and education program)-No participation-t3

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

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(ReintegrationofNormalLiving)-MeanSD-Community participation interventions (exercise and education program)-No participation-t3

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(Preference-BasedStrokeIndex)-MeanSD-Community participation interventions (exercise and education program)-No participation-t3

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation interventions (exercise and education program)-No participation-t3

Section	Question	Answer

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

Moore, 2015

Bibliographic Reference Moore, S. A.; Hallsworth, K.; Jakovljevic, D. G.; Blamire, A. M.; He, J.; Ford, G. A.; Rochester, L.; Trenell, M. I.; Effects of Community Exercise Therapy on Metabolic, Brain, Physical, and Cognitive Function Following Stroke: A Randomized Controlled Pilot Trial; Neurorehabilitation & Neural Repair; 2015; vol. 29 (no. 7); 623-35

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	United Kingdom

Study setting	People attending stroke services in the North East of the United Kingdom.
Study dates	May 2011 to February 2012.
Sources of funding	Funded by Research Councils UK Newcastle Centre for Brain Ageing and Vitality; the National Institute for Health Research (Senior Fellowship Award to MIT, Senior Investigator award to GAF); The Medical Research Council (ref: G0802536); National Institute for Health Research Newcastle Biomedical Research Centre for Ageing and Age Related Disease based at Newcastle upon Tyne Hospitals NHS Foundation Trust and Newcastle University; The NIHR North East Stroke Research Network.
Inclusion criteria	>50 years old; had a stroke (>6 months previously); were able to complete the 6-minute walk test (with/without stick); living at home; had completed all NHS physiotherapy; were not already undertaking regular exercise (at least 3 times/week, moderate intensity).
Exclusion criteria	Absolute and relative contraindications to exercise testing (American Heart Association guidelines); insulin-dependent diabetes; neurological disorders other than stroke; pain on walking (>5 on the Visual Analogue Scale); inability to follow 2-stage commands; cognitive problems (Mini Mental State Examination score <25); untreated major depression; contraindications to magnetic resonance imaging.
Recruitment / selection of participants	People were recruited from stroke services in the North East via referral from stroke health professionals or advertisement in the local newspaper
Intervention(s)	Community participation intervention (leisure-center structured exercise classes) N=20 Fitness and Mobility Exercise program with a mixed exercise intervention incorporating functional movement. Community leisure-center classes were run by a physiotherapist and physical activity instructor for 19 weeks (3 times/week, 45-60 minutes). To progress the cardiovascular element of the exercise program, a heart rate training zone was calculated for the participants and people trained at 40-50% of their maximum heart rate increasing up to 70-80% over 4 weeks. Strength/balance exercises were progressed by increasing repetitions and loading. Concomitant therapy: No additional information.
Subgroup 1: Severity	Mild (or NIHSS 1-5)
Subgroup 2:	Not stated/unclear

Presence of communication difficulties	
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No additional information
Population subgroups	No additional information
Comparator	No participation N=20 A matched-duration home stretching program. Stretching was chosen because other potential control interventions such as yoga or Tai chi can improve metabolic risk factors, whereas these benefits have not been demonstrated with stretching. People were given an instruction booklet and diary to record stretches and changes in medication/diet/physical activity and contacted fortnightly to check progress. Concomitant therapy: No additional information.
Number of	40

participants	
Duration of follow-up	19 weeks
Indirectness	No additional information
Additional comments	No additional information

Study arms

Community participation intervention (leisure-center structured exercise classes) (N = 20)
Fitness and Mobility Exercise program with a mixed exercise intervention incorporating functional movement. Community leisure-center classes were run by a physiotherapist and physical activity instructor for 19 weeks (3 times/week, 45-60 minutes). To progress the cardiovascular element of the exercise program, a heart rate training zone was calculated for the participants and people trained at 40-50% of their maximum heart rate increasing up to 70-80% over 4 weeks. Strength/balance exercises were progressed by increasing repetitions and loading. Concomitant therapy: No additional information.

No participation (N = 20)
A matched-duration home stretching program. Stretching was chosen because other potential control interventions such as yoga or Tai chi can improve metabolic risk factors, whereas these benefits have not been demonstrated with stretching. People were given an instruction booklet and diary to record stretches and changes in medication/diet/physical activity and contacted fortnightly to check progress. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (leisure-center structured exercise classes) (N = 20)	No participation (N = 20)

Characteristic	Community participation intervention (leisure-center structured exercise classes) (N = 20)	No participation (N = 20)
% Female Sample size	n = 2 ; % = 10	n = 4 ; % = 20
Mean age (SD) (years) Mean (SD)	68 (8)	70 (11)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity NIHSS score Mean (SD)	3 (3)	2 (2)
Time after stroke (Months) Mean (SD)	21 (34)	16 (12)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (leisure-center structured exercise classes) (N = 20)	No participation (N = 20)
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 19 week (<6 months. End of intervention.)

Continuous outcomes

Outcome	Community participation intervention (leisure-center structured exercise classes), Baseline, N = 20	Community participation intervention (leisure-center structured exercise classes), 19 week, N = 20	No participation, Baseline, N = 20	No participation, 19 week, N = 20
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale) Scale range: 0-100. Change	NA (NA)	NA (NA)	NA (NA)	NA (NA)

Outcome	Community participation intervention (leisure-center structured exercise classes), Baseline, N = 20	Community participation intervention (leisure-center structured exercise classes), 19 week, N = 20	No participation, Baseline, N = 20	No participation, 19 week, N = 20
scores. Mean (SD)				
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale) Scale range: 0-100. Change scores. Mean (p value)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
Stroke Impact Scale Stroke recovery subscale Mean (SD)	66 (28)	NA (NA)	89 (22)	NA (NA)
Stroke Impact Scale Stroke recovery subscale Mean (p value)	NA (NA)	13 (0.01)	NA (NA)	3 (0.1)
Stroke Impact Scale Mood subscale Mean (SD)	77 (24)	NA (NA)	85 (19)	NA (NA)
Stroke Impact Scale Mood subscale Mean (p value)	NA (NA)	10 (0.02)	NA (NA)	-1 (0.6)

Outcome	Community participation intervention (leisure-center structured exercise classes), Baseline, N = 20	Community participation intervention (leisure-center structured exercise classes), 19 week, N = 20	No participation, Baseline, N = 20	No participation, 19 week, N = 20
Stroke Impact Scale Strength subscale Mean (SD)	74 (27)	NA (NA)	78 (21)	NA (18)
Stroke Impact Scale Strength subscale Mean (p value)	NA (NA)	5 (0.04)	NA (NA)	5 (0.23)
Stroke Impact Scale Memory subscale Mean (SD)	85 (19)	NA (NA)	87 (19)	NA (13)
Stroke Impact Scale Memory subscale Mean (p value)	NA (NA)	0 (0.81)	NA (NA)	3 (0.52)
Stroke Impact Scale Communication subscale Mean (SD)	87 (21)	NA (NA)	96 (6)	NA (NA)
Stroke Impact Scale Communication subscale Mean (p value)	NA (NA)	1 (0.7)	NA (NA)	-1 (0.76)
Stroke Impact Scale Activities	82 (19)	NA (NA)	90 (17)	NA (NA)

Outcome	Community participation intervention (leisure-center structured exercise classes), Baseline, N = 20	Community participation intervention (leisure-center structured exercise classes), 19 week, N = 20	No participation, Baseline, N = 20	No participation, 19 week, N = 20
of daily living subscale Mean (SD)				
Stroke Impact Scale Activities of daily living subscale Mean (p value)	NA (NA)	3 (0.42)	NA (NA)	0 (0.75)
Stroke Impact Scale Community mobility subscale Mean (SD)	86 (25)	NA (NA)	90 (16)	NA (NA)
Stroke Impact Scale Community mobility subscale Mean (p value)	NA (NA)	5 (0.08)	NA (NA)	1 (0.4)
Stroke Impact Scale Hand subscale Mean (SD)	66 (42)	NA (NA)	78 (31)	NA (NA)
Stroke Impact Scale Hand subscale Mean (p value)	NA (NA)	3 (0.13)	NA (NA)	7 (0.07)
Stroke Impact Scale Participation subscale	72 (29)	NA (NA)	89 (18)	NA (NA)

Outcome	Community participation intervention (leisure-center structured exercise classes), Baseline, N = 20	Community participation intervention (leisure-center structured exercise classes), 19 week, N = 20	No participation, Baseline, N = 20	No participation, 19 week, N = 20
Mean (SD)				
Stroke Impact Scale Participation subscale Mean (p value)	NA (NA)	4 (0.53)	NA (NA)	0 (0.17)

Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (leisure-center structured exercise classes), Baseline, N = 20	Community participation intervention (leisure-center structured exercise classes), 19 week, N = 20	No participation, Baseline, N = 20	No participation, 19 week, N = 20
Discontinuation No of events	n = NA ; % = NA	n = 0 ; % = 0	n = NA ; % = NA	n = 0 ; % = 0

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleStrokerecoverysubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

Section	Question	Answer

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleMoodsubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleStrengthsubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleMemorysubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleCommunicationsubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleActivitiesofdailylivingsubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleCommunitymobilitysubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

Section	Question	Answer

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleHandsubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-StrokeImpactScaleParticipationsubscale-MeanPValue-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (leisure-center structured exercise classes)-No participation-t19

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Nour K, Desrosiers J, Gauthier P, 2002

Bibliographic Reference	Nour K, Desrosiers J, Gauthier P CH; Impact of a Home Leisure Educational Program for Older Adults Who Have Had a Stroke (Home Leisure Educational Program); Therapeutic Recreation Journal; 2002; vol. 36 (no. Vol. 36 No. 1); 48-64

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	Canada
Study setting	People who finished their active rehabilitation at 1) the intensive functional rehabilitation unit, 2) the day hospital program of the Sherbrooke Geriatric University Institute in the Province of Quebec, Canada.
Study dates	Mid-October 1998 to mid-April 1999.

Sources of funding	This research was done as a master's thesis in gerontology and was partially supported by a grant from the Centre de recherche en gerontologic et geriatrie, Institut universitaire de geriatrie de Sherbrooke.
Inclusion criteria	Aged 55 or over; be retired; live less than one hour's drive from the Sherbrooke Geriatric University Institute.
Exclusion criteria	Communication problems or any major cognitive deficit that would make them unable to answer the questionnaires or follow the program.
Recruitment / selection of participants	Recruitment was progressive: each participant was met when discharged rehabilitation over 6 months.
Intervention(s)	Community participation intervention (home leisure educational program) N=7 A leisure educational program that encourages and supports the individual to "self-manage" their leisure activities. It begins with a leisure questionnaire (Individual profile in leisure) that generates a broad picture of the leisure activities done before the stroke, those still pursued and activities the client wishes to begin. Interest, attitudes frequency and motivation regarding leisure and perceived barriers are also evaluated. This information gives a general picture of which specific activities and problems should be focused on. The 12 steps of the program were addressed during 10 intervention sessions. Each session may include one step, more than one step or part of one step depending on the individual. The process of developing their own solution started in the first session and continued throughout. Concomitant therapy: No additional information
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Mixed Majority no communication problems (8), 6 with minor or moderate communication problems
Subgroup 3: Presence of sensory difficulties	Mixed Visual hemineglect present in 7 people
Subgroup 4:	Not stated/unclear

Presence of psychological distress	
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No additional information.
Population subgroups	No additional information.
Comparator	No participation N=7 A flexible "social" program was set up including a weekly hour comprised of friendly home visits with conversations on different topics. Many ideas for conversation were pre-established but they were not imposed and were used only if a topic did not arise spontaneously. Often, the themes of family and social support, care received at the hospital and news were discussed. Concomitant therapy: No additional information.
Number of participants	14
Duration of follow-up	10 weeks
Indirectness	Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.

Additional comments	No additional information

Study arms

Community participation intervention (home leisure educational program) (N = 7)
A leisure educational program that encourages and supports the individual to "self-manage" their leisure activities. It begins with a leisure questionnaire (Individual profile in leisure) that generates a broad picture of the leisure activities done before the stroke, those still pursued and activities the client wishes to begin. Interest, attitudes frequency and motivation regarding leisure and perceived barriers are also evaluated. This information gives a general picture of which specific activities and problems should be focused on. The 12 steps of the program were addressed during 10 intervention sessions. Each session may include one step, more than one step or part of one step depending on the individual. The process of developing their own solution started in the first session and continued throughout. Concomitant therapy: No additional information

No participation (N = 7)
A flexible "social" program was set up including a weekly hour comprised of friendly home visits with conversations on different topics. Many ideas for conversation were pre-established but they were not imposed and were used only if a topic did not arise spontaneously. Often, the themes of family and social support, care received at the hospital and news were discussed. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (home leisure educational program) (N = 7)	No participation (N = 7)
% Female	n = 3 ; % = 42.9	n = 1 ; % = 14.3

Characteristic	Community participation intervention (home leisure educational program) (N = 7)	No participation (N = 7)
Sample size		
Mean age (SD) (years) Mean (SD)	71.1 (9.5)	71.7 (8.7)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Mean (SD)	6.4 (3.3)	8.1 (2.4)
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of communication difficulties No of events	n = 2 ; % = 28.6	n = 4 ; % = 57.1
Presence of sensory difficulties Visual hemineglect Mean (SD)	2 (28.6)	5 (83.3)
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (home leisure educational program) (N = 7)	No participation (N = 7)
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 10 week (<6 months. End of intervention.)

Continuous outcomes

Outcome	Community participation intervention (home leisure educational program), Baseline, N = 7	Community participation intervention (home leisure educational program), 10 week, N = 6	No participation, Baseline, N = 7	No participation, 10 week, N = 7
Psychological distress - depression (Beck Depression Scale) Scale range: 0-63. Final values. Mean (SD)	54.9 (4.2)	56.3 (3.3)	54.7 (3.1)	53.7 (3.5)
Stroke-specific Patient-	20.4 (2.7)	26.2 (2.2)	19.1 (3.4)	18.4 (2.6)

Outcome	Community participation intervention (home leisure educational program), Baseline, N = 7	Community participation intervention (home leisure educational program), 10 week, N = 6	No participation, Baseline, N = 7	No participation, 10 week, N = 7
Reported Outcome Measures (Stroke Impact Profile) Scale range: 0-30. Final values. Mean (SD)				

Psychological distress - depression (Beck Depression Scale) - Polarity - Lower values are better
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Profile) - Polarity - Lower values are better

Dichotomous outcome

Outcome	Community participation intervention (home leisure educational program), Baseline, N = 7	Community participation intervention (home leisure educational program), 10 week, N = 7	No participation, Baseline, N = 7	No participation, 10 week, N = 7
Discontinuation Intervention: 1 illness No of events	n = NA ; % = NA	n = 1 ; % = 14.3	n = NA ; % = NA	n = 0 ; % = 0

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Psychologicaldistress-depression(BeckDepressionScale)-MeanSD-Community participation intervention (home leisure educational program)-No participation-t10

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactProfile)-MeanSD-Community participation intervention (home leisure educational program)-No participation-t10

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (home leisure educational program)-No participation-t10

Section	Question	Answer
Overall bias and	Risk of bias	High

Section	Question	Answer
Directness	judgement	
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Ntsiea, 2015

Bibliographic Reference	Ntsiea, M. V.; Van Aswegen, H.; Lord, S.; Olorunju, S. S.; The effect of a workplace intervention programme on return to work after stroke: a randomised controlled trial; Clinical Rehabilitation; 2015; vol. 29 (no. 7); 663-73

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	South African National Clinical Trials register. Trial Number: DOH-27-0512-4079.
Study type	Randomised controlled trial (RCT)
Study location	South Africa

Study setting	Workplaces. Some people were outpatients and were inpatients.
Study dates	2009 to 2012
Sources of funding	This research was partially funded by the Carnegie Large research grant and the African Doctoral Dissertation Research Fellowship offered by the African Population and Health Research Centre in partnership with the International Development Research Centre.
Inclusion criteria	Aged between 18 and 60 years; employed in the formal work sector at the time of stroke; less than eight weeks since onset of stroke (in order to start the workplace intervention programme before the end of the six week sick leave period).
Exclusion criteria	Barthel index score of less than 12 out of 20 indicating dependence in activities of daily living; involved in another workplace intervention programme at the time of the study; reported premorbid dependence in activities of daily living and were not willing to return to work after stroke.
Recruitment / selection of participants	People were recruited from 2009-2012 from three hospitals which offer stroke rehabilitation services within the Gauteng province of South Africa.
Intervention(s)	Community participation intervention (workplace intervention programme) N=40 The workplace intervention programme was tailored according to the functional ability and workplace challenges of each stroke survivor. All sessions (apart from the first one) took place at the person's place of work. This program was administered by a physiotherapist and an occupational therapist. The stroke survivors were seen once per week for one hour per session except for work skill assessment sessions which took a minimum of four hours. The intervention involved meetings between the therapist, stroke survivor and employer/supervisor. It included vocational counselling and coaching; emotional support; adaptation of the working environment; advice on coping strategies to compensate for mobility and upper limb functional limitations and fatigue management. A social worker/psychologist/speech therapist were involved when necessary. Concomitant therapy: General activities to improve impairments and activity limitations and prepare the stroke survivor for return home.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2:	Not stated/unclear

Presence of communication difficulties	
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Not stated/unclear.
Population subgroups	No additional information.
Comparator	No participation N=40 Usual care only (no workplace intervention program, just general advice). Concomitant therapy: General activities to improve impairments and activity limitations and prepare the stroke survivor for return home.
Number of participants	80.

Duration of follow-up	3 months and 6 months.
Indirectness	No additional information.
Additional comments	Intention to treat analysis and per protocol analysis.

Study arms

Community participation intervention (workplace intervention programme) (N = 40)
The workplace intervention programme was tailored according to the functional ability and workplace challenges of each stroke survivor. All sessions (apart from the first one) took place at the person's place of work. This program was administered by a physiotherapist and an occupational therapist. The stroke survivors were seen once per week for one hour per session except for work skill assessment sessions which took a minimum of four hours. The intervention involved meetings between the therapist, stroke survivor and employer/supervisor. It included vocational counselling and coaching; emotional support; adaptation of the working environment; advice on coping strategies to compensate for mobility and upper limb functional limitations and fatigue management. A social worker/psychologist/speech therapist were involved when necessary. Concomitant therapy: General activities to improve impairments and activity limitations and prepare the stroke survivor for return home.

No participation (N = 40)
Usual care only (no workplace intervention program, just general advice). Concomitant therapy: General activities to improve impairments and activity limitations and prepare the stroke survivor for return home.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (workplace intervention programme) (N = 40)	No participation (N = 40)

Characteristic	Community participation intervention (workplace intervention programme) (N = 40)	No participation (N = 40)
% Female Sample size	n = 19 ; % = 48	n = 20 ; % = 50
Mean age (SD) (years) Mean (SD)	45 (8.5)	44 (8.9)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Weeks) Mean (SD)	4.4 (1.9)	4.7 (1.5)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (workplace intervention programme) (N = 40)	No participation (N = 40)
Sample size		
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 3 month (<6 months)
- 6 month (Greater than or equal to 6 months)

Dichotomous outcomes

Outcome	Community participation intervention (workplace intervention programme), Baseline, N = 40	Community participation intervention (workplace intervention programme), 3 month, N = 40	Community participation intervention (workplace intervention programme), 6 month, N = 40	No participation, Baseline, N = 40	No participation, 3 month, N = 40	No participation, 6 month, N = 40
Return to work	n = NA ; % = NA	n = 11 ; % = 27	n = 24 ; % = 60	n = NA ; % = NA	n = 5 ; % = 12	n = 8 ; % = 20

Outcome	Community participation intervention (workplace intervention programme), Baseline, N = 40	Community participation intervention (workplace intervention programme), 3 month, N = 40	Community participation intervention (workplace intervention programme), 6 month, N = 40	No participation, Baseline, N = 40	No participation, 3 month, N = 40	No participation, 6 month, N = 40
No of events						
Discontinuation Intervention: 2 death, 3 moved out of research geographic location. Control: 2 death, 1 moved out of research geographic location. No of events	n = NA ; % = NA	n = 4 ; % = 10	n = 5 ; % = 12.5	n = NA ; % = NA	n = 3 ; % = 7.5	n = 3 ; % = 7.5

Return to work - Polarity - Higher values are better
Discontinuation - Polarity - Lower values are better

Continuous outcomes

Outcome	Community participation intervention (workplace intervention programme), Baseline, N = 40	Community participation intervention (workplace intervention programme), 3 month, N = 40	Community participation intervention (workplace intervention programme), 6 month, N = 40	No participation, Baseline, N = 40	No participation, 3 month, N = 40	No participation, 6 month, N = 40
Activities of daily living (barthel index)	17.2 (2.6)	18.8 (1.6)	NA (NA)	15.6 (2.8)	18.2 (2.2)	NA (NA)

Outcome	Community participation intervention (workplace intervention programme), Baseline, N = 40	Community participation intervention (workplace intervention programme), 3 month, N = 40	Community participation intervention (workplace intervention programme), 6 month, N = 40	No participation, Baseline, N = 40	No participation, 3 month, N = 40	No participation, 6 month, N = 40
Scale range: 0-20. Final values at 3 months, change score at 6 months. Mean (SD)						
Activities of daily living (barthel index) Scale range: 0-20. Final values at 3 months, change score at 6 months. Mean (SE)	NA (NA)	NA (NA)	2.9 (0.44)	NA (NA)	NA (NA)	3.6 (0.38)
Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life) Scale range: 0-245. Final values at 3 months, change	180.8 (30.5)	215.5 (19.8)	NA (NA)	166.7 (37.7)	208.9 (27.1)	NA (NA)

Outcome	Community participation intervention (workplace intervention programme), Baseline, N = 40	Community participation intervention (workplace intervention programme), 3 month, N = 40	Community participation intervention (workplace intervention programme), 6 month, N = 40	No participation, Baseline, N = 40	No participation, 3 month, N = 40	No participation, 6 month, N = 40
score at 6 months. Mean (SD)						
Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life) Scale range: 0-245. Final values at 3 months, change score at 6 months. Mean (SE)	NA (NA)	NA (NA)	44.3 (4.93)	NA (NA)	NA (NA)	51.8 (8.5)

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

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

Dichotomousoutcomes-Returntowork-NoOfEvents-Community participation intervention (workplace intervention programme)-No participation-t3

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

Dichotomousoutcomes-Returntowork-NoOfEvents-Community participation intervention (workplace intervention programme)-No participation-t6

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

Dichotomousoutcomes-Discontinuation-NoOfEvents-Community participation intervention (workplace intervention programme)-No participation-t3

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

Dichotomousoutcomes-Discontinuation-NoOfEvents-Community participation intervention (workplace intervention programme)-No participation-t6

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

Continuousoutcomes-Activitiesofdailyliving(barthelindex)-MeanSD-Community participation intervention (workplace intervention programme)-No participation-t3

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

Continuousoutcomes-Activitiesofdailyliving(barthelindex)-MeanSE-Community participation intervention (workplace intervention programme)-No participation-t6

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeSpecificQualityofLife)-MeanSD-Community participation intervention (workplace intervention programme)-No participation-t3

Section	Question	Answer

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

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeSpecificQualityofLife)-MeanSE-Community participation intervention (workplace intervention programme)-No participation-t6

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

Ostwald, 2014

Bibliographic Reference Ostwald SK; Godwin KM; Cron SG; Kelley CP; Hersch G; Davis S; Home-based psychoeducational and mailed information programs for stroke-caregiving dyads post-discharge: a randomized trial.; Disability and rehabilitation; 2014; vol. 36 (no. 1)

Study details

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

associated with this study included in review	
Trial name / registration number	No additional information.
Study type	Randomised controlled trial (RCT)
Study location	United States of America
Study setting	Home based, people recently discharged from inpatient rehabilitation.
Study dates	No additional information.
Sources of funding	The study was supported by a grant from the National Institute of Health, National Institute for Nursing Research (R01, NR005316, Sharon K. Ostwald, PI). Additional funding was provided by the Isla Carroll Turner Friendship Trust, Houston, Texas.
Inclusion criteria	One member of the dyad had a diagnosis of stroke within the previous 12 months and was admitted to the hospital from home; the stroke survivor needed daily assistance with activities of daily living as indicated by the functional independence measure; the stroke survivor was to be discharged home to a spouse; both members could communicate in English; stroke survivors was at least 55 years of age initially, but after 3 months the age was lowered to 50 to include African American and Hispanic survivors who were having strokes at earlier ages than the white population; lived within 50 miles of the Texas Medical Center.
Exclusion criteria	Stroke survivors had a comorbidity that would take priority over stroke rehabilitation; either member of the dyad had severe psychopathology that would interfere with the intervention; stroke survivor had a life expectancy of less than 6 months; stroke survivor was globally aphasic preventing communication and the ability to consent to the study.
Recruitment / selection of participants	Recruited from medical chart identification of participants. People were recruited from five health care systems within the Texas Medical Center in Houston, Texas.
Intervention(s)	Community participation intervention (psychoeducation intervention) N=80 Home-based intervention with home visits for the first 6 months post-discharge by advance practice nurses, occupational and physical therapists, who provided information following pre-determined protocols, developed to provide education, support, skill training, counselling and linkages to social and community resources. Protocols were divided into seven

	categories: stroke recovery, stress of stroke, promotion of a healthy lifestyle, special problems, therapeutic skill training, coping strategies and community networks. (Participants represent dyads of stroke survivors and caregivers). On average the intervention included 16 visits of 70 minutes each for a mean total of 36.7 hour of education per dyad. Concomitant therapy: All people received mailed monthly personalized letters with information on signs and symptoms of stroke, stroke prevention, stress reduction strategies, diet and exercise guidelines, links to support groups and advocacy organisations, and tips for leisure activity adaptations.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Mixture of races, including African American, Asian, Pacific Islander, White, non-Hispanic, Hispanic, Latino and Other.
Population	No additional information.

subgroups	
Comparator	No participation N=79 No home-based intervention. Concomitant therapy: All people received mailed monthly personalized letters with information on signs and symptoms of stroke, stroke prevention, stress reduction strategies, diet and exercise guidelines, links to support groups and advocacy organisations, and tips for leisure activity adaptations.
Number of participants	159
Duration of follow-up	Intervention over 6 months, end of follow up at 12 months.
Indirectness	Intervention indirectness - While the intervention discusses social group integration, it is a home-based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.
Additional comments	Intention-to-treat

Study arms

Community participation intervention (psychoeducation intervention) (N = 80)
Home-based intervention with home visits for the first 6 months post-discharge by advance practice nurses, occupational and physical therapists, who provided information following pre-determined protocols, developed to provide education, support, skill training, counselling and linkages to social and community resources. Protocols were divided into seven categories: stroke recovery, stress of stroke, promotion of a healthy lifestyle, special problems, therapeutic skill training, coping strategies and community networks. (Participants represent dyads of stroke survivors and caregivers). On average the intervention included 16 visits of 70 minutes each for a mean total of 36.7 hour of education per dyad. Concomitant therapy: All people received mailed monthly personalized letters with

information on signs and symptoms of stroke, stroke prevention, stress reduction strategies, diet and exercise guidelines, links to support groups and advocacy organisations, and tips for leisure activity adaptations.

No participation (N = 79)
No home-based intervention. Concomitant therapy: All people received mailed monthly personalized letters with information on signs and symptoms of stroke, stroke prevention, stress reduction strategies, diet and exercise guidelines, links to support groups and advocacy organisations, and tips for leisure activity adaptations.

Characteristics

Arm-level characteristics

Characteristic	**Community participation intervention (psychoeducation intervention) (N = 80)**	**No participation (N = 79)**
% Female Sample size	n = 25 ; % = 31.25	n = 15 ; % = 18.99
Mean age (SD) (years) Mean (SD)	66.98 (9.04)	65.75 (9.26)
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA
African American Sample size	n = 17 ; % = 21.25	n = 14 ; % = 17.72
Asian, Pacific Islander	n = 2 ; % = 2.5	n = 3 ; % = 3.8

Characteristic	Community participation intervention (psychoeducation intervention) (N = 80)	No participation (N = 79)
Sample size		
White, Non-Hispanic Sample size	n = 45 ; % = 59.49	n = 47
Hispanic, Latino Sample size	n = 12 ; % = 15	n = 13 ; % = 16.46
Other Sample size	n = 4 ; % = 5	n = 2 ; % = 2.53
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Mean (SD)	NR (NR)	NR (NR)
Time after stroke Mean (SD)	NR (NR)	NR (NR)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (psychoeducation intervention) (N = 80)	No participation (N = 79)
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 3 month (<6 months)
- 12 month (Greater than or equal to 6 months)

Continuous outcomes

Outcome	Community participation intervention (psychoeducation intervention), Baseline, N = 80	Community participation intervention (psychoeducation intervention), 3 month, N = 80	Community participation intervention (psychoeducation intervention), 12 month, N = 80	No participation, Baseline, N = 79	No participation, 3 month, N = 79	No participation, 12 month, N = 79
Psychological	4.3 (2.91)	4.19 (3.23)	3.71 (2.73)	3.58 (2.88)	3.12 (2.79)	2.68 (2.63)

Outcome	Community participation intervention (psychoeducation intervention), Baseline, N = 80	Community participation intervention (psychoeducation intervention), 3 month, N = 80	Community participation intervention (psychoeducation intervention), 12 month, N = 80	No participation, Baseline, N = 79	No participation, 3 month, N = 79	No participation, 12 month, N = 79
distress - Depression (Geriatric depression scale) Scale range: 0-15. Final values. Mean (SD)						
Activities of daily living (functional independence measure) Scale range: 18-126. Final values. Mean (SD)	87.08 (23.5)	98.32 (20.76)	102.75 (20.83)	92.67 (22.4)	102.71 (19.45)	107.09 (20.47)
Stroke-specific Patient-Reported Outcome Measure (Stroke impact scale) Different scale range for different subscales (but scales provided doesn't make sense next to the numbers provided - possibly 0-100?). Final	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)	NA (NA)

Outcome	Community participation intervention (psychoeducation intervention), Baseline, N = 80	Community participation intervention (psychoeducation intervention), 3 month, N = 80	Community participation intervention (psychoeducation intervention), 12 month, N = 80	No participation, Baseline, N = 79	No participation, 3 month, N = 79	No participation, 12 month, N = 79
values. Mean (SD)						
SIS Physical subscale Scale range: 4-50 Mean (SD)	48.56 (22.28)	59.08 (22.53)	65.64 (23.46)	53.28 (21.39)	67.47 (20.3)	72.86 (22.56)
SIS Emotion subscale Scale range: 9-45 Mean (SD)	76.35 (15.91)	77.15 (18.6)	79.03 (16.15)	80.08 (17.81)	82.1 (15.64)	82.77 (16.69)
SIS Memory subscale Scale range: 7-35 Mean (SD)	72.73 (22.7)	76.53 (22.66)	83 (18.95)	78.5 (25.29)	84.38 (18.66)	87.43 (16.38)
SIS Communication subscale Scale range: 7-35 Mean (SD)	77.46 (25.2)	83.47 (22.03)	85.25 (21.16)	84.67 (24.22)	87.44 (21.4)	92.05 (14.26)
SIS Social participation subscale Scale range: 8-40 Mean (SD)	44.08 (23.62)	60.24 (24.98)	69.32 (22.52)	50.39 (23.69)	68.28 (21.27)	76.25 (18.74)

Outcome	Community participation intervention (psychoeducation intervention), Baseline, N = 80	Community participation intervention (psychoeducation intervention), 3 month, N = 80	Community participation intervention (psychoeducation intervention), 12 month, N = 80	No participation, Baseline, N = 79	No participation, 3 month, N = 79	No participation, 12 month, N = 79
SIS Stroke recovery score Scale range: 0-100 Mean (SD)	49.59 (23.82)	56.71 (22.8)	68.41 (19.24)	54.78 (23.64)	64.93 (20.43)	73.84 (20.46)

Psychological distress - Depression (Geriatric depression scale) - Polarity - Lower values are better
Activities of daily living (functional independence measure) - Polarity - Higher values are better
Stroke-specific Patient-Reported Outcome Measure (Stroke impact scale) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (psychoeducation intervention), Baseline, N = 80	Community participation intervention (psychoeducation intervention), 3 month, N = 80	Community participation intervention (psychoeducation intervention), 12 month, N = 80	No participation, Baseline, N = 79	No participation, 3 month, N = 79	No participation, 12 month, N = 79
Discontinuation Intervention: 10 discontinued (4 death, 5 too busy, 1 relocated). Control: 15 discontinued (7 death, 3 too busy, 3 relocated, 1 no longer interested, 1 dyad	n = NA ; % = NA	n = NR ; % = NR	n = 10 ; % = 12.5	n = NA ; % = NA	n = NR ; % = NR	n = 15 ; % = 19

Outcome	Community participation intervention (psychoeducation intervention), Baseline, N = 80	Community participation intervention (psychoeducation intervention), 3 month, N = 80	Community participation intervention (psychoeducation intervention), 12 month, N = 80	No participation, Baseline, N = 79	No participation, 3 month, N = 79	No participation, 12 month, N = 79
separated). No of events						

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Psychologicaldistress-Depression(Geriatricdepressionscale)-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t3

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (psychoeducation intervention)-No participation-t12

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Psychologicaldistress-Depression(Geriatricdepressionscale)-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Activitiesofdailyliving(functionalindependencemeasure)-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t3

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Activitiesofdailyliving(functionalindependencemeasure)-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t12

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISPhysicalsubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t3

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISPhysicalsubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISEmotionsubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t3

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISEmotionsubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISMemorysubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t3

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISMemorysubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t12

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISCommunicationsubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t3

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISCommunicationsubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISSocialparticipationsubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t3

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISSocialparticipationsubscale-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISStrokerecoveryscore-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t3

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasure(Strokeimpactscale)-SISStrokerecoveryscore-MeanSD-Community participation intervention (psychoeducation intervention)-No participation-t12

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness due to home based intervention)*

Parker, 2001

Bibliographic Reference	Parker CJ; Gladman JR; Drummond AE; Dewey ME; Lincoln NB; Barer D; Logan PA; Radford KA; A multicentre randomized controlled trial of leisure therapy and conventional occupational therapy after stroke. TOTAL Study Group. Trial of Occupational Therapy and Leisure.; Clinical rehabilitation; 2001; vol. 15 (no. 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	Randomised controlled trial (RCT)
Study location	United Kingdom
Study setting	Inpatients who were recently discharged from hospital (for all sites except Glasgow) or people attending an outpatient clinic (for people in Glasgow).

Study dates	No additional information.
Sources of funding	Financial support provided by the NHS Research and Development Programme (Cardiovascular Disease and Stroke), by the NHS R&D Programme for Health Technology Assessment, and by Lothian Health. The COSTAR collaboration was supported by a grant from NHS R&D (Cardiovascular Disease and Stroke).
Inclusion criteria	People with stroke (WHO definition) during the study period (in all sites except Glasgow were inpatients, in Glasgow they were outpatients).
Exclusion criteria	Residence outside the catchment area of the local occupational therapy service; discharge to residential or nursing home; insufficient English understood in the patient's home for postal questionnaires to be completed; documented history of dementia prior to stroke; people unable to tolerate interventions, for example because of other illness; in Glasgow only stroke more than six months before clinic visit.
Recruitment / selection of participants	Recruitment was conducted at five sites: Aintree Fazakerley Hospital, Bristol Southmead Hospital, Edinburgh Western General Hospital, Glasgow Royal Infirmary and Nottingham University Hospital.
Intervention(s)	Community participation intervention (leisure therapy) N=153 Two groups received an occupational therapy intervention at home for up to 6 months after recruitment that specified a minimum of 10 sessions lasting not less than 30 minutes each. Goals were set in terms of leisure activities and so interventions included practising the leisure tasks as well as any activities of daily living tasks necessary to achieve the leisure objective. The treating therapist used a standard form to record brief details of date and duration of sessions. Concomitant therapy: All people were eligible for any existing rehabilitation services provided in their area, such as day hospital visits.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3:	Not stated/unclear

Presence of sensory difficulties	
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No additional information.
Population subgroups	No additional information.
Comparator	No participation N=313 Combination of two groups. One received (n=156) an occupational therapy intervention at home for up to 6 months after recruitment that specified a minimum of 10 sessions lasting not less than 30 minutes each. The treatment goals set in the group were in terms of improving independence in self-care tasks and therefore treatment involved practising these tasks (such as preparing a meal or walking outdoors). One received no treatment (n=157). Concomitant therapy: All people were eligible for any existing rehabilitation services provided in their area, such as day hospital visits.
Number of participants	466
Duration of follow-up	6 months and 12 months

Indirectness	No additional information
Additional comments	Intention-to-treat

Study arms

Community participation intervention (leisure therapy) (N = 153)
Two groups received an occupational therapy intervention at home for up to 6 months after recruitment that specified a minimum of 10 sessions lasting not less than 30 minutes each. Goals were set in terms of leisure activities and so interventions included practising the leisure tasks as well as any activities of daily living tasks necessary to achieve the leisure objective. The treating therapist used a standard form to record brief details of date and duration of sessions. Concomitant therapy: All people were eligible for any existing rehabilitation services provided in their area, such as day hospital visits.

No participation (N = 313)
Combination of two groups. One received (n=156) an occupational therapy intervention at home for up to 6 months after recruitment that specified a minimum of 10 sessions lasting not less than 30 minutes each. The treatment goals set in the group were in terms of improving independence in self-care tasks and therefore treatment involved practising these tasks (such as preparing a meal or walking outdoors). One received no treatment (n=157). Concomitant therapy: All people were eligible for any existing rehabilitation services provided in their area, such as day hospital visits.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (leisure therapy) (N = 153)	No participation (N = 313)
% Female	n = 65 ; % = 42	n = 132 ; % = 42

Characteristic	Community participation intervention (leisure therapy) (N = 153)	No participation (N = 313)
Sample size		
Mean age (SD) (years) For control groups: ADL group = 71 (66-78). Control group = 72 (65-78). Median (IQR)	72 (65 to 79)	NA (NA to NA)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke Mean (SD)	NR (NR)	NR (NR)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (leisure therapy) (N = 153)	No participation (N = 313)
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 12 month (Greater than or equal to 6 months)

Continuous outcomes

Outcome	Community participation intervention (leisure therapy), Baseline, N = 153	Community participation intervention (leisure therapy), 12 month, N = 153	No participation, Baseline, N = 313	No participation, 12 month, N = 313
Participation in leisure activities/social group scores (Nottingham Leisure Questionnaire) Scale range: 0-60. Final values. ADL (n=156) and control (n=157) group combined. ADL group = 14.9 (8.1). Control = 15.1 (7.9). Mean (SD)	NR (NR)	16 (7.5)	NR (NR)	15 (8)

Outcome	Community participation intervention (leisure therapy), Baseline, N = 153	Community participation intervention (leisure therapy), 12 month, N = 153	No participation, Baseline, N = 313	No participation, 12 month, N = 313
Activities of daily living (Nottingham Extended ADL Scale) Scale range: 0-66. Final values. ADL (n=156) and control (n=157) group combined. ADL group = 34.1 (19.1). Control = 33.3 (19.5). Mean (SD)	NR (NR)	32.7 (17.8)	NR (NR)	33.7 (19.3)
Psychological distress - depression (General Health Questionnaire) Scale range: 0-36. Final values. ADL (n=156) and control (n=157) group combined. ADL group = 16.9 (7.3). Control = 16.2 (7.4). Mean (SD)	NR (NR)	15.4 (7.3)	NR (NR)	16.6 (7.4)

Participation in leisure activities/social group scores (Nottingham Leisure Questionnaire) - Polarity - Higher values are better
Activities of daily living (Nottingham Extended ADL Scale) - Polarity - Higher values are better
Psychological distress - depression (General Health Questionnaire) - Polarity - Lower values are better

Dichotomous outcome

Outcome	Community participation intervention (leisure therapy), Baseline, N = 145	Community participation intervention (leisure therapy), 12 month, N = 145	No participation, Baseline, N = 313	No participation, 12 month, N = 313
Discontinuation Community participation intervention: 14 died, 26 no response. No participation - ADL group:	n = NA ; % = NA	n = 40 ; % = 28	n = NA ; % = NA	n = 95 ; % = 30

Outcome	Community participation intervention (leisure therapy), Baseline, N = 145	Community participation intervention (leisure therapy), 12 month, N = 145	No participation, Baseline, N = 313	No participation, 12 month, N = 313
15 died, 35 no response. Control group: 11 died, 34 no response. No of events				

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Participationinleisureactivities(NottinghamLeisureQuestionnaire)-MeanSD-Community participation intervention (leisure therapy)-No participation-t12

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

Continuousoutcomes-Activitiesofdailyliving(NottinghamExtendedADLScale)-MeanSD-Community participation intervention (leisure therapy)-No participation-t12

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcomes-Psychologicaldistress-depression(GeneralHealthQuestionnaire)-MeanSD-Community participation intervention (leisure therapy)-No participation-t12

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (leisure therapy)-No participation-t12

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

Schmid, 2012

Bibliographic Reference	Schmid, Arlene A.; Van Puymbroeck, Marieke; Altenburger, Peter A.; Schalk, Nancy L.; Dierks, Tracy A.; Miller, Kristine K.; Damush, Teresa M.; Bravata, Dawn M.; Williams, Linda S.; Poststroke Balance Improves With Yoga; Stroke; 2012; vol. 43 (no. 9); 2402-2407

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	Clinicaltrials.gov = NCT01109602.
Study type	Randomised controlled trial (RCT)
Study location	United States of America
Study setting	Outpatient setting
Study dates	No additional information
Sources of funding	
Inclusion criteria	Completed all stroke-related rehabilitation; able to stand with or without a device; able to speak and understand English; scored at least 4 out of 6 on the short 6-item Mini-Mental State Examination; agreed to commit to assessments and 16 sessions of group therapy.
Exclusion criteria	People receiving palliative care; unable to ensure transportation to the sessions; had a self-reported medical contraindication (serious cardiac conditions, serious chronic obstructive pulmonary disease or oxygen dependence, severe weight bearing pain, a history of significant psychiatric illness, uncontrollable diabetes with recent weight loss); current enrolment in another research trial.
Recruitment / selection of participants	Veterans were contacted via an approved letter and follow-up telephone calls. Nonveterans were recruited from local stroke support groups and previously completed stroke research studies.

Intervention(s)	Community participation intervention (yoga and yoga-plus) N=37 Two groups combined: group yoga and yoga plus group (group yoga plus at-home yoga/relaxation audio recording). The group yoga program was completed over 8 weeks including seated and standing yoga. In addition, the yoga-plus group was included in incorporate standard clinical practice of home exercise prescription. Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	White = 28 (60%). No additional information.
Population	No additional information

subgroups	
Comparator	No participation N=10 Waiting list control. Concomitant therapy: No additional information.
Number of participants	47
Duration of follow-up	8 weeks
Indirectness	No additional information
Additional comments	No additional information.

Study arms

Community participation intervention (yoga and yoga-plus) (N = 37)
Two groups combined: group yoga and yoga plus group (group yoga plus at-home yoga/relaxation audio recording). The group yoga program was completed over 8 weeks including seated and standing yoga. In addition, the yoga-plus group was included in incorporate standard clinical practice of home exercise prescription. Concomitant therapy: No additional information.

No participation (N = 10)
Waiting list control. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (yoga and yoga-plus) (N = 37)	No participation (N = 10)
% Female Sample size	n = 17	n = 0 ; % = 0
Mean age (SD) (years) Mean (SD)	63.9 (8.7)	60.2 (8.9)
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA
White Sample size	n = 22 ; % = 59	n = 6 ; % = 60
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	54.9 (43.2)	36.4 (23.6)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (yoga and yoga-plus) (N = 37)	No participation (N = 10)
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 8 week (<6 months)

Continuous outcome

Outcome	Community participation intervention (yoga and yoga-plus), Baseline, N = 37	Community participation intervention (yoga and yoga-plus), 8 week, N = 37	No participation, Baseline, N = 10	No participation, 8 week, N = 10
Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life)	33.7 (9.2)	35.8 (9.1)	32.7 (5.2)	33 (6.2)

Outcome	Community participation intervention (yoga and yoga-plus), Baseline, N = 37	Community participation intervention (yoga and yoga-plus), 8 week, N = 37	No participation, Baseline, N = 10	No participation, 8 week, N = 10
Scale range: Unclear. Final values. Mean (SD)				

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

Discontinuation outcome

Outcome	Community participation intervention (yoga and yoga-plus), Baseline, N = 37	Community participation intervention (yoga and yoga-plus), 8 week, N = 37	No participation, Baseline, N = 10	No participation, 8 week, N = 10
Discontinuation Yoga: 3 lost to follow-up, 4 less than or equal to 5 yoga sessions, 1 hospitalised. No of events	n = NR ; % = NR	n = 8 ; % = 22	n = NR ; % = NR	n = 0 ; % = 0

Discontinuation - Polarity - Lower values are better

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeSpecificQualityofLife)-MeanSD-Community participation intervention (yoga and yoga-plus)-No participation-t8

Section	Question	Answer

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

Discontinuationoutcome-Discontinuation-NoOfEvents-Community participation intervention (yoga and yoga-plus)-No participation-t8

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

Song, 2021

Bibliographic Reference Song, R.; Park, M.; Jang, T.; Oh, J.; Sohn, M. K.; Effects of a Tai Chi-Based Stroke Rehabilitation Program on Symptom Clusters, Physical and Cognitive Functions, and Quality of Life: a Randomized Feasibility Study; International journal of environmental research and public health; 2021; vol. 18 (no. 10)

Study details

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

associated with this study included in review	
Trial name / registration number	Clinicaltrials.gov - NCT02868840
Study type	Randomised controlled trial (RCT)
Study location	Korea
Study setting	Outpatient rehabilitation center
Study dates	February 2016 to May 2017
Sources of funding	The study was supported by Basic Science Research Program through the National Research Foundation of Korea (2013R-1A-1A-2065536).
Inclusion criteria	Diagnosed with stroke; referred by a physician to the rehabilitation therapeutic program; who have a mobile phone and can use the text functions.
Exclusion criteria	Not being able to understand questionnaires; not being able to stand unaided during functional tests.
Recruitment / selection of participants	No additional information.
Intervention(s)	Community participation interventions (Tai chi program) N=18 Adapted form of Tai Chi for health programs was used as the exercise component of the stroke rehabilitation program for stroke survivors. The Tai Chi class as a group was led by a trained Tai Chi instructor twice a week for 6 months in the physical therapy room of the university hospital rehabilitation center. Each session consisted of a 5-min warm up, a 5-min of qigong, a 35-min of Tai Chi movements in a seated or standing position, and a 5-min cool-down. Chairs were available for safety and comfort while patients were performing seated Tai Chi. Any signs of discomfort were closely monitored by a research assistant and a rehabilitation center staff during each session. Various motivation strategies were applied in an effort to reduce the dropout rate, such as promoting the goal of performing self-exercises regularly at home, providing Tai Chi shirts when attended at least 80% of the sessions over 3 months, and making weekly follow-up calls to remind the person about performing home exercises and the next schedule of the program.

	Concomitant therapy: All people received a symptom management program.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No additional information.
Population subgroups	No additional information.
Comparator	No participation N=16 A research assisted provided weekly text messages with information about stroke symptoms at different rehabilitation stages and how to manage those symptoms, as well as the contact number to call or send a text message to when they had any

	questions about symptom management. Concomitant therapy: All people received a symptom management program.
Number of participants	34
Duration of follow-up	3 months and 6 months.
Indirectness	No additional information.
Additional comments	No additional information

Study arms

Community participation interventions (Tai chi program) (N = 18)
Adapted form of Tai Chi for health programs was used as the exercise component of the stroke rehabilitation program for stroke survivors. The Tai Chi class as a group was led by a trained Tai Chi instructor twice a week for 6 months in the physical therapy room of the university hospital rehabilitation center. Each session consisted of a 5-min warm up, a 5-min of qigong, a 35-min of Tai Chi movements in a seated or standing position, and a 5-min cool-down. Chairs were available for safety and comfort while patients were performing seated Tai Chi. Any signs of discomfort were closely monitored by a research assistant and a rehabilitation center staff during each session. Various motivation strategies were applied in an effort to reduce the dropout rate, such as promoting the goal of performing self-exercises regularly at home, providing Tai Chi shirts when attended at least 80% of the sessions over 3 months, and making weekly follow-up calls to remind the person about performing home exercises and the next schedule of the program.
Concomitant therapy: All people received a symptom management program.

No participation (N = 16)
A research assisted provided weekly text messages with information about stroke symptoms at different rehabilitation stages and how to manage those symptoms, as well as the contact number to call or send a text message to when they had any questions about symptom management. Concomitant therapy: All people received a symptom management program.

Characteristics

Arm-level characteristics

Characteristic	Community participation interventions (Tai chi program) (N = 18)	No participation (N = 16)
% Female Sample size	n = 8	n = 5 ; % = 31.3
Mean age (SD) (years) Mean (SD)	58.72 (17.13)	57.18 (10.65)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NA ; % = NA	n = NA ; % = NA
Hypertension Sample size	n = 11 ; % = 61.1	n = 6 ; % = 37.5
Cardiovascular disease Sample size	n = 2 ; % = 11.1	n = 3 ; % = 18.8

Characteristic	Community participation interventions (Tai chi program) (N = 18)	No participation (N = 16)
Diabetes Sample size	n = 5 ; % = 27.8	n = 6 ; % = 37.5
Neurological disease Sample size	n = 10 ; % = 55.6	n = 8 ; % = 50
Other Sample size	n = 6 ; % = 33.3	n = 4 ; % = 25
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	7.58 (5.98)	10.94 (8.5)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation interventions (Tai chi program) (N = 18)	No participation (N = 16)
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 3 month (<6 months)
- 6 month (Greater than or equal to 6 months)

Continuous outcome

Outcome	Community participation interventions (Tai chi program), Baseline, N = 18	Community participation interventions (Tai chi program), 3 month, N = 18	Community participation interventions (Tai chi program), 6 month, N = 18	No participation, Baseline, N = 16	No participation, 3 month, N = 16	No participation, 6 month, N = 16
Activities of daily living (Korean modified Barthel Index) Scale range: 0-100. Final values. Mean (SD)	87.67 (9.93)	89.5 (8.35)	92.78 (7.95)	87.88 (10.89)	86.13 (13.09)	89.88 (10.61)
Stroke-specific Patient-Reported	NR (NR)	NR (NR)	NR (NR)	NR (NR)	NR (NR)	NR (NR)

Outcome	Community participation interventions (Tai chi program), Baseline, N = 18	Community participation interventions (Tai chi program), 3 month, N = 18	Community participation interventions (Tai chi program), 6 month, N = 18	No participation, Baseline, N = 16	No participation, 3 month, N = 16	No participation, 6 month, N = 16
Outcome Measure (Stroke specific Quality of Life) Scale range varies between questions. Final values. Mean (SD)						
SSQOL Energy subscale Scale range: 3-15 Mean (SD)	10.28 (3.01)	9.56 (2.85)	9 (2.28)	9.06 (3.21)	10 (3.08)	9 (2.92)
SSQOL Family roles subscale Scale range: 3-15 Mean (SD)	10.72 (2.59)	10.44 (3.24)	10.22 (3.42)	9.19 (2.95)	9.56 (3.1)	9.88 (3.05)
SSQOL Language subscale Scale range: 5-25 Mean (SD)	18.17 (6.15)	19.72 (3.64)	18.67 (4.46)	17.69 (5.31)	17.25 (5.78)	16.69 (4.67)
SSQOL Mobility subscale	19.06 (4.21)	21.89 (4.56)	20.72 (4.97)	18.25 (5.67)	18.81 (6.31)	17.38 (6.41)

Outcome	Community participation interventions (Tai chi program), Baseline, N = 18	Community participation interventions (Tai chi program), 3 month, N = 18	Community participation interventions (Tai chi program), 6 month, N = 18	No participation, Baseline, N = 16	No participation, 3 month, N = 16	No participation, 6 month, N = 16
Scale range: 6-30 Mean (SD)						
SSQOL Mood subscale Scale range: 5-25 Mean (SD)	16.22 (4.51)	17.56 (4.37)	17.78 (4.7)	15.75 (5.34)	15.69 (3.63)	14.69 (3.94)
SSQOL Social roles subscale Scale range: 5-25 Mean (SD)	13.56 (4.13)	14.28 (4.04)	16.11 (5.09)	13.94 (5.2)	14.63 (5.51)	15.19 (4.13)
SSQOL Personality subscale Scale range: 3-15 Mean (SD)	9.67 (3.65)	9.89 (3.01)	11.17 (3.24)	9.31 (4.24)	9.69 (3.96)	10.38 (3.38)
SSQOL Thinking subscale Scale range: 3-15 Mean (SD)	9.22 (2.58)	10.44 (2.87)	11.33 (2.74)	8.69 (3.5)	9.38 (2.47)	9.06 (2.64)
SSQOL Self-care Scale range: 5-25	12.11 (2.81)	12.56 (3.15)	18.78 (5.06)	13.88 (3.61)	12.06 (3.62)	16 (3.93)

Outcome	Community participation interventions (Tai chi program), Baseline, N = 18	Community participation interventions (Tai chi program), 3 month, N = 18	Community participation interventions (Tai chi program), 6 month, N = 18	No participation, Baseline, N = 16	No participation, 3 month, N = 16	No participation, 6 month, N = 16
Mean (SD)						

Activities of daily living (Korean modified Barthel Index) - Polarity - Higher values are better
Stroke-specific Patient-Reported Outcome Measure (Stroke specific Quality of Life) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation interventions (Tai chi program), Baseline, N = 18	Community participation interventions (Tai chi program), 3 month, N = 18	Community participation interventions (Tai chi program), 6 month, N = 18	No participation, Baseline, N = 16	No participation, 3 month, N = 16	No participation, 6 month, N = 16
Discontinuation Tai Chi: 2 missed measurement, 1 discontinued due to lost support for transportation. Control: 2 missed measurement. No of events	n = NA ; % = NA	n = NR ; % = NR	n = 3 ; % = 17	n = NA ; % = NA	n = NR ; % = NR	n = 2 ; % = 13

Discontinuation - Polarity - Lower values are better

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

Continuousoutcome-Activitiesofdailyliving(KoreanmodifiedBarthelIndex)-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Activitiesofdailyliving(KoreanmodifiedBarthelIndex)-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLEnergysubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLEnergysubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLFamilyrolessubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLFamilyrolessubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLLanguagesubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

Section	Question	Answer

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLLanguagesubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLMobilitysubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLMobilitysubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Directly applicable

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLMoodsubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLMoodsubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLSocialrolessubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLSocialrolessubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLPersonalitysubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLPersonalitysubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLThinkingsubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLThinkingsubscale-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLSelf-care-MeanSD-Community participation interventions (Tai chi program)-No participation-t3

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

Continuousoutcome-Stroke-specificPatient-ReportedOutcomeMeasure(StrokespecificQualityofLife)-SSQOLSelf-care-MeanSD-Community participation interventions (Tai chi program)-No participation-t6

Section	Question	Answer

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation interventions (Tai chi program)-No participation-t6

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

Stark, 2018

Bibliographic Reference	Stark, S.; Keglovits, M.; Somerville, E.; Hu, Y. L.; Conte, J.; Yan, Y.; Feasibility of a Novel Intervention to Improve Participation after Stroke; British Journal of Occupational Therapy; 2018; vol. 81 (no. 2); 116-124

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	Clinicaltrials.gov = NCT02396589
Study type	Randomised controlled trial (RCT)
Study location	United States of America
Study setting	Home and community based
Study dates	No additional information
Sources of funding	Funding for the COMPASS trial is through National Center for Medical Rehabilitation Research (NCMRR), 1 R03 HD079841-01A1.
Inclusion criteria	At least 45 years old; acute ischaemic stroke; baseline National Institutes of Health Stroke Scale at least 8 or overall functional independence measure score at least 90; independent in daily activities prior to stroke (pre morbid Rankin score of 2 or less); plan to discharge to home.
Exclusion criteria	Severe terminal systemic disease that limits life expectancy to <6 months; previous disorder (e.g. dementia) that makes interpretation of the self-rated scales difficult or Short-Blessed test score of 10 or less (indicating significant cognitive impairment); moderate to severe Aphasia as determined by the NIHSS Best Language rating of 2 or more due to the communication required to complete the outcome measures; reside in congregate living facility; not eligible for a therapeutic pass (required to leave the rehabilitation center).
Recruitment / selection of participants	No additional information
Intervention(s)	Community participation intervention (home modification and community participation) N=9 COMPASS is a complex intervention that combined a unique set of effective treatment strategies at a new point of care (transition from inpatient rehabilitation). A treatment manual was developed following a model to guide interventionists, including the conceptual framework, standardized assessments, treatment goals, intervention elements and format of delivery including a visit-by-visit grid outlining key components of each visit. The treatment includes a set of one pre-discharge and five post-discharge home visits by an occupational therapist to remediate barriers in the home and community that influence daily activities and community participation. The home modification intervention is a collaboration between the

	occupational therapist and participant, modifications are installed by the therapist or licensed contractor and active practice occurs in home and community including caregiver training (if appropriate). The treatment theory guiding the intervention is a competence-press model that posits changes to the physical environment (e.g. grab bars near toiler), matched with the individual's pattern of functional loss, will improve the outcome performance. Essential elements of COMPASS to be an environmental modification intervention that includes physical changes to the environment and active practice of daily activities in the participant's own home and community environment. The intervention includes compensatory strategies that are tailored to the person, motivational enhancement strategies and self-management incorporating the ability to use problem-solving skills. Concomitant therapy: No additional information.
Subgroup 1: Severity	Moderate (or NIHSS 5-14)
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No additional information
Population subgroups	No additional information

Comparator	No participation N=6 Evidence-based stroke education program based on evidence-based guidelines and literature review only. Concomitant therapy: No additional information.
Number of participants	15
Duration of follow-up	12 months in total
Indirectness	No additional information
Additional comments	No additional information

Study arms

Community participation intervention (home modification and community participation) (N = 9)
COMPASS is a complex intervention that combined a unique set of effective treatment strategies at a new point of care (transition from inpatient rehabilitation). A treatment manual was developed following a model to guide interventionists, including the conceptual framework, standardized assessments, treatment goals, intervention elements and format of delivery including a visit-by-visit grid outlining key components of each visit. The treatment includes a set of one pre-discharge and five post-discharge home visits by an occupational therapist to remediate barriers in the home and community that influence daily activities and community participation. The home modification intervention is a collaboration between the occupational therapist and participant, modifications are installed by the therapist or licensed contractor and active practice occurs in home and community including caregiver training (if appropriate). The treatment theory guiding the intervention is a competence-press model that posits changes to the physical environment (e.g. grab bars near toiler), matched with the individual's pattern of functional loss, will improve the outcome performance. Essential elements of COMPASS to be an environmental modification intervention that includes physical changes to the environment and active practice of daily activities in the participant's own home and community environment. The intervention includes compensatory strategies that are

tailored to the person, motivational enhancement strategies and self-management incorporating the ability to use problem-solving skills. Concomitant therapy: No additional information.

No participation (N = 6)
Evidence-based stroke education program based on evidence-based guidelines and literature review only. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	**Community participation intervention (home modification and community participation) (N = 9)**	**No participation (N = 6)**
% Female Sample size	n = 3 ; % = 33	n = 2 ; % = 33
Mean age (SD) (years) Mean (SD)	66.89 (7.96)	64.67 (8.21)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (home modification and community participation) (N = 9)	No participation (N = 6)
Time after stroke Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 12 month (Greater than or equal to 6 months)

Continuous outcomes

Outcome	Community participation intervention (home modification and community participation), Baseline, N = 9	Community participation intervention (home modification and community participation), 12 month, N = 9	No participation, Baseline, N = 6	No participation, 12 month, N = 6
Participation in leisure activities/social groups scores (Reintegration to Normal Living index) Scale range: 0-100. Final values. Mean (SD)	52.73 (18.87)	65.45 (27.17)	62.88 (22.24)	81.82 (20.77)
Specific-specific Patient-Reported Outcome Measures (Stroke Impact Scale Total) Scale range: 0-100. Final values. Mean (SD)	38.33 (21.79)	39 (28.81)	40.83 (22)	60 (14.14)

Participation in leisure activities/social groups scores (Reintegration to Normal Living index) - Polarity - Higher values are better
Specific-specific Patient-Reported Outcome Measures (Stroke Impact Scale Total) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (home modification and community participation), Baseline, N = 9	Community participation intervention (home modification and community participation), 12 month, N = 9	No participation, Baseline, N = 6	No participation, 12 month, N = 6
Discontinuation Intervention: 1 change in health, 1 deceased, 2 unable to contact.	n = NA ; % = NA	n = 4 ; % = 44	n = NA ; % = NA	n = 1 ; % = 17

Outcome	Community participation intervention (home modification and community participation), Baseline, N = 9	Community participation intervention (home modification and community participation), 12 month, N = 9	No participation, Baseline, N = 6	No participation, 12 month, N = 6
Control: 1 unable to contact. No of events				

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Participationinleisureactivities/socialgroupsscores(ReintegrationtoNormalLivingindex)-MeanSD-Community participation intervention (home modification and community participation)-No participation-t12

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

Continuousoutcomes-Specific-specificPatient-ReportedOutcomeMeasures(StrokeImpactScaleTotal)-MeanSD-Community participation intervention (home modification and community participation)-No participation-t12

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (home modification and community participation)-No participation-t12

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

Taylor-Piliae, 2012

Bibliographic Reference Taylor-Piliae, R. E.; Coull, B. M.; Community-based Yang-style Tai Chi is safe and feasible in chronic stroke: a pilot study; Clinical rehabilitation; 2012; vol. 26 (no. 2); 121-131

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	United States of America
Study setting	Outpatient, people who were attending of had completed outpatient rehabilitation at four rehabilitation facilities
Study dates	No additional information.
Sources of funding	Supported by the American Heart Association (National Scientist Development Grant #0930324N (Taylor-Piliae, PI)); and the Robert Wood Johnson Foundation (Nurse Faculty Scholars Grant #66527 (Taylor-Piliae, PI)).
Inclusion criteria	Community dwelling men and women; age at least 50 years; at least three month post-stroke; people who attended or had completed outpatient rehabilitation at four rehabilitation facilities; a modified Rankin Scale score of three or less; Short Physical Performance Battery score of three to nine; a Mini-Mental State Exam score of 18 or greater; be assigned to either Tai Chi or usual care; follow the study protocol for the assigned group; attend all study assessments; provide informed consent.
Exclusion criteria	Stroke survivors whom had no disability, a severe disability, severe cognitive impairment or a serious medical condition that would interfere with study participation.
Recruitment / selection of participants	People from the rehabilitation facilities were targeted for recruitment by placing the study flyers, ads and brochures in prominent locations at these facilities.
Intervention(s)	Community participation interventions (Tai Chi) N=16 Tai Chi subjects attended a 60-minute class three times a week for 12 weeks. People were allowed to use walkers or canes as required. Classes were limited to six people per group to allow for adequate supervision. Each session consisted of a 20-minute warm-up period, 30-minutes of Tai Chi exercise, and a 10-minute cool-down period. This involved the Yang style of Tai Chi. Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of	Not stated/unclear

communication difficulties	
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Mixed 4 people were depressed
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Mixed 4 use assistive devices for walking
Subgroup 7: Ethnicity	White/European-American = 20 (71). Hispanic (including Latino(a), Mexican-American) = 4 (14). Native-American = 2 (7). Other = 2 (7).
Population subgroups	No additional information.
Comparator	No participation N=12 Usual care subjects who were provided with written materials and resources for participating in community-based physical activity suitable for older adults (e.g. SilverSneakers) that they could contact on their own (this group could include another community participation intervention but this is not clear. Therefore, this was downgraded for intervention indirectness). In addition, weekly phone calls were made to inquire about their health status. They received the National Center on Physical Activity and Disability stroke survivors exercise DVD and booklet. Concomitant therapy: No additional information
Number of participants	28
Duration of follow-	12 weeks (end of intervention)

up	
Indirectness	The usual care comparison group could include another community participation intervention but this is not clear. It was classified as no participation given that it was not clear, but was downgraded for intervention indirectness
Additional comments	No additional information.

Study arms

Community participation interventions (Tai Chi) (N = 16)
Tai Chi subjects attended a 60-minute class three times a week for 12 weeks. People were allowed to use walkers or canes as required. Classes were limited to six people per group to allow for adequate supervision. Each session consisted of a 20-minute warm-up period, 30-minutes of Tai Chi exercise, and a 10-minute cool-down period. This involved the Yang style of Tai Chi. Concomitant therapy: No additional information.

No participation (N = 12)
Usual care subjects who were provided with written materials and resources for participating in community-based physical activity suitable for older adults (e.g. SilverSneakers) that they could contact on their own (this group could include another community participation intervention but this is not clear. Therefore, this was downgraded for intervention indirectness). In addition, weekly phone calls were made to inquire about their health status. They received the National Center on Physical Activity and Disability stroke survivors exercise DVD and booklet. Concomitant therapy: No additional information

Characteristics

Arm-level characteristics

Characteristic	Community participation interventions (Tai Chi) (N = 16)	No participation (N = 12)
% Female	n = 6 ; % = 38	n = 5 ; % = 42

Characteristic	Community participation interventions (Tai Chi) (N = 16)	No participation (N = 12)
Sample size		
Mean age (SD) (years) Mean (SD)	72.8 (10.1)	64.5 (10.9)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
White/European-American Sample size	n = 14 ; % = 86	n = 6 ; % = 50
Hispanic (including Latino(a), Mexican-American) Sample size	n = 1 ; % = 6	n = 3 ; % = 25
Native-American Sample size	n = 1 ; % = 6	n = 1 ; % = 8
Other Sample size	n = 0 ; % = 0	n = 2 ; % = 17
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Hypertension Sample size	n = 11 ; % = 69	n = 7 ; % = 58
Dyslipidaemia Sample size	n = 9 ; % = 56	n = 6 ; % = 50

Characteristic	Community participation interventions (Tai Chi) (N = 16)	No participation (N = 12)
Diabetes Sample size	n = 4 ; % = 25	n = 3 ; % = 25
Current smoker Sample size	n = 1 ; % = 6	n = 1 ; % = 8
Arrhythmia Sample size	n = 6 ; % = 38	n = 2 ; % = 17
Congestive heart failure Sample size	n = 1 ; % = 6	n = 3 ; % = 25
previous myocardial infarction Sample size	n = 2 ; % = 13	n = 0 ; % = 0
Asthma Sample size	n = 3 ; % = 19	n = 2 ; % = 17
Depression Sample size	n = 3 ; % = 19	n = 1 ; % = 8
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	58.3 (46.7)	47.9 (42.5)

Characteristic	Community participation interventions (Tai Chi) (N = 16)	No participation (N = 12)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NA	n = NA ; % = NA
Depression Sample size	n = 3 ; % = 19	n = 1 ; % = 8
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NA ; % = NA	n = NA ; % = NA
Uses assistive devices for walking Sample size	n = 2 ; % = 12	n = 2 ; % = 17

Outcomes

Study timepoints

- Baseline
- 12 week (<6 months)

Continuous outcomes

Outcome	Community participation interventions (Tai Chi), Baseline, N = 13	Community participation interventions (Tai Chi), 12 week, N = 13	No participation, Baseline, N = 12	No participation, 12 week, N = 12
Person/participant generic health-related quality of life (SF-36) Scale range: 0-100. Final values. Mean (SD)	NR (NR)	NR (NR)	NR (NR)	NR (NR)
SF-36 physical component summary Called SF-36 physical health Mean (SD)	36.8 (8.3)	40.5 (9.1)	40.2 (8.7)	38 (10.4)
SF-36 mental component summary Called SF-36 mental health Mean (SD)	49.6 (11.5)	55.2 (5.4)	51.9 (13.1)	52.7 (8.3)
Psychological distress - Depression (Center for Epidemiological Studies Depression scale) Scale range: 0-60. Final values. Mean (SD)	13.9 (10.8)	11.8 (6.5)	12.3 (9.2)	12.9 (8.4)

Person/participant generic health-related quality of life (SF-36) - Polarity - Higher values are better
Psychological distress - Depression (Center for Epidemiological Studies Depression scale) - Polarity - Lower values are better

Dichotomous outcome

Outcome	Community participation interventions (Tai Chi), Baseline, N = 13	Community participation interventions (Tai Chi), 12 week, N = 13	No participation, Baseline, N = 12	No participation, 12 week, N = 12
Discontinuation Tai chi: 2 health issues, 1 died. No of events	n = NA ; % = NA	n = 3 ; % = 23	n = NA ; % = NA	n = 0 ; % = 0

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36physicalcomponentsummary-MeanSD-Community participation interventions (Tai Chi)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Unclear if control group is a different community participation intervention or no participation. Is more likely to be no participation but is downgraded as people may have received another intervention.)*

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36mentalcomponentsummary-MeanSD-Community participation interventions (Tai Chi)-No participation-t12

Section	Question	Answer

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Unclear if control group is a different community participation intervention or no participation. Is more likely to be no participation but is downgraded as people may have received another intervention.)*

Continuousoutcomes-Psychologicaldistress-Depression(CenterforEpidemiologicalStudiesDepressionscale)-MeanSD-Community participation interventions (Tai Chi)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Unclear if control group is a different community participation intervention or no participation. Is more likely to be no participation but is downgraded as people may have received another intervention.)*

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation interventions (Tai Chi)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Unclear if control group is a different community participation intervention or no participation. Is more likely to be no participation but is downgraded as people may have received another intervention.)*

Taylor-Piliae, 2014

Bibliographic Reference	Taylor-Piliae, R. E.; Hoke, T. M.; Hepworth, J. T.; Latt, L. D.; Najafi, B.; Coull, B. M.; Effect of Tai Chi on physical function, fall rates and quality of life among older stroke survivors; Archives of Physical Medicine & Rehabilitation; 2014; vol. 95 (no. 5); 816-24

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	United States of America
Study setting	Community-dwelling people living in the greater Tucson Arizona area.
Study dates	January 2009 and December 2012
Sources of funding	Supported by an American Heart Association Scientist Development Grant (no. 0930324N; Taylor-Piliae, principal investigator) and a Robert Wood Johnson Foundation Nurse Faculty Scholars Grant (no. 66527; Taylor-Piliae, principal investigator).
Inclusion criteria	Community-dwelling survivors of stroke, aged at least 50 years, who were at least 3 months poststroke.
Exclusion criteria	No disability (e.g. no poststroke sequela); a severe disability (e.g. bedridden and requiring constant nursing care); a serious

	medical condition (e.g. active cancer treatment).
Recruitment / selection of participants	Recruited from multiple sources, including radio and newspaper advertisements, flyers and brochures placed at outpatient rehabilitation centers, community centers and physician offices.
Intervention(s)	Community participation intervention (Tai Chi) N=53 1-hour class 3 times a week for 12 weeks. Over the 12 weeks, they gradually learned the Yang style 24-posture short-form taught at an outpatient rehabilitation center. Each class approximately consisted of a 10-minute warm-up period, 40 minutes of Tai Chi exercise, and a 10-minute cool-down period. People were allowed to use walkers and canes as needed throughout the class. Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Mixed 24 (16.6%) had major depression
Subgroup 5: Presence of cognition difficulties	Not stated/unclear

Subgroup 6: Baseline mobility	Mixed 19 uses a walking aid (13.1%)
Subgroup 7: Ethnicity	White/European-American = 114 (78.6%). Other = 31 (21.4%).
Population subgroups	No additional information.
Comparator	Another community participation intervention (SilverSneakers) N=44 1-hour class 3 times a week for 12 weeks. A national fitness program for older adults that offers different types of group-based exercise classes (eg, aerobics, strength and range of movement, water aerobics, yoga). Muscular strength and range of movement classes were taught by a certified instructor at local community fitness centers. Each class approximately consisted of a 10-minute warm-up period, 40-minutes of exercise and a 10-minute cool-down period. Some exercises were performed from a seated position. Chairs were positioned in close proximity to the participants to allow for brief rest periods and participants were allowed to use walkers and canes as needed throughout the class. Concomitant therapy: No additional information. No participation N=48 Written materials and resources for participating in community-based physical activity suitable for older adults which they could contact on their own. In addition, they received a weekly phone call to inquire of their health status to provide individual attention. Concomitant therapy: No additional information.
Number of	145

participants	
Duration of follow-up	12 weeks
Indirectness	No additional information
Additional comments	Intention to treat

Study arms

Community participation intervention (Tai Chi) (N = 53)
1-hour class 3 times a week for 12 weeks. Over the 12 weeks, they gradually learned the Yang style 24-posture short-form taught at an outpatient rehabilitation center. Each class approximately consisted of a 10-minute warm-up period, 40 minutes of Tai Chi exercise, and a 10-minute cool-down period. People were allowed to use walkers and canes as needed throughout the class. Concomitant therapy: No additional information.

Another community participation intervention (SilverSneakers) (N = 44)
1-hour class 3 times a week for 12 weeks. A national fitness program for older adults that offers different types of group-based exercise classes (eg, aerobics, strength and range of movement, water aerobics, yoga). Muscular strength and range of movement classes were taught by a certified instructor at local community fitness centers. Each class approximately consisted of a 10-minute warm-up period, 40-minutes of exercise and a 10-minute cool-down period. Some exercises were performed from a seated position. Chairs were positioned in close proximity to the participants to allow for brief rest periods and participants were allowed to use walkers and canes as needed throughout the class. Concomitant therapy: No additional information.

No participation (N = 48)
Written materials and resources for participating in community-based physical activity suitable for older adults which they could contact on their own. In addition, they received a weekly phone call to inquire of their health status to provide individual attention. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (Tai Chi) (N = 53)	Another community participation intervention (SilverSneakers) (N = 44)	No participation (N = 48)
% Female Sample size	n = 19 ; % = 35.8	n = 24 ; % = 54.5	n = 25 ; % = 52.1
Mean age (SD) (years) Mean (SD)	71.5 (10.3)	69.6 (9.4)	68.2 (10.3)
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA	n = NA ; % = NA
White/European-American Sample size	n = 43 ; % = 81.1	n = 39 ; % = 88.6	n = 32 ; % = 66.7
Other Sample size	n = 10 ; % = 18.9	n = 5 ; % = 11.4	n = 16 ; % = 33.3
Comorbidities Sample size	n = NA ; % = NA	n = NA ; % = NA	n = NA ; % = NA
Hypertension Sample size	n = 38 ; % = 71.7	n = 33 ; % = 75	n = 35 ; % = 72.9
Dyslipidaemia	n = 29 ; % = 54.7	n = 32 ; % = 72.7	n = 30 ; % = 62.5

Characteristic	Community participation intervention (Tai Chi) (N = 53)	Another community participation intervention (SilverSneakers) (N = 44)	No participation (N = 48)
Sample size			
Arrhythmia Sample size	n = 13 ; % = 24.5	n = 13 ; % = 29.5	n = 15 ; % = 31.3
Diabetes Sample size	n = 17 ; % = 32.1	n = 12 ; % = 27.3	n = 11 ; % = 22.9
Major depression Sample size	n = 9 ; % = 17	n = 6 ; % = 13.6	n = 9 ; % = 18.8
Congestive heart failure Sample size	n = 4 ; % = 7.5	n = 7 ; % = 15.9	n = 11 ; % = 22.9
previous myocardial infarction Sample size	n = 5 ; % = 9.4	n = 10 ; % = 22.7	n = 7 ; % = 14.6
Asthma Sample size	n = 7 ; % = 13.2	n = 4 ; % = 9.1	n = 7 ; % = 14.6
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	39 (40.2)	33 (58.7)	38.7 (46.7)

Characteristic	Community participation intervention (Tai Chi) (N = 53)	Another community participation intervention (SilverSneakers) (N = 44)	No participation (N = 48)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NA ; % = NA	n = NA ; % = NA	n = NA ; % = NA
Uses walking aid Sample size	n = 7 ; % = 13.2	n = 8 ; % = 18.2	n = 4 ; % = 8.3

Outcomes

Study timepoints

- Baseline

- 12 week (<6 months)

Continuous outcomes

Outcome	Community participation intervention (Tai Chi), Baseline, N = 53	Community participation intervention (Tai Chi), 12 week, N = 53	Another community participation intervention (SilverSneakers), Baseline, N = 44	Another community participation intervention (SilverSneakers), 12 week, N = 44	No participation, Baseline, N = 48	No participation, 12 week, N = 48
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)	NA (NA)	NA (NA)
SF-36 physical component summary Mean (SD)	37.4 (8.4)	38.3 (9.9)	37.5 (8.4)	38.8 (8.6)	37.1 (8.9)	38.6 (10.5)
SF-36 mental component summary Mean (SD)	49.7 (10.9)	52.8 (10.3)	51 (7.9)	54 (8.9)	48.6 (10.7)	51.6 (9.4)
Psychological distress - depression (Center for Epidemiological Studies - Depression score) Scale range: 0-60. Final values.	14.3 (9.8)	14 (9.6)	11.1 (7.4)	11.4 (9.6)	15.7 (11.9)	13.6 (10.2)

Outcome	Community participation intervention (Tai Chi), Baseline, N = 53	Community participation intervention (Tai Chi), 12 week, N = 53	Another community participation intervention (SilverSneakers), Baseline, N = 44	Another community participation intervention (SilverSneakers), 12 week, N = 44	No participation, Baseline, N = 48	No participation, 12 week, N = 48
Mean (SD)						

Person/participant generic health-related quality of life (SF-36) - Polarity - Higher values are better
Psychological distress - depression (Center for Epidemiological Studies - Depression score) - Polarity - Lower values are better

Dichotomous outcome

Outcome	Community participation intervention (Tai Chi), Baseline, N = 53	Community participation intervention (Tai Chi), 12 week, N = 53	Another community participation intervention (SilverSneakers), Baseline, N = 44	Another community participation intervention (SilverSneakers), 12 week, N = 44	No participation, Baseline, N = 48	No participation, 12 week, N = 48
Discontinuation Tai Chi: 1 moved, 3 illness, 1 died. SilverSneakers: 5 refused group, 1 lack of time. No participation: 3 refused group. No of events	n = NA ; % = NA	n = 5 ; % = 9.4	n = NA ; % = NA	n = 6 ; % = 13.6	n = NA ; % = NA	n = 3 ; % = 6.3

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36physicalcomponentsummary(TaiChivs.Silversneakers)-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36physicalcomponentsummary(TaiChivs.noparticipation)-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36physicalcomponentsummary(Silversneakersvs.noparticipation)-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36mentalcomponentsummary(TaiChivs.Silversneakers)-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36mentalcomponentsummary(TaiChivs.noparticipation)-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(SF-36)-SF-36mentalcomponentsummary(Silversneakersvs.noparticipation)-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Continuousoutcomes-Psychologicaldistress-depression(CenterforEpidemiologicalStudies-Depressionscore)-TaiChivs.Silversneakers-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Continuousoutcomes-Psychologicaldistress-depression(CenterforEpidemiologicalStudies-Depressionscore)-TaiChivs.noparticipation-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Continuousoutcomes-Psychologicaldistress-depression(CenterforEpidemiologicalStudies-Depressionscore)-Silversneakersvs.noparticipation-MeanSD-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Dichotomousoutcome-Discontinuation-TaiChivs.Silversneakers-NoOfEvents-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Dichotomousoutcome-Discontinuation-TaiChivs.noparticipation-NoOfEvents-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Dichotomousoutcome-Discontinuation-Silversneakersvs.noparticipation-NoOfEvents-Community participation intervention (Tai Chi)-Another community participation intervention (SilverSneakers)-No participation-t12

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

Tielemans, 2015

Bibliographic Tielemans NS; Visser-Meily JM; Schepers VP; van de Passier PE; Port IG; Vloothuis JD; Struyf PA; van Heugten CM;

Reference 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)

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	Tielemans, N. S.; Visser-Meily, J. M. A.; Schepers, V. P. M.; Post, M. W. M.; Wade, D. T.; van Heugten, C. M.; Study protocol of the Restore4Stroke self-management study: A multicenter randomized controlled trial in stroke patients and their partners; International Journal of Stroke; 2014; vol. 9 (no. 6); 818-823 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
Trial name / registration number	Dutch Trial Register NTR3051
Study type	Randomised controlled trial (RCT)
Study location	The Netherlands
Study setting	Outpatient facilities of 3 hospitals and 5 rehabilitation centres
Study dates	February 2012 and May 2014
Sources of funding	Supported by the Dutch VSBFonds (#89000004) and the Dutch Heart Foundation.
Inclusion criteria	Adult stroke patients (at least 18 years) who had a first or recurrent symptomatic stroke (i.e. ischaemic or intracerebral haemorrhagic lesion), as confirmed by a neurologist. A rehabilitation physician or nurse confirmed patients' experienced

	participation problems in vocation, social or leisure domains by endorsing at least 2 items on the Restriction scale of the Utrecht Scale for Evaluation of Rehabilitation-Participation.
Exclusion criteria	Clinical judgement to have insufficient mental abilities to understand the intervention; disturbance in production or comprehension of language (score below 5 on Shortened version of the Aphasia Scale of the Dutch Aphasia Foundation); behavioural problems hampering group functioning; major depression; receiving structured psychological counselling for proactive coping post-stroke at recruitment.
Recruitment / selection of participants	No additional information.
Intervention(s)	Community participation intervention (self management intervention) N=58 Self management intervention (Restore4Stroke) over 10-weeks consisting 7 sessions, 6 x 2-hour sessions in the first 6 weeks and 1 x 2-hour booster session in week 10. It was provided to groups of 4-8 participants by 2 rehabilitation professionals (e.g. psychologist or occupational therapist) at hospitals and rehabilitation centre outpatient facilities. The intervention aimed to teach proactive action planning strategies within 4 themes: "handling negative emotions", "social relations and support", "participation in society", and "less visible stroke consequences". Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Mixed Around 45%
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of	Not stated/unclear

psychological distress	
Subgroup 5: Presence of cognition difficulties	Mixed Around 60%
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Dutch nationality = 99%
Population subgroups	No additional information.
Comparator	No participation N=55 Education intervention for the same time consisting of 3 x 1-hour sessions in the first 6 weeks and 1 x 1-hour booster session in week 10. It was provided in groups of 4-8 participants by one rehabilitation professional (e.g. occupational therapist or psychologist) at hospital and rehabilitation centre outpatient facilities. The intervention aimed to provide information about "the brain and a stroke", "general stroke consequences", and "preventing a recurrent stroke". Concomitant therapy: No additional information.
Number of participants	113
Duration of follow-up	10 weeks (end of intervention), 3 months, 9 months.
Indirectness	Intervention indirectness - While the intervention discusses social group integration, it is a self management program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.
Additional	Intention-to-treat

comments	

Study arms

Community participation intervention (self management intervention) (N = 58)
Self management intervention (Restore4Stroke) over 10-weeks consisting 7 sessions, 6 x 2-hour sessions in the first 6 weeks and 1 x 2-hour booster session in week 10. It was provided to groups of 4-8 participants by 2 rehabilitation professionals (e.g. psychologist or occupational therapist) at hospitals and rehabilitation centre outpatient facilities. The intervention aimed to teach proactive action planning strategies within 4 themes: "handling negative emotions", "social relations and support", "participation in society", and "less visible stroke consequences". Concomitant therapy: No additional information.

No participation (N = 55)
Education intervention for the same time consisting of 3 x 1-hour sessions in the first 6 weeks and 1 x 1-hour booster session in week 10. It was provided in groups of 4-8 participants by one rehabilitation professional (e.g. occupational therapist or psychologist) at hospital and rehabilitation centre outpatient facilities. The intervention aimed to provide information about "the brain and a stroke", "general stroke consequences", and "preventing a recurrent stroke". Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (self management intervention) (N = 58)	No participation (N = 55)
% Female Sample size	n = NR ; % = 44.8	n = NR ; % = 60
Mean age (SD)	55.2 (8.9)	58.8 (8.7)

Characteristic	Community participation intervention (self management intervention) (N = 58)	No participation (N = 55)
Mean (SD)		
Ethnicity Sample size	n = NA ; % = NA	n = NA ; % = NA
Dutch Sample size	n = NR ; % = 98.3	n = NR ; % = 100
Comorbidities Sample size	n = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Mean (SD)	15.6 (20.9)	21.9 (34.1)
Presence of communication difficulties Sample size	n = NR ; % = 43.1	n = NR ; % = 50.9
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (self management intervention) (N = 58)	No participation (N = 55)
Presence of cognition difficulties Sample size	n = NR ; % = 55.2	n = NR ; % = 63
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 10 week (<6 months (outcomes were only reported at end of intervention or at 9 months))
- 9 month (Greater than or equal to 6 months)
- 3 month (For EQ-5D only)
- 12 month (For EQ-5D only)

Continuous outcomes

Outcome	Community participation intervention (self management intervention), Baseline, N = 58	Community participation intervention (self management intervention), 10 week, N = 58	Community participation intervention (self management intervention), 9 month, N = 58	Community participation intervention (self management intervention), 3 month, N = 58	Community participation intervention (self management intervention), 12 month, N = 58	No participation, Baseline, N = 55	No participation, 10 week, N = 55	No participation, 9 month, N = 55	No participation, 3 month, N = 55	No participation, 12 month, N = 55
Psychological distress - depression (HADS total) Downgrade for indirectness as only reports the total score for HADS. Scale range: 0-84. Mean (SD)	13.2 (7.3)	12.1 (7.4)	NR (NR)	NR (NR)	NR (NR)	12.8 (6.6)	14 (6.8)	NR (NR)	NR (NR)	NR (NR)
Stroke-specific Patient-Reported Outcome Measures (SSQOL-12) Scale range: 1-	3.6 (0.7)	NR (NR)	3.8 (0.8)	NR (NR)	NR (NR)	3.6 (0.8)	NR (NR)	3.5 (0.9)	NR (NR)	NR (NR)

Outcome	Community participation intervention (self management intervention), Baseline, N = 58	Community participation intervention (self management intervention), 10 week, N = 58	Community participation intervention (self management intervention), 9 month, N = 58	Community participation intervention (self management intervention), 3 month, N = 58	Community participation intervention (self management intervention), 12 month, N = 58	No participation, Baseline, N = 55	No participation, 10 week, N = 55	No participation, 9 month, N = 55	No participation, 3 month, N = 55	No participation, 12 month, N = 55
5. Final values. Mean (SD)										
Person/participant generic health-related quality of life (EQ-5D-3L utility) Scale range: -0.11-1. Final values. Mean (SD)	0.6 (0.31)	NR (NR)	NR (NR)	0.71 (0.21)	0.72 (0.24)	0.68 (0.25)	NR (NR)	NR (NR)	0.69 (0.19)	0.68 (0.24)

Psychological distress - depression (HADS total) - Polarity - Lower values are better
Stroke-specific Patient-Reported Outcome Measures (SSQOL-12) - Polarity - Higher values are better
Person/participant generic health-related quality of life (EQ-5D-3L utility) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (self management intervention), Baseline, N = 58	Community participation intervention (self management intervention), 10 week, N = 58	Community participation intervention (self management intervention), 9 month, N = 58	Community participation intervention (self management intervention), 3 month, N = 58	Community participation intervention (self management intervention), 12 month, N = 58	No participation, Baseline, N = 55	No participation, 10 week, N = 55	No participation, 9 month, N = 55	No participation, 3 month, N = 55	No participation, 12 month, N = 55
Discontinuation Intervention: 2 did not receive intervention (1 own physical condition, 1 other commitments), 1 unable to take part in intervention due to physical condition, 1 due to cognitive impairment, 1 unable to take part due to	n = NA ; % = NR	n = NR ; % = NR	n = 5 ; % = 8.6	n = NR ; % = NR	n = NR ; % = NR	n = NA ; % = NA	n = NR ; % = NR	n = 6 ; % = 10.9	n = NR ; % = NR	n = NR ; % = NR

Outcome	Community participation intervention (self management intervention), Baseline, N = 58	Community participation intervention (self management intervention), 10 week, N = 58	Community participation intervention (self management intervention), 9 month, N = 58	Community participation intervention (self management intervention), 3 month, N = 58	Community participation intervention (self management intervention), 12 month, N = 58	No participation, Baseline, N = 55	No participation, 10 week, N = 55	No participation, 9 month, N = 55	No participation, 3 month, N = 55	No participation, 12 month, N = 55
other committments. Control: 1 did not receive for physical condition, 1 did not receive for other commitments, 1 discontinued due to other commitments, 1 unable to complete questionnaires, 2 reason unknown. No of events										

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Psychologicaldistress-depression(HADStotal)-MeanSD-Community participation intervention (self management intervention)-No participation-t10

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Indirectly applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a self management program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness. Outcome indirectness - HADS total score rather than depression and anxiety subscales.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(SSQOL-12)-MeanSD-Community participation intervention (self management intervention)-No participation-t9

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a self management program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (self management intervention)-No participation-t9

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a self management program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5D-3Lutility)-MeanSD-Community participation intervention (self management intervention)-No participation-t3

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	High
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a self management program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Person/participantgenerichealth-relatedqualityoflife(EQ-5D-3Lutility)-MeanSD-Community participation intervention (self management intervention)-No participation-t12

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses social group integration, it is a self management program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Tielemans, 2014

Bibliographic Reference	Tielemans, N. S.; Visser-Meily, J. M. A.; Schepers, V. P. M.; Post, M. W. M.; Wade, D. T.; van Heugten, C. M.; Study protocol of the Restore4Stroke self-management study: A multicenter randomized controlled trial in stroke patients and their partners; International Journal of Stroke; 2014; vol. 9 (no. 6); 818-823

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

van Mastrigt, 2020

Bibliographic Reference	van Mastrigt, G. A. P. G.; van Eeden, M.; van Heugten, C. M.; Tielemans, N.; Schepers, V. P. M.; Evers, S. M. A. A.; 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

Wang, 2013

Bibliographic Reference	Wang, L.; Chen, C. M.; Liao, W. C.; Hsiao, C. Y.; Evaluating a community-based stroke nursing education and rehabilitation programme for patients with mild stroke; International Journal of Nursing Practice; 2013; vol. 19 (no. 3); 249-56

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	Taiwan
Study setting	People from seven municipal communities in central Taiwan.
Study dates	August 2007 to June 2008.
Sources of funding	No additional information.
Inclusion criteria	People who had stroke confirmed by positive findings on computed tomography or magnetic resonance imaging (or both) of the head.
Exclusion criteria	People who had experienced multiple strokes.
Recruitment / selection of participants	No additional information.
Intervention(s)	Community participation intervention (community nursing education and rehabilitation programme) N=85 A community-based stroke nursing education and rehabilitation programme. The intervention and counselling programme was comprised of two stroke educational sessions, communication seminars, alternating with patient support groups. The contents of the two-session stroke education consisted of lectures regarding warning signs, clinical manifestations, risk factors of stroke, diet, social activities and rehabilitation. The communication section included discussions and sharing classes, which conversed about each rehabilitation experience in order to teach each other to recall the material taught in the session as well as observe others in similar situations engage in rehabilitation. The section of patient support groups comprised of inviting therapists, nurses and people in the community to talk with patients in order to instruct and transfer techniques for better methods of daily living. The programme was scheduled three times per week for 8 weeks, each sessions lasting 2 hours. Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication	Not stated/unclear

difficulties	
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of cognition difficulties	Not stated/unclear
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	No additional information
Population subgroups	No additional information
Comparator	No participation N=85 Normal care, people who had received hospital-based poststroke education and rehabilitation programmes. Concomitant therapy: No additional information.
Number of participants	170
Duration of follow-up	6 months
Indirectness	No additional information

Additional comments	No additional information

Study arms

Community participation intervention (community nursing education and rehabilitation programme) (N = 85)
A community-based stroke nursing education and rehabilitation programme. The intervention and counselling programme was comprised of two stroke educational sessions, communication seminars, alternating with patient support groups. The contents of the two-session stroke education consisted of lectures regarding warning signs, clinical manifestations, risk factors of stroke, diet, social activities and rehabilitation. The communication section included discussions and sharing classes, which conversed about each rehabilitation experience in order to teach each other to recall the material taught in the session as well as observe others in similar situations engage in rehabilitation. The section of patient support groups comprised of inviting therapists, nurses and people in the community to talk with patients in order to instruct and transfer techniques for better methods of daily living. The programme was scheduled three times per week for 8 weeks, each sessions lasting 2 hours. Concomitant therapy: No additional information.

No participation (N = 85)
Normal care, people who had received hospital-based poststroke education and rehabilitation programmes. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	Community participation intervention (community nursing education and rehabilitation programme) (N = 85)	No participation (N = 85)
% Female Sample size	n = 22 ; % = 33.8	n = 22 ; % = 35.5

Characteristic	Community participation intervention (community nursing education and rehabilitation programme) (N = 85)	No participation (N = 85)
Mean age (SD) (years) Mean (SD)	67.3 (12.8)	67.2 (10.4)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Hypertension Sample size	n = 22 ; % = 33.8	n = 21 ; % = 33.9
Diabetes Sample size	n = 11 ; % = 16.9	n = 7 ; % = 11.3
Hyperlipidaemia Sample size	n = 13 ; % = 20	n = 19 ; % = 30.6
Severity Sample size	n = NR	n = NR ; % = NR
Time after stroke Mean (SD)	NR (NR)	NR (NR)
Presence of communication difficulties	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (community nursing education and rehabilitation programme) (N = 85)	No participation (N = 85)
Sample size		
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 3 month (<6 months)
- 6 month (Greater than and equal to 6 months)

Continuous outcome

Outcome	Community participation intervention (community nursing education and rehabilitation programme), Baseline, N = 85	Community participation intervention (community nursing education and rehabilitation programme), 3 month, N = 76	Community participation intervention (community nursing education and rehabilitation programme), 6 month, N = 65	No participation, Baseline, N = 85	No participation, 3 month, N = 73	No participation, 6 month, N = 62
Participation in leisure activities/social groups scores (Social participation) Scale range: 0-10. Final values. Mean (SD)	5.4 (1.3)	6.2 (1.3)	6.1 (1.2)	5.7 (1.2)	5.9 (1.4)	5.8 (1.4)

Participation in leisure activities/social groups scores (Social participation) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (community nursing education and rehabilitation programme), Baseline, N = 85	Community participation intervention (community nursing education and rehabilitation programme), 3 month, N = 85	Community participation intervention (community nursing education and rehabilitation programme), 6 month, N = 85	No participation, Baseline, N = 85	No participation, 3 month, N = 85	No participation, 6 month, N = 85
Discontinuation Community	n = NA ; % = NA	n = 9 ; % = 11	n = 20 ; % = 24	n = NA ; % = NA	n = 12 ; % = 14	n = 23 ; % = 27

Outcome	Community participation intervention (community nursing education and rehabilitation programme), Baseline, N = 85	Community participation intervention (community nursing education and rehabilitation programme), 3 month, N = 85	Community participation intervention (community nursing education and rehabilitation programme), 6 month, N = 85	No participation, Baseline, N = 85	No participation, 3 month, N = 85	No participation, 6 month, N = 85
participation intervention: 2 withdrawal, 18 no response. No participation: 23 no response. No of events						

Discontinuation - Polarity - Lower values are better

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

Continuousoutcome-Participationinleisureactivities/socialgroupsscores(Socialparticipation)-MeanSD-Community participation intervention (community nursing education and rehabilitation programme)-No participation-t3

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

Continuousoutcome-Participationinleisureactivities/socialgroupsscores(Socialparticipation)-MeanSD-Community participation intervention (community nursing education and rehabilitation programme)-No participation-t6

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (community nursing education and rehabilitation programme)-No participation-t3

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

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (community nursing education and rehabilitation programme)-No participation-t6

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

Wang, 2015

Bibliographic Wang, T. C.; Tsai, A. C.; Wang, J. Y.; Lin, Y. T.; Lin, K. L.; Chen, J. J.; Lin, B. Y.; Lin, T. C.; Caregiver-mediated intervention

Reference can improve physical functional recovery of patients with chronic stroke: a randomized controlled trial; Neurorehabilitation & Neural Repair; 2015; vol. 29 (no. 1); 3-12

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	Southern Taiwan
Study setting	Home-dwelling people from the rehabilitation and neurology departments of 3 teaching hospitals in Southern Taiwan.
Study dates	No additional information.
Sources of funding	Funding for this study was provided by a grant from the National Science Council of Taiwan (NSC99-2314-B-468-001).
Inclusion criteria	People who experienced a single ischaemic or haemorrhagic stroke in the cerebral hemisphere, as determined through computer tomography or magnetic resonance imaging; were >6 months post-onset; exhibited mild to moderate disability (Brunnstrom recovery stages III-V); were undergoing rehabilitation activities 2 or fewer times per week; were home dwelling; had family members, friends, or paid workers as caregivers; still required assistance to accomplish everyday activities.
Exclusion criteria	Use of a nasogastric feeding, urine or tracheal tube; exhibited 1 of the following conditions (recurring stroke, dementia, global or receptive aphasia, severe orthopedic disability, an unstable medical condition for example severe acute myocardial infarction).

Recruitment / selection of participants	People were recruited from the rehabilitation and neurology departments of 3 teaching hospitals in Southern Taiwan.
Intervention(s)	Community participation intervention (home-based caregiver-mediated education intervention) N=25 Caregiver-mediated home-based intervention. Included a personalised weekly training schedule. The program was roughly divided into 3 phases: phase 1 aiming to improve the person's body functions and structural components (weeks 1-4); phase 2 aiming to improve the person's ability to undertake everyday activities within their living environments using task-specific restorative and compensatory training methods (weeks 5-8); phase 3 aiming to help the person reintegrate into the society by participating in restorative outdoor leisure activities (weeks 9-12). A physical therapist visited once weekly for approximately 90 minutes to teach personalised rehabilitation skills and to teach the caregivers the skills required to assist the person in performing the planned tasks during the time period. The caregiver was asked to encourage the person (and help if necessary) to perform the planned activities at least twice weekly and, if possible, every day. Concomitant therapy: No additional information.
Subgroup 1: Severity	Not stated/unclear
Subgroup 2: Presence of communication difficulties	Not stated/unclear
Subgroup 3: Presence of sensory difficulties	Not stated/unclear
Subgroup 4: Presence of psychological distress	Not stated/unclear
Subgroup 5: Presence of	Not stated/unclear

cognition difficulties	
Subgroup 6: Baseline mobility	Not stated/unclear
Subgroup 7: Ethnicity	Not stated/unclear.
Population subgroups	No additional information
Comparator	No participation N=26 Maintained everyday routines but also received weekly visits or telephone calls by the therapist to talk about their rehabilitation progress, daily activities and general health conditions. They were not given specific instructions or guidance related to rehabilitation skills. Concomitant therapy: No additional information.
Number of participants	51
Duration of follow-up	12 weeks
Indirectness	Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.
Additional comments	No drop outs

Study arms

Community participation intervention (home-based caregiver-mediated education intervention) (N = 25)
Caregiver-mediated home-based intervention. Included a personalised weekly training schedule. The program was roughly divided into 3 phases: phase 1 aiming to improve the person's body functions and structural components (weeks 1-4); phase 2 aiming to improve the person's ability to undertake everyday activities within their living environments using task-specific restorative and compensatory training methods (weeks 5-8); phase 3 aiming to help the person reintegrate into the society by participating in restorative outdoor leisure activities (weeks 9-12). A physical therapist visited once weekly for approximately 90 minutes to teach personalised rehabilitation skills and to teach the caregivers the skills required to assist the person in performing the planned tasks during the time period. The caregiver was asked to encourage the person (and help if necessary) to perform the planned activities at least twice weekly and, if possible, every day. Concomitant therapy: No additional information.

No participation (N = 26)
Maintained everyday routines but also received weekly visits or telephone calls by the therapist to talk about their rehabilitation progress, daily activities and general health conditions. They were not given specific instructions or guidance related to rehabilitation skills. Concomitant therapy: No additional information.

Characteristics

Arm-level characteristics

Characteristic	**Community participation intervention (home-based caregiver-mediated education intervention) (N = 25)**	**No participation (N = 26)**
% Female Sample size	n = 12 ; % = 48	n = 9 ; % = 34.6
Mean age (SD) (years) Mean (SD)	62 (9.5)	65.4 (10.6)

Characteristic	Community participation intervention (home-based caregiver-mediated education intervention) (N = 25)	No participation (N = 26)
Ethnicity Sample size	n = NR ; % = NR	n = NR ; % = NR
Comorbidities Sample size	n = NR ; % = NR	n = NR ; % = NR
Severity Sample size	n = NR ; % = NR	n = NR ; % = NR
Time after stroke (Months) Median (IQR)	18.5 (8.75 to 31.75)	18 (11.5 to 32)
Presence of communication difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of sensory difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of psychological distress Sample size	n = NR ; % = NR	n = NR ; % = NR
Presence of cognition difficulties Sample size	n = NR ; % = NR	n = NR ; % = NR

Characteristic	Community participation intervention (home-based caregiver-mediated education intervention) (N = 25)	No participation (N = 26)
Baseline mobility Sample size	n = NR ; % = NR	n = NR ; % = NR

Outcomes

Study timepoints

- Baseline
- 12 week (<6 months. End of intervention.)

Continuous outcomes

Outcome	Community participation intervention (home-based caregiver-mediated education intervention), Baseline, N = 25	Community participation intervention (home-based caregiver-mediated education intervention), 12 week, N = 25	No participation, Baseline, N = 26	No participation, 12 week, N = 26
Activities of daily living (barthel index) Scale range: 0-100. Change scores. Mean (95% CI)	NA (NA to NA)	7.2 (5.3 to 9.1)	NA (NA to NA)	0.6 (-0.9 to 2.1)
Activities of daily living (barthel index) Scale range: 0-100. Change scores.	82.4 (16.3)	NA (NA)	77.1 (22.3)	NA (NA)

Outcome	Community participation intervention (home-based caregiver-mediated education intervention), Baseline, N = 25	Community participation intervention (home-based caregiver-mediated education intervention), 12 week, N = 25	No participation, Baseline, N = 26	No participation, 12 week, N = 26
Mean (SD)				
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale) Scale range: 0-100 (for each subscale). Change scores. Mean (SD)	NA (NA)	NA (NA)	NA (NA)	NA (NA)
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale) Scale range: 0-100 (for each subscale). Change scores. Mean (95% CI)	NA (NA to NA)	NA (NA to NA)	NA (NA to NA)	NA (NA to NA)
SIS Strength subscale Mean (SD)	36.8 (19.8)	NA (NA)	38.7 (16.4)	NA (NA)
SIS Strength subscale Mean (95% CI)	NA (NA to NA)	15.5 (12.1 to 18.9)	NA (NA to NA)	1.4 (-0.9 to 3.8)
SIS ADL/IADL subscale Mean (SD)	62.3 (21.5)	NA (NA)	59.6 (22.3)	NA (NA)

Outcome	Community participation intervention (home-based caregiver-mediated education intervention), Baseline, N = 25	Community participation intervention (home-based caregiver-mediated education intervention), 12 week, N = 25	No participation, Baseline, N = 26	No participation, 12 week, N = 26
SIS ADL/IADL subscale Mean (95% CI)	NA (NA to NA)	8.7 (1.9 to 15.5)	NA (NA to NA)	-0.2 (-2.5 to 2.1)
SIS Mobility subscale Mean (SD)	71.3 (17.8)	NA (NA)	67.3 (24.6)	NA (NA)
SIS Mobility subscale Mean (95% CI)	NA (NA to NA)	14.2 (6.9 to 21.5)	NA (NA to NA)	-0.5 (-2.8 to 1.7)
SIS Hand function subscale Mean (SD)	34.2 (35.1)	NA (NA)	42.3 (37.9)	NA (NA)
SIS Hand function subscale Mean (95% CI)	NA (NA to NA)	12.5 (0.9 to 23.9)	NA (NA to NA)	-3.7 (-6.7 to -0.6)
SIS Memory subscale Mean (SD)	81.3 (18.3)	NA (NA)	77.6 (13.2)	NA (NA)
SIS Memory subscale Mean (95% CI)	NA (NA to NA)	2.6 (-5.5 to 10.8)	NA (NA to NA)	-1.8 (-4.4 to 0.8)
SIS Communication subscale Mean (SD)	90.3 (16.3)	NA (NA)	95.3 (10.9)	NA (NA)

Outcome	Community participation intervention (home-based caregiver-mediated education intervention), Baseline, N = 25	Community participation intervention (home-based caregiver-mediated education intervention), 12 week, N = 25	No participation, Baseline, N = 26	No participation, 12 week, N = 26
SIS Communication subscale Mean (95% CI)	NA (NA to NA)	8 (1.8 to 14.3)	NA (NA to NA)	-2.3 (-3.7 to -0.9)
SIS Emotion subscale Mean (SD)	62 (11.9)	NA (NA)	59.9 (10.5)	NA (NA)
SIS Emotion subscale Mean (95% CI)	NA (NA to NA)	0.07 (-8.2 to 8.3)	NA (NA to NA)	-1 (-3.6 to 1.6)
SIS Social participation subscale Mean (SD)	75.8 (22.7)	NA (NA)	80.6 (17.6)	NA (NA)
SIS Social participation subscale Mean (95% CI)	NA (NA to NA)	11.4 (2.9 to 19.9)	NA (NA to NA)	0.5 (-1.7 to 2.7)
SIS General recovery Mean (SD)	48.3 (17.4)	NA (NA)	50.4 (15.9)	NA (NA)
SIS General recovery Mean (95% CI)	NA (NA to NA)	17.2 (10 to 24.4)	NA (NA to NA)	0.2 (-1.7 to 2.1)

Activities of daily living (barthel index) - Polarity - Higher values are better
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale) - Polarity - Higher values are better

Dichotomous outcome

Outcome	Community participation intervention (home-based caregiver-mediated education intervention), Baseline, N = 25	Community participation intervention (home-based caregiver-mediated education intervention), 12 week, N = 25	No participation, Baseline, N = 26	No participation, 12 week, N = 26
Discontinuation No drop outs No of events	n = NA ; % = NA	n = 0 ; % = 0	n = NA ; % = NA	n = 0 ; % = 0

Discontinuation - Polarity - Lower values are better

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

Continuousoutcomes-Activitiesofdailyliving(barthelindex)-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISStrengthsubscale-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISADL/IADLsubscale-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISMobilitysubscale-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISHandfunctionsubscale-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISMemorysubscale-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

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

Section	Question	Answer
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISCommunicationsubscale-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISEmotionsubscale-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the*

Section	Question	Answer
		protocol it is included but downgraded for indirectness.)

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISSocialparticipationsubscale-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Continuousoutcomes-Stroke-specificPatient-ReportedOutcomeMeasures(StrokeImpactScale)-SISGeneralrecovery-MeanNineFivePercentCI-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Dichotomousoutcome-Discontinuation-NoOfEvents-Community participation intervention (home-based caregiver-mediated education intervention)-No participation-t12

Section	Question	Answer
Overall bias and Directness	Risk of bias judgement	Some concerns
Overall bias and Directness	Overall Directness	Partially applicable *(Intervention indirectness - While the intervention discusses community involvement, it is a home based program and doesn't necessarily lead to community participation. Due to how this is close to being relevant to the protocol it is included but downgraded for indirectness.)*

Appendix E – Forest plots

E.1 Community participation intervention compared to other community participation intervention

Figure 2: Person/participant generic health-related quality of life (EQ-5D VAS, 0-100, higher values are better, change score) at <6 months

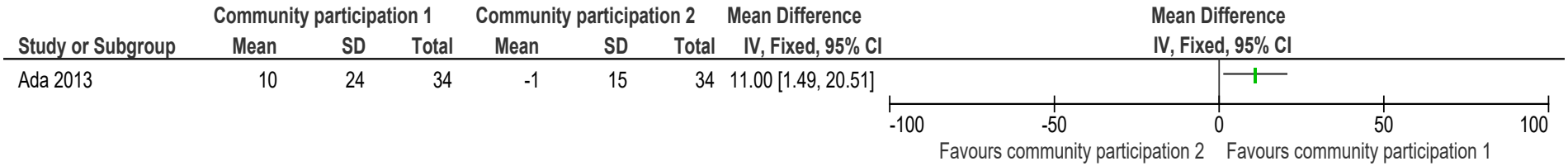


Figure 3: Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final value) at <6 months

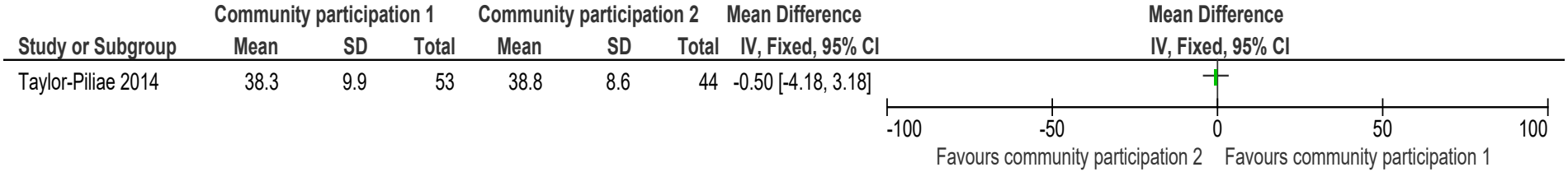


Figure 4: Person/participant generic health-related quality of life (SF-36 mental component summary, 0-100, higher values are better, final value) at <6 months

Study or Subgroup	Community participation 1 Mean	SD	Total	Community participation 2 Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Taylor-Piliae 2014	52.8	10.3	53	54	8.9	44	-1.20 [-5.02, 2.62]

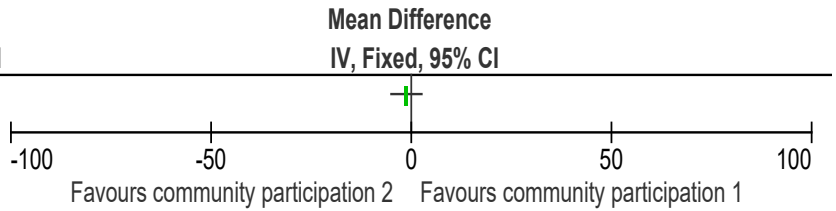


Figure 5: Person/participant generic health-related quality of life (EQ-5D VAS, AQoL [different scale ranges], higher values are better, change scores) at ≥6 months

Study or Subgroup	Community participation 1 Mean	SD	Total	Community participation 2 Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Ada 2013	6	32	34	-6	22	34	48.6%	0.43 [-0.05, 0.91]
Cadilhac 2011	0.008	0.03	48	-0.02	0.02	47	51.4%	1.09 [0.66, 1.52]
Total (95% CI)			**82**			**81**	**100.0%**	**0.77 [0.13, 1.41]**

Heterogeneity: Tau² = 0.16; Chi² = 3.94, df = 1 (P = 0.05); I² = 75%
Test for overall effect: Z = 2.35 (P = 0.02)

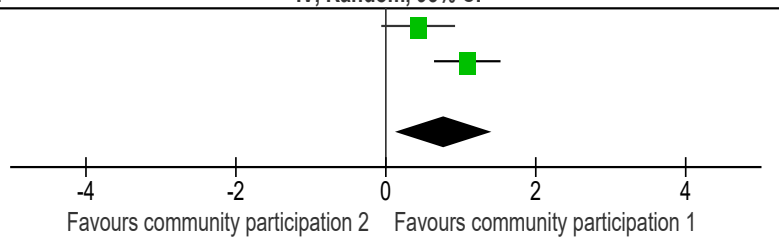


Figure 6: Participation in leisure activities/social groups (Adelaide Activities Profile, 0-63, higher values are better, change score) at <6 months

Study or Subgroup	Community participation 1 Mean	SD	Total	Community participation 2 Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Ada 2013	1	7	34	1	6	34	0.00 [-3.10, 3.10]

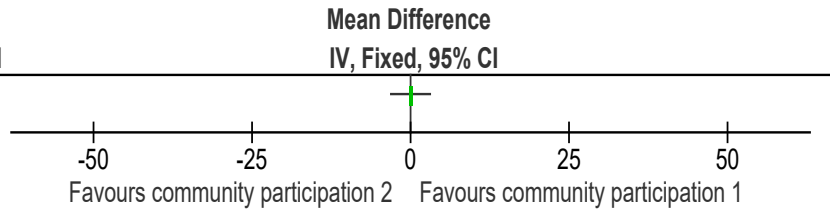


Figure 7: Participation in leisure activities/social groups (Adelaide Activities Profile, Health Education Impact Scale - Positive and active engagement in life domain [different scale ranges], higher values are better, change scores) at ≥6 months

Study or Subgroup	Community participation 1 Mean	SD	Total	Community participation 2 Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Ada 2013	2	8	34	1	9	34	48.1%	0.12 [-0.36, 0.59]
Cadilhac 2011	0.11	0.09	48	0.16	0.1	47	51.9%	-0.52 [-0.93, -0.11]
Total (95% CI)			**82**			**81**	**100.0%**	**-0.21 [-0.84, 0.41]**

Heterogeneity: Tau² = 0.15; Chi² = 3.97, df = 1 (P = 0.05); I² = 75%
Test for overall effect: Z = 0.67 (P = 0.50)

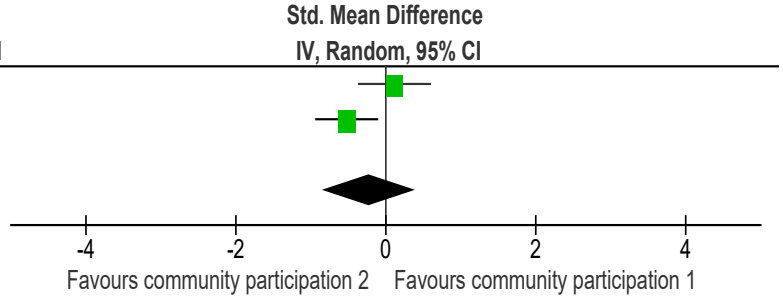


Figure 8: Psychological distress - Depression (CES-D, 0-60, lower values are better, final value) at <6 months

Study or Subgroup	Community participation 1 Mean	SD	Total	Community participation 2 Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Taylor-Piliae 2014	14	9.6	53	11.4	9.6	44	2.60 [-1.24, 6.44]

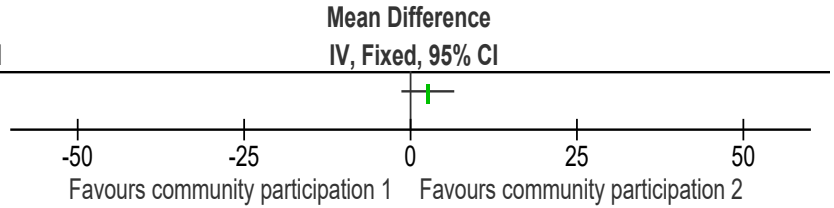


Figure 9: Psychological distress - Depression (Irritability, depression and anxiety scale - depression subscale, 0-20, lower values are better, change score) at ≥6 months

Study or Subgroup	Community participation 1 Mean	SD	Total	Community participation 2 Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Cadilhac 2011	-0.104	0.35	48	0	0.32	47	-0.10 [-0.24, 0.03]

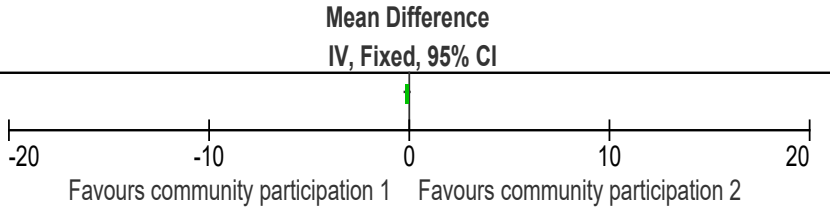


Figure 10: Psychological distress - Anxiety (Irritability, depression and anxiety scale - anxiety subscale, 0-20, lower values are better, change score) at ≥6 months

Study or Subgroup	Community participation 1 Mean	SD	Total	Community participation 2 Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Cadilhac 2011	-0.104	0.35	48	0	0.32	47	-0.10 [-0.24, 0.03]

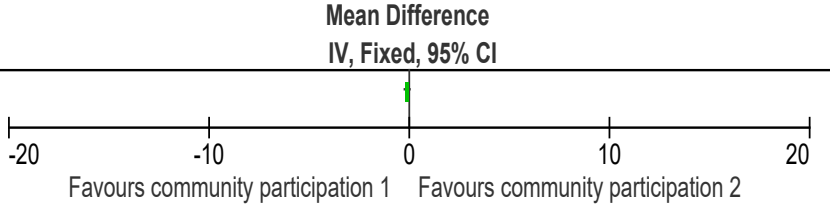


Figure 11: Discontinuation at <6 months

Study or Subgroup	Community participation 1 Events	Total	Community participation 2 Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Ada 2013	0	34	1	34	18.6%	0.33 [0.01, 7.91]
Taylor-Piliae 2014	5	53	6	44	81.4%	0.69 [0.23, 2.11]
Total (95% CI)		**87**		**78**	**100.0%**	**0.63 [0.22, 1.78]**
Total events	5		7			

Heterogeneity: Chi² = 0.18, df = 1 (P = 0.67); I² = 0%
Test for overall effect: Z = 0.88 (P = 0.38)

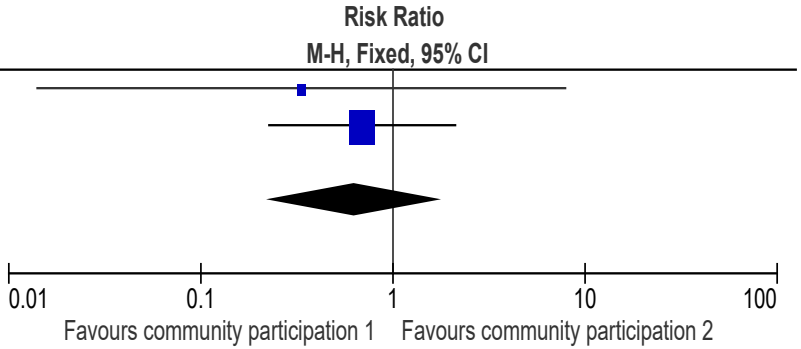
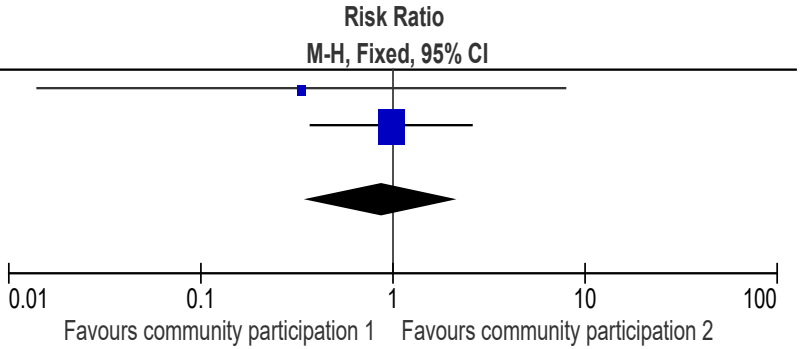


Figure 12: Discontinuation at ≥6 months

Study or Subgroup	Community participation 1 Events	Total	Community participation 2 Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Ada 2013	0	34	1	34	17.5%	0.33 [0.01, 7.91]
Cadilhac 2011	7	48	7	47	82.5%	0.98 [0.37, 2.58]
Total (95% CI)		**82**		**81**	**100.0%**	**0.87 [0.35, 2.16]**
Total events	7		8			

Heterogeneity: Chi² = 0.41, df = 1 (P = 0.52); I² = 0%
Test for overall effect: Z = 0.31 (P = 0.76)



E.2 Community participation intervention compared to no participation

Figure 13: Person/participant generic health-related quality of life (EQ-5D-3L, -0.11-1, higher values are better, final values) at <6 months

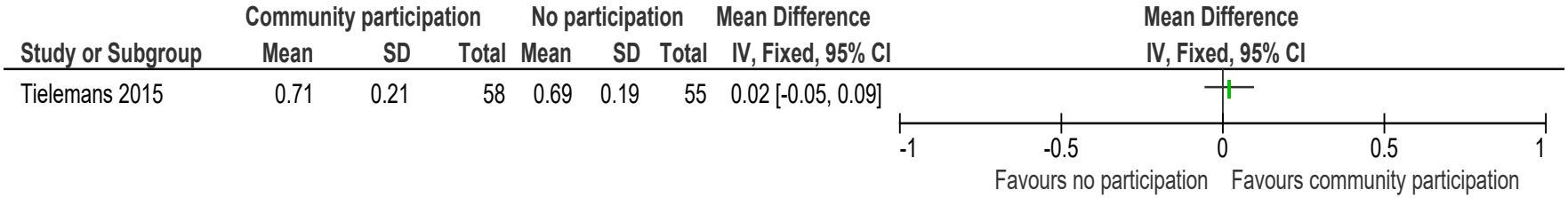


Figure 14: Person/participant generic health-related quality of life (EQ-5D VAS, 0-100, higher values are better, change scores) at <6 months

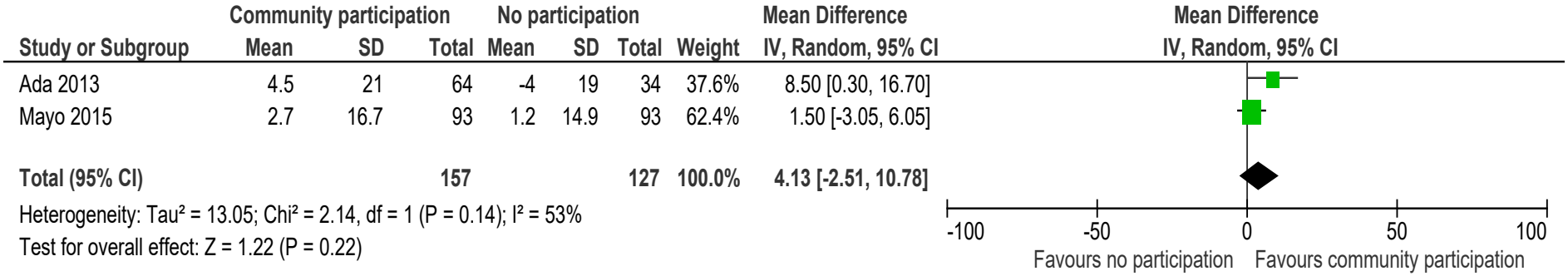


Figure 15: Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Taylor-Piliae 2012	55.2	5.4	13	52.7	8.3	12	21.8%	2.50 [-3.04, 8.04]
Taylor-Piliae 2014	53.3	6.1	97	51.6	9.4	48	78.2%	1.70 [-1.22, 4.62]
Total (95% CI)			**110**			**60**	**100.0%**	**1.87 [-0.71, 4.46]**

Heterogeneity: Chi² = 0.06, df = 1 (P = 0.80); I² = 0%
Test for overall effect: Z = 1.42 (P = 0.16)

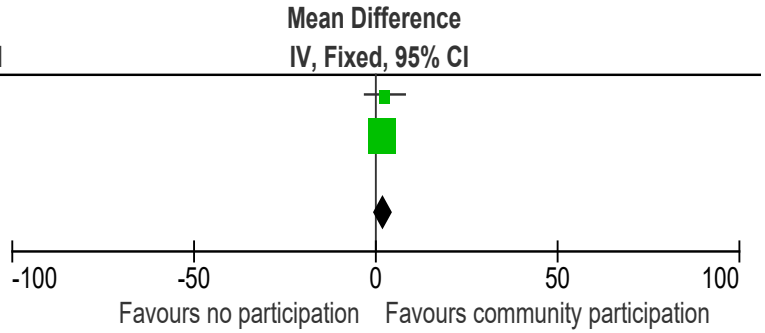


Figure 16: Person/participant generic health-related quality of life (SF-36 mental component summary, 0-100, higher values are better, final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Taylor-Piliae 2012	40.5	9.1	13	38	10.4	12	17.2%	2.50 [-5.19, 10.19]
Taylor-Piliae 2014	38.5	9.3	97	38.6	10.5	48	82.8%	-0.10 [-3.60, 3.40]
Total (95% CI)			**110**			**60**	**100.0%**	**0.35 [-2.84, 3.53]**

Heterogeneity: Chi² = 0.36, df = 1 (P = 0.55); I² = 0%
Test for overall effect: Z = 0.21 (P = 0.83)

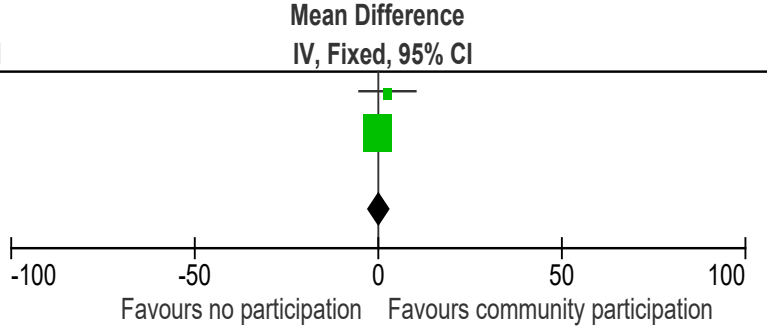


Figure 17: Person/participant generic health-related quality of life (SF-36 physical function, 0-100, higher values are better, final value) at <6 months

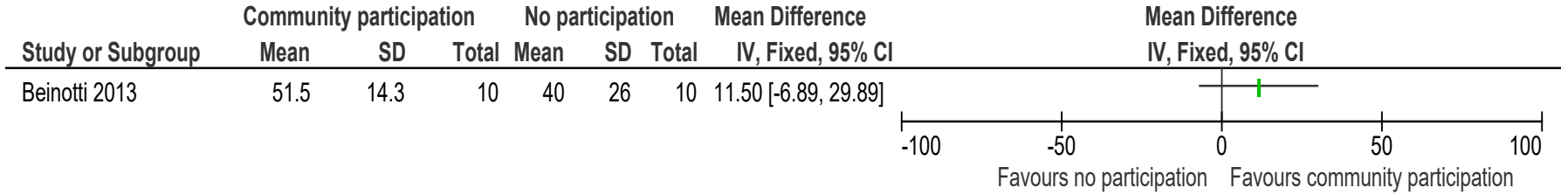


Figure 18: Person/participant generic health-related quality of life (SF-36 bodily pain, 0-100, higher values are better, final value) at <6 months

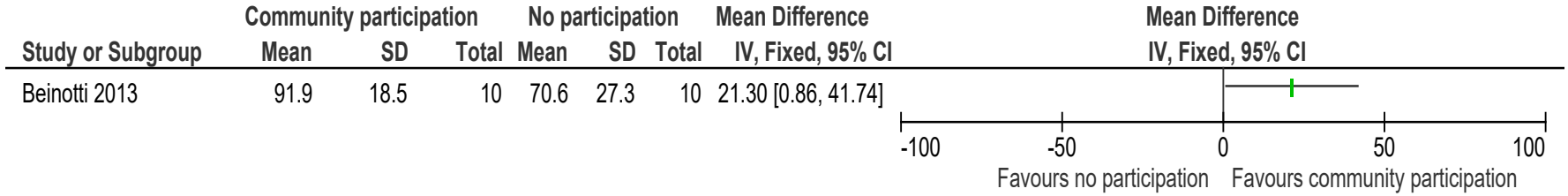


Figure 19: Person/participant generic health-related quality of life (SF-36 role physical, 0-100, higher values are better, final value) at <6 months

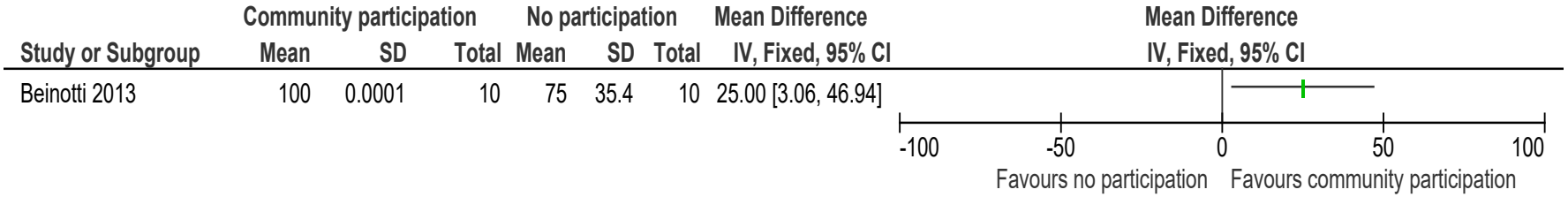


Figure 20: Person/participant generic health-related quality of life (SF-36 vitality, 0-100, higher values are better, final value) at <6 months

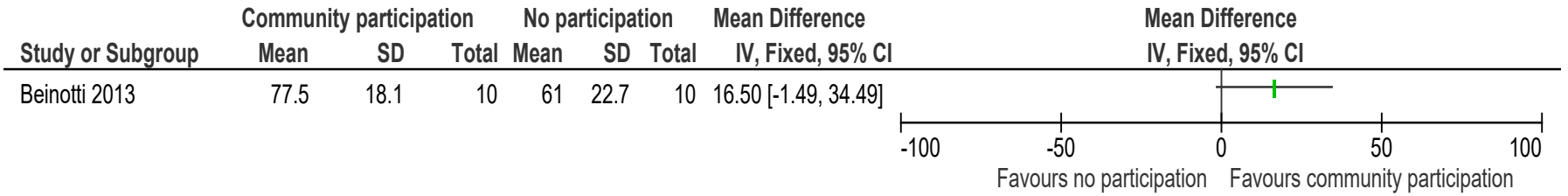


Figure 21: Person/participant generic health-related quality of life (SF-36 general health, 0-100, higher values are better, final value) at <6 months

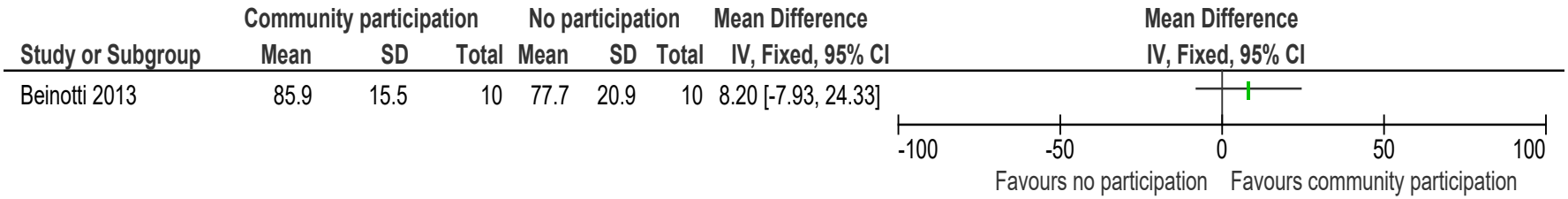


Figure 22: Person/participant generic health-related quality of life (SF-36 mental health, 0-100, higher values are better, final value) at <6 months

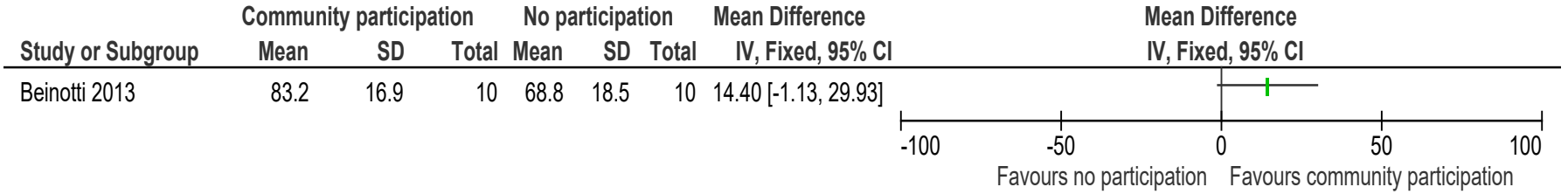


Figure 23: Person/participant generic health-related quality of life (SF-36 role emotional, 0-100, higher values are better, final value) at <6 months

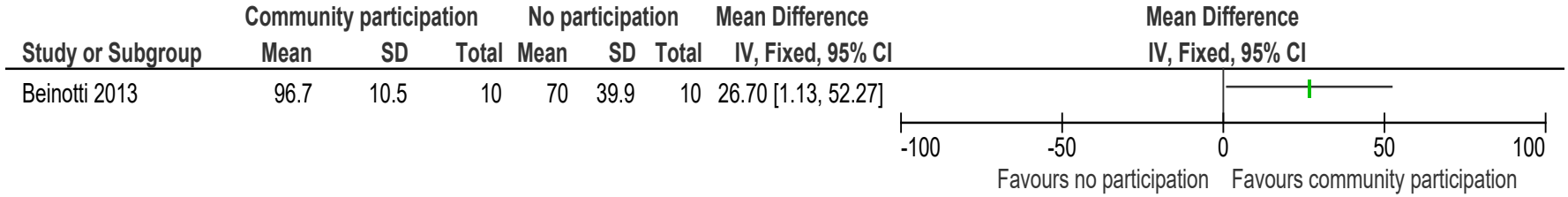


Figure 24: Person/participant generic health-related quality of life (SF-36 social function, 0-100, higher values are better, final value) at <6 months

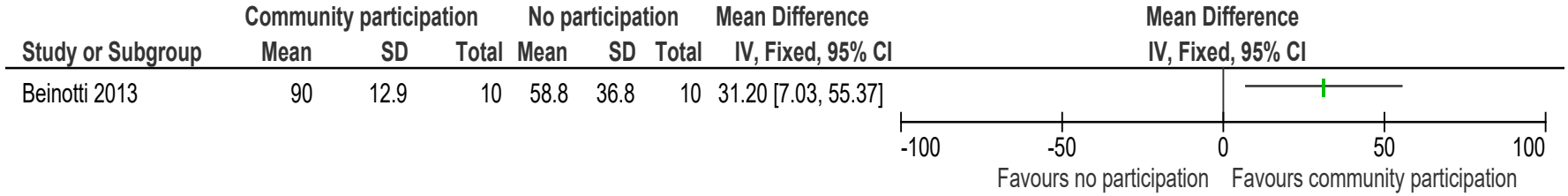


Figure 25: Person/participant generic health-related quality of life (EQ-5D-3L, AQoL, -0.11-1, higher values are better, change scores and final value) at ≥6 months

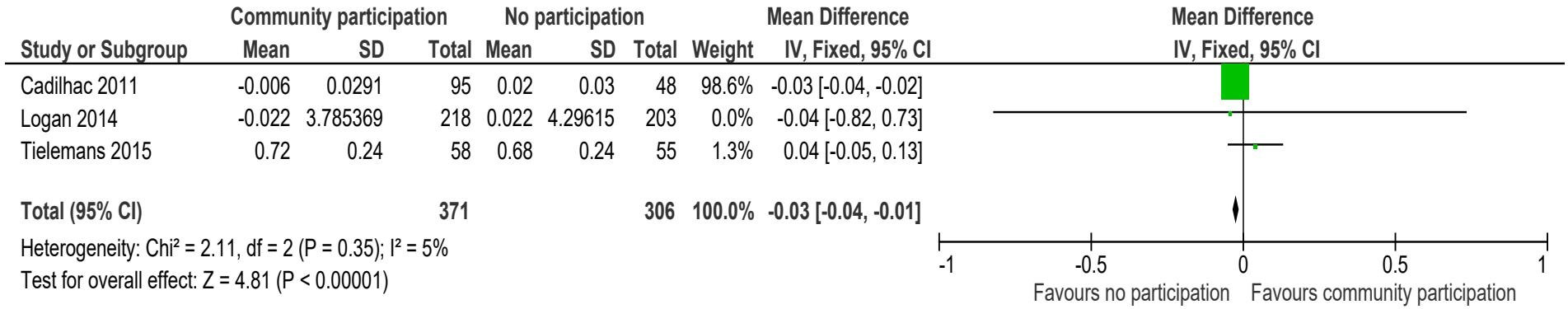


Figure 26: Person/participant generic health-related quality of life (EQ-5D VAS, Nottingham Health Profile, 0-100, higher values are better, change score and final value) at ≥6 months

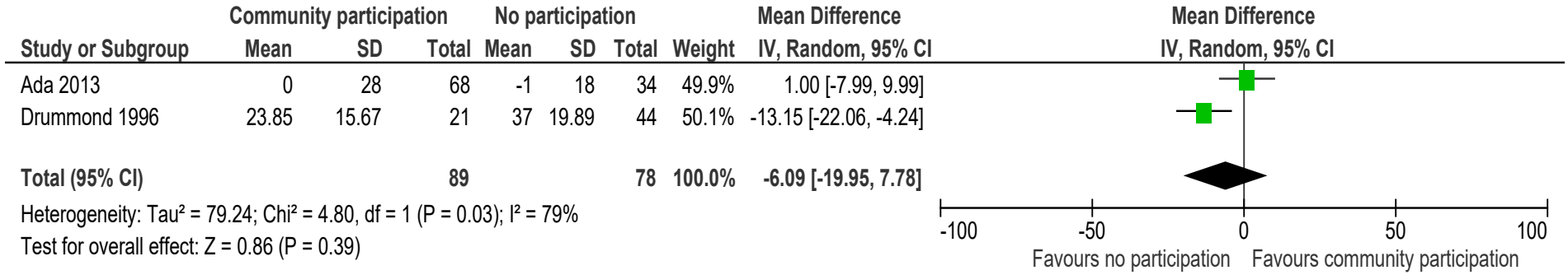


Figure 27: Person/participant generic health-related quality of life (SF-36 physical function, 0-100, higher values are better, change score) at ≥6 months

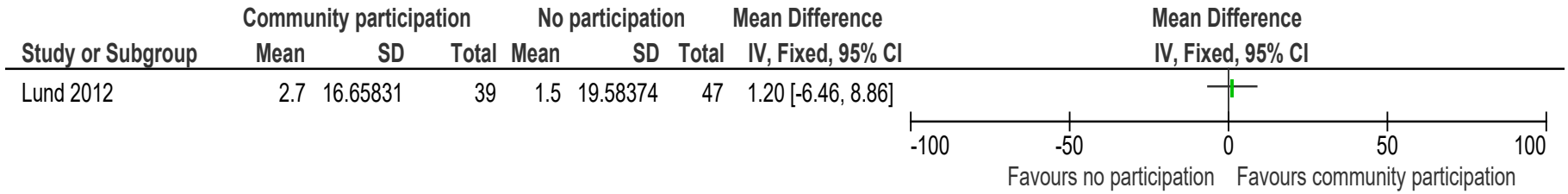


Figure 28: Person/participant generic health-related quality of life (SF-36 bodily pain, 0-100, higher values are better, change score) at ≥6 months

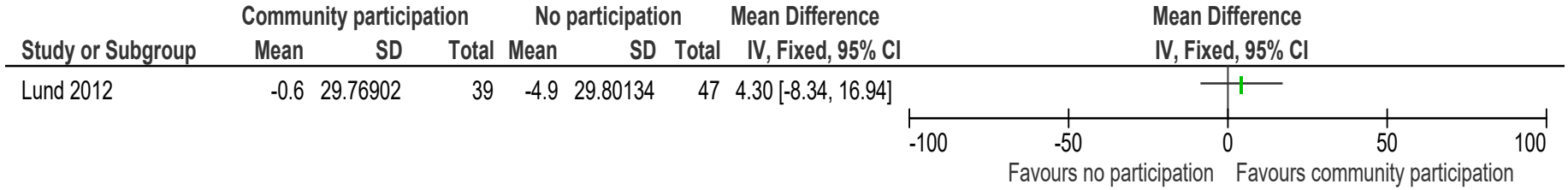


Figure 29: Person/participant generic health-related quality of life (SF-36 role physical, 0-100, higher values are better, change score) at ≥6 months

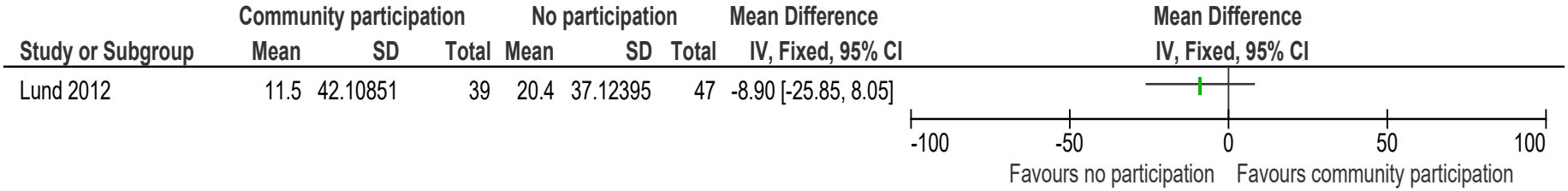


Figure 30: Person/participant generic health-related quality of life (SF-36 vitality, 0-100, higher values are better, change score) at ≥6 months

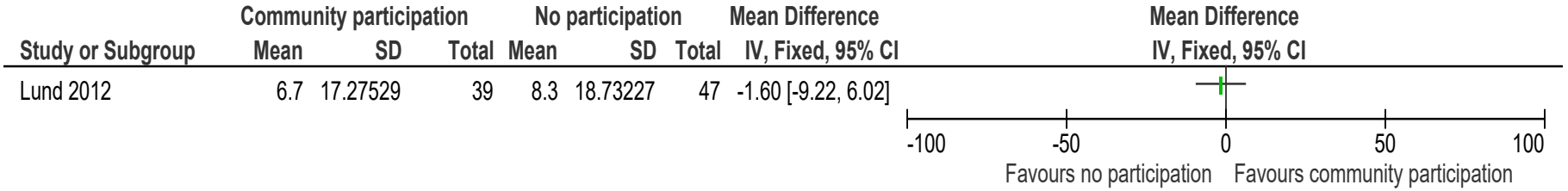


Figure 31: Person/participant generic health-related quality of life (SF-36 general health, 0-100, higher values are better, change score) at ≥6 months

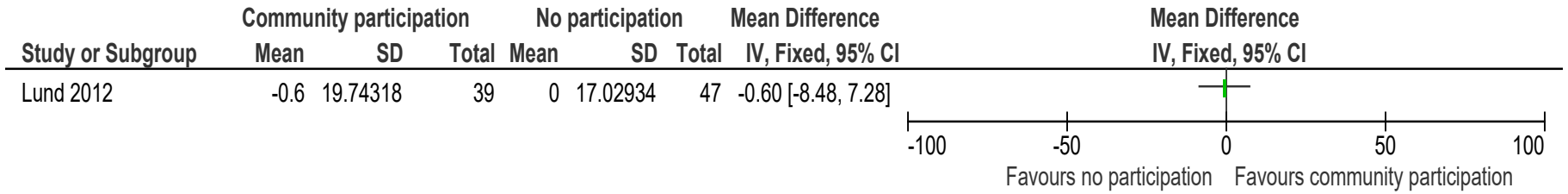


Figure 32: Person/participant generic health-related quality of life (SF-36 mental health, 0-100, higher values are better, change score) at ≥6 months

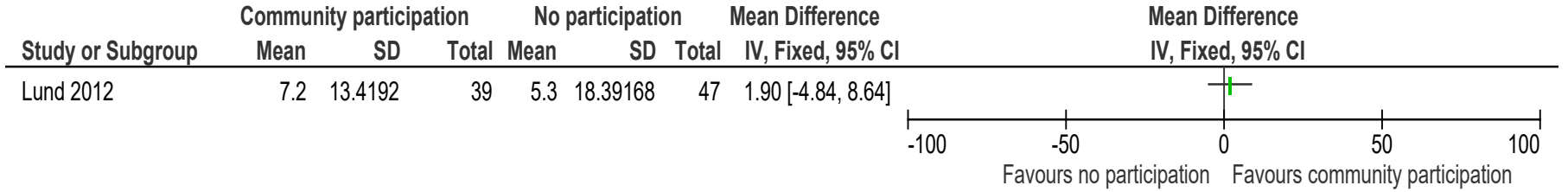


Figure 33: Person/participant generic health-related quality of life (SF-36 role emotional, 0-100, higher values are better, change score) at ≥6 months

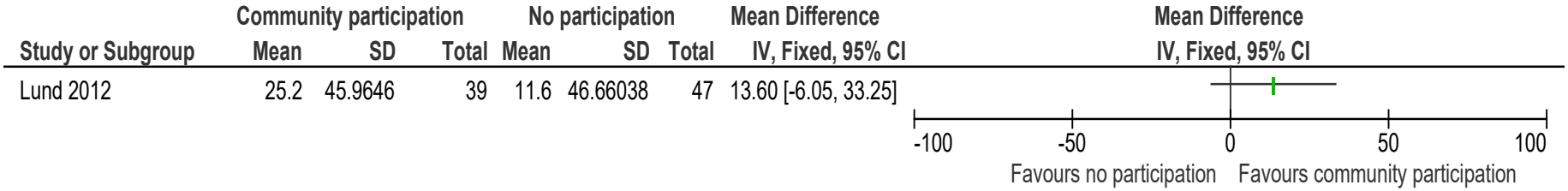


Figure 34: Person/participant generic health-related quality of life (SF-36 social function, 0-100, higher values are better, change score) at ≥6 months

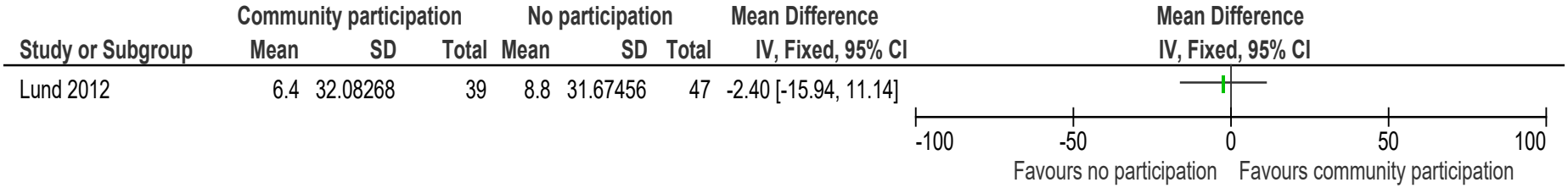


Figure 35: Return to work at <6 months

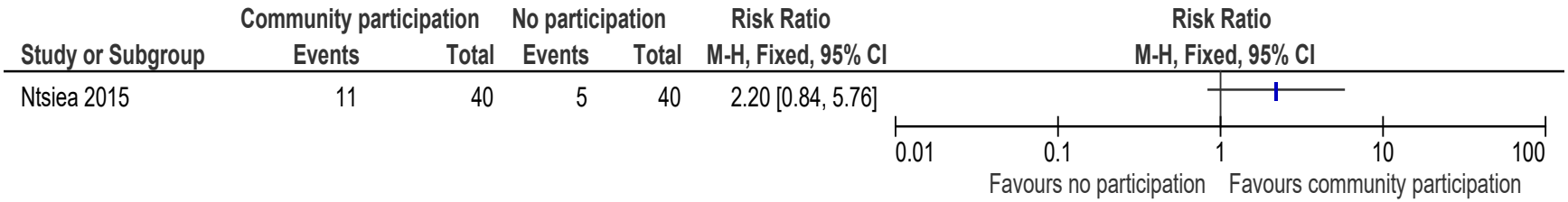


Figure 36: Return to work at ≥6 months

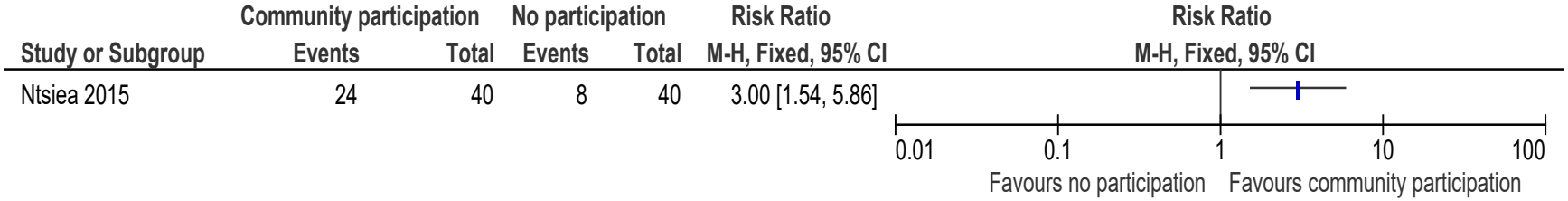


Figure 37: Wellbeing scores (General Well-Being Schedule, 0-110, higher values are better, change score) at <6 months

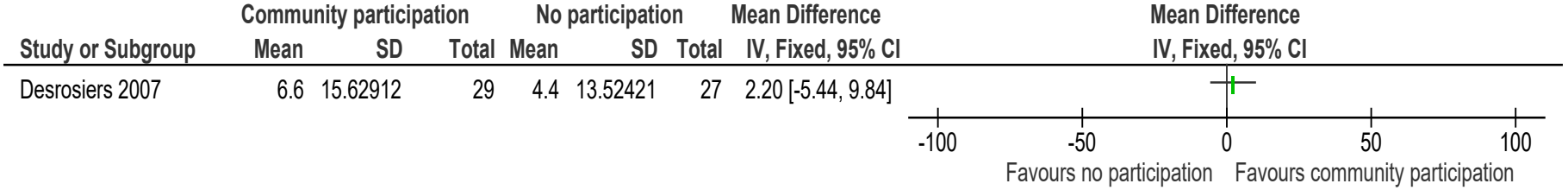


Figure 38: Wellbeing scores (Warwick Edinburgh Mental wellbeing scale, 14-70, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Marshall 2020	54.69	12.3	16	49.94	9.99	18	4.75 [-2.84, 12.34]

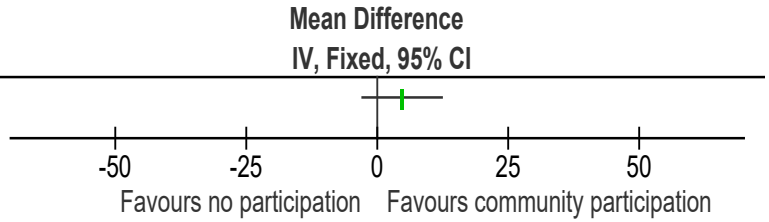


Figure 39: Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Adelaide Activities Profile [different scale ranges], higher values are better, change scores) at <6 months

	Community participation			No participation				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Ada 2013	1	7	34	-1	6	34	23.1%	0.30 [-0.17, 0.78]
Harel-Katz 2020	8.45	18.3	20	2.73	12.84	19	13.2%	0.35 [-0.28, 0.99]
Mayo 2015	3.7	16.1	93	1.2	12.8	93	63.7%	0.17 [-0.12, 0.46]
Total (95% CI)			**147**			**146**	**100.0%**	**0.23 [-0.00, 0.46]**

Heterogeneity: Chi² = 0.39, df = 2 (P = 0.82); I² = 0%

Test for overall effect: Z = 1.92 (P = 0.05)

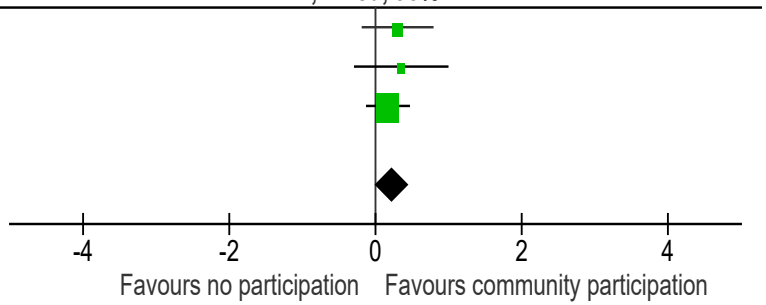


Figure 40: Participation in leisure activities/social groups scores (number of different activities, higher values are better, change score) at <6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Desrosiers 2007	2.2	3.811981	29	-0.7	3.084026	27	2.90 [1.09, 4.71]	

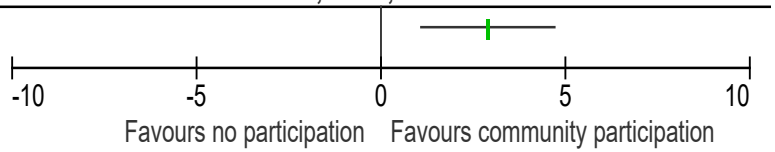


Figure 41: Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Total leisure score, Social participation scale [different scale ranges], higher values are better, final values) at <6 months

	Community participation			No participation				Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Adamit 2021	79.9	13.9	33	64.9	19.5	33	31.7%	0.88 [0.37, 1.38]	
Drummond 1996	43.91	13.54	21	31.17	9.77	44	29.9%	1.13 [0.58, 1.69]	
Wang 2013	6.3	1.3	76	5.9	1.4	73	38.3%	0.29 [-0.03, 0.62]	
Total (95% CI)			**130**			**150**	**100.0%**	**0.73 [0.20, 1.26]**	

Heterogeneity: Tau² = 0.16; Chi² = 8.08, df = 2 (P = 0.02); I² = 75%
Test for overall effect: Z = 2.70 (P = 0.007)

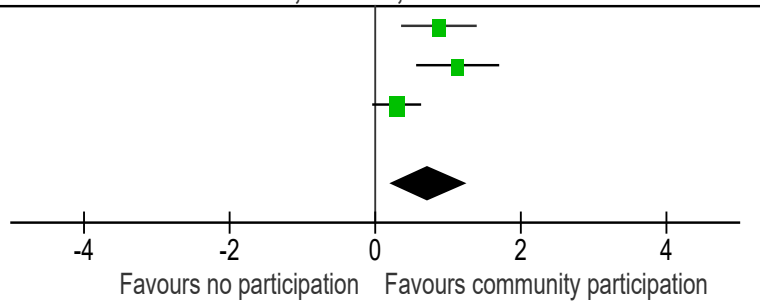


Figure 42: Participation in leisure activities/social groups scores (Adelaide Activities Profile, Health Education Impact scale - positive and active engagement in life domain [different scale ranges], higher values are better, change scores) at ≥6 months

	Community participation			No participation				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Ada 2013	1.5	8.5	68	1	6	34	41.8%	0.06 [-0.35, 0.48]
Cadilhac 2011	0.14	0.1	95	0.11	0.098	48	58.2%	0.30 [-0.05, 0.65]
Total (95% CI)			**163**			**82**	**100.0%**	**0.20 [-0.06, 0.47]**

Heterogeneity: Chi² = 0.74, df = 1 (P = 0.39); I² = 0%

Test for overall effect: Z = 1.48 (P = 0.14)

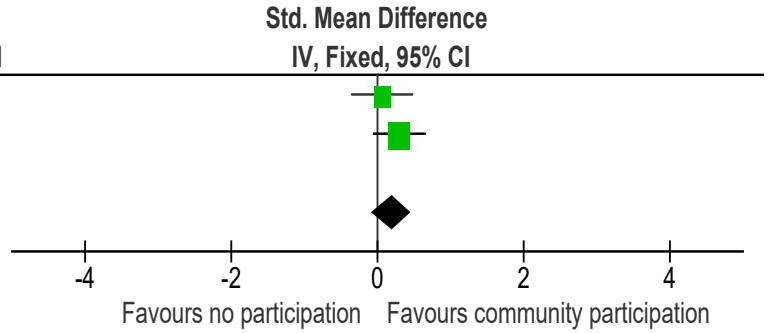


Figure 43: Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Nottingham Leisure Questionnaire, Social Connectedness Scale, Total leisure score, Social participation scale [different scale ranges], higher values are better, final values) at ≥6 months

	Community participation			No participation				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Drummond 1996	43.91	13.54	21	31.17	9.77	44	18.9%	1.13 [0.58, 1.69]
Marshall 2020	88.12	17.04	16	85	17.16	18	15.8%	0.18 [-0.50, 0.85]
Parker 2001	16	7.5	153	15	8	313	30.0%	0.13 [-0.07, 0.32]
Stark 2018	64.5	27.17	9	81.82	20.77	6	8.9%	-0.65 [-1.72, 0.41]
Wang 2013	6.3	1.3	76	5.9	1.4	73	26.3%	0.29 [-0.03, 0.62]
Total (95% CI)			**275**			**454**	**100.0%**	**0.30 [-0.07, 0.67]**

Heterogeneity: Tau² = 0.11; Chi² = 13.98, df = 4 (P = 0.007); I² = 71%
Test for overall effect: Z = 1.57 (P = 0.12)

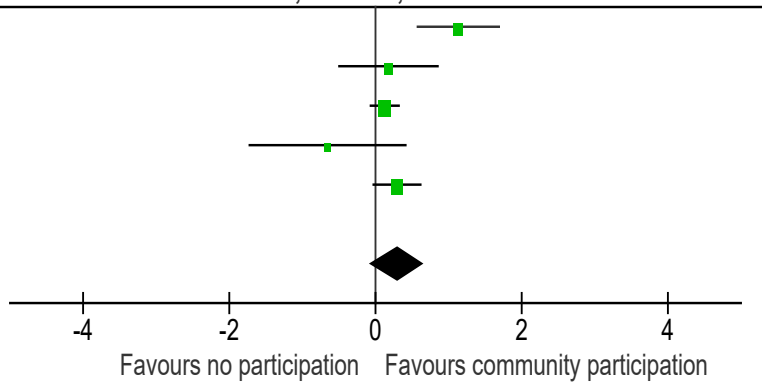


Figure 44: Psychological distress - Depression (PHQ-9, Stroke specific Geriatric Depression Scale, Geriatric Depression Scale 15, CES-D [different scale ranges], lower values are better, change scores) at <6 months

	Community participation			No participation				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Chan 2012	-1.1	1.4	8	-0.33	1.3	6	4.8%	-0.53 [-1.61, 0.55]
Desrosiers 2007	-8.7	11.43594	29	-1.5	8.342037	27	19.4%	-0.71 [-1.25, -0.16]
Marsden 2016	-2.4	4.1	10	-0.7	3.2	10	7.2%	-0.44 [-1.33, 0.45]
Mayo 2015	-2.6	20.7	93	-1.6	22.5	93	68.6%	-0.05 [-0.33, 0.24]
Total (95% CI)			**140**			**136**	**100.0%**	**-0.23 [-0.46, 0.01]**

Heterogeneity: Chi² = 5.05, df = 3 (P = 0.17); I² = 41%

Test for overall effect: Z = 1.86 (P = 0.06)

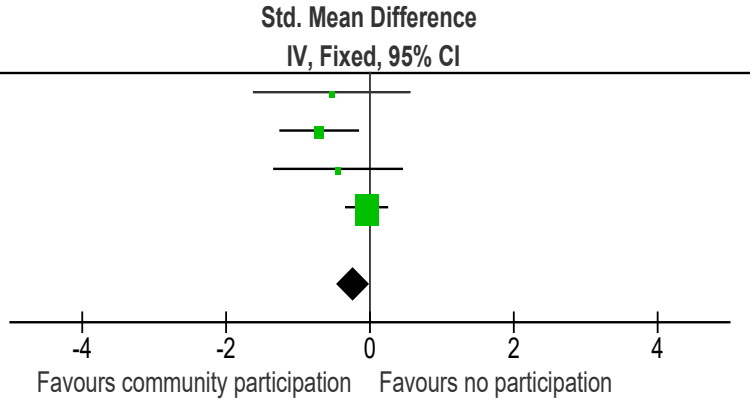


Figure 45: Psychological distress - Depression (HADS total score, Beck Depression Scale, Geriatric Depression Scale, CES-D [different scale ranges], lower values are better, final values) at <6 months

	Community participation			No participation				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Immink 2014	2.7	2.9	11	4.8	3.3	11	9.4%	-0.65 [-1.51, 0.21]
Nour 2002	56.3	3.3	6	53.7	3.5	7	6.1%	0.71 [-0.43, 1.85]
Ostwald 2014	4.19	3.23	80	3.12	2.79	79	25.9%	0.35 [0.04, 0.67]
Taylor-Piliae 2012	11.8	6.5	13	12.9	8.4	12	10.7%	-0.14 [-0.93, 0.64]
Taylor-Piliae 2014	12.8	9.7	97	13.6	10.2	48	24.5%	-0.08 [-0.43, 0.27]
Tielemans 2015	12.1	7.4	58	14	6.8	55	23.4%	-0.27 [-0.64, 0.11]
Total (95% CI)			**265**			**212**	**100.0%**	**-0.02 [-0.33, 0.28]**

Heterogeneity: Tau² = 0.07; Chi² = 10.82, df = 5 (P = 0.06); I² = 54%
Test for overall effect: Z = 0.15 (P = 0.88)

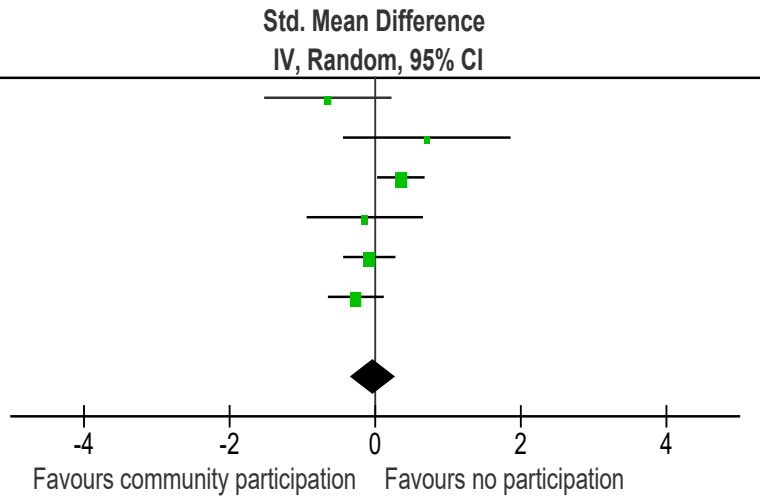


Figure 46: Psychological distress - Depression (people with 'definite depression') at <6 months

	Community participation		No participation		Risk Ratio
Study or Subgroup	Events	Total	Events	Total	M-H, Fixed, 95% CI
Drummond 1996	4	21	16	44	0.52 [0.20, 1.37]

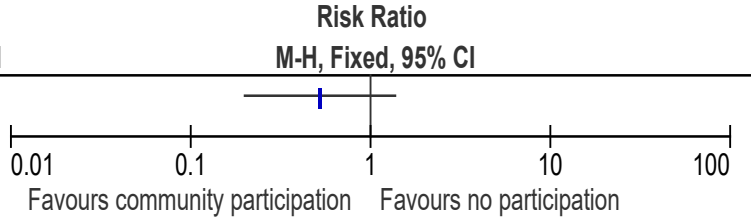


Figure 47: Psychological distress - Depression (GHQ-12, HADS depression, Irritability, depression and anxiety scale depression subscale [different scale ranges], lower values are better, change scores) at ≥6 months

Study or Subgroup	Std. Mean Difference	SE	Community participation Total	No participation Total	Weight	Std. Mean Difference IV, Fixed, 95% CI
Cadilhac 2011	1.2108	0.1914	95	48	17.4%	1.21 [0.84, 1.59]
Logan 2014	0.18	0.0961	208	228	69.0%	0.18 [-0.01, 0.37]
Lund 2012	0.0874	0.2167	39	47	13.6%	0.09 [-0.34, 0.51]
Total (95% CI)			**342**	**323**	**100.0%**	**0.35 [0.19, 0.50]**

Heterogeneity: Chi² = 24.82, df = 2 (P < 0.00001); I² = 92%
Test for overall effect: Z = 4.34 (P < 0.0001)

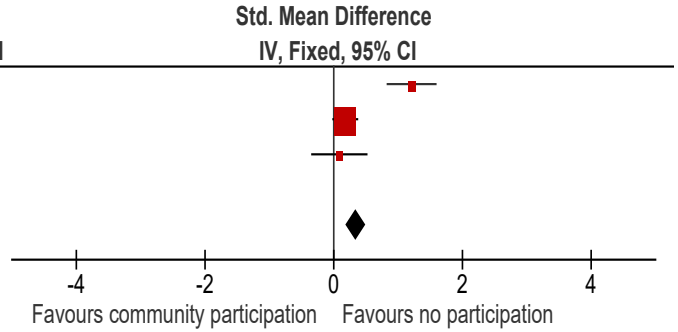


Figure 48: Psychological distress - Depression (GHQ, Geriatric Depression Scale [different scale ranges], lower values are better, final values) at ≥6 months

Study or Subgroup	Community participation Mean	SD	Total	No participation Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Ostwald 2014	3.71	2.73	80	2.68	2.63	79	47.3%	0.38 [0.07, 0.70]
Parker 2001	15.4	7.3	153	16.6	7.4	313	52.7%	-0.16 [-0.36, 0.03]
Total (95% CI)			**233**			**392**	**100.0%**	**0.10 [-0.44, 0.63]**

Heterogeneity: Tau² = 0.13; Chi² = 8.39, df = 1 (P = 0.004); I² = 88%
Test for overall effect: Z = 0.35 (P = 0.73)

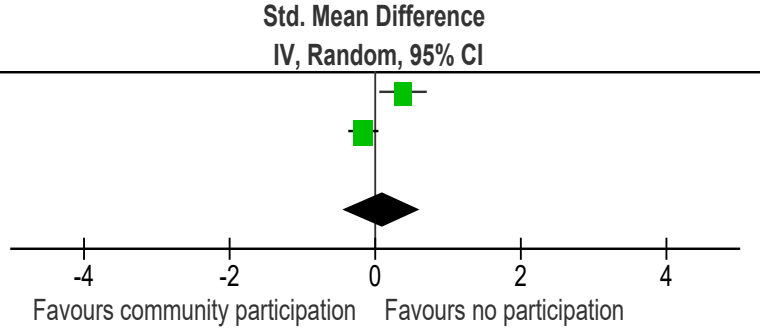


Figure 49: Psychological distress - Depression (people with 'definite depression') at ≥6 months

Study or Subgroup	Community participation Events	Total	No participation Events	Total	Risk Ratio M-H, Fixed, 95% CI
Drummond 1996	3	21	15	44	0.42 [0.14, 1.29]

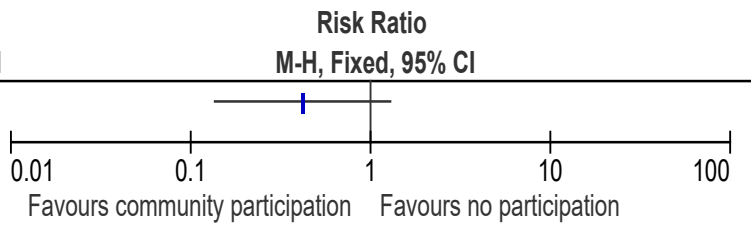


Figure 50: Psychological distress - Anxiety (State Trait Anxiety Inventory - State subscale, 20-80, lower values are better, change score and final value) at <6 months

Study or Subgroup	Community participation Mean	SD	Total	No participation Mean	SD	Total	Weight	Mean Difference IV, Fixed, 95% CI
Chan 2012	-4.6	5.6	8	-1.3	3.9	6	73.7%	-3.30 [-8.28, 1.68]
Immink 2014	33.4	7.1	11	41.8	12.2	11	26.3%	-8.40 [-16.74, -0.06]
Total (95% CI)			**19**			**17**	**100.0%**	**-4.64 [-8.92, -0.36]**

Heterogeneity: Chi² = 1.06, df = 1 (P = 0.30); I² = 6%
Test for overall effect: Z = 2.13 (P = 0.03)

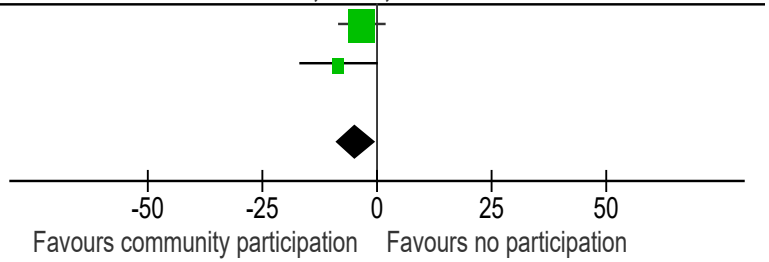


Figure 51: Psychological distress - Anxiety (State Trait Anxiety Inventory - Trait subscale, 20-80, lower values are better, change score and final value) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Chan 2012	-2.1	5.7	8	2.8	4.6	6	72.0%	-4.90 [-10.30, 0.50]
Immink 2014	35.3	10.5	11	42	10.2	11	28.0%	-6.70 [-15.35, 1.95]
Total (95% CI)			**19**			**17**	**100.0%**	**-5.40 [-9.98, -0.82]**

Heterogeneity: Chi² = 0.12, df = 1 (P = 0.73); I² = 0%
Test for overall effect: Z = 2.31 (P = 0.02)

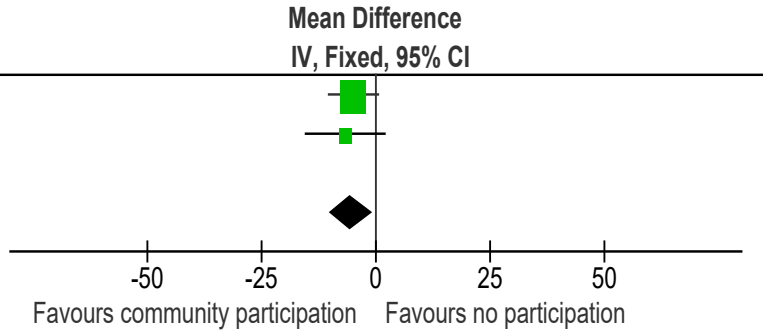


Figure 52: Psychological distress - Anxiety (HADS-A, Irritability, depression and anxiety scale anxiety subscale [different scale ranges], lower values are better, change scores) at ≥6 months

	Community participation			No participation				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Cadilhac 2011	-0.775	0.4244	95	-0.979	0.34	48	51.4%	0.51 [0.16, 0.86]
Lund 2012	-1.5	2.467898	39	-0.7	4.257334	47	48.6%	-0.22 [-0.65, 0.20]
Total (95% CI)			**134**			**95**	**100.0%**	**0.15 [-0.56, 0.87]**

Heterogeneity: Tau² = 0.23; Chi² = 6.74, df = 1 (P = 0.009); I² = 85%
Test for overall effect: Z = 0.42 (P = 0.67)

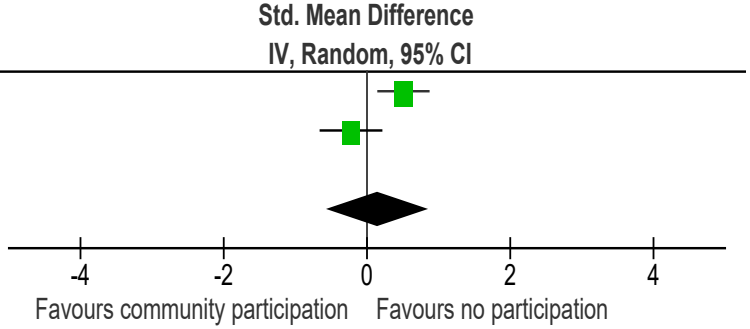


Figure 53: Activities of daily living (Barthel index, Functional Independence Measure motor subscale [different scale ranges], higher values are better, change scores) at <6 months

Study or Subgroup	Community participation Mean	SD	Total	No participation Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Harel-Katz 2020	8.45	18.3	20	2.73	12.84	19	50.0%	0.35 [-0.28, 0.99]
Wang 2015	7.2	4.602939	25	0.6	3.71371	26	50.0%	1.56 [0.92, 2.19]
Total (95% CI)			**45**			**45**	**100.0%**	**0.96 [-0.23, 2.14]**

Heterogeneity: Tau² = 0.62; Chi² = 6.95, df = 1 (P = 0.008); I² = 86%
Test for overall effect: Z = 1.59 (P = 0.11)

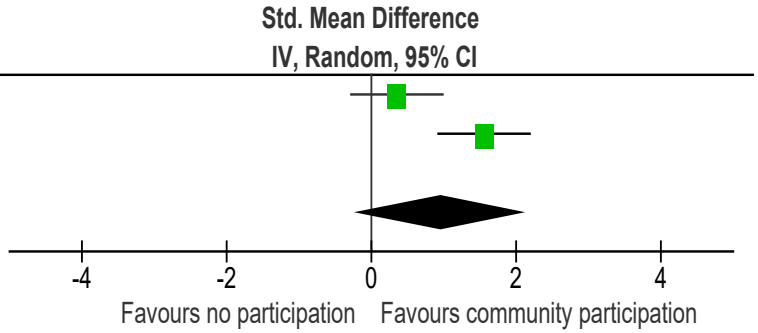


Figure 54: Activities of daily living (Barthel index, Korean modified Barthel index, Functional Independence Measure [different scale ranges], higher values are better, final values) at <6 months

Study or Subgroup	Community participation Mean	SD	Total	No participation Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Ntsiea 2015	18.8	1.6	40	18.2	2.2	40	34.4%	0.31 [-0.13, 0.75]
Ostwald 2014	98.32	20.76	80	102.71	19.45	79	43.9%	-0.22 [-0.53, 0.09]
Song 2021	89.5	8.35	18	86.13	13.09	16	21.7%	0.30 [-0.37, 0.98]
Total (95% CI)			**138**			**135**	**100.0%**	**0.08 [-0.32, 0.47]**

Heterogeneity: Tau² = 0.07; Chi² = 4.52, df = 2 (P = 0.10); I² = 56%
Test for overall effect: Z = 0.38 (P = 0.70)

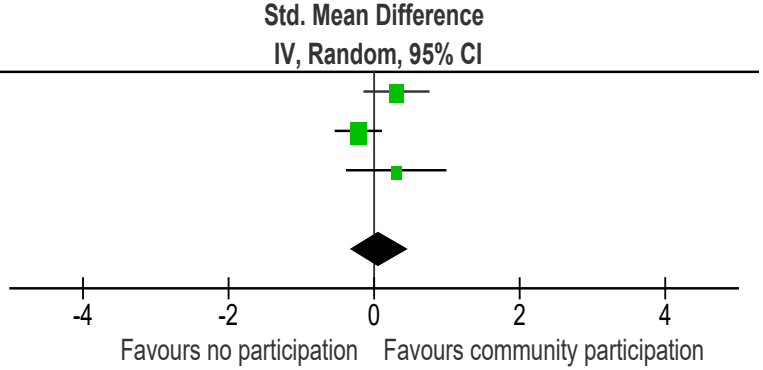


Figure 55: Activities of daily living (Canadian Occupational Performance Measure - Performance subscale, 0-10, higher values are better, final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Adamit 2021	6.2	2.4	33	4.7	2.3	33	40.8%	1.50 [0.37, 2.63]
Ahn 2019	4.7	0.6	23	4.5	0.4	20	59.2%	0.20 [-0.10, 0.50]
Total (95% CI)			**56**			**53**	**100.0%**	**0.73 [-0.52, 1.98]**

Heterogeneity: Tau² = 0.67; Chi² = 4.71, df = 1 (P = 0.03); I² = 79%
Test for overall effect: Z = 1.14 (P = 0.25)

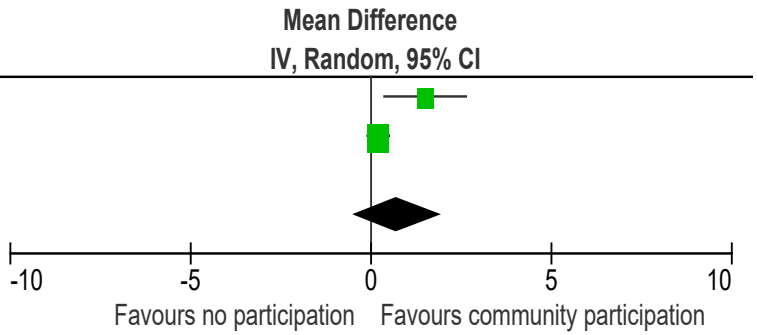


Figure 56: Activities of daily living (Canadian Occupational Performance Measure - Satisfaction subscale, 0-10, higher values are better, final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Adamit 2021	6.4	2.6	33	4.4	2.5	33	46.8%	2.00 [0.77, 3.23]
Ahn 2019	4.2	0.5	23	4.6	0.5	20	53.2%	-0.40 [-0.70, -0.10]
Total (95% CI)			**56**			**53**	**100.0%**	**0.72 [-1.62, 3.07]**

Heterogeneity: Tau² = 2.67; Chi² = 13.79, df = 1 (P = 0.0002); I² = 93%
Test for overall effect: Z = 0.60 (P = 0.55)

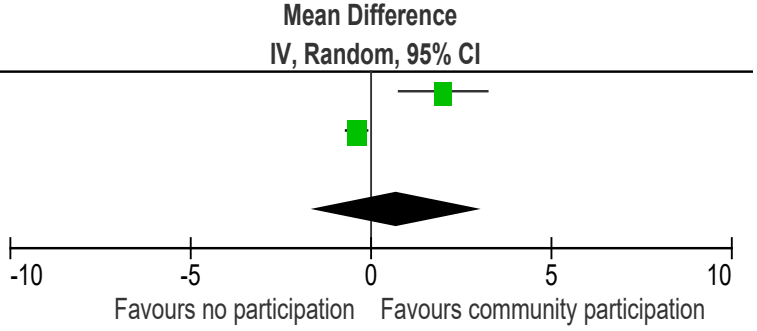


Figure 57: Activities of daily living (Nottingham Activities of Daily Living - Domestic subscale, scale range unclear, higher values are better, final value) at <6 months

Study or Subgroup	Community participation Mean	SD	Total	No participation Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Drummond 1996	4.81	4.78	21	4.34	3.92	44	0.47 [-1.88, 2.82]

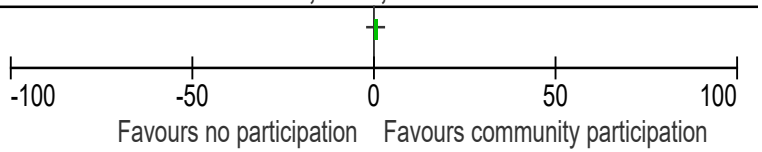


Figure 58: Activities of daily living (Nottingham Activities of Daily Living - Kitchen subscale, scale range unclear, higher values are better, final value) at <6 months

Study or Subgroup	Community participation Mean	SD	Total	No participation Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Drummond 1996	10.43	4.18	21	8.88	5.46	44	1.55 [-0.86, 3.96]

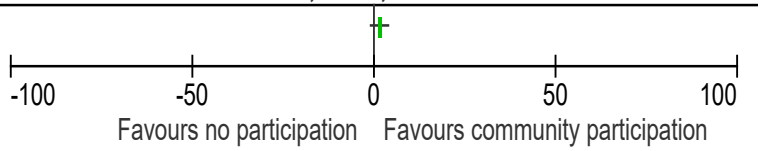


Figure 59: Activities of daily living (Nottingham Activities of Daily Living - Leisure subscale, scale range unclear, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Drummond 1996	8.86	3.99	21	6.83	2.63	44	2.03 [0.15, 3.91]	

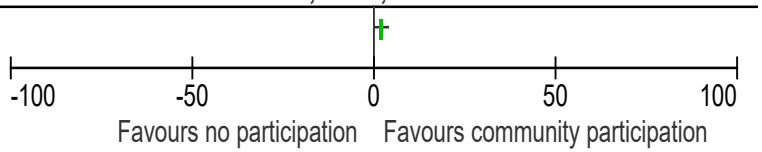


Figure 60: Activities of daily living (Nottingham Activities of Daily Living - Mobility subscale, scale range unclear, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Drummond 1996	10.67	5.21	21	6.54	4.89	44	4.13 [1.47, 6.79]	

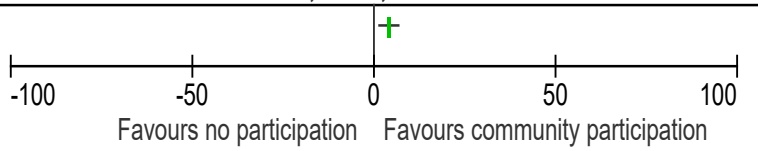


Figure 61: Activities of daily living (Barthel index, 0-20, higher values are better, change score) at ≥6 months

Study or Subgroup	Community participation Mean	SD	Total	No participation Mean	SD	Total	Mean Difference IV, Fixed, 95% CI
Ntsiea 2015	2.9	2.782804	40	3.6	2.403331	40	-0.70 [-1.84, 0.44]

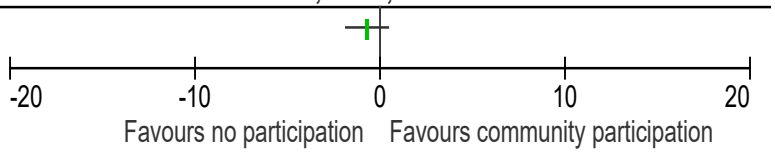


Figure 62: Activities of daily living (Korean modified Barthel index, Functional Independence Measure, Nottingham Extended Activities of Daily Living [different scale ranges], higher values are better, final values) at ≥6 months

Study or Subgroup	Std. Mean Difference	SE	Community participation Total	No participation Total	Weight	Std. Mean Difference IV, Fixed, 95% CI
Logan 2014	0.1292	0.0957	210	228	42.0%	0.13 [-0.06, 0.32]
Ostwald 2014	-0.2091	0.1591	80	79	15.2%	-0.21 [-0.52, 0.10]
Parker 2001	-0.053	0.0987	153	313	39.5%	-0.05 [-0.25, 0.14]
Song 2021	0.3047	0.3458	18	16	3.2%	0.30 [-0.37, 0.98]
Total (95% CI)			**461**	**636**	**100.0%**	**0.01 [-0.11, 0.13]**

Heterogeneity: Chi² = 4.58, df = 3 (P = 0.21); I² = 35%
Test for overall effect: Z = 0.18 (P = 0.85)

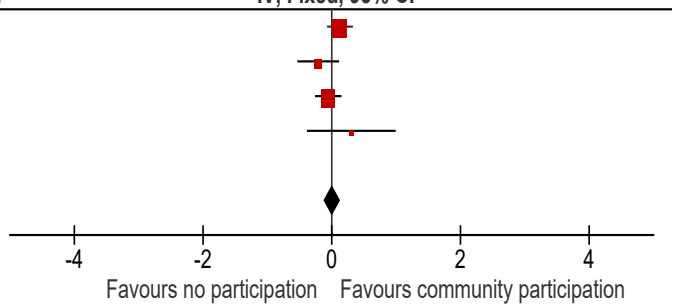


Figure 63: Activities of daily living (Communication Activities of Daily Living, 0-100, higher values are better, final value) at ≥6 months

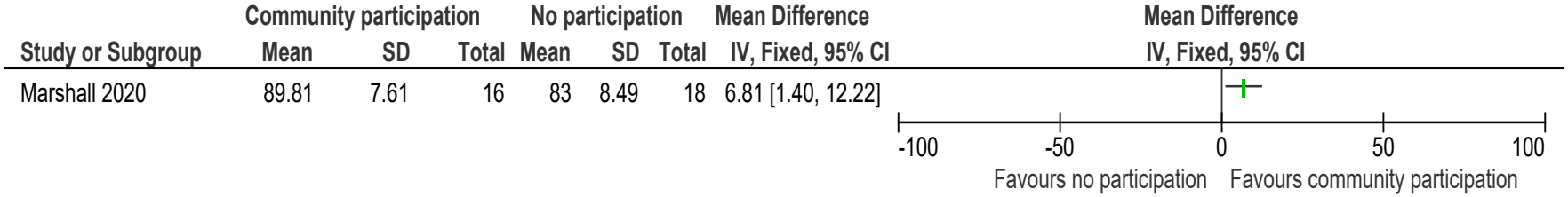


Figure 64: Activities of daily living (Canadian Occupational Performance Measure - Performance subscale, 0-10, higher values are better, change score) at ≥6 months

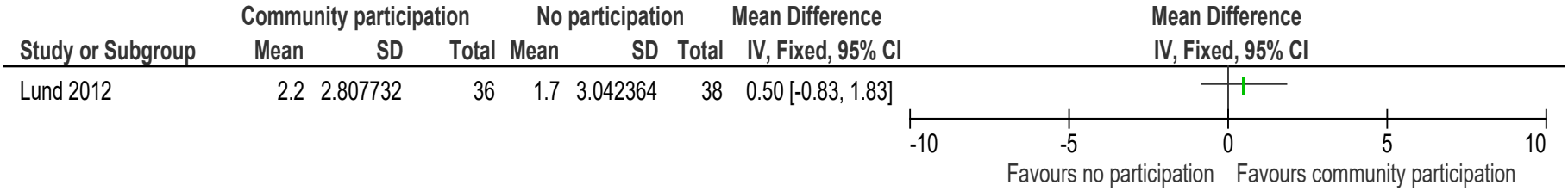


Figure 65: Activities of daily living (Canadian Occupational Performance Measure - Satisfaction subscale, 0-10, higher values are better, change score) at ≥6 months

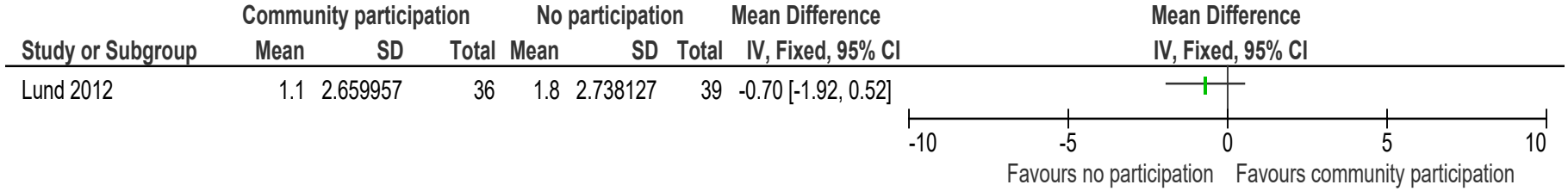


Figure 66: Activities of daily living (Nottingham Activities of Daily Living - Domestic subscale, scale range unclear, higher values are better, final value) at ≥6 months

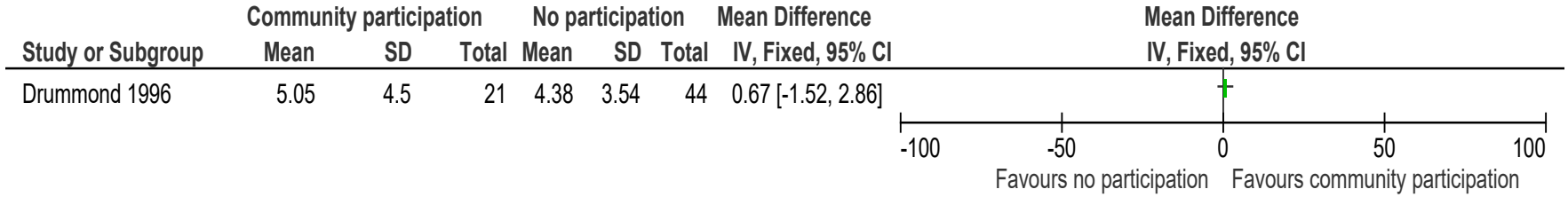


Figure 67: Activities of daily living (Nottingham Activities of Daily Living - Kitchen subscale, scale range unclear, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Drummond 1996	12.4	5.73	21	10.68	7.43	44	1.72 [-1.57, 5.01]	

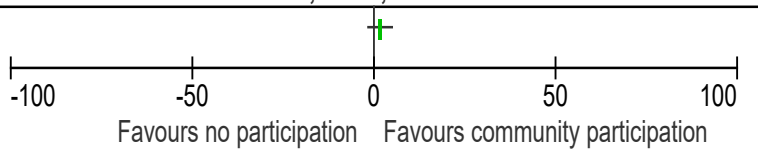


Figure 68: Activities of daily living (Nottingham Activities of Daily Living - Leisure subscale, scale range unclear, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Drummond 1996	10.2	3.25	21	6.9	3.53	44	3.30 [1.56, 5.04]	

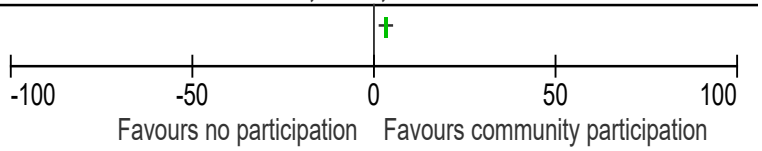


Figure 69: Activities of daily living (Nottingham Activities of Daily Living - Mobility subscale, scale range unclear, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Drummond 1996	12.3	4.49	21	7.5	5.43	44	4.80 [2.30, 7.30]

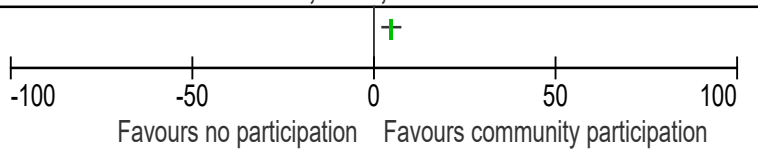


Figure 70: Stroke-specific Patient-Reported Outcome Measures (SAQoL, SS-SIP30, Preference-based Stroke Index [different scale ranges], higher values are better, change scores) at <6 months

	Community participation			No participation			Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Desrosiers 2007	1.2	3.128453	29	1.4	2.654285	27	21.4%	-0.07 [-0.59, 0.46]
Marsden 2016	-0.1	0.5	10	0.1	0.3	10	7.4%	-0.46 [-1.36, 0.43]
Mayo 2015	2.9	11.5	93	1.7	9.6	93	71.2%	0.11 [-0.17, 0.40]
Total (95% CI)			**132**			**130**	**100.0%**	**0.03 [-0.21, 0.27]**

Heterogeneity: Chi² = 1.64, df = 2 (P = 0.44); I² = 0%
Test for overall effect: Z = 0.25 (P = 0.80)

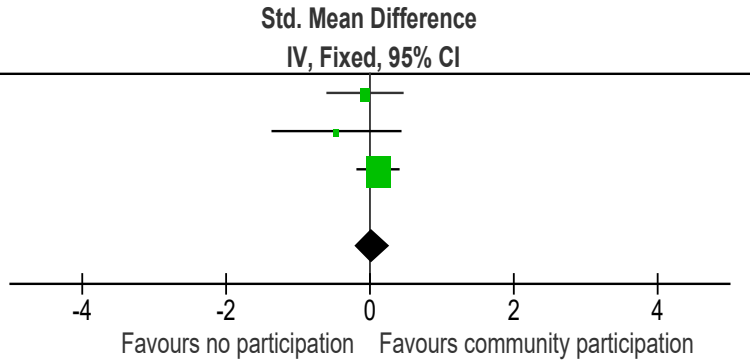


Figure 71: Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life, Sickness Impact Profile [different scale ranges], higher values are better, final values) at <6 months

	Community participation			No participation				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Nour 2002	-26.2	2.2	6	-18.4	2.6	7	4.3%	-2.99 [-4.75, -1.23]
Ntsiea 2015	215.5	19.8	40	208.9	27.1	40	68.6%	0.28 [-0.17, 0.72]
Schmid 2012	35.8	9.1	37	33	6.2	10	27.0%	0.32 [-0.38, 1.02]
Total (95% CI)			**83**			**57**	**100.0%**	**0.15 [-0.22, 0.51]**

Heterogeneity: Chi² = 12.82, df = 2 (P = 0.002); I² = 84%
Test for overall effect: Z = 0.79 (P = 0.43)

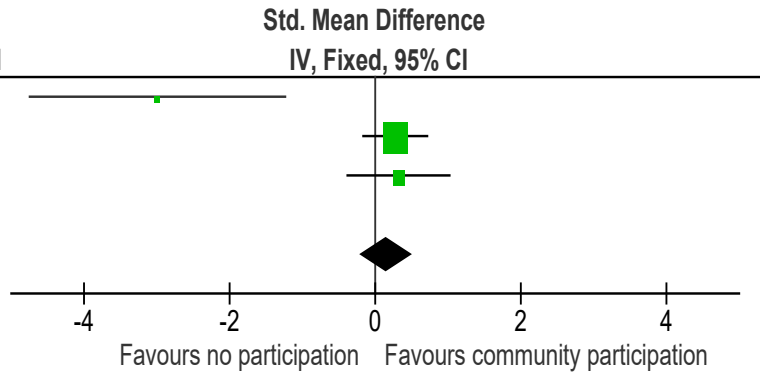


Figure 72: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Communication subscale, 0-100, higher values are better, change scores and final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Immink 2014	88	10.6	11	86.6	15	11	19.4%	1.40 [-9.45, 12.25]
Moore 2015	1	11.43177	20	-1	14.4303	20	24.6%	2.00 [-6.07, 10.07]
Ostwald 2014	83.47	22.03	80	87.44	21.4	79	27.3%	-3.97 [-10.72, 2.78]
Wang 2015	8	15.14125	25	-2.3	3.466129	26	28.7%	10.30 [4.22, 16.38]
Total (95% CI)			**136**			**136**	**100.0%**	**2.64 [-4.29, 9.56]**

Heterogeneity: Tau² = 33.86; Chi² = 9.76, df = 3 (P = 0.02); I² = 69%
Test for overall effect: Z = 0.75 (P = 0.46)

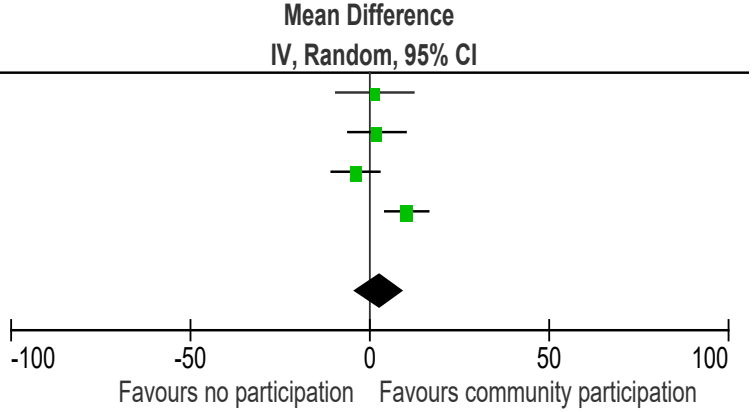


Figure 73: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Emotion/Mood subscale, 0-100, higher values are better, change scores and final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Immink 2014	74.3	15	11	67.5	21.2	11	15.6%	6.80 [-8.55, 22.15]
Moore 2015	10	17.61042	20	-1	8.38556	20	26.0%	11.00 [2.45, 19.55]
Ostwald 2014	77.15	18.6	80	82.1	15.64	79	31.8%	-4.95 [-10.29, 0.39]
Wang 2015	0.07	19.98645	25	-1	6.437098	26	26.6%	1.07 [-7.15, 9.29]
Total (95% CI)			**136**			**136**	**100.0%**	**2.63 [-5.34, 10.61]**

Heterogeneity: Tau² = 44.70; Chi² = 10.46, df = 3 (P = 0.02); I² = 71%
Test for overall effect: Z = 0.65 (P = 0.52)

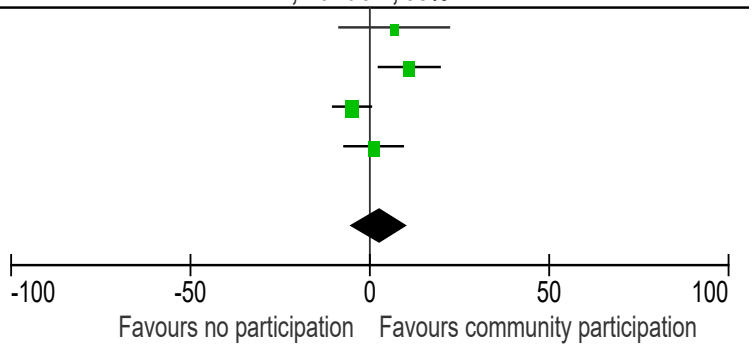


Figure 74: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Memory subscale, 0-100, higher values are better, change scores and final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Immink 2014	87.5	11	11	72.2	21	11	18.3%	15.30 [1.29, 29.31]
Moore 2015	0	0.0001	20	3	20.46721	20	25.5%	-3.00 [-11.97, 5.97]
Ostwald 2014	76.53	22.66	80	84.38	18.66	79	29.4%	-7.85 [-14.30, -1.40]
Wang 2015	2.6	19.74419	25	-1.8	6.437098	26	26.8%	4.40 [-3.73, 12.53]
Total (95% CI)			**136**			**136**	**100.0%**	**0.91 [-7.75, 9.56]**

Heterogeneity: Tau² = 55.52; Chi² = 11.38, df = 3 (P = 0.010); I² = 74%
Test for overall effect: Z = 0.21 (P = 0.84)

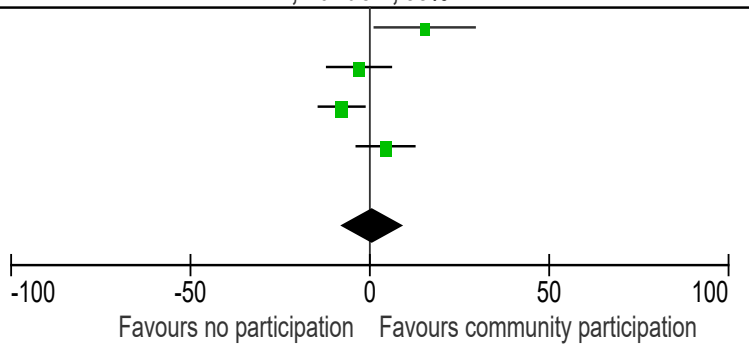


Figure 75: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Physical subscale, 0-100, higher values are better, final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Immink 2014	64.4	20	11	72.2	21	11	13.1%	-7.80 [-24.94, 9.34]
Ostwald 2014	59.08	22.53	80	67.47	20.3	79	86.9%	-8.39 [-15.05, -1.73]
Total (95% CI)			**91**			**90**	**100.0%**	**-8.31 [-14.52, -2.10]**

Heterogeneity: Chi² = 0.00, df = 1 (P = 0.95); I² = 0%
Test for overall effect: Z = 2.62 (P = 0.009)

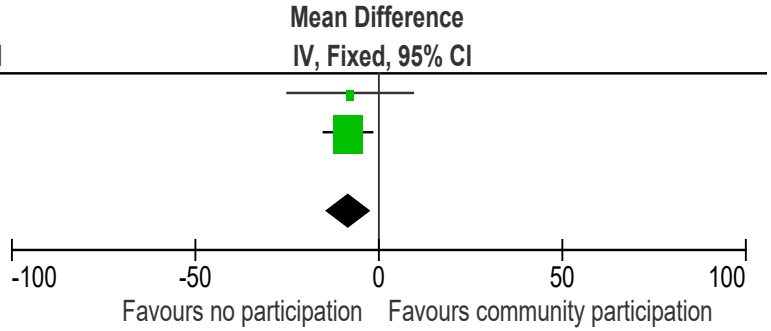


Figure 76: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Strength subscale, 0-100, higher values are better, change scores) at <6 months

	Community participation			No participation				Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Moore 2015	5	10.14227	20	5	18.02992	20	45.6%	0.00 [-9.07, 9.07]	
Wang 2015	15.5	8.236839	25	1.4	5.818146	26	54.4%	14.10 [10.17, 18.03]	
Total (95% CI)			**45**			**46**	**100.0%**	**7.67 [-6.10, 21.43]**	

Heterogeneity: Tau² = 86.70; Chi² = 7.82, df = 1 (P = 0.005); I² = 87%
Test for overall effect: Z = 1.09 (P = 0.28)

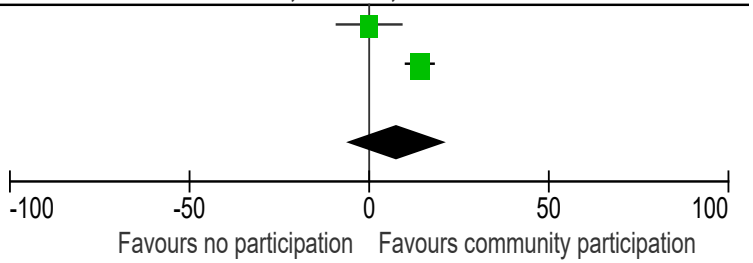


Figure 77: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Hand function subscale, 0-100, higher values are better, change scores) at <6 months

	Community participation			No participation				Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Moore 2015	3	8.477062	20	7	16.30473	20	52.0%	-4.00 [-12.05, 4.05]	
Wang 2015	12.5	27.8599	25	-3.7	7.551211	26	48.0%	16.20 [4.90, 27.50]	
Total (95% CI)			**45**			**46**	**100.0%**	**5.70 [-14.08, 25.47]**	

Heterogeneity: Tau² = 178.96; Chi² = 8.14, df = 1 (P = 0.004); I² = 88%
Test for overall effect: Z = 0.56 (P = 0.57)

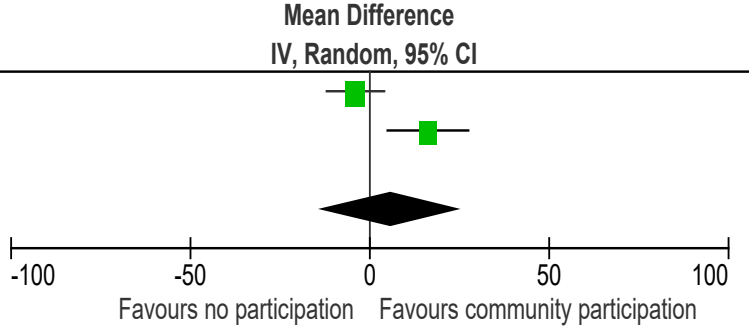


Figure 78: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Mobility/Community mobility subscale, 0-100, higher values are better, change scores) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Moore 2015	5	12.08993	20	1	5.194417	20	52.2%	4.00 [-1.77, 9.77]
Wang 2015	14.2	17.68498	25	-0.5	5.570565	26	47.8%	14.70 [7.44, 21.96]
Total (95% CI)			**45**			**46**	**100.0%**	**9.11 [-1.36, 19.59]**

Heterogeneity: Tau² = 46.06; Chi² = 5.12, df = 1 (P = 0.02); I² = 80%
Test for overall effect: Z = 1.71 (P = 0.09)

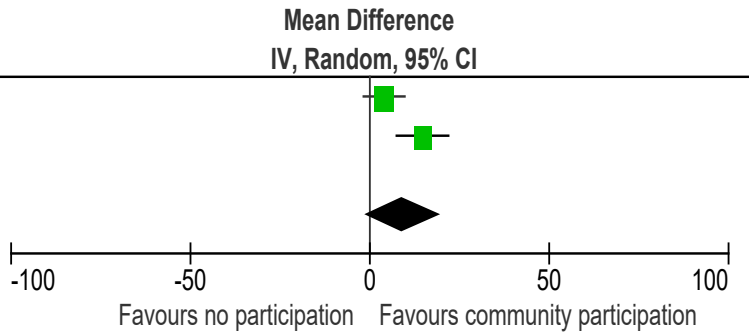


Figure 79: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Activities of daily living subscale, 0-100, higher values are better, change scores) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI
Moore 2015	3	16.27622	20	0	0.00001	20	47.7%	3.00 [-4.13, 10.13]
Wang 2015	8.7	16.47368	25	-0.2	5.694356	26	52.3%	8.90 [2.08, 15.72]
Total (95% CI)			**45**			**46**	**100.0%**	**6.08 [1.15, 11.01]**

Heterogeneity: Chi² = 1.37, df = 1 (P = 0.24); I² = 27%
Test for overall effect: Z = 2.42 (P = 0.02)

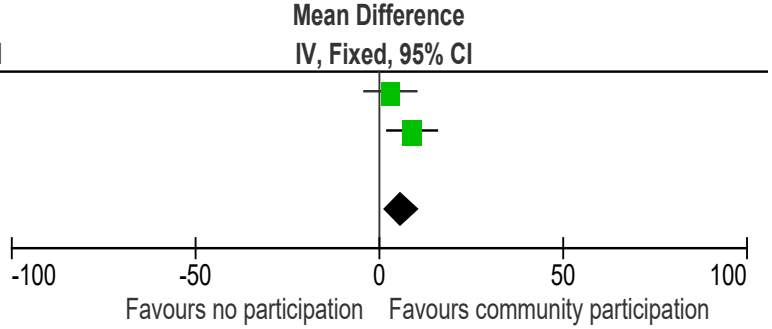


Figure 80: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Social participation subscale, 0-100, higher values are better, change scores and final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Immink 2014	70.6	24.5	11	54.5	30	11	9.5%	16.10 [-6.79, 38.99]
Kim 2014	12.49	10.17	11	4.25	3.77	11	25.1%	8.24 [1.83, 14.65]
Moore 2015	4	27.96353	20	0	0.00001	20	18.3%	4.00 [-8.26, 16.26]
Ostwald 2014	60.24	24.98	80	68.28	21.27	79	24.2%	-8.04 [-15.25, -0.83]
Wang 2015	11.4	20.5921	25	0.5	5.446775	26	22.9%	10.90 [2.56, 19.24]
Total (95% CI)			**147**			**147**	**100.0%**	**4.87 [-3.69, 13.44]**

Heterogeneity: Tau² = 65.30; Chi² = 16.10, df = 4 (P = 0.003); I² = 75%

Test for overall effect: Z = 1.12 (P = 0.26)

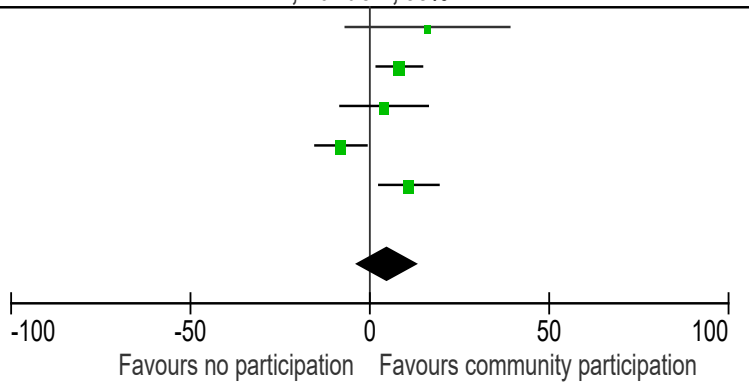


Figure 81: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Stroke recovery/general recovery subscale, 0-100, higher values are better, change scores and final values) at <6 months

	Community participation			No participation				Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Immink 2014	65	22.6	11	63	24.5	11	18.5%	2.00 [-17.70, 21.70]
Moore 2015	13	20.32125	20	3	7.759038	20	26.1%	10.00 [0.47, 19.53]
Ostwald 2014	56.71	22.8	80	64.93	20.43	79	27.8%	-8.22 [-14.95, -1.49]
Wang 2015	17.2	17.44272	25	0.2	4.704033	26	27.6%	17.00 [9.93, 24.07]
Total (95% CI)			**136**			**136**	**100.0%**	**5.38 [-8.44, 19.21]**

Heterogeneity: Tau² = 167.20; Chi² = 27.04, df = 3 (P < 0.00001); I² = 89%
Test for overall effect: Z = 0.76 (P = 0.45)

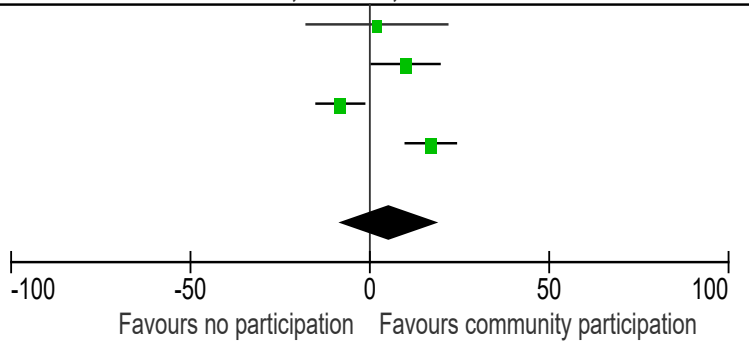


Figure 82: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Energy subscale, 3-15, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	9.56	2.85	18	10	3.08	16	-0.44 [-2.44, 1.56]

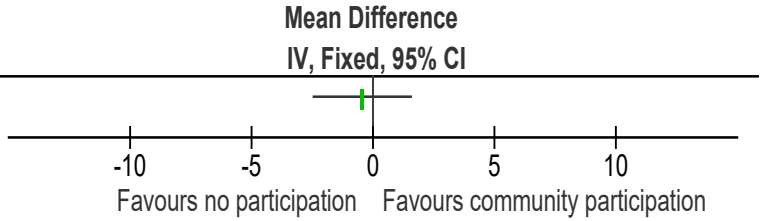


Figure 83: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Family roles subscale, 3-15, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Song 2021	10.44	3.24	18	9.56	3.1	16	0.88 [-1.25, 3.01]	

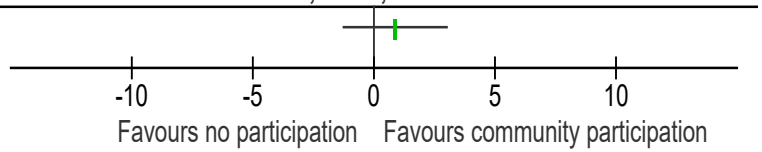


Figure 84: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Language subscale, 5-25, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Song 2021	19.72	3.64	18	17.25	5.78	16	2.47 [-0.82, 5.76]	

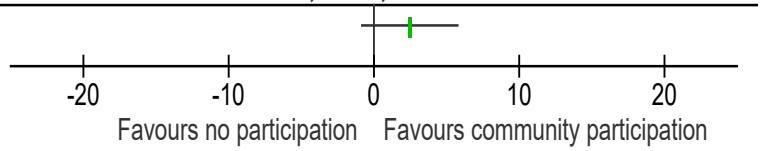


Figure 85: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mobility subscale, 6-30, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	21.89	4.56	18	18.81	6.31	16	3.08 [-0.66, 6.82]

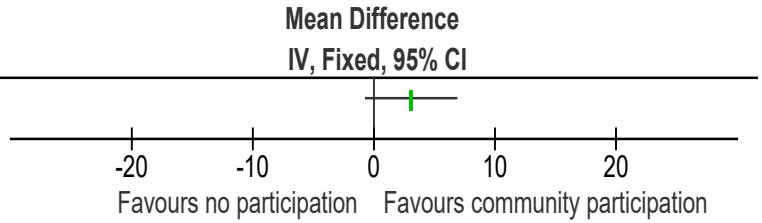


Figure 86: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mood subscale, 5-25, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	17.56	4.37	18	15.69	3.63	16	1.87 [-0.82, 4.56]

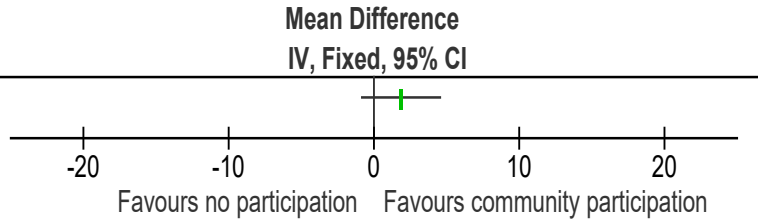


Figure 87: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Personality subscale, 3-15, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	9.89	3.01	18	9.69	3.96	16	0.20 [-2.19, 2.59]

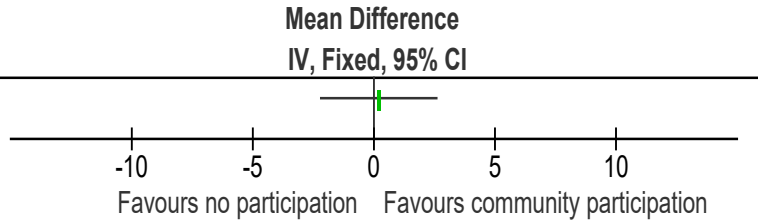


Figure 88: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Self-care subscale, 5-25, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	12.56	3.15	18	12.06	3.62	16	0.50 [-1.79, 2.79]

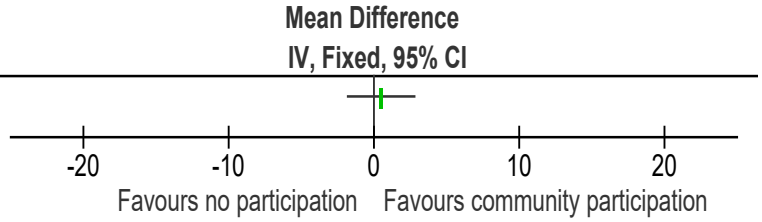


Figure 89: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Social roles subscale, 5-25, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	14.28	4.04	18	14.63	5.51	16	-0.35 [-3.63, 2.93]

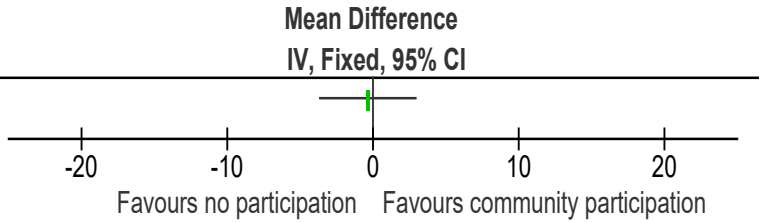


Figure 90: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Thinking subscale, 3-15, higher values are better, final value) at <6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	10.44	2.87	18	9.38	2.47	16	1.06 [-0.74, 2.86]

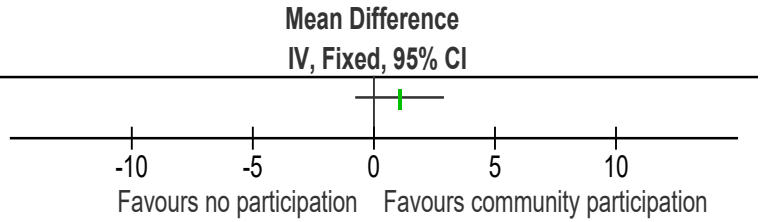


Figure 91: Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life, 0-245, higher values are better, change score) at ≥6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Ntsiea 2015	44.3	31.18006	40	51.8	53.75872	40	-7.50 [-26.76, 11.76]

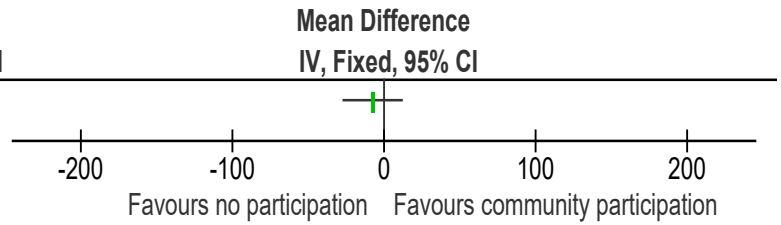


Figure 92: Stroke-specific Patient-Reported Outcome Measures (Stroke and Aphasia Quality of Life-39, Stroke specific Quality of Life, Stroke Impact Scale [different scale ranges], higher values are better, final values) at ≥6 months

	Community participation			No participation				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Marshall 2020	3.73	0.72	16	3.35	0.65	18	32.6%	0.54 [-0.14, 1.23]
Stark 2018	39	28.81	9	60	14.14	6	19.4%	-0.82 [-1.90, 0.27]
Tielemans 2015	3.8	0.8	58	3.5	0.9	55	48.0%	0.35 [-0.02, 0.72]
Total (95% CI)			**83**			**79**	**100.0%**	**0.19 [-0.40, 0.77]**

Heterogeneity: Tau² = 0.15; Chi² = 4.59, df = 2 (P = 0.10); I² = 56%
Test for overall effect: Z = 0.63 (P = 0.53)

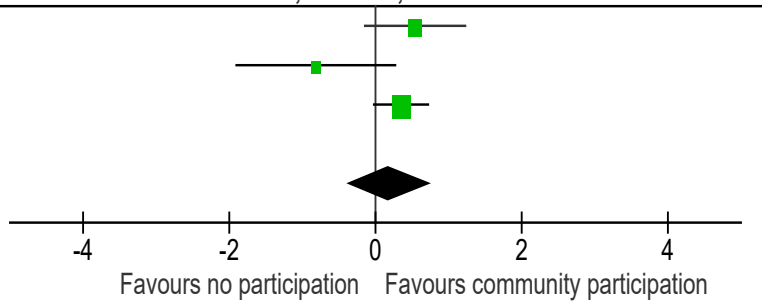


Figure 93: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Communication subscale, 0-100, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Ostwald 2014	85.25	21.16	80	92.05	14.26	79	-6.80 [-12.40, -1.20]	

Figure 94: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Emotion/Mood subscale, 0-100, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Ostwald 2014	79.03	16.15	80	82.77	16.69	79	-3.74 [-8.85, 1.37]	

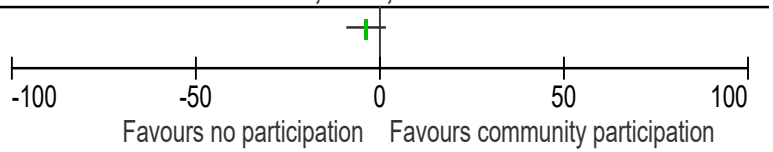


Figure 95: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Memory subscale, 0-100, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Ostwald 2014	83	18.95	80	87.43	16.38	79	-4.43 [-9.93, 1.07]	

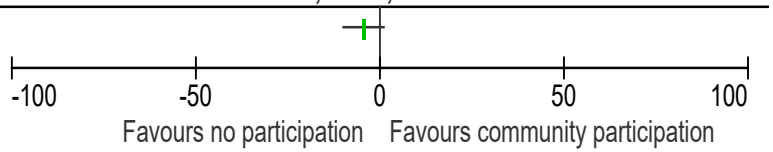


Figure 96: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Physical subscale, 0-100, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Ostwald 2014	65.64	23.46	80	72.86	22.56	79	-7.22 [-14.37, -0.07]	

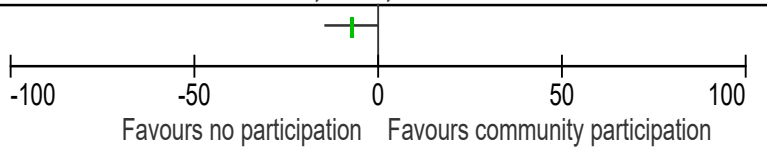


Figure 97: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Social participation subscale, 0-100, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Ostwald 2014	69.32	22.52	80	76.25	18.74	79	-6.93 [-13.37, -0.49]	

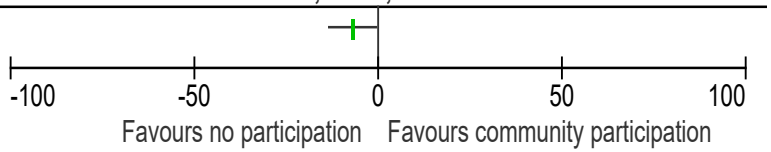


Figure 98: Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Stroke recovery/general recovery subscale, 0-100, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Ostwald 2014	68.41	19.24	80	73.84	20.46	79	-5.43 [-11.61, 0.75]	

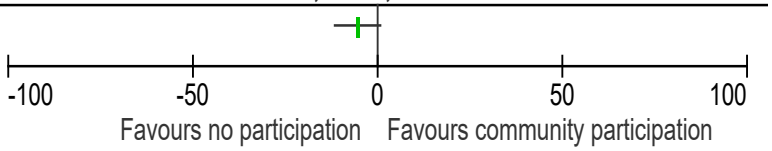


Figure 99: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Energy subscale, 3-15, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	9	2.28	18	9	2.92	16	0.00 [-1.78, 1.78]

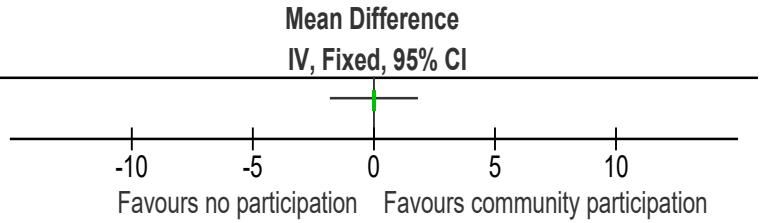


Figure 100: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Family roles subscale, 3-15, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	10.22	3.42	18	9.88	3.05	16	0.34 [-1.83, 2.51]

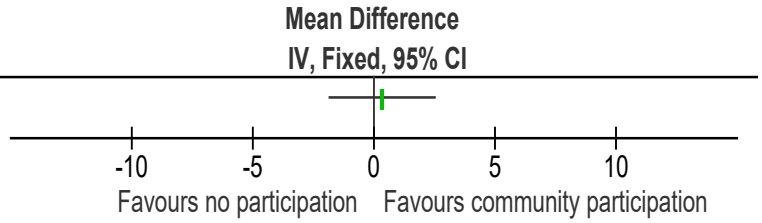


Figure 101: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Language subscale, 5-25, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Song 2021	18.67	4.46	18	16.69	4.67	16	1.98 [-1.10, 5.06]	

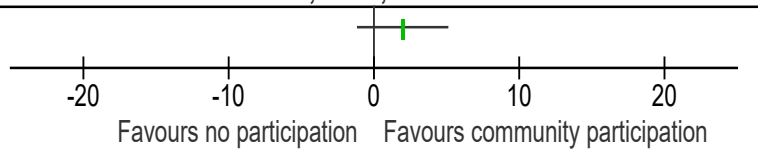


Figure 102: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mobility subscale, 6-30, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Song 2021	20.72	4.97	18	17.38	6.41	16	3.34 [-0.55, 7.23]	

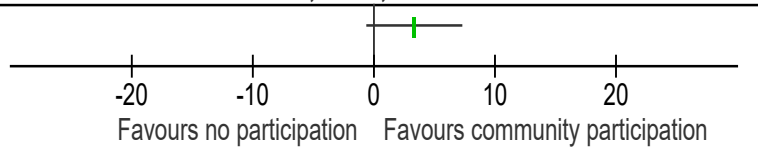


Figure 103: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mood subscale, 5-25, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Song 2021	17.78	4.7	18	14.69	3.94	16	3.09 [0.18, 6.00]	

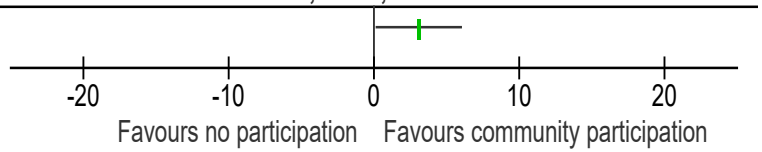


Figure 104: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Personality subscale, 3-15, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Song 2021	11.17	3.24	18	10.38	3.38	16	0.79 [-1.44, 3.02]	

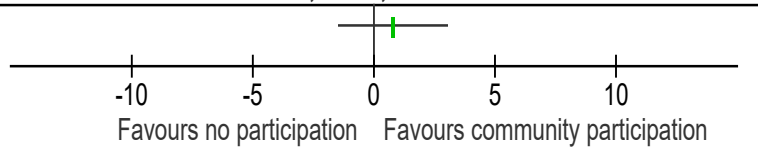


Figure 105: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Self-care subscale, 5-25, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	18.78	5.06	18	16	3.93	16	2.78 [-0.25, 5.81]

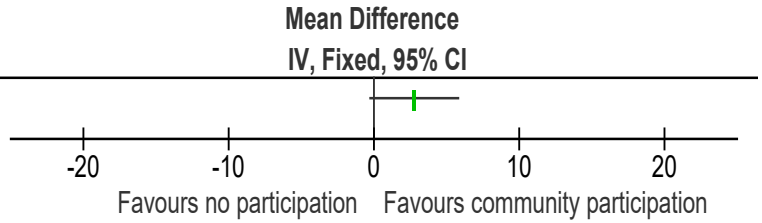


Figure 106: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Social roles subscale, 5-25, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	16.11	5.09	18	15.19	4.13	16	0.92 [-2.18, 4.02]

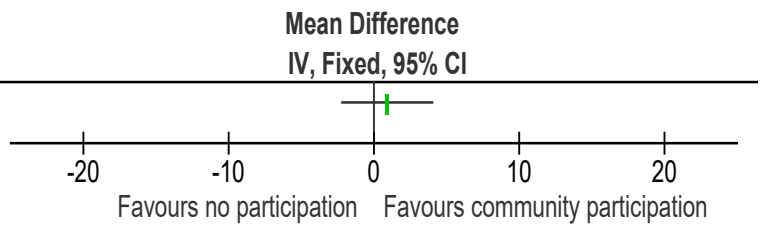


Figure 107: Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Thinking subscale, 3-15, higher values are better, final value) at ≥6 months

	Community participation			No participation			Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	IV, Fixed, 95% CI
Song 2021	11.33	2.74	18	9.06	2.64	16	2.27 [0.46, 4.08]

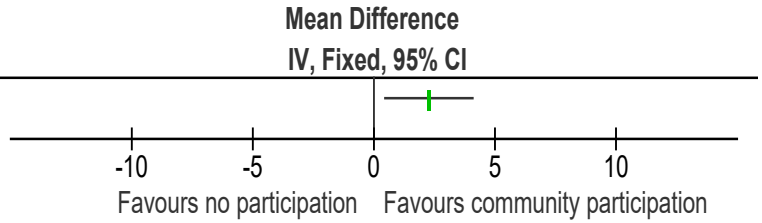


Figure 108: Discontinuation at <6 months

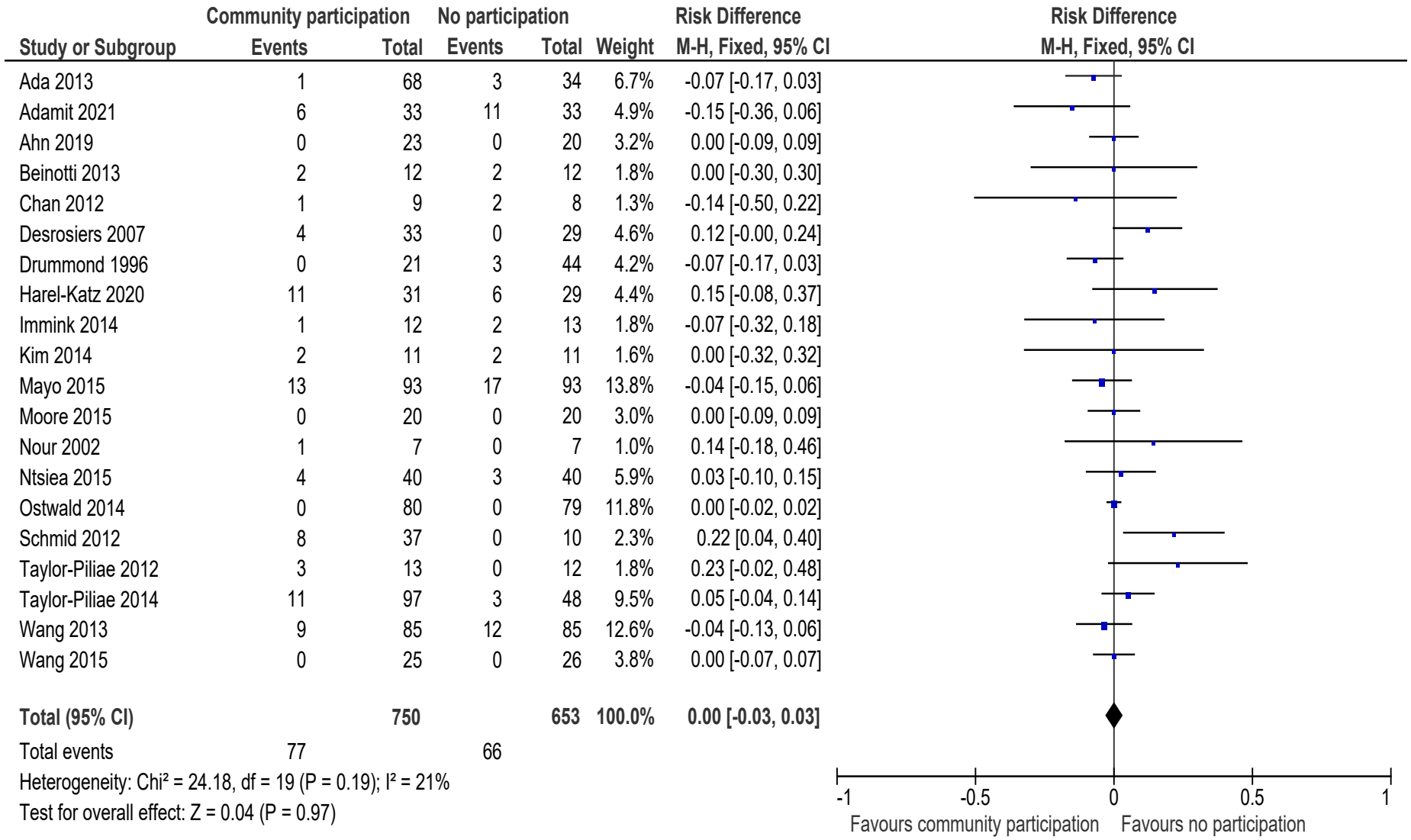
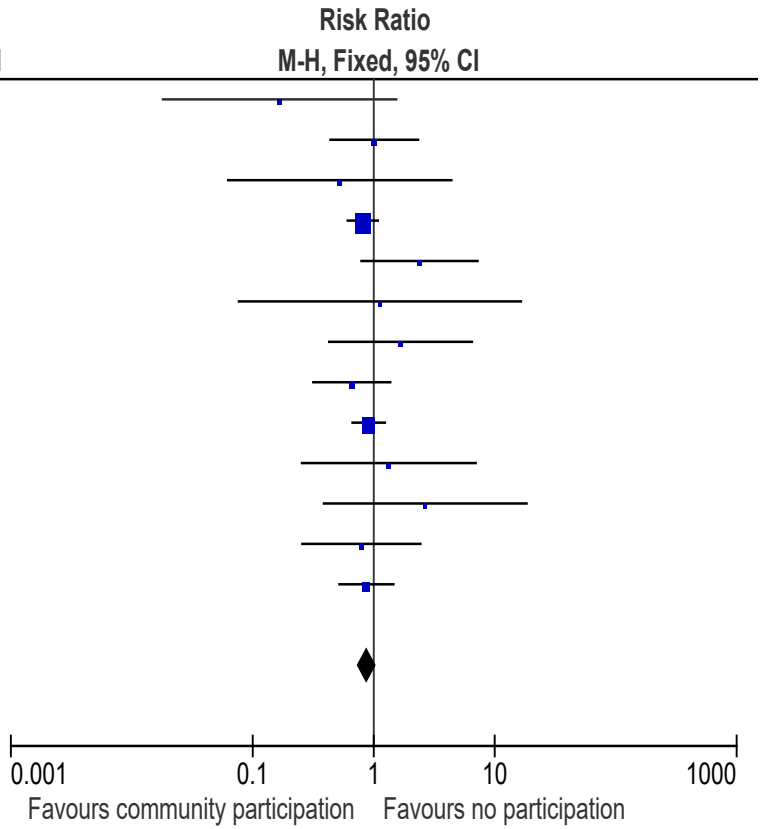


Figure 109: Discontinuation at ≥6 months

Study or Subgroup	Community participation Events	Total	No participation Events	Total	Weight	Risk Ratio M-H, Fixed, 95% CI
Ada 2013	1	68	3	34	1.9%	0.17 [0.02, 1.54]
Cadilhac 2011	14	95	7	48	4.5%	1.01 [0.44, 2.34]
Drummond 1996	1	21	4	44	1.2%	0.52 [0.06, 4.40]
Logan 2014	63	287	76	281	36.9%	0.81 [0.61, 1.09]
Lund 2012	9	48	4	51	1.9%	2.39 [0.79, 7.25]
Marshall 2020	1	16	1	18	0.5%	1.13 [0.08, 16.55]
Ntsiea 2015	5	40	3	40	1.4%	1.67 [0.43, 6.51]
Ostwald 2014	10	80	15	79	7.2%	0.66 [0.31, 1.38]
Parker 2001	40	145	95	313	28.9%	0.91 [0.66, 1.24]
Song 2021	3	18	2	16	1.0%	1.33 [0.25, 7.00]
Stark 2018	4	9	1	6	0.6%	2.67 [0.39, 18.42]
Tielemans 2015	5	58	6	55	3.0%	0.79 [0.26, 2.44]
Wang 2013	20	85	23	85	11.0%	0.87 [0.52, 1.46]
Total (95% CI)		**970**		**1070**	**100.0%**	**0.89 [0.74, 1.06]**
Total events	176		240			

Heterogeneity: Chi² = 8.95, df = 12 (P = 0.71); I² = 0%

Test for overall effect: Z = 1.35 (P = 0.18)



Appendix F – GRADE tables

Table 8: Clinical evidence profile: community participation interventions compared to other community participation interventions

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation interventions	other types of community participation interventions	Relative (95% CI)	Absolute (95% CI)		
Person/participant generic health-related quality of life (EQ-5D VAS, 0-100, higher values are better, change score) at <6 months (follow-up: 4 months)												
1	randomised trials	serious[a]	not serious	not serious	serious[b]	none	34	34	-	MD **11 higher** (1.49 higher to 20.51 higher)	⨁⨁◯◯ Low	CRITICAL
Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	very serious[c]	not serious	not serious	serious[b]	none	53	44	-	MD **0.5 lower** (4.18 lower to 3.18 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 mental component summary, 0-100, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	very serious[c]	not serious	not serious	serious[b]	none	53	44	-	MD **1.2 lower** (5.02 lower to 2.62 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (EQ-5D VAS, AQoL [different scale ranges], higher values are better, change scores) at ≥6 months (follow-up: mean 9 months)												
2	randomised trials	not serious	very serious[d]	serious[e]	serious[b]	none	82	81	-	SMD **0.77 SD higher** (0.13 higher to 1.41 higher)	⨁◯◯◯ Very low	CRITICAL
Participation in leisure activities/social groups (Adelaide Activities Profile, 0-63, higher values are better, change score) at <6 months (follow-up: 4 months)												
1	randomised trials	serious[a]	not serious	not serious	not serious	none	34	34	-	MD **0** (3.1 lower to 3.1 higher)	⨁⨁⨁◯ Moderate	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation interventions	other types of community participation interventions	Relative (95% CI)	Absolute (95% CI)		
Participation in leisure activities/social groups (Adelaide Activities Profile, Health Education Impact Scale - Positive and active engagement in life domain [different scale ranges], higher values are better, change scores) at ≥6 months (follow-up: mean 9 months)												
2	randomised trials	not serious	very serious[d]	serious[e]	serious[b]	none	82	81	-	SMD **0.21 SD lower** (0.84 lower to 0.41 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological distress - Depression (CES-D, 0-60, lower values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	very serious[c]	not serious	not serious	serious[b]	none	53	44	-	MD **2.6 higher** (1.24 lower to 6.44 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological distress - Depression (Irritability, depression and anxiety scale - depression subscale, 0-20, lower values are better, change score) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	serious[e]	serious[b]	none	48	47	-	MD **0.1 lower** (0.24 lower to 0.03 higher)	⨁⨁◯◯ Low	CRITICAL
Psychological distress - Anxiety (Irritability, depression and anxiety scale - anxiety subscale, 0-20, lower values are better, change score) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	serious[e]	serious[b]	none	48	47	-	MD **0.1 lower** (0.24 lower to 0.03 higher)	⨁⨁◯◯ Low	CRITICAL
Discontinuation at <6 months (follow-up: mean 14 weeks)												
2	randomised trials	serious[a]	serious[f]	not serious	very serious[b]	none	5/87 (5.7%)	7/78 (9.0%)	**RR 0.63** (0.22 to 1.78)	**33 fewer per 1,000** (from 70 fewer to 70 more)	⨁◯◯◯ Very low	CRITICAL
Discontinuation at ≥6 months (follow-up: mean 9 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation interventions	other types of community participation interventions	Relative (95% CI)	Absolute (95% CI)		
2	randomised trials	not serious	serious[f]	not serious	very serious[b]	none	7/82 (8.5%)	8/81 (9.9%)	**RR 0.87** (0.35 to 2.16)	**13 fewer per 1,000** (from 64 fewer to 115 more)	⨁◯◯◯ Very low	CRITICAL

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

Explanations

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

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 interventions and bias in measurement of the outcome)

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

e. Downgraded by 1 increment due to intervention indirectness (home-based program where community participation after the intervention is unclear)

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

Table 9: Clinical evidence profile: community participation interventions compared to no participation

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		

Person/participant generic health-related quality of life (EQ-5D-3L, -0.11-1, higher values are better, final values) at <6 months (follow-up: 3 months)

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[a]	not serious	serious[b]	very serious[c]	none	58	55	-	MD **0.02 higher** (0.05 lower to 0.09 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (EQ-5D VAS, 0-100, higher values are better, change scores) at <6 months (follow-up: mean 14 weeks)												
2	randomised trials	very serious[d]	serious[e]	not serious	serious[c]	none	157	127	-	MD **4.13 higher** (2.51 lower to 10.78 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 physical component summary, 0-100, higher values are better, final values) at <6 months (follow-up: mean 12 weeks)												
2	randomised trials	very serious[f]	not serious	not serious	serious[c]	none	110	60	-	MD **1.87 higher** (0.71 lower to 4.46 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 mental component summary, 0-100, higher values are better, final values) at <6 months (follow-up: mean 12 weeks)												
2	randomised trials	very serious[f]	not serious	not serious	serious[c]	none	110	60	-	MD **0.35 higher** (2.84 lower to 3.53 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 physical function, 0-100, higher values are better, final value) at <6 months (follow-up: 16 weeks)												
1	randomised trials	very serious[g]	not serious	not serious	very serious[c]	none	10	10	-	MD **11.5 higher** (6.89 lower to 29.89 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 bodily pain, 0-100, higher values are better, final value) at <6 months (follow-up: 16 weeks)												
1	randomised trials	very serious[g]	not serious	not serious	serious[c]	none	10	10	-	MD **21.3 higher** (0.86 higher to 41.74 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 role physical, 0-100, higher values are better, final value) at <6 months (follow-up: 16 weeks)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[g]	not serious	not serious	not serious	none	10	10	-	MD **25 higher** (3.06 higher to 46.94 higher)	⨁⨁◯◯ Low	CRITICAL
Person/participant generic health-related quality of life (SF-36 vitality, 0-100, higher values are better, final value) at <6 months (follow-up: 16 weeks)												
1	randomised trials	very serious[g]	not serious	not serious	serious[c]	none	10	10	-	MD **16.5 higher** (1.49 lower to 34.49 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 general health, 0-100, higher values are better, final value) at <6 months (follow-up: 16 weeks)												
1	randomised trials	very serious[g]	not serious	not serious	very serious[c]	none	10	10	-	MD **8.2 higher** (7.93 lower to 24.33 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 mental health, 0-100, higher values are better, final value) at <6 months (follow-up: 16 weeks)												
1	randomised trials	very serious[g]	not serious	not serious	serious[c]	none	10	10	-	MD **14.4 higher** (1.13 lower to 29.93 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 role emotional, 0-100, higher values are better, final value) at <6 months (follow-up: 16 weeks)												
1	randomised trials	very serious[g]	not serious	not serious	serious[c]	none	10	10	-	MD **26.7 higher** (1.13 higher to 52.27 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 social function, 0-100, higher values are better, final value) at <6 months (follow-up: 16 weeks)												
1	randomised trials	very serious[g]	not serious	not serious	not serious	none	10	10	-	MD **31.2 higher** (7.03 higher to 55.37 higher)	⨁⨁◯◯ Low	CRITICAL
Person/participant generic health-related quality of life (EQ-5D-3L, AQoL, -0.11-1, higher values are better, change scores and final value) at ≥6 months (follow-up: mean 9 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
3	randomised trials	not serious	not serious	serious[h]	not serious	none	371	306	-	MD **0.03 lower** (0.04 lower to 0.01 lower)	⨁⨁⨁◯ Moderate	CRITICAL
Person/participant generic health-related quality of life (EQ-5D VAS, Nottingham Health Profile, 0-100, higher values are better, change score and final value) at ≥6 months (follow-up: mean 9 months)												
2	randomised trials	very serious[i]	very serious[e]	not serious	serious[c]	none	89	78	-	MD **6.09 lower** (19.95 lower to 7.78 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 physical function, 0-100, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	very serious[c]	none	39	47	-	MD **1.2 higher** (6.46 lower to 8.86 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 bodily pain, 0-100, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	very serious[c]	none	39	47	-	MD **4.3 higher** (8.34 lower to 16.94 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 role physical, 0-100, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	very serious[c]	none	39	47	-	MD **8.9 lower** (25.85 lower to 8.05 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 vitality, 0-100, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	very serious[c]	none	39	47	-	MD **1.6 lower** (9.22 lower to 6.02 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 general health, 0-100, higher values are better, change score) at ≥6 months (follow-up: 9 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	very serious[i]	not serious	not serious	very serious[c]	none	39	47	-	MD **0.6 lower** (8.48 lower to 7.28 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 mental health, 0-100, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	very serious[c]	none	39	47	-	MD **1.9 higher** (4.84 lower to 8.64 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 role emotional, 0-100, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	very serious[c]	none	39	47	-	MD **13.6 higher** (6.05 lower to 33.25 higher)	⨁◯◯◯ Very low	CRITICAL
Person/participant generic health-related quality of life (SF-36 social function, 0-100, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	very serious[c]	none	39	47	-	MD **2.4 lower** (15.94 lower to 11.14 higher)	⨁◯◯◯ Very low	CRITICAL
Return to work at <6 months (follow-up: 3 months)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	11/40 (27.5%)	5/40 (12.5%)	**RR 2.20** (0.84 to 5.76)	**150 more per 1,000** (from 20 fewer to 595 more)	⨁⨁⨁◯ Moderate	CRITICAL
Return to work at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	not serious	none	24/40 (60.0%)	8/40 (20.0%)	**RR 3.00** (1.54 to 5.86)	**400 more per 1,000** (from 108 more to 972 more)	⨁⨁⨁⨁ High	CRITICAL
Wellbeing scores (General Well-Being Schedule, 0-110, higher values are better, change score) at <6 months (follow-up: 12 weeks)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	serious[k]	not serious	serious[h]	serious[c]	none	29	27	-	MD **2.2 higher** (5.44 lower to 9.84 higher)	⨁◯◯◯ Very low	CRITICAL
Wellbeing scores (Warwick Edinburgh Mental wellbeing scale, 14-70, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[c]	none	16	18	-	MD **4.75 higher** (2.84 lower to 12.34 higher)	⨁◯◯◯ Very low	CRITICAL
Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Adelaide Activities Profile [different scale ranges], higher values are better, change scores) at <6 months (follow-up: mean 13 weeks)												
3	randomised trials	very serious[f]	not serious	not serious	not serious	none	147	146	-	SMD **0.23 SD higher** (0 to 0.46 higher)	⨁⨁◯◯ Low	CRITICAL
Participation in leisure activities/social groups scores (number of different activities, higher values are better, change score) at <6 months (follow-up: 12 weeks)												
1	randomised trials	serious[k]	not serious	serious[h]	serious[c]	none	29	27	-	MD **2.9 higher** (1.09 higher to 4.71 higher)	⨁◯◯◯ Very low	CRITICAL
Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Total leisure score, Social participation scale [different scale ranges], higher values are better, final values) at <6 months (follow-up: mean 3 months)												
3	randomised trials	very serious[l]	very serious[e]	not serious	serious[c]	none	130	150	-	SMD **0.73 SD higher** (0.2 higher to 1.26 higher)	⨁◯◯◯ Very low	CRITICAL
Participation in leisure activities/social groups scores (Adelaide Activities Profile, Health Education Impact scale - positive and active engagement in life domain [different scale ranges], higher values are better, change scores) at ≥6 months (follow-up: mean 9 weeks)												
2	randomised trials	not serious	not serious	serious[h]	not serious	none	163	82	-	SMD **0.2 SD higher** (0.06 lower to 0.47 higher)	⨁⨁⨁◯ Moderate	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
Participation in leisure activities/social groups scores (Reintegration to Normal Living index, Nottingham Leisure Questionnaire, Social Connectedness Scale, Total leisure score, Social participation scale [different scale ranges], higher values are better, final values) at ≥6 months (follow-up: mean 8 months)												
5	randomised trials	very serious[l]	serious[e]	not serious	serious[c]	none	275	454	-	SMD **0.3 SD higher** (0.07 lower to 0.67 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological distress - Depression (PHQ-9, Stroke specific Geriatric Depression Scale, Geriatric Depression Scale 15, CES-D [different scale ranges], lower values are better, change scores) at <6 months (follow-up: 11 weeks)												
4	randomised trials	very serious[f]	not serious	not serious	not serious	none	140	136	-	SMD **0.23 SD lower** (0.46 lower to 0.01 higher)	⨁⨁◯◯ Low	CRITICAL
Psychological distress - Depression (HADS total score, Beck Depression Scale, Geriatric Depression Scale, CES-D [different scale ranges], lower values are better, final values) at <6 months (follow-up: mean 11 weeks)												
6	randomised trials	very serious[l]	serious[e]	serious[m]	not serious	none	265	212	-	SMD **0.02 SD lower** (0.33 lower to 0.28 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological distress - Depression (people with 'definite depression') at <6 months (follow-up: 3 months)												
1	randomised trials	very serious[n]	not serious	serious[o]	very serious[c]	none	4/21 (19.0%)	16/44 (36.4%)	**RR 0.52** (0.20 to 1.37)	**175 fewer per 1,000** (from 291 fewer to 135 more)	⨁◯◯◯ Very low	CRITICAL
Psychological distress - Depression (GHQ-12, HADS depression, Irritability, depression and anxiety scale depression subscale [different scale ranges], lower values are better, change scores) at ≥6 months (follow-up: mean 9 months)												
3	randomised trials	not serious	very serious[e]	not serious	not serious	none	342	323	-	SMD **0.35 SD higher** (0.19 higher to 0.5 higher)	⨁⨁◯◯ Low	CRITICAL
Psychological distress - Depression (GHQ, Geriatric Depression Scale [different scale ranges], lower values are better, final values) at ≥6 months (follow-up: mean 12 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
2	randomised trials	very serious[p]	not serious	serious[b]	serious[c]	none	233	392	-	SMD **0.1 SD higher** (0.44 lower to 0.63 higher)	⨁◯◯◯ Very low	CRITICAL
Psychological distress - Depression (people with 'definite depression') at ≥6 months (follow-up: 6 months)												
1	randomised trials	very serious[n]	not serious	serious[o]	very serious[c]	none	3/21 (14.3%)	15/44 (34.1%)	**RR 0.42** (0.14 to 1.29)	**198 fewer per 1,000** (from 293 fewer to 99 more)	⨁◯◯◯ Very low	CRITICAL
Psychological distress - Anxiety (State Trait Anxiety Inventory - State subscale, 20-80, lower values are better, change score and final value) at <6 months (follow-up: mean 8 weeks)												
2	randomised trials	serious[q]	not serious	not serious	serious[c]	none	19	17	-	MD **4.64 lower** (8.92 lower to 0.36 lower)	⨁⨁◯◯ Low	CRITICAL
Psychological distress - Anxiety (State Trait Anxiety Inventory - Trait subscale, 20-80, lower values are better, change score and final value) at <6 months (follow-up: mean 8 weeks)												
2	randomised trials	serious[q]	not serious	not serious	serious[c]	none	19	17	-	MD **5.4 lower** (9.98 lower to 0.82 lower)	⨁⨁◯◯ Low	CRITICAL
Psychological distress - Anxiety (HADS-A, Irritability, depression and anxiety scale anxiety subscale [different scale ranges], lower values are better, change scores) at ≥6 months (follow-up: mean 8 months)												
2	randomised trials	not serious	very serious[e]	serious[h]	very serious[c]	none	134	95	-	SMD **0.15 SD higher** (0.56 lower to 0.87 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Barthel index, Functional Independence Measure motor subscale [different scale ranges], higher values are better, change scores) at <6 months (follow-up: mean 12 weeks)												
2	randomised trials	very serious[r]	very serious[e]	serious[h]	serious[c]	none	45	45	-	SMD **0.96 SD higher** (0.23 lower to 2.14 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
Activities of daily living (Barthel index, Korean modified Barthel index, Functional Independence Measure [different scale ranges], higher values are better, final values) at <6 months (follow-up: mean 3 months)												
3	randomised trials	not serious	serious[e]	not serious	not serious	none	138	135	-	SMD **0.08 SD higher** (0.32 lower to 0.47 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Activities of daily living (Canadian Occupational Performance Measure - Performance subscale, 0-10, higher values are better, final values) at <6 months (follow-up: mean 9 weeks)												
2	randomised trials	very serious[f]	very serious[e]	not serious	serious[c]	none	56	53	-	MD **0.73 higher** (0.52 lower to 1.98 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Canadian Occupational Performance Measure - Satisfaction subscale, 0-10, higher values are better, final values) at <6 months (follow-up: mean 9 weeks)												
2	randomised trials	very serious[f]	very serious[e]	not serious	very serious[c]	none	56	53	-	MD **0.72 higher** (1.62 lower to 3.07 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Nottingham Activities of Daily Living - Domestic subscale, scale range unclear, higher values are better, final value) at <6 months (follow-up: 3 months)												
1	randomised trials	very serious[n]	not serious	not serious	serious[c]	none	21	44	-	MD **0.47 higher** (1.88 lower to 2.82 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Nottingham Activities of Daily Living - Kitchen subscale, scale range unclear, higher values are better, final value) at <6 months (follow-up: 3 months)												
1	randomised trials	very serious[n]	not serious	not serious	serious[c]	none	21	44	-	MD **1.55 higher** (0.86 lower to 3.96 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Nottingham Activities of Daily Living - Leisure subscale, scale range unclear, higher values are better, final value) at <6 months (follow-up: 3 months)												
1	randomised trials	very serious[n]	not serious	not serious	serious[c]	none	21	44	-	MD **2.03 higher** (0.15 higher to 3.91 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
Activities of daily living (Nottingham Activities of Daily Living - Mobility subscale, scale range unclear, higher values are better, final value) at <6 months (follow-up: 3 months)												
1	randomised trials	very serious[n]	not serious	not serious	serious[c]	none	21	44	-	MD **4.13 higher** (1.47 higher to 6.79 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Barthel index, 0-20, higher values are better, change score) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	40	40	-	MD **0.7 lower** (1.84 lower to 0.44 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Activities of daily living (Korean modified Barthel index, Functional Independence Measure, Nottingham Extended Activities of Daily Living [different scale ranges], higher values are better, final values) at ≥6 months (follow-up: mean 11 months)												
4	randomised trials	not serious	not serious	serious[h]	not serious	none	461	636	-	SMD **0.01 SD higher** (0.11 lower to 0.13 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Activities of daily living (Communication Activities of Daily Living, 0-100, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	very serious[a]	not serious	not serious	serious[c]	none	16	18	-	MD **6.81 higher** (1.4 higher to 12.22 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Canadian Occupational Performance Measure - Performance subscale, 0-10, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	serious[c]	none	36	38	-	MD **0.5 higher** (0.83 lower to 1.83 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Canadian Occupational Performance Measure - Satisfaction subscale, 0-10, higher values are better, change score) at ≥6 months (follow-up: 9 months)												
1	randomised trials	very serious[i]	not serious	not serious	serious[c]	none	36	39	-	MD **0.7 lower** (1.92 lower to 0.52 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
Activities of daily living (Nottingham Activities of Daily Living - Domestic subscale, scale range unclear, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	very serious[n]	not serious	not serious	serious[c]	none	21	44	-	MD **0.67 higher** (1.52 lower to 2.86 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Nottingham Activities of Daily Living - Kitchen subscale, scale range unclear, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	very serious[n]	not serious	not serious	serious[c]	none	21	44	-	MD **1.72 higher** (1.57 lower to 5.01 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Nottingham Activities of Daily Living - Leisure subscale, scale range unclear, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	very serious[n]	not serious	not serious	serious[c]	none	21	44	-	MD **3.3 higher** (1.56 higher to 5.04 higher)	⨁◯◯◯ Very low	CRITICAL
Activities of daily living (Nottingham Activities of Daily Living - Mobility subscale, scale range unclear, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	very serious[n]	not serious	not serious	serious[c]	none	21	44	-	MD **4.8 higher** (2.3 higher to 7.3 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (SAQoL, SS-SIP30, Preference-based Stroke Index [different scale ranges], higher values are better, change scores) at <6 months (follow-up: mean 12 weeks)												
3	randomised trials	very serious[s]	not serious	not serious	not serious	none	132	130	-	SMD **0.03 SD higher** (0.21 lower to 0.27 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life, Sickness Impact Profile [different scale ranges], higher values are better, final values) at <6 months (follow-up: mean 11 weeks)												
3	randomised trials	not serious	very serious[e]	not serious	serious[c]	none	83	57	-	SMD **0.15 SD higher** (0.22 lower to 0.51 higher)	⨁◯◯◯ Very low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Communication subscale, 0-100, higher values are better, change scores and final values) at <6 months (follow-up: mean 13 weeks)												
4	randomised trials	serious[f]	serious[e]	serious[h]	serious[c]	none	136	136	-	MD **2.64 higher** (4.29 lower to 9.56 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Emotion/Mood subscale, 0-100, higher values are better, change scores and final values) at <6 months (follow-up: mean 13 weeks)												
4	randomised trials	serious[f]	serious[e]	serious[h]	serious[c]	none	136	136	-	MD **2.63 higher** (5.34 lower to 10.61 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Memory subscale, 0-100, higher values are better, change scores and final values) at <6 months (follow-up: mean 13 weeks)												
4	randomised trials	serious[f]	serious[e]	serious[h]	serious[c]	none	136	136	-	MD **0.91 higher** (7.75 lower to 9.56 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Physical subscale, 0-100, higher values are better, final values) at <6 months (follow-up: mean 11 weeks)												
2	randomised trials	serious[f]	not serious	serious[h]	serious[c]	none	91	90	-	MD **8.31 lower** (14.52 lower to 2.1 lower)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Strength subscale, 0-100, higher values are better, change scores) at <6 months (follow-up: mean 16 weeks)												
2	randomised trials	serious[f]	very serious[e]	serious[h]	serious[c]	none	45	46	-	MD **7.67 higher** (6.1 lower to 21.43 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Hand function subscale, 0-100, higher values are better, change scores) at <6 months (follow-up: mean 16 weeks)												
2	randomised trials	not serious	very serious[e]	not serious	serious[c]	none	45	46	-	MD **5.7 higher** (14.08 lower to 25.47 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Mobility/Community mobility subscale, 0-100, higher values are better, change scores) at <6 months (follow-up: mean 16 weeks)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
2	randomised trials	not serious	very serious[e]	not serious	serious[c]	none	45	46	-	MD **9.11 higher** (1.36 lower to 19.59 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Activities of daily living subscale, 0-100, higher values are better, change scores) at <6 months (follow-up: mean 16 weeks)												
2	randomised trials	serious[t]	not serious	serious[h]	serious[c]	none	45	46	-	MD **6.08 higher** (1.15 higher to 11.01 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Social participation subscale, 0-100, higher values are better, change scores and final values) at <6 months (follow-up: mean 11 weeks)												
5	randomised trials	serious[u]	very serious[e]	not serious	serious[c]	none	147	147	-	MD **4.87 higher** (3.69 lower to 13.44 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Stroke recovery/general recovery subscale, 0-100, higher values are better, change scores and final values) at <6 months (follow-up: 13 weeks)												
4	randomised trials	serious[t]	very serious[e]	serious[h]	serious[c]	none	136	136	-	MD **5.38 higher** (8.44 lower to 19.21 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Energy subscale, 3-15, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **0.44 lower** (2.44 lower to 1.56 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Family roles subscale, 3-15, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **0.88 higher** (1.25 lower to 3.01 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Language subscale, 5-25, higher values are better, final value) at <6 months (follow-up: 12 weeks)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **2.47 higher** (0.82 lower to 5.76 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mobility subscale, 6-30, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **3.08 higher** (0.66 lower to 6.82 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mood subscale, 5-25, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **1.87 higher** (0.82 lower to 4.56 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Personality subscale, 3-15, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	not serious	not serious	not serious	very serious[c]	none	18	16	-	MD **0.2 higher** (2.19 lower to 2.59 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Self-care subscale, 5-25, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	not serious	not serious	not serious	very serious[c]	none	18	16	-	MD **0.5 higher** (1.79 lower to 2.79 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Social roles subscale, 5-25, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	not serious	not serious	not serious	very serious[c]	none	18	16	-	MD **0.35 lower** (3.63 lower to 2.93 higher)	⨁⨁◯◯ Low	CRITICAL

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Thinking subscale, 3-15, higher values are better, final value) at <6 months (follow-up: 12 weeks)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **1.06 higher** (0.74 lower to 2.86 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Specific Quality of Life, 0-245, higher values are better, change score) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	40	40	-	MD **7.5 lower** (26.76 lower to 11.76 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke and Aphasia Quality of Life-39, Stroke specific Quality of Life, Stroke Impact Scale [different scale ranges], higher values are better, final values) at ≥6 months (follow-up: 9 months)												
3	randomised trials	very serious[r]	serious[e]	not serious	serious[c]	none	120	89	-	SMD **0.26 SD higher** (0.14 lower to 0.65 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Communication subscale, 0-100, higher values are better, final value) at ≥6 months (follow-up: 12 months)												
1	randomised trials	serious[t]	not serious	serious[h]	serious[c]	none	80	79	-	MD **6.8 lower** (12.4 lower to 1.2 lower)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Emotion/Mood subscale, 0-100, higher values are better, final value) at ≥6 months (follow-up: 12 months)												
1	randomised trials	serious[t]	not serious	serious[h]	serious[c]	none	80	79	-	MD **3.74 lower** (8.85 lower to 1.37 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Memory subscale, 0-100, higher values are better, final value) at ≥6 months (follow-up: 12 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	serious[i]	not serious	serious[h]	serious[c]	none	80	79	-	MD **4.43 lower** (9.93 lower to 1.07 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Physical subscale, 0-100, higher values are better, final value) at ≥6 months (follow-up: 12 months)												
1	randomised trials	serious[i]	not serious	serious[h]	serious[c]	none	80	79	-	MD **7.22 lower** (14.37 lower to 0.07 lower)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Social participation subscale, 0-100, higher values are better, final value) at ≥6 months (follow-up: 12 months)												
1	randomised trials	serious[i]	not serious	serious[h]	serious[c]	none	80	79	-	MD **6.93 lower** (13.37 lower to 0.49 lower)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke Impact Scale - Stroke recovery/general recovery subscale, 0-100, higher values are better, final value) at ≥6 months (follow-up: 12 months)												
1	randomised trials	serious[i]	not serious	serious[h]	serious[c]	none	80	79	-	MD **5.43 lower** (11.61 lower to 0.75 higher)	⨁◯◯◯ Very low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Energy subscale, 3-15, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	very serious[c]	none	18	16	-	MD **0** (1.78 lower to 1.78 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Family roles subscale, 3-15, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	very serious[c]	none	18	16	-	MD **0.34 higher** (1.83 lower to 2.51 higher)	⨁⨁◯◯ Low	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Language subscale, 5-25, higher values are better, final value) at ≥6 months (follow-up: 6 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **1.98 higher** (1.1 lower to 5.06 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mobility subscale, 6-30, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **3.34 higher** (0.55 lower to 7.23 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Mood subscale, 5-25, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **3.09 higher** (0.18 higher to 6 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Personality subscale, 3-15, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **0.79 higher** (1.44 lower to 3.02 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Self-care subscale, 5-25, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **2.78 higher** (0.25 lower to 5.81 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Social roles subscale, 5-25, higher values are better, final value) at ≥6 months (follow-up: 6 months)												
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **0.92 higher** (2.18 lower to 4.02 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Stroke-specific Patient-Reported Outcome Measures (Stroke specific Quality of Life - Thinking subscale, 3-15, higher values are better, final value) at ≥6 months (follow-up: 6 months)												

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	community participation intervention	no participation	Relative (95% CI)	Absolute (95% CI)		
1	randomised trials	not serious	not serious	not serious	serious[c]	none	18	16	-	MD **2.27 higher** (0.46 higher to 4.08 higher)	⨁⨁⨁◯ Moderate	CRITICAL
Discontinuation at <6 months (follow-up: mean 11 weeks)												
20	randomised trials	very serious[r]	serious[v]	not serious	very serious[w]	none	77/750 (10.3%)	66/653 (10.1%)	**RD 0.00** (-0.03 to 0.03)	**0 fewer per 1,000** (from 30 fewer to 30 more)[x]	⨁◯◯◯ Very low	CRITICAL
Discontinuation at ≥6 months (follow-up: mean 9 months)												
13	randomised trials	not serious	not serious	not serious	serious[c]	none	176/970 (18.1%)	240/1070 (22.4%)	**RR 0.89** (0.74 to 1.06)	**25 fewer per 1,000** (from 58 fewer to 13 more)	⨁⨁⨁◯ Moderate	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 the randomisation process and bias due to deviations from the intended interventions)

b. Downgraded by 1 or 2 increments because of intervention indirectness (as the intervention is a self management program that educates on but may not necessarily lead to community participation)

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

d. 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 the randomisation process, bias due to deviations from the intended interventions and bias in measurement of the outcome)

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

f. 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 the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data and bias in measurement of the outcome)

g. Downgraded by 2 increments as the majority of the evidence was of very high risk of bias (due to bias due to the randomisation process)

h. Downgraded by 1 or 2 increments because of intervention indirectness (as the intervention is a home-based program that may not necessarily lead to community participation)

i. 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 the randomisation process, bias in measurement of the outcome and bias in selection of the reported result)

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

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

l. 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 the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data, bias in measurement of the outcome and bias in selection of the reported result)

m. Downgraded by 1 or 2 increments because of a mixture of intervention indirectness (as the intervention is a home-based program that may not necessarily lead to community participation) and outcome indirectness (using HADS-total scale instead of the depression subscale)

n. 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 the randomisation process, bias due to deviations from the intended interventions, bias in measurement of the outcome and bias in selection of the reported result)

o. Downgraded by 1 or 2 increments because of outcome indirectness (reporting an outcome defined in the protocol as continuous in a dichotomous form)

p. 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 the randomisation process, bias due to missing outcome data, and bias in measurement of the outcome)

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

r. 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 the randomisation process, bias due to deviations from the intended interventions, bias due to missing outcome data and bias in selection of the reported result)

s. 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 the randomisation process and bias in measurement of the outcome)

t. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to bias due to the randomisation process)

u. Downgraded by 1 increment as the majority of the evidence was of high risk of bias (due to a mixture of bias due to the randomisation process and bias in selection of the reported result)

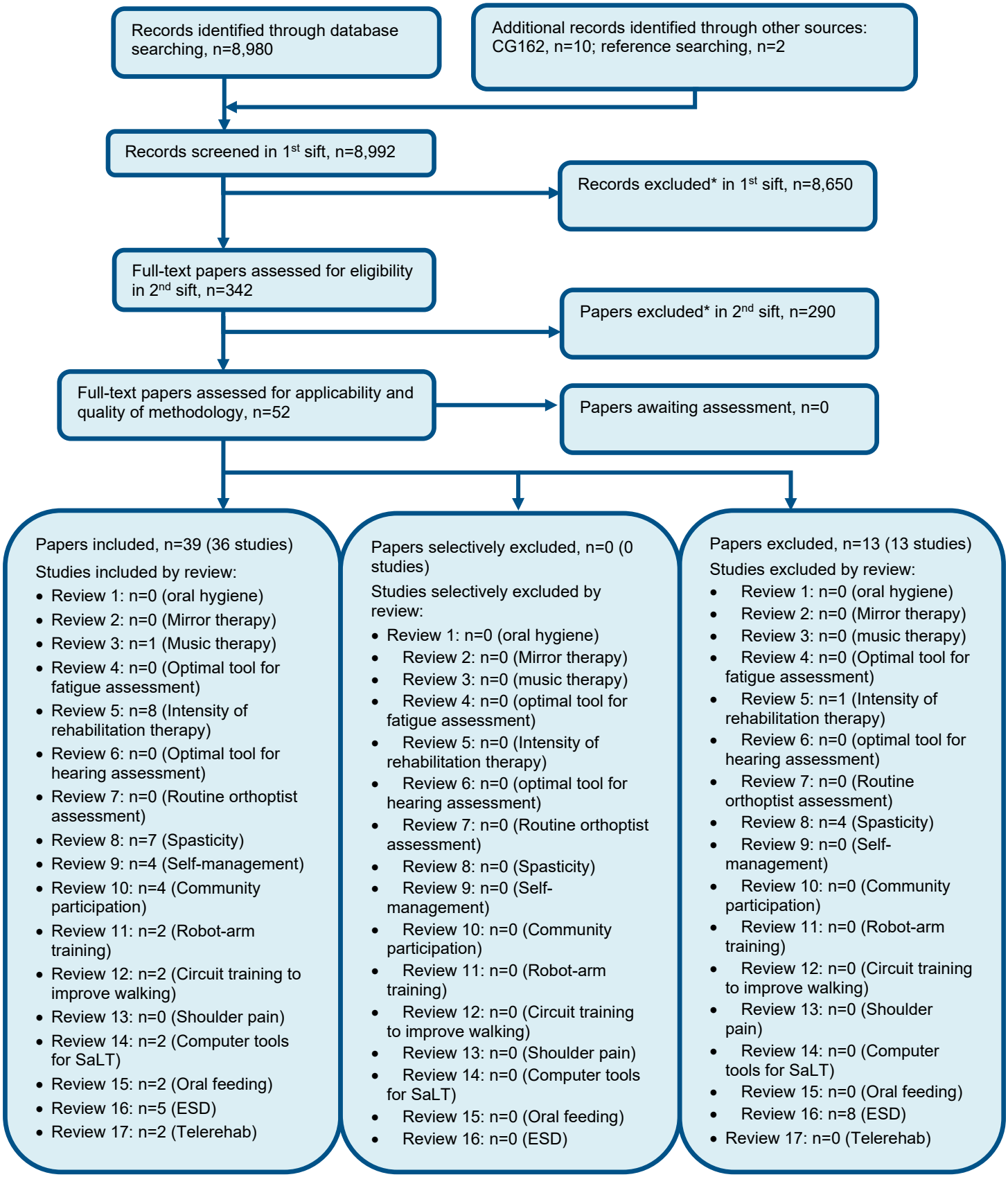
v. Downgraded for heterogeneity due to conflicting number of events in different studies (zero events in one or more studies)

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

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

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

Appendix H – Economic evidence tables

Study	Harrington 2010[15]			
Study details	**Population & interventions**	**Costs**	**Health outcomes**	**Cost effectiveness**
Economic analysis: Cost-consequence analysis (CC) (various health outcomes). **Study design:** Within-RCT analysis (Harrington 2010[15]). **Approach to analysis:** Analysis of individual-level healthcare resource use collected at baseline, 9 weeks and 6 months for both groups. Unit costs applied. **Perspective:** UK NHS and PSS **Follow-up**: 12 months **Treatment effect duration:**[(a)] 12 months **Discounting:** n/a	**Population:** Adults with stroke living in the community for at least three months. **Patient characteristics:** N = 243 Mean age: 70.5 years (SD: 10.3) Male: 54.3% **Intervention 1:** Standard care (n=124) plus an information sheet detailing local groups and contact numbers. Standard care differed according to the area where the participants lived: in five of the six Primary Care Trust areas covered a stroke coordinator contacted or visited stroke survivors approximately six weeks after they returned home. In all areas stroke survivors were invited to a six-month review. **Intervention 2:** Community exercise and education scheme in addition to standard care (n=119) held twice weekly for eight weeks, facilitated by volunteers and qualified exercise instructors (supported by a physiotherapist), each with nine participants plus carers or family members. Sessions were held in leisure and community centres and consisted of 1 hour of exercise followed by a	**Total costs (mean per patient):** Intervention 1: £2,994 Intervention 2: £3,741 Incremental (2−1): £746 (95%CI: –£432 to £1924; p=NR) **Currency & cost year:** 2005 UK pounds (£) **Cost components incorporated:** NHS costs (primary care consultations, secondary care, community care and prescribed medication) and social care costs (home care, meals on wheels, use of a day centre and social worker time). See Table 10 for cost breakdown between intervention groups.	**SIPSO physical at 12 months (median change score per patient):** Intervention 1: -1 (95% CI: -2 to 1; p<0.05) Intervention 2: 0 (95% CI: -1 to 2; p=0.024) Incremental (2−1): 1 (95% CI: NR; p=NR) **WHOQol-Bref psychological at 6 months (median change score per patient):** Intervention 1: 0 (95% CI: -2.3 to 4.3; p=NR) Intervention 2: 6.2 (95% CI: -0.1 to 9.1; p=0.011) Incremental (2−1): 6.2 (95% CI: NR; p=NR)	**ICER (Intervention 2 versus Intervention 1):** n/a Probability Intervention 2 is cost effective (£20K threshold): n/a **Analysis of uncertainty:** None.

	short break, and 1 hour of interactive education.			
Data sources				
Health outcomes: RCT was excluded from the clinical review as primary clinical outcomes were reported as medians or 95% CIs. One primary outcome was the Subjective Index of Physical and Social Outcome (SIPSO), which was developed specifically to measure social and physical integration in stroke survivors. Secondary outcomes included the Timed Up and Go Test and the WHOQoL-Bref (quality of life). **Quality-of-life weights:** None. **Cost sources:** Within-trial analysis of resource use measured using a diary given to patients to note when they used any of the services identified. An assessor also visited who asked follow-up questions to gain more information about the nature of any contact. UK National Unit costs applied.				
Comments				
Source of funding: The Stroke Association, in partnership with the University of Bath and Age Concern Wiltshire, received funding from the Big Lottery. **Limitations:** EQ-5D and QALYs not used. 2005 UK resource use and unit costs may not reflect current UK NHS context. RCT (Harrington 2010[15]) was excluded from the clinical review as the clinical outcomes were reported as medians and 95% CIs (GRADE analysis is designed for mean differences). Within-trial analysis and so only reflects this study and not the wider evidence base identified in the clinical review. Unclear if time horizon (12 months) was sufficient to assess the full costs and benefits. Sensitivity analyses not performed. **Other:** This study was also included in the circuit class training review for this guideline. The study reports outcomes relevant to the review as median and interquartile range values, that could not be used in the analysis of the clinical evidence and so were not extracted in the clinical review. In the circuit class training review, unpublished data was obtained from a Cochrane review for the outcome of the timed up and go test for this study that included mean and standard deviation values. This outcome was not relevant to the community participation review.				
Overall applicability:[(b)] Partially applicable **Overall quality:**[(c)] Potentially serious limitations				

Abbreviations: 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); ICER= incremental cost-effectiveness ratio; NR= not reported; QALYs= quality-adjusted life years; RCT= randomised controlled trial; SIPSO= Subjective Index of Physical and Social Outcome (scale: 0 to 20, higher values are better); WHOQol-Bref psychological= World Health Organization Quality-Of-Life Psychological Scale (scale: 0 to 100, higher values are better).

(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) Directly applicable / Partially applicable / Not applicable

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

Table 10: Cost breakdown from Harrington 2010[15]

	Mean (SD) cost per participant (£)		Mean cost difference (95% CI) (£)
	Control	Intervention	
Primary care	167 (158)	204 (172)	
Outpatient care	333 (469)	223 (338)	
Inpatient care	927 (2231)	1377 (3725)	
Community care	281 (410)	347 (660)	
Medication	313 (314)	265 (188)	
All NHS	2021 (2412)	2415 (4019)	

Social care	973 (2139)	1226 (1954)	
Intervention	0 (0)	99 (0)	
All NHS and PSS including cost of the intervention	2994 (3604)	3741 (4893)	746 (–432 to 1924)
Personal out-of-pocket costs (not included in the incremental results)	420 (969)	413 (843)	–7.62 (–260 to 245)

Abbreviation: PSS = Personal social services

Study	**Logan 2014[21]**			
Study details	**Population & interventions**	**Costs**	**Health outcomes**	**Cost effectiveness**
Economic analysis: Cost-utility analysis (CUA) (health outcome: QALYs). **Study design:** Within-RCT analysis included in the clinical review (Logan 2014[21]). **Approach to analysis:** Individual-level analysis of healthcare resource use and EQ-5D to estimate costs and QALYs. Unit costs applied. The groups were compared at 6 and 12 months, accounting for baseline differences	**Population:** Adults who experienced a stroke at least 6 weeks prior, wishing to get out of the house more often. **Patient characteristics:** N = 568 Mean age: 71.6 years (SD: 12.1) Male: 44.5% **Intervention 1:** Usual care only (n=281). All people received control information during the baseline visit. This information was provision of verbal and written local mobility and transport information that was site specific. This included information about bus times, local community transport, taxi services, wheelchair services,	**Total costs (mean per patient):** Intervention 1: NR Intervention 2: NR Incremental (2−1): £3414 (95% CI –£448 to £7121; p=NR) **Currency & cost year:** 2010-11 UK pounds (£) **Cost components incorporated:** Staff time associated with healthcare professional (including training and travel costs), or home help visits; visits to accident and emergency,	**QALYs (mean per patient):** Intervention 1: NR Intervention 2: NR Incremental (2−1): 0.027 fewer QALYs (95% CI –0.060 to 0.007; p=NR)	**ICER (Intervention 2 versus Intervention 1):** Dominated by usual care (higher costs and lower QALYs). Probability Intervention 2 cost effective (£20K threshold): 5.2% The probability that the intervention was cost-effective was <20% at all cost-effectiveness thresholds. **Analysis of uncertainty:** Sensitivity analyses included assessing the effect of missing data on the overall conclusions of the study using multiple imputation (MI) to replace missing values, including only those who received six or more intervention visits, and replacing data values below the 5th percentile with the 5th percentile value and to data values above the 95th

and adjusting for the multiple membership random effects caused by having numerous therapists delivering the intervention in several sites. An available case analyses approach was also adopted. **Perspective:** UK NHS and PSS **Follow-up**: 12 months **Treatment effect duration:**[(a)] n/a **Discounting:** n/a	disabled persons' car badges, wheelchair borrowing schemes and mobility equipment. **Intervention 2:** Community participation intervention (n=287) (outdoor mobility). Practice of outdoor mobility through repeated practice. This included buses, taxis, walking, voluntary drivers and mobility scooters until they felt confident to go alone or with a companion. The number of intervention sessions depended entirely on the participant. If they felt they did not require any further intervention, for whatever reason, then the intervention stopped. If they felt they required additional intervention for whatever reason, they could continue the intervention up to a maximum of 12 visits.	walk-in centres, outpatients, day centres; and admissions to hospital, residential homes, and nursing homes.		percentile with the 95th percentile value (a process known as Winsorising). Study conclusions were supported by the results of the sensitivity analyses, as the 95% CI surrounding the incremental net benefit (INB) was never wholly positive at the £20,000-per-QALY threshold. The only positive INB reported was the MI analysis for the SF-6D, which reported that the intervention was estimated to be (on average) less costly (-£455) and more effective (QALY gain of 0.001). Applying different cost perspectives also did not have a great impact on the results.
Data sources				
Health outcomes: Within-trial analysis based on an RCT (Getting out of the House Study) included in the clinical review[21]. The primary outcome was health-related quality of life, as measured by Social Function domain score from the SF-6D at 6 months' follow-up. However, EQ-5D was collected at baseline and at 6- and 12-months post-randomisation was used to calculate QALYs using the area under the curve method. Baseline mobility as well as cognitive, sensory or communication difficulties were either not stated or unclear. **Quality-of-life weights:** Within-RCT analysis: EQ-5D-3L (UK population valuation tariff). **Cost sources:** Within-trial analysis of resource use measured using a self-reported questionnaire collected at 6-months and 12-months post-randomisation in 2012. UK National Unit costs applied.				
Comments				
Source of funding: UK National Institute for Health Research (NIHR). **Limitations:** 2011-2012 UK resource use and 2010–2011 unit costs may not reflect current UK NHS context. Within-trial analysis of costs and outcomes based on Logan 2014 RCT included in clinical review and so only reflects this study and not the wider evidence base identified in the clinical review. Baseline mobility as well as cognitive, sensory or communication difficulties were either not stated or unclear. A number of assumptions were required in order to estimate some of the cost variables, for example it was unclear (for a few participants) whether they were reporting average times per carer/home help visit or total times for the week. **Other:** Conducted as part of the NIHR				

Health Technology Assessment programme.

Overall applicability:[b] Partially applicable **Overall quality:**[c] 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; pa= probabilistic analysis; QALYs= quality-adjusted life years; SF-6D = Short Form questionnaire-6 Dimensions (based on a subset of questions from the Short Form 36 version 2 (SF-36 v2)).

(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) Directly applicable / Partially applicable / Not applicable

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

Study	**Van Mastrigt 2020[41]**			
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[39]). **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). **Patient characteristics:** N=113 Start age: 57 years Male: 52.2%	**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: -£107 • Home adjustments: -£144 **Informal care costs (mean per patient)** Intervention 1: £996 Intervention 2: £1,605 Incremental (2−1): £609	**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	**Intervention 1:** Active control intervention (n=55) Stroke-specific education only (EDU); 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.	(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 (n=113).[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.[44xxx]
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]. This study was also included as part of the self-management 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; pa= probabilistic analysis; QALYs= quality-adjusted life years.

(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[31]

(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

Study	**Flood 2022[12]**			
Study details	**Population & interventions**	**Costs**	**Health outcomes**	**Cost effectiveness**
Economic analysis: Cost-utility analysis (health outcome: QALYs).	**Population:** Adults with aphasia (mostly mild (66%)) due to stroke and low levels of emotional distress (score of ≤2 on Depression Intensity	**Total costs (mean per patient):** Intervention 1: £3,376 Intervention 2: £5,747 Incremental (2−1):	**QALYs (mean per patient):** Intervention 1: NR Intervention 2: NR Incremental (2−1):	**ICER (Intervention 2 versus Intervention 1):** Dominated by usual care (higher costs and lower QALYs).

Study design: Exploratory within-trial analysis of the SUPERB feasibility RCT[16] excluded from the clinical review. **Approach to analysis:** Analysis of individual level healthcare resource use and EQ-5D to produce preliminary estimates of incremental costs and QALYs associated with usual care compared to usual care plus peer-befriending for people with aphasia post-stroke and low levels of psychological distress. Unit costs applied. Cost-effectiveness results were also presented to indicate the cost per unit of change in mood (GHQ-12). **Perspective:** UK NHS and PSS **Follow-up:** 10 months **Treatment effect duration:**[(a)] NA **Discounting:** NA	Scale Circles (DISCS)). **Patient characteristics:** N=56 Mean age (SD): 70.1 (13.4) years Male: 52% **Intervention 1:** Control group (n=28) received usual care, i.e., all health, social care and voluntary services available to them in their borough. **Intervention 2:** Usual care plus peer befriending (n=28). Participants received 6 1-hour peer-befriending visits over 3 months. The schedule, nature of visits, and goals (e.g., discuss concerns; pursue activities) will be agreed between the pair. Visits could include conversation, problem solving, trips out, joint activities.	£2,371[(b)] (95% CI: NR; p>0.05) **Currency & cost year:** 2018 UK pounds (£). **Cost components incorporated:** Intervention costs (Befriender visits, staff training and supervision) and healthcare resource use e.g., inpatient and outpatient hospital visits, GP, PT, OT and SLT visits, community-based HCP visits, residential care, nursing homes and social services i.e., help or support worker NHS/social services.	0.0479 fewer QALYs[(c)] (95% CI: NR; p=NR)	Probability Intervention 2 cost effective (£20K/£30K threshold): NR/35% **Analysis of uncertainty:** • The ICER at 10 months when using an improvement change in mood (GHQ-12) as the utility vales was £373[(d)] per QALY gained with a 66% probability of being cost-effective.
Data sources				

Health outcomes: Exploratory within-trial analysis of the SUPERB feasibility RCT[16], where clinical effectiveness was measured using the General Health Questionnaire-12 (GHQ-12), a measure of psychological distress, while EQ-5D-5L scores were collected at 4- and 10-months post-randomisation. **Quality-of-life weights:** Within-RCT analysis: EQ-5D-5L mapped to EQ-5D-3L (UK population valuation tariff). **Cost sources:** Costs were collected via questionnaire from the stroke-adapted Client Service Receipt Inventory (CSRI) for health, social care and personal out-of-pocket expenditure arising from care for participants and carers at 4- and 10-months post-randomisation (completed August 2019). The primary source of data was from a participant (n=23), significant other (n=20), a combination of the two (n=4) or other sources (e.g., nurse, carer; n=4). CSRI data was collected either face-to-face (n=18), by telephone (n=31) or email (n=2). Additional information was sought from secondary sources (e.g., research nurses, significant others) for 16 participants. The average cost of providing one befriending visit was £57.14, inclusive of training and supervision costs. UK National unit costs applied.
Comments
Source of funding: The Stroke Association 2015 Priority Programme Award for Psychological Consequences of Stroke (grant number PPA2015/03) **Limitations:** Exploratory within-trial analysis of a single RCT with a small sample size, 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. Estimates of resource use were based on data from the study population and not a systematic review. Probabilistic sensitivity analyses were reported for £30K threshold when NICE reference case prefers £20,000 threshold. **Other:** SUPERB feasibility RCT was excluded from the clinical review as the intervention acceptability was explored through qualitative interviews.
Overall applicability:(e) Directly applicable **Overall quality:**(f) Potentially serious limitations

Abbreviations: 95% CI= 95% confidence interval; DISCS= Depression Intensity Scale Circles (scale 0-10, lower values are better); EQ-5D-3L (5L)= EuroQol 5 dimensions 3 levels (5 levels) (scale: 0.0 [death] to 1.0 [full health], negative values mean worse than death); GHQ-12= General health questionnaire-12 (scale 0-12, lower values are better); ICER= incremental cost-effectiveness ratio; NA= not applicable; NR= not reported; PSS= personal social services; QALYs= quality-adjusted life years; RCT= randomised controlled trial.

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) No statistically significant differences in health and social care costs between the control and intervention arms at 10-months except for outpatient appointments (higher in control, p=0.04)

c) EQ-5D scores were not reported but incremental QALY was estimated by dividing the incremental cost by the ICER reported in the paper (£2,371/-£49,488). Of note, the study reported a negative ICER, suggesting a QALY loss. When an intervention has higher costs and lower QALYs, it is said to be dominated by the comparator. A negative ICER is not reported.

d) Hilari 2021[16] reported an estimated mean difference of −1.23 (95% CI: -2.63, 0.17) between peer-friending and usual care arms.

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.

Appendix J – Excluded studies

Clinical studies

Table 11: Studies excluded from the clinical review

Study	Code [Reason]
(2017) Community-Based Rehabilitation to Improve Stroke Survivors' Rehabilitation Participation and Functional Recovery. American journal of physical medicine & rehabilitation 96(7): e123-e129	- Non-randomised study that does not account for confounding factors in a multivariate or univariate analysis or not reporting sufficient evidence to show matched groups
Abbud, G. and Pearce, A. (2019) Implementing cardiovascular exercise training and education in a community setting to maximize long-term functional changes in subacute stroke-A feasibility study. International journal of stroke conferencecanadianstrokecongress2019canada14(3supplement): 29	- Conference abstract
Andersen, H. E., Eriksen, K., Brown, A. et al. (2002) Follow-up services for stroke survivors after hospital discharge--a randomized control study. Clinical Rehabilitation 16(6): 593-603	- Study does not contain an intervention relevant to this review protocol *Not inherently social and is home based instead of community based*
Attard, Michelle C., Loupis, Yasmine, Togher, Leanne et al. (2018) The efficacy of an inter-disciplinary community aphasia group for living well with aphasia. Aphasiology 32(2): 105-138	- Study design not relevant to this review protocol *Noncomparative trial*
Barclay, R. E., Stevenson, T. J., Poluha, W. et al. (2015) Interventions for improving community ambulation in individuals with stroke. Cochrane Database of Systematic Reviews: cd010200	- Systematic review used as source of primary studies *Cochrane review. Investigated interventions to include community ambulation which could include any intervention rather than interventions that are inherently social. Given the limited scope to just ambulation, and the inclusion of studies that are not relevant to the protocol, this was excluded but used as a source of primary studies.*
Barker, Ruth N., Sealey, Cindy J., Polley, Michelle L. et al. (2017) Impact of a person-centred community rehabilitation service on outcomes for individuals with a neurological condition. Disability &	- Population not relevant to this review protocol

Study	Code [Reason]
Rehabilitation 39(11): 1136-1142	*Could have included people with conditions other than stroke* - Study design not relevant to this review protocol *Non-comparative study*
Bassingthwaighte, L., Griffin, J., Fleming, J. et al. (2021) Evaluating the effectiveness of on-road driving remediation following acquired brain injury: A wait-list feasibility study with follow-up. Australian Occupational Therapy Journal 68(2): 124-134	- Population not relevant to this review protocol *Acquired brain injury with <80% of participants having had a stroke*
Beckley, M. N. (2007) The influence of the quality and quantity of social support in the promotion of community participation following stroke. Australian Occupational Therapy Journal 54(3): 215-220	- Study design not relevant to this review protocol *Non-comparative study*
Bertilsson, A. S., Ranner, M., von Koch, L. et al. (2014) A client-centred ADL intervention: three-month follow-up of a randomized controlled trial. Scandinavian Journal of Occupational Therapy 21(5): 377-91	- Study does not contain an intervention relevant to this review protocol *Intervention was not inherently social in nature*
Bhogal, S. K., Teasell, R. W., Foley, N. C. et al. (2003) Community reintegration after stroke. Topics in Stroke Rehabilitation 10(2): 107-29	- Systematic review used as source of primary studies
Bin Zainal, Mohamad Nizar, Pei Wen, Pauline Koh, Sien, Ng Yee et al. (2020) Supporting People With Stroke to Return to Work in Singapore: Findings From a Pilot Vocational Rehabilitation Program. American Journal of Occupational Therapy 74(6): 1-9	- Comparator in study does not match that specified in this review protocol *Compares people who returned to work after an intervention with those who did not*
Bittman, B., Poornima, I., Smith, M. A. et al. (2020) Gospel Music: A Catalyst for Retention, Engagement, and Positive Health Outcomes for African Americans in a Cardiovascular Prevention and Treatment Program. Advances in Mind-Body Medicine 34(1): 8-16	- Population not relevant to this review protocol *Number of people who had a stroke not specified*
Bolster, Ruby A., Van Puymbroeck, Marieke, Atler, Karen E. et al. (2018) Yoga and self-management for people with chronic stroke: Effect on community reintegration and perceived activity constraints. American Journal of Recreation Therapy 17(2): 20-26	- Study design not relevant to this review protocol *Non-comparative study*
Brasure, M., Lamberty, G. J., Sayer, N. A. et al. (2013)	- Population not relevant to this

Study	Code [Reason]
Participation after multidisciplinary rehabilitation for moderate to severe traumatic brain injury in adults: A systematic review. Archives of Physical Medicine and Rehabilitation 94(7): 1398-1420	review protocol *Traumatic brain injury*
Brouns, R., Valenzuela Espinoza, A., Goudman, L. et al. (2019) Interventions to promote work participation after ischaemic stroke: A systematic review. Clinical Neurology & Neurosurgery 185: 105458	- Systematic review used as source of primary studies *No relevant studies to add*
Callister, R., Dunn, A., Marsden, D. et al. (2017) Improvements in fitness at 12-months follow up of an individualised home and community based exercise program after stroke. Journal of Science & Medicine in Sport 20: e22-e23	- Conference abstract
Calugi, S., Taricco, M., Rucci, P. et al. (2016) Effectiveness of adaptive physical activity combined with therapeutic patient education in stroke survivors at twelve months: a non-randomized parallel group study. European journal of physical & rehabilitation medicine. 52(1): 72-80	- Non-randomised study that does not account for confounding factors in a multivariate or univariate analysis or not reporting sufficient evidence to show matched groups
Carr, Julie; Callanan, Katherine; Swanson, Julie (2020) Staying Active after Stroke: A Customizable Community Resource Guide for Stroke Survivors. GeriNotes 27(4): 8-13	- Commentary only
Chang, F. H., Chiu, V., Ni, P. et al. (2020) Enhancing community participation for stroke survivors with cognitive impairment: study protocol for a randomised controlled trial in Taiwan. BMJ Open 10(12): e040241	- Protocol only
Cheng, H. Y.; Chair, S. Y.; Chau, J. P. (2014) The effectiveness of psychosocial interventions for stroke family caregivers and stroke survivors: a systematic review and meta-analysis. Patient education and counseling 95(1): 30-44	- Study does not contain an intervention relevant to this review protocol *Not inherently social in nature*
Cheng, H.; Chair, S.; Chau, J. (2012) The effectiveness of caregiver psychosocial interventions on the psychosocial wellbeing, physical health and quality of life of stroke family caregivers and their stroke survivors: A systematic review. The JBI Database of Systematic Reviews and Implementation Reports 10(12): 679-797	- Study does not contain an intervention relevant to this review protocol *Intervention focusses on caregivers instead of stroke survivors*
Chiu, E. C.; Chi, F. C.; Chen, P. T. (2021) Investigation of the home-reablement program on rehabilitation outcomes for people with stroke: a pilot study. Medicine 100(26): e26515	- Study does not contain an intervention relevant to this review protocol *Intervention is home based and not inherently social*

Study	Code [Reason]
Chu, K. S., Eng, J. J., Dawson, A. S. et al. (2004) Water-based exercise for cardiovascular fitness in people with chronic stroke: a randomized controlled trial. Archives of Physical Medicine & Rehabilitation 85(6): 870-4	- No relevant outcomes *Study reports physical function outcomes and does not appear to specifically be studying social participation*
Church, G., Parker, J., Powell, L. et al. (2019) The effectiveness of group exercise for improving activity and participation in adult stroke survivors: a systematic review. Physiotherapy 105(4): 399-411	- Systematic review used as source of primary studies *Not all studies appeared to be related to social participation. Those that could have been were ordered for this review.*
Corr S; Phillips CJ; Walker M (2004) Evaluation of a pilot service designed to provide support following stroke: a randomized cross-over design study. Clinical rehabilitation 18(1): 69-75	- Cross-over trial
Damush TM, Ofner S, Yu Z 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	- Study does not contain an intervention relevant to this review protocol *Discusses a self management program that discusses social elements as a small part, but is completed entirely at home using telephone communication and is not emphasising social participation.*
de Rooij, I. J. M., van de Port, I. G. L., Punt, M. et al. (2021) Effect of Virtual Reality Gait Training on Participation in Survivors of Subacute Stroke: A Randomized Controlled Trial. Physical Therapy 101(5): 04	- Study does not contain an intervention relevant to this review protocol *Not group based therapy and does not appear to be inherently social*
de Rooij, I. J. M., van de Port, I. G. L., Visser-Meily, J. M. A. et al. (2019) Virtual reality gait training versus non-virtual reality gait training for improving participation in subacute stroke survivors: study protocol of the ViRTAS randomized controlled trial. Trials [Electronic Resource] 20(1): 89	- Protocol only
Devos, H., Akinwuntan, A. E., Nieuwboer, A. et al. (2010) Effect of simulator training on fitness-to-drive after stroke: a 5-year follow-up of a randomized controlled trial. Neurorehabilitation & Neural Repair 24(9): 843-50	- Study does not contain an intervention relevant to this review protocol *Discusses the use of a driving simulator compared to cognitive therapy. While this does focus on transportation, the intervention is not inherently social and is*

Study	Code [Reason]
	focussed solely on interventions that are not social in nature.
Devos, H., Akinwuntan, A. E., Nieuwboer, A. et al. (2009) Comparison of the effect of two driving retraining programs on on-road performance after stroke. Neurorehabilitation & Neural Repair 23(7): 699-705	- Study does not contain an intervention relevant to this review protocol *Discusses the use of a driving simulator compared to cognitive therapy. While this does focus on transportation, the intervention is not inherently social and is focussed solely on interventions that are not social in nature.*
Dorstyn, D., Roberts, R., Kneebone, I. et al. (2014) Systematic Review of Leisure Therapy and Its Effectiveness in Managing Functional Outcomes in Stroke Rehabilitation. Topics in stroke rehabilitation 21(1): 40-51	- Systematic review used as source of primary studies
Eng, J. J., Chu, K. S., Kim, C. M. et al. (2003) A community-based group exercise program for persons with chronic stroke. Medicine and science in sports and exercise 35: 1271-1278	- Study design not relevant to this review protocol *Non-comparative study*
Ertel, K. A., Glymour, M. M., Glass, T. A. et al. (2007) Frailty modifies effectiveness of psychosocial intervention in recovery from stroke. Clinical Rehabilitation 21(6): 511-22	- Study does not contain an intervention relevant to this review protocol *While social in nature, the activity could be considered part of the domestic role and related to home rather than specifically being about the nondomestic role.*
Faria, A. L., Andrade, A., Soares, L. et al. (2016) Benefits of virtual reality based cognitive rehabilitation through simulated activities of daily living: a randomized controlled trial with stroke patients. Journal of Neuroengineering & Rehabilitation 13(1): 96	- Study does not contain an intervention relevant to this review protocol *Is preparing for integration with community. The activity itself is not inherently social and isn't the main focus of this review.*
Friedland, J. F. and McColl, M. (1992) Social support intervention after stroke: results of a randomized trial. Archives of Physical Medicine & Rehabilitation 73(6): 573-81	- Data not reported in an extractable format or a format that can be analysed
Friedland, J. F. and McColl, M. (1992) Social support intervention after stroke: results of a randomised trial. Archives of physical medicine and rehabilitation 73: 573-581	- Duplicate reference
George, S., Crotty, M., Gelinas, I. et al. (2014) Rehabilitation for	- Systematic review used as

Study	Code [Reason]
improving automobile driving after stroke. Cochrane Database of Systematic Reviews: cd008357	source of primary studies *Cochrane review - not specific to social participation as a whole (focussing more on parameters of driving) but includes studies that may be relevant to a part of this review. Therefore, used as a source of references only.*
Green T, Haley E, Eliasziw M et al. (2007) Education in stroke prevention: efficacy of an educational counselling intervention to increase knowledge in stroke survivors. Canadian journal of neuroscience nursing 29(2): 13-20	- Study does not contain an intervention relevant to this review protocol *Not related to community participation (nurse-led stroke education only)*
Harper, C. (2009) Community reintegration: therapeutic dining program for older adult following stroke. American Journal of Recreation Therapy 8(3): 7-18	- Study design not relevant to this review protocol *Case study*
Harrington, R., Taylor, G., Hollinghurst, S. et al. (2010) A community-based exercise and education scheme for stroke survivors: a randomized controlled trial and economic evaluation. Clinical Rehabilitation 24(1): 3-15	- Data not reported in an extractable format or a format that can be analysed
Hartman-Maeir, A., Eliad, Y., Kizoni, R. et al. (2007) Evaluation of a long-term community based rehabilitation program for adult stroke survivors. Neurorehabilitation 22(4): 295-301	- Study design not relevant to this review protocol *Non-comparative study*
Huijbregts MP, Myers AM, Streiner D et al. (2008) Implementation, process, and preliminary outcome evaluation of two community programs for persons with stroke and their care partners. Topics in stroke rehabilitation 15(5): 503-520	- Non-randomised study that does not account for confounding factors in a multivariate or univariate analysis or not reporting sufficient evidence to show matched groups
Jagroop, D.; Maebrae-Waller, A.; Dogra, S. (2018) The feasibility of an exercise program 12 months post-stroke in a small urban community. The Journal of sports medicine and physical fitness 58(6): 895-902	- Study design not relevant to this review protocol *Non-comparative study*
Johnson, L., Bird, M. L., Muthalib, M. et al. (2018) Innovative STRoke Interactive Virtual thErapy (STRIVE) online platform for community-dwelling stroke survivors: a randomised controlled trial protocol. BMJ Open 8(1): e018388	- Protocol only
Jongbloed L and Morgan D (1991) An investigation of involvement in leisure activities after a stroke. The American journal of occupational therapy : official publication of the	- Data not reported in an extractable format or a format that can be analysed

Study	Code [Reason]
American Occupational Therapy Association 45(5): 420-427	*Reports continuous outcomes without standard deviations or a way of calculating them*
Kim, Y. N. and Lee, D. K. (2015) Effects of horse-riding exercise on balance, gait, and activities of daily living in stroke patients. Journal of Physical Therapy Science 27(3): 607-9	- Study does not contain an intervention relevant to this review protocol *Horse-riding exercise is simulated rather than being conducted on a horse and therefore is not associated with leisure activities and does not appear to be relevant to this review topic*
Lee, D., Fischer, H., Zera, S. et al. (2017) Examining a participation-focused stroke self-management intervention in a day rehabilitation setting: a quasi-experimental pilot study. Topics in Stroke Rehabilitation 24(8): 601-607	- Non-randomised study that does not account for confounding factors in a multivariate or univariate analysis or not reporting sufficient evidence to show matched groups
Lee, D.; Heffron, J. L.; Mirza, M. (2019) Content and Effectiveness of Interventions Focusing on Community Participation Poststroke: A Systematic Review. Archives of Physical Medicine & Rehabilitation 100(11): 2179-2192.e1	- Systematic review used as source of primary studies
Lewis, J. A. (2006) Recreational therapy intervention following stroke: community reintegration. American Journal of Recreation Therapy 5(3): 26-29	- Protocol only
Liu-Ambrose, T. and Eng, J. J. (2015) Exercise training and recreational activities to promote executive functions in chronic stroke: a proof-of-concept study. Journal of stroke and cerebrovascular diseases 24(1): 130-137	- Cross-over trial
Lo, S. H. S. (2016) A self-efficacy enhancing stroke self-management program for community-dwelling stroke survivors (SESSMP).	- Thesis only
Lo, S. H. S., Chang, A. M., Chau, J. P. C. et al. (2013) Theory-based self-management programs for promoting recovery in community-dwelling stroke survivors: A systematic review. JBI Database of Systematic Reviews and Implementation Reports 11(12): 157-215	- Study does not contain an intervention relevant to this review protocol *Not specifically a community participation intervention, focussed more on self-management interventions*
Lo, S. H. S., Chau, J. P. C., Choi, K. C. et al. (2021) Promoting community reintegration using narratives and skills building for young adults with stroke: a protocol for a randomised controlled	- Protocol only

Study	Code [Reason]
trial. BMC Neurology 21(1): 3	
Logan, P. A., Gladman, J. R. F., Drummond, A. E. R. et al. (2003) A study of intervention and related outcomes in a randomized controlled trial of occupational therapy and leisure therapy for community stroke patients. Clinical rehabilitation 17(3): 249-255	- Duplicate reference
Logan, P. A., Gladman, J. R., Drummond, A. E. et al. (2003) A study of interventions and related outcomes in a randomized controlled trial of occupational therapy and leisure therapy for community stroke patients. Clinical Rehabilitation 17(3): 249-55	- No relevant outcomes *Outcomes reporting specific activities of daily living as dichotomous data rather than continuous data*
Logan, Pa, Ahern, J, Gladman, Jr et al. (1997) A randomized controlled trial of enhanced Social Service occupational therapy for stroke patients. Clinical Rehabilitation 11(2): 107-13.	- Study does not contain an intervention relevant to this review protocol *Enhanced occupational therapy consisting of a single therapy who could see people sooner than possible by routine service. Not related to community participation.*
Magwood, G. S., Nichols, M., Jenkins, C. et al. (2020) Community-Based Interventions for Stroke Provided by Nurses and Community Health Workers: A Review of the Literature. Journal of Neuroscience Nursing 52(4): 152-159	- Study does not contain an intervention relevant to this review protocol *Interventions included were not specifically social or related to social participation. Those that looked like they could be relevant were ordered.*
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 *Reported physical function and self efficacy outcomes which were not included in the protocol*
Marsden, D., Quinn, R., Pond, N. et al. (2010) A multidisciplinary group programme in rural settings for community-dwelling chronic stroke survivors and their carers: a pilot randomized controlled trial. Clinical Rehabilitation 24(4): 328-41	- Cross-over trial
McKellar, J., Cheung, D., Huijbregts, M. et al. (2015) The impact of a community re-engagement cue to action trigger tool on re-engaging in activities post-stroke: a mixed-methods study. Topics in Stroke Rehabilitation 22(2): 134-43	- Data not reported in an extractable format or a format that can be analysed
McNaughton, Harry, Weatherall, Mark, McPherson, Kathryn et al. (2021) The effect of the Take Charge intervention on mood,	- Study does not contain an intervention relevant to this review

Study	Code [Reason]
motivation, activation and risk factor management: Analysis of secondary data from the Taking Charge after Stroke (TaCAS) trial. Clinical Rehabilitation 35(7): 1021-1031	protocol *Not inherently social intervention in nature*
Menkin, J. A., McCreath, H. E., Song, S. Y. et al. (2019) "Worth the Walk": Culturally Tailored Stroke Risk Factor Reduction Intervention in Community Senior Centers. Journal of the American Heart Association 8(6): e011088	- Population not relevant to this review protocol *People with hypertension and risk factors for a stroke rather than having a stroke*
Monroe, P., Halaki, M., Kumfor, F. et al. (2020) The effects of choral singing on communication impairments in acquired brain injury: A systematic review. International Journal of Language & Communication Disorders 55(3): 303-319	- Population not relevant to this review protocol *Includes people with a range of acquired brain injuries, including some with stroke. These studies were ordered if they were relevant to the protocol.*
Moore, S. A., Jakovljevic, D. G., Ford, G. A. et al. (2016) Exercise Induces Peripheral Muscle But Not Cardiac Adaptations After Stroke: A Randomized Controlled Pilot Trial. Archives of Physical Medicine & Rehabilitation 97(4): 596-603	- No relevant outcomes *Reports cardiovascular function outcomes only*
Moore, S. A., Jakovljevic, D. J., Ford, G. A. et al. (2012) The effect of a community exercise intervention on physiological and physical function following stroke: a randomised controlled trial. Cerebrovascular diseases (basel, switzerland) 33(suppl2): 850-851	- Conference abstract
Mulders, A. H. M.; de Witte, L. P.; Diederiks, J. P. M. (1989) Evaluation of a rehabilitation after-care programme for stroke patients. Journal of rehabilitation sciences 2(4): 97-103	- Data not reported in an extractable format or a format that can be analysed *Reports means without any method to calculate a standard deviation*
O'Connor, D.; McCluskey, A.; Bennett, S. (2008) Occupational therapy focussed on personal activities of daily living improves independence and reduces deterioration in community-dwelling people with stroke. Australian Occupational Therapy Journal 55(4): 295-296	- Commentary only
Obembe, A. O. and Eng, J. J. (2016) Rehabilitation Interventions for Improving Social Participation After Stroke: A Systematic Review and Meta-analysis. Neurorehabilitation & Neural Repair 30(4): 384-92	- Study does not contain an intervention relevant to this review protocol *Unclear if these are community based or not. Those that could be relevant were ordered*

Study	Code [Reason]
Pang, M. Y., Eng, J. J., Dawson, A. S. et al. (2005) A community-based fitness and mobility exercise program for older adults with chronic stroke: a randomized, controlled trial. Journal of the American Geriatrics Society 53(10): 1667-74	- Study does not contain an intervention relevant to this review protocol *Does not appear to be inherently social*
Pang, M. Y.; Harris, J. E.; Eng, J. J. (2006) A community-based upper-extremity group exercise program improves motor function and performance of functional activities in chronic stroke: a randomized controlled trial. Archives of Physical Medicine & Rehabilitation 87(1): 1-9	- Study does not contain an intervention relevant to this review protocol *Does not appear to be inherently social and is unclear as to whether it is group based*
Park, H. J., Oh, D. W., Choi, J. D. et al. (2017) Action observation training of community ambulation for improving walking ability of patients with post-stroke hemiparesis: a randomized controlled pilot trial. Clinical Rehabilitation 31(8): 1078-1086	- No relevant outcomes *Reports physical function outcomes only*
Radford, K. A., Craven, K., McLellan, V. et al. (2020) An individually randomised controlled multi-centre pragmatic trial with embedded economic and process evaluations of early vocational rehabilitation compared with usual care for stroke survivors: study protocol for the RETurn to work After stroKE (RETAKE) trial. Trials [Electronic Resource] 21(1): 1010	- Protocol only
Sackley, C. M., Walker, M. F., Burton, C. R. et al. (2016) An Occupational Therapy intervention for residents with stroke-related disabilities in UK Care Homes (OTCH): cluster randomised controlled trial with economic evaluation. Health Technology Assessment (Winchester, England) 20(15): 1-138	- Study does not contain an intervention relevant to this review protocol *Does not appear to be inherently social and is mostly focussed on function at home rather than community activities*
Schmid AA; Van Puymbroeck M; Koceja DM (2010) Effect of a 12-week yoga intervention on fear of falling and balance in older adults: a pilot study. Archives of physical medicine and rehabilitation 91(4): 576-583	- Population not relevant to this review protocol *People with fear of falling (which may include people with stroke, but the number if not explicitly stated)*
Shaughnessy M; Michael K; Resnick B (2012) Impact of treadmill exercise on efficacy expectations, physical activity, and stroke recovery. The Journal of neuroscience nursing : journal of the American Association of Neuroscience Nurses 44(1): 27-35	- Study does not contain an intervention relevant to this review protocol *Not inherently social in nature*
Sit JWH, Chan AWH, So WKW et al. (2017) Promoting Holistic Well-Being in Chronic Stroke Patients Through Leisure Art-Based Creative Engagement. Rehabilitation nursing : the official journal	- Study design not relevant to this review protocol

Study	Code [Reason]
of the Association of Rehabilitation Nurses 42(2): 58-66	*Qualitative study*
Stuart, M., Benvenuti, F., Macko, R. et al. (2009) Community-based adaptive physical activity program for chronic stroke: feasibility, safety, and efficacy of the Empoli model. Neurorehabilitation & Neural Repair 23(7): 726-34	- Non-randomised study that does not account for confounding factors in a multivariate or univariate analysis or not reporting sufficient evidence to show matched groups
Stuart, M., Dromerick, A. W., Macko, R. et al. (2019) Adaptive Physical Activity for Stroke: An Early-Stage Randomized Controlled Trial in the United States. Neurorehabilitation & Neural Repair 33(8): 668-680	- Data not reported in an extractable format or a format that can be analysed
Thayabaranathan, T., Andrew, N. E., Immink, M. A. et al. (2017) Determining the potential benefits of yoga in chronic stroke care: a systematic review and meta-analysis. Topics in stroke rehabilitation 24(4): 1-10	- Systematic review used as source of primary studies
Unsworth, C. A. and Baker, A. (2014) Driver rehabilitation: a systematic review of the types and effectiveness of interventions used by occupational therapists to improve on-road fitness-to-drive. Accident Analysis & Prevention 71: 106-14	- Population not relevant to this review protocol *Population was not specific to stroke*
Valentina, Iemmi, Lorna, Gibson, Karl, Blanchet et al. (2015) Community-based rehabilitation for people with disabilities in low- and middle-income countries. Campbell Collaboration 11	- Population not relevant to this review protocol - 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	- No relevant outcomes *Reports self efficacy outcomes only that were not included in the protocol*
Xie, G., Rao, T., Lin, L. et al. (2018) Effects of Tai Chi Yunshou exercise on community-based stroke patients: a cluster randomized controlled trial. European Reviews of Aging & Physical Activity 15: 17	- Study design not relevant to this review protocol *Cluster randomised trials where the unit of randomisation is participant rather than clusters and it is unclear how many participants are in each cluster with no information about the intra-cluster correlation coefficient.*

Study	Code [Reason]
Zhang, Q., Schwade, M., Smith, Y. et al. (2020) Exercise-based interventions for post-stroke social participation: A systematic review and network meta-analysis. International Journal of Nursing Studies 111: 103738	- Systematic review used as source of primary studies
Zheng, G., Chen, B., Fang, Q. et al. (2019) Baduanjin exercise intervention for community adults at risk of ischamic stroke: A randomized controlled trial. Scientific Reports 9(1): 1240	- Population not relevant to this review protocol *People who are at risk of having a stroke instead of people who have had a stroke*

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.	