

COMMUNITY BASED COMPLEX INTERVENTIONS TO SUSTAIN INDEPENDENCE IN OLDER PEOPLE: SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS

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SUPPLEMENTARY MATERIAL

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Additional data

Crocker TF, Lam N, Ensor J, Jordão M, Bajpai R, Bond M, et al. (2023) Community-based complex interventions to sustain independence in older people systematic review and network meta-analysis: effect estimates and findings dataset. University of Leeds. [Dataset] <https://doi.org/10.5518/1377>

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Appendix 1. Differences from the published protocol

Our protocol was published in BMJ Open prior to analyses beginning.²

1.1 Changes to protocol following publication

We precisely specified the cutoffs for our timeframes, which were already specified as around 6, 12, 24 months. We selected the medium-term (around 12 months) timeframe as the main timeframe for summary reports.

We initially planned to conduct meta-analyses of both odds ratios (ORs) and risk ratios (RRs) for dichotomous outcomes where possible but decided not to calculate RRs in meta-analysis due to their limited portability.³ We instead calculated an RR from the pooled OR to assist with interpretation.⁴

We initially planned to use GRADE^{5,6} to assess certainty but added CINeMA^{7,8} with the intention of making our assessments more systematic and reproducible. However, once we had performed our analyses, we discovered that the CINeMA software could not estimate imprecision, heterogeneity or incoherence for many of our networks. We therefore returned to our original plan of using GRADE.

We added methods based on the Cochrane Handbook to summarise economic evidence. Although costs and cost-effectiveness were specified as outcomes of interest, no methods were initially specified for handling economic evidence. It is rarely appropriate to conduct meta-analysis of cost and cost-effectiveness outcomes.⁹

1.2 Differences from the planned protocol in analyses conducted

95% CIs were calculated using the Wald based approach, but with inflated variances to account for uncertainty in the estimated variances, similar to the approach of Hartung-Knapp but using a normal approximation instead of a t-distribution.^{10,11}

The software programs we used included EndNote and Covidence, in addition to Rayyan, for citation record management/study selection. We used Microsoft Access, Excel, and Word to compile the tables in the reports instead of GRADEPro and RevMan.

Due to the availability of data and sparsity of our networks we were unable to conduct all of our analyses as planned. This led to the following differences:

- We limited the analyses for some outcomes and additional analyses to the main timeframe (medium term) due to the escalating number of analyses caused by having a split network for almost all outcomes (available-care and homecare networks).
- Frailty analyses, where conducted, were based on study-level categorisation of frailty only as too few studies provided validated measures to conduct our planned initial frailty analyses.
- We conducted our risk of bias sensitivity analyses by excluding results rated very serious concerns about risk of bias as there were no low-risk results (our planned approach).
- We did not conduct planned sensitivity analyses for publication years or follow-up timeframes as there were too few trials to include.

Appendix 2. Plain language summary

Which community services are best for helping older people to be independent?

Key messages

- Individualised care planning, where medication is adjusted and there are regular follow-ups, probably helps people stay living at home.
- Due to a lack of robust evidence, the benefits and risks of most types of community services for older people are unclear.

What are community services for older people?

There are many kinds of community services for older people. For example, in some services, everyone is given exercise and dietary advice or an individualised care plan. These often aim to help older people age independently.

What was the study about?

Maintaining independence is important in later life.

We wanted to find out which community services work best:

- to help people stay living at home, and
- to do day-to-day activities independently.

We reviewed findings from previous studies that have tested different community services for older people. We combined these findings and compared different types of service with one another. We rated our confidence in the evidence.

What did we find?

We found 129 studies with 74,946 people. We found 63 different kinds of service have been studied. The studies were carried out in diverse populations around the world.

Individualised care planning, where medication is adjusted and there are regular follow-ups may help people age independently. It probably increases the chance of staying at home slightly. It may also help with doing day-to-day activities very slightly.

Exercise and dietary advice may also help people stay living at home.

However, there was some evidence that some services may reduce independence.

We do not know what effect most services have.

What are the limitations of the evidence?

We generally had little confidence in the evidence because studies were small, and information was missing.

How current is the evidence?

The evidence is up to date to August 2021.

Appendix 3. Search strategies and their development

The search contained the following concepts:

1. Older people or frailty
2. Home-based or community interventions
3. RCT filter
4. 1 AND 2 AND 3

Restrictions by publication status or language were not used.

3.1 Search strategy development process

Search terms were harvested by exploring three relevant systematic reviews and their included studies.¹²⁻¹⁴ Their search strategies, as well as words and phrases in title, abstract and subject indexing were reviewed to find relevant search terms for inclusion. These terms were used to develop the initial draft search strategy. Extra search terms were found by reviewing results from that initial strategy. The PubMed PubReMiner (<https://hgserver2.amc.nl/cgi-bin/miner/miner2.cgi>) word frequency analysis tool was also used to find index terms and keyword terms for inclusion in the search strategy. For the concept 'home-based or community interventions', we included both broad and specific search terms as testing showed that this was necessary to capture all relevant interventions. We limited terms about geriatric nursing to community or home settings to increase the relevance of search results. Following testing, we also excluded some specific medical conditions in titles to increase the relevancy of the search results. For our MEDLINE search we added the Cochrane Collaboration highly sensitive filter, to identify randomised trials.¹⁵ This was supplemented with a search filter developed to find Phase Three Trials not found by the Cochrane RCT filter.¹⁶ For the Embase search we used the filter for finding randomised trials in Embase developed by the Cochrane Collaboration.¹⁷ For the Psycinfo search we used a sensitive methodological search filter.¹⁸ For the CINAHL search we developed our own search strategy to identify randomised trials. The strategies were peer reviewed by another information specialist prior to execution using the Peer Review of Electronic Search Strategies Checklist.¹⁹

3.2 Electronic search strategies

3.2.1 CENTRAL

Cochrane Central Register of Controlled Trials (CENTRAL) via Wiley interface was searched. The database coverage was 1992 to present and the database was searched on the 11th of August 2021

- | | | |
|-----|--|--------|
| #1 | ((frail* or prefrailty)):ti,ab,kw (Word variations have been searched) | 4037 |
| #2 | MeSH descriptor: [Aged] explode all trees | 213642 |
| #3 | MeSH descriptor: [Geriatrics] this term only | 207 |
| #4 | (elderly or old* next people* or old* next person* or old* next wom?n* or old* next m?n* or old* next male* or old* next female* or old* next adult* or old* next age* or aging or geriatric* or senior next citizen* or seniors or pensioner* or veteran* or sexagenarian* or septuagenarian* or octogenarian* or nonagenarian* or centenarian*):ti,ab,kw | 92534 |
| #5 | ((over Near/2 ("60" or "61" or "62" or "63" or "64" or "65" or "66" or "67" or "68" or "69" or "70" or "71" or "72" or "73" or "74" or "75" or "76" or "77" or "78" or "79" or "80" or "81" or "82" or "83" or "84" or "85" or "86" or "87" or "88" or "89" or "90" or "91" or "92" or "93" or "94" or "95" or "96" or "97" or "98" or "99" or "100") Near years)):ti,ab,kw (Word variations have been searched) | 3277 |
| #6 | {or #1-#5} | 283983 |
| #7 | MeSH descriptor: [Independent Living] this term only | 544 |
| #8 | MeSH descriptor: [Community Health Nursing] explode all trees | 345 |
| #9 | ("Community support services"):ti,ab,kw (Word variations have been searched) | 23 |
| #10 | MeSH descriptor: [Managed Care Programs] explode all trees | 502 |
| #11 | ("health maintenance organization*" or "health maintenance organisation*"):ti,ab,kw (Word variations have been searched) | 627 |
| #12 | (HMO*):ti,ab,kw (Word variations have been searched) | 494 |
| #13 | MeSH descriptor: [Social Work] this term only | 184 |
| #14 | (social Near/3 services):ti,ab,kw (Word variations have been searched) | 1417 |
| #15 | ("Voluntary services"):ti,ab,kw (Word variations have been searched) | 14 |
| #16 | MeSH descriptor: [Home Nursing] this term only | 282 |
| #17 | ("house call*"):ti,ab,kw (Word variations have been searched) | 583 |
| #18 | (home near/5 visit*):ti,ab,kw (Word variations have been searched) | 5140 |

- #19 (((("general practice" or "primary care" or nurse* or group or "ambulatory clinic" or "geriatric clinic") near/3 visit*)):ti,ab,kw (Word variations have been searched) 4731
- #20 MeSH descriptor: [Geriatric Assessment] this term only 1509
- #21 (pharmac* near/2 visit):ti,ab,kw (Word variations have been searched) 278
- #22 ((home or house) near/2 appointment*):ti,ab,kw (Word variations have been searched) 24
- #23 ("Home Care Services"):ti,ab,kw (Word variations have been searched) 2257
- #24 MeSH descriptor: [Home Care Services] this term only 1883
- #25 MeSH descriptor: [Health Services for the Aged] this term only 456
- #26 MeSH descriptor: [Home Health Nursing] explode all trees 7
- #27 ("district nursing"):ti,ab,kw (Word variations have been searched) 115
- #28 ("health visit*"):ti,ab,kw (Word variations have been searched) 186
- #29 ("community matron"):ti,ab,kw (Word variations have been searched) 4
- #30 (home Near/3 (intervention* or support* or assessment*)):ti,ab,kw (Word variations have been searched) 4926
- #31 MeSH descriptor: [Home Health Nursing] this term only 7
- #32 (((preventive* or preventative*) near/5 medicine)):ti,ab,kw (Word variations have been searched) 781
- #33 MeSH descriptor: [Preventive Medicine] this term only 121
- #34 ((preventive* or preventative*) near/3 (program* or intervent* or support* or care or service* or approach* or "case management" or measure* or OT or "occupational therapy" or assess*)):ti,ab,kw (Word variations have been searched) 6275
- #35 {or #7-#34} 25735
- #36 MeSH descriptor: [Geriatric Nursing] this term only 178
- #37 ("geriatric nursing"):ti,ab,kw (Word variations have been searched) 274
- #38 {or #36-#37} 274
- #39 MeSH descriptor: [Community Health Services] this term only 1061
- #40 (community):ti,ab,kw 46478
- #41 MeSH descriptor: [Community Health Nursing] explode all trees 345
- #42 MeSH descriptor: [Community Pharmacy Services] this term only 271
- #43 MeSH descriptor: [Home Care Services] this term only 1883
- #44 MeSH descriptor: [Aftercare] this term only 661
- #45 MeSH descriptor: [Primary Health Care] this term only 4388
- #46 (domiciliary or ("social support" and home*) or ((homecare or medical) near/2 home) or (home and package*) or (outreach and home) or ("alternative setting" and home) or "home visit*" or "home manag*" or homecare or "home care" or "home therap*" or (model* adj1 home*) or "home program*" or "home monitor*"):ti,ab,kw (Word variations have been searched) 12652
- #47 ("home-based" or homebased or homebound):ti,ab,kw (Word variations have been searched) 7510
- #48 ((live or living or lived or dwell*) near/5 ("at home" or "own home" or "in home" or alone or independent*)):ti,ab,kw (Word variations have been searched) 3855
- #49 ("Home care" or "primary care" or "primary healthcare" or "primary health care" or "community dwelling"):ti,ab,kw (Word variations have been searched) 31085
- #50 {or #39-#49} 80654
- #51 #38 AND #50 103
- #52 #35 or #51 25779
- #53 #6 and #52 8010
- #54 (coronary heart disease or CHD or chronic obstructive pulmonary disease or COPD or kidney failure or CKD or Heart failure or diabetes or asthma or cancer or schizophrenia or severe mental illness*):ti 210929
- #55 #53 NOT #54 7003

3.2.2 MEDLINE

MEDLINE(R) ALL was searched via OvidSP. The database coverage was 1946 to present and the database was searched on 9th of August 2021

- 1 randomized controlled trial.pt. (539556)
- 2 controlled clinical trial.pt. (94320)
- 3 randomized.ab. (529280)
- 4 placebo.ab. (220248)
- 5 clinical trials as topic.sh. (196870)
- 6 randomly.ab. (363058)
- 7 trial.ti. (244962)
- 8 or/1-7 (1384889)
- 9 exp animals/ not humans.sh. (4870600)
- 10 8 not 9 [Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity- and precision-maximizing version (2008 revision)] (1274483)
- 11 Clinical Trial, Phase III/ (18797)
- 12 ("phase 3" or "phase3" or "phase III" or "P3" or "PIII").ti,ab,kw. (73139)
- 13 11 or 12 [search filter for phase three trials to supplement Cochrane HSSS, Cooper 2019] (79735)
- 14 10 or 13 [final RCT filter] (1318490)
- 15 (frail* or prefrailty).tw. (25865)
- 16 exp aged/ (3283911)
- 17 geriatrics/ (30590)
- 18 (elder* or older or old people* or old person* or old wom#n*1 or old m#n*1 or old male*1 or old female*1 or old adult*1 or old age* or aging or ageing or geriatric* or senior citizen* or seniors or pensioner* or veteran* or sexagenarian* or septuagenarian* or octogenarian* or nonagenarian* or centenarian*).tw,kf. (1385083)
- 19 (over adj2 ("60" or "61" or "62" or "63" or "64" or "65" or "66" or "67" or "68" or "69" or "70" or "71" or "72" or "73" or "74" or "75" or "76" or "77" or "78" or "79" or "80" or "81" or "82" or "83" or "84" or "85" or "86" or "87" or "88" or "89" or "90" or "91" or "92" or "93" or "94" or "95" or "96" or "97" or "98" or "99" or "100") adj years).tw. (21451)
- 20 or/15-19 [older or frail people] (4132930)
- 21 independent living/ (8001)
- 22 community health services/ (32391)
- 23 community health nursing/ (19684)
- 24 Community support services.tw. (173)
- 25 exp managed care programs/ (40081)
- 26 (health maintenance organi?ation* or HMO*).tw. (13817)
- 27 (Social adj3 services).tw. (10694)
- 28 Voluntary services.tw. (99)
- 29 *home nursing/ (5361)
- 30 House Calls/ (3846)
- 31 house call*.tw. (656)
- 32 (home adj5 visit*).tw. (12399)
- 33 ((general practice or primary care or nurse* or group or ambulatory clinic or geriatric clinic) adj3 visit*).tw. (9527)
- 34 *geriatric assessment/ (13906)
- 35 (pharmac* adj2 visit).tw. (212)
- 36 ((home or house) adj2 appointment*).tw. (52)
- 37 Home Care Services/ (34738)
- 38 Home care service*.tw. (1913)

- 39 *health services for the aged/ (14001)
40 home health nursing/ (364)
41 district nursing.tw. (667)
42 health visit*.ti. or health visit*.ab. /freq=2 (2285)
43 community matron*.ti. or community matron*.ab. /freq=2 (83)
44 (home adj3 (intervention* or support* or assessment*)).tw. (8887)
45 preventive health services/ (14024)
46 ((preventive* or preventative*) adj5 medicine).tw. (7306)
47 preventative medicine/ (11938)
48 ((preventive* or preventative*) adj3 (program* or intervent* or support* or care or service* or approach* or case management or measure* or OT or occupational therapy or assess*)).tw. (66507)
49 or/21-48 (283985)
50 geriatric nursing/ (13707)
51 geriatric nurs*.tw,kf. (1164)
52 or/50-51 [geriatric nursing] (14118)
53 community.ti,ab,kf. (539116)
54 community health services/ or community health nursing/ or community mental health services/ or community pharmacy services/ (74241)
55 "domiciliary care"/ (34738)
56 aftercare/ (10404)
57 primary health care/ (83064)
58 (domiciliary or (social support and home*) or ((homecare or medical) adj2 home) or (home and package*) or (outreach and home) or (alternative setting and home) or home visit* or home manag* or homecare or home care or home therap* or (model* adj1 home*) or home program* or home monitor*).tw. (58982)
59 ((live or living or lived or dwell*) adj5 ("at home" or "own home" or "in home" or alone or independent*)).tw. (17479)
60 (home-based or homebased or homebound).tw. (12811)
61 (Home care or primary care or primary health care or primary healthcare).tw. (163820)
62 or/53-61 [interventions in a community or home setting] (808717)
63 52 and 62 [geriatric nursing and interventions in a community or home setting] (2015)
64 49 or 63 [all interventions] (284694)
65 (coronary heart disease or CHD or chronic obstructive pulmonary disease or COPD or kidney failure or CKD or Heart failure or diabetes or asthma or cancer or schizophrenia or severe mental illness*).ti. (1592860)
66 64 not 65 [all interventions excluding specific diseases in title] (267883)
67 14 and 20 and 66 [RCTS and older people and interventions] (7005)

3.2.3 Embase

Embase and Embase Classic via OvidSP was searched. The database coverage was 1947 to present and the database was search on the 9th of August 2021

- 1 randomized controlled trial/ (672319)
2 controlled clinical study/ (463974)
3 1 or 2 (860531)
4 random*.tw. (1703521)
5 randomization/ (91766)
6 intermethod comparison/ (273924)
7 placebo.tw. (332206)
8 (compare or compared or comparison).ti. (574408)
9 ((evaluated or evaluate or evaluating or assessed or assess) and (compare or compared)).ab. (2067060)

10 (open adj label).ti,ab. (89661)
11 ((double or single or doubly or singly) adj blind).tw. (227285)
12 parallel group\$1.tw. (27916)
13 double blind procedure/ (188870)
14 (crossover or cross over).tw. (113362)
15 ((assign* or match or matched or allocation) adj5 (alternate or group\$1 or intervention\$1 or patient\$1 or subject\$1 or participant\$1)).tw. (362240)
16 (assigned or allocated).tw. (427304)
17 (controlled adj7 (study or design or trial)).tw. (388612)
18 (volunteer or volunteers).tw. (265628)
19 human experiment/ (551078)
20 trial.ti. (343846)
21 or/4-20 (5189451)
22 21 or 3 (5347546)
23 (random* adj sampl* adj7 ("cross section*" or questionnaire\$1 or survey* or database\$1)).tw. not (comparative study/ or controlled study/ or randomi?ed controlled.tw. or randomly assigned.tw.) (8774)
24 Cross-sectional study/ not (randomized controlled trial/ or controlled clinical study/ or controlled study/ or randomi?ed controlled.tw. or control group\$1.tw.) (277846)
25 (((case adj control*) and random*) not randomi?ed controlled).tw. (18755)
26 (Systematic review not (trial or study)).ti. (182362)
27 (nonrandom* not random*).tw. (17268)
28 "Random field*".tw. (2544)
29 (random cluster adj3 sampl*).tw. (1374)
30 (review.ab. and review.pt.) not trial.ti. (913087)
31 "we searched".ab. and (review.ti. or review.pt.) (37761)
32 "update review".ab. (119)
33 (databases adj4 searched).ab. (44421)
34 (rat or rats or mouse or mice or swine or porcine or murine or sheep or lambs or pigs or piglets or rabbit or rabbits or cat or cats or dog or dogs or cattle or bovine or monkey or monkeys or trout or marmoset\$1).ti. and animal experiment/ (1116446)
35 Animal experiment/ not (human experiment/ or human/) (2346095)
36 or/23-35 (3759577)
37 22 not 36 [Cochrane Highly Sensitive Search Strategy for identifying controlled trials in Embase: (2018 revision); Ovid format (Glanville *et al.*, 2019b)] (4755948)
38 (frail* or prefrailty).tw. (39809)
39 aged/ (3370037)
40 very elderly/ (236950)
41 frail elderly/ (10922)
42 geriatrics/ (39915)
43 (elder* or older or old peple*ople* or old person* or old wom#n*1 or old m#n*1 or old ma 1 or old female*1 or old adult*1 or old age* or aging or ageing or geriatric* or senior citizen* or seniors or pensioner* or veteran* or sexagenarian* or septuagenarian* or octogenarian* or nonagenarian* or centenarian*).tw,kw. (1838159)
44 (over adj2 ("60" or "61" or "62" or "63" or "64" or "65" or "66" or "67" or "68" or "69" or "70" or "71" or "72" or "73" or "74" or "75" or "76" or "77" or "78" or "79" or "80" or "81" or "82" or "83" or "84" or "85" or "86" or "87" or "88" or "89" or "90" or "91" or "92" or "93" or "94" or "95" or "96" or "97" or "98" or "99" or "100") adj years).tw. (33789)
45 or/38-44 [frail or elderly people] (4516350)
46 independent living/ (5523)

47 community care/ (61677)
48 community health nursing/ (26723)
49 Community support services.tw. (239)
50 (health maintenance organi?ation* or HMO*).tw. (16728)
51 (Social adj3 services).tw. (14016)
52 Voluntary services.tw. (148)
53 home visit/ (3712)
54 house call*.tw. (852)
55 (home adj5 visit*).tw. (17275)
56 ((general practice or primary care or nurse* or group or ambulatory clinic or geriatric clinic) adj3 visit*).tw. (14158)
57 *geriatric assessment/ (6239)
58 (pharmac* adj2 visit).tw. (504)
59 ((home or house) adj2 appointment*).tw. (107)
60 Home Care/ (66345)
61 Home care service*.tw. (2345)
62 *elderly care/ (21267)
63 district nursing.tw. (664)
64 health visit*.ti. or health visit*.ab. /freq=2 (2402)
65 community matron*.ti. or community matron*.ab. /freq=2 (82)
66 (home adj3 (intervention* or support* or assessment*)).tw. (12351)
67 preventive health service/ (30244)
68 ((preventive* or preventative*) adj5 medicine).tw. (12282)
69 preventive medicine/ (29022)
70 ((preventive* or preventative*) adj3 (program* or intervent* or support* or care or service* or approach* or case management or measure* or OT or occupational therapy or assess*)).tw. (88643)
71 or/46-70 [specific interventions] (376111)
72 geriatric nursing/ (12986)
73 geriatric nurs*.tw,kw. (1405)
74 or/72-73 [geriatric nursing] (13603)
75 community.tw,kw. (686753)
76 community health services/ or community health nursing/ or mental health service/ or "pharmacy (shop)"/ (144914)
77 aftercare/ (8598)
78 primary health care/ (70765)
79 (domiciliary or (social support and home*) or ((homecare or medical) adj2 home) or (home and package*) or (outreach and home) or (alternative setting and home) or home visit* or home manag* or homecare or home care or home therap* or (model* adj1 home*) or home program* or home monitor*).tw. (78824)
80 ((live or living or lived or dwell*) adj5 ("at home" or "own home" or "in home" or alone or independent*)).tw. (24399)
81 (home-based or homebased or homebound).tw. (17773)
82 (Home care or primary care or primary healthcare or primary health care).tw. (217034)
83 or/75-82 [home or community setting] (1060004)
84 74 and 83 [geriatric nursing and home or community setting] (1864)
85 71 or 84 [all interventions] (376832)
86 (coronary heart disease or CHD or chronic obstructive pulmonary disease or COPD or kidney failure or CKD or Heart failure or diabetes or asthma or cancer or schizophrenia or severe mental illness*).ti. (2270105)
87 85 not 86 [all interventions except those mentioning specific diseases] (350036)

88 37 and 45 and 87 [RCT and elderly and Interventions] (17333)

3.2.4 APA Psycinfo

APA Psycinfo via OvidSP was searched. The database coverage was 1806 to present and the database was searched on the 9th of August 2021

1 (control: or random:).tw. or exp treatment/ [sensitive rct psycinfo search strategy Eady *et al.*, 2009] (1743140)
2 (frail* or prefrailty).tw. (5244)
3 exp aging/ (79898)
4 geriatric patients/ (13753)
5 geriatrics/ (11969)
6 (elder* or older or old people* or old person* or old wom#n*1 or old m#n*1 or old male*1 or old female*1 or old adult*1 or old age* or aging or geriatric* or senior citizen* or seniors or pensioner* or veteran* or sexagenarian* or septuagenarian* or octogenarian* or nonagenarian* or centenarian*).tw. (355903)
7 (over adj2 ("60" or "61" or "62" or "63" or "64" or "65" or "66" or "67" or "68" or "69" or "70" or "71" or "72" or "73" or "74" or "75" or "76" or "77" or "78" or "79" or "80" or "81" or "82" or "83" or "84" or "85" or "86" or "87" or "88" or "89" or "90" or "91" or "92" or "93" or "94" or "95" or "96" or "97" or "98" or "99" or "100") adj years).tw. (2391)
8 or/2-7 [frail or elderly people] (371975)
9 Self-Care Skills/ (4756)
10 community health/ (3653)
11 community services/ (17234)
12 social services/ (9557)
13 Community support services.tw. (219)
14 exp managed care/ (4567)
15 (health maintenance organi?ation* or HMO*).tw. (2449)
16 (Social adj3 services).tw. (11772)
17 Voluntary services.tw. (71)
18 home visiting programs/ (1861)
19 home care/ (6905)
20 house call*.tw. (106)
21 (home adj5 visit*).tw. (5619)
22 ((general practice or primary care or nurse* or group or ambulatory clinic or geriatric clinic) adj3 visit*).tw. (2716)
23 (pharmac* adj2 visit).tw. (23)
24 ((home or house) adj2 appointment*).tw. (12)
25 Independent Living Programs/ (408)
26 Home care service*.tw. (706)
27 district nursing.tw. (64)
28 health visit*.ti. or health visit*.ab. /freq=2 (342)
29 community matron*.ti. or community matron*.ab. /freq=2 (14)
30 (home adj3 (intervention* or support* or assessment*)).tw. (5172)
31 ((preventive* or preventative*) adj5 medicine).tw. (1085)
32 preventive medicine/ (2464)
33 ((preventive* or preventative*) adj3 (program* or intervent* or support* or care or service* or approach* or case management or measure* or OT or occupational therapy or assess*)).tw. (17107)
34 or/9-33 [interventions] (83270)
35 geriatric nursing.tw. (252)
36 (geriatrics/ or geriatric patients/) and nursing/ (639)
37 or/35-36 [geriatric nursing] (833)

- 38 community.tw. (275605)
 39 community services/ or community health/ or community mental health services/ or pharmacy/ (28713)
 40 (community healthcare or community health care).tw. (588)
 41 home care/ (6905)
 42 aftercare/ (1121)
 43 primary health care/ (19284)
 44 Public Health Service Nurses/ (658)
 45 (domiciliary or (social support and home*) or ((homecare or medical) adj2 home) or (home and package*) or (outreach and home) or (alternative setting and home) or home visit* or home manag* or homecare or home care or home therap* or (model* adj1 home*) or home program* or home monitor*).tw. (19096)
 46 ((live or living or lived or dwell*) adj5 ("at home" or "own home" or "in home" or alone or independent*)).tw. (10597)
 47 (home-based or homebased or homebound).tw. (5823)
 48 (Home care or primary care or primary health care or primary healthcare).tw. (44178)
 49 or/38-48 [community or home based] (340141)
 50 37 and 49 [geriatric nursing and community or home based] (174)
 51 34 or 50 [all interventions] (83378)
 52 (coronary heart disease or CHD or chronic obstructive pulmonary disease or COPD or kidney failure or CKD or Heart failure or diabetes or asthma or cancer or schizophrenia or severe mental illness*).ti. (116600)
 53 51 not 52 [all interventions except specific diseases in title] (79888)
 54 1 and 8 and 53 [RCT filter and elderly and all interventions except specific diseases in title] (7917)

3.2.5 CINAHL

CINAHL via EBSCOhost interface was searched. The database coverage was 1972 to present and the database was searched on the 9th of August 2021

Table 1 - CINAHL search strategy

#	Query	Limiters/Expanders	Last Run Via	Results
S46	S10 AND S18 and S45	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	10,636
S45	S43 NOT S44	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	106,016
S44	TI ("coronary heart disease" or CHD or "chronic obstructive pulmonary disease" or COPD or "kidney failure" or CKD or "Heart failure" or diabetes or asthma or cancer or schizophrenia or "severe mental illness*")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	501,973
S43	S29 or S42	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	113,278

S42	S30 and S41	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	2,217
S41	S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	687,262
S40	TX "Home care" or "primary care" or "primary health care" or "primary healthcare"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	198,977
S39	TX "home-based" or homebased or homebound	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	9,035
S38	(MH "Community Health Services")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	22,541
S37	TX ((live or living or lived or dwell*) N5 ("at home" or "own home" or "in home" or community or alone or independent*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	57,710
S36	TX domiciliary or ("social support" and home*) or ((homecare or medical) N2 home) or (home and package*) or (outreach and home) or (alternative setting and home) or home visit* or home manag* or homecare or "home care" or "home therap*" or (model* N1 home*) or "home program*" or "home monitor*")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	68,720
S35	(MH "Primary Health Care")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	67,490
S34	(MH "After Care")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	16,366
S33	(MH "Community Health Nursing")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	28,024

S32	(MH "Community Mental Health Services")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	9,964
S31	TX community	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	479,269
S30	(MH "Gerontologic Nursing")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	13,362
S29	S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	111,533
S28	TX ((preventive* or preventative*) N3 (program* or intervent* or support* or care or service* or approach* or case management or measure* or OT or "occupational therapy" or assess*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	47,492
S27	(MH "Preventive Health Care")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	21,369
S26	TX (home N3 (intervention* or support* or assessment*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	10,880
S25	TX "community matron*"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	283
S24	TX "health visit*"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	8,986
S23	TX "district nursing"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	2,176
S22	MM "Home Health Care"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	17,073

S21	(MH "Health Services for the Aged")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	6,819
S20	(MH "Home Visits") or (MH "Community Living")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	23,215
S19	TX "Community support services"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	155
S18	S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	1,209,432
S17	TX (over N2 ("60" or "61" or "62" or "63" or "64" or "65" or "66" or "67" or "68" or "69" or "70" or "71" or "72" or "73" or "74" or "75" or "76" or "77" or "78" or "79" or "80" or "81" or "82" or "83" or "84" or "85" or "86" or "87" or "88" or "89" or "90" or "91" or "92" or "93" or "94" or "95" or "96" or "97" or "98" or "99" or "100") N1 years)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	7,999
S16	TX (aging or ageing or geriatric* or gerontologic* or elderly or "senior citizen*" or seniors or pensioner* or veteran* or sexagenarian* or septuagenarian* or octogenarian* or nonagenarian* or centenarian*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	523,198
S15	TX ((older or elder*) N2 (person or people or adult* or patient* or m?n* or wom?n* or female* or male*))	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	194,690
S14	(MH "Aged+")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	878,186
S13	(MH "Geriatrics")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	5,708

S12	TX (frail*)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	18,976
S11	TX (prefrailty)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	160
S10	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	1,157,497
S9	AB group or AB groups	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	795,542
S8	AB trial or AB Trials	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	299,002
S7	AB randomly	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	96,217
S6	AB (randomised or randomized)	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	221,475
S5	TX "randomised controlled trial*"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	26,900
S4	TX "controlled clinical trial*"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	10,403
S3	(MH "Clinical Trials")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	177,904
S2	(MH "Randomized Controlled Trials")	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL	117,892
S1	TX "randomized controlled trial*"	Search modes - Boolean/Phrase	Interface - EBSCOhost Research Databases Search Screen - Advanced	

Search
Database - CINAHL

3.2.6 Trial registers

To search [Clinicaltrials.gov](https://clinicaltrials.gov) we used the advanced search interface, and searched the Conditions or Disease field using the following search terms: Frail Elderly Syndrome, frailty syndrome, Age-Related Atrophy ,Frailty, Old Age; Debility .The search yielded 861 records

For the [International Clinical Trials Registry Platform \(ICTRP\)](https://www.clinicaltrials.gov/) we used the advanced search interface, and used the search syntax older or elderly or frail in Title field and community or complex or independent or independence in Intervention field (with synonyms, all recruitment status).The search resulted in 425 records.

Appendix 4. Data items

In addition to outcomes, frailty status and intervention details as specified in the paper, we sought to extract data about:

- reports;
- funding sources;
- country;
- aims;
- RCT design;
- analysis details;
- participant:
 - description,
 - eligibility criteria,
 - number allocated in total and per group;
 - age,
 - gender,
 - living arrangement,
 - carer presence,
 - ethnicity,
 - frailty indicators and measures,
 - health status,
 - dependence and disabilities
 - comorbidities
 - cognitive status
 - mood status
- number of clusters if applicable;
- intervention name and role (experimental/control) per group; and
- further outcomes not specified as of interest for this review.

Appendix 5. Interpretation of the evidence

We described interpretation of the evidence following recent guidance,²⁰ providing an indication of size and direction if the evidence was not very low certainty. We used the terms ‘probably’ and ‘may’ to indicate moderate and low certainty respectively.^{20,21} Where the point estimate was large but the evidence was low certainty we described only the direction in the text as we were not assessing certainty in the size of the estimate; in these cases we described the size alongside the statistical summary.

For effect sizes expressed as SMD we took 0.05 to be the lower bound for a very small effect, 0.16 to be a small effect, 0.38 to be a moderate effect, 0.76 to be a large effect, and 1.2 and above to be a very large effect, based on empirical evidence of effect sizes in gerontological research.²² We re-expressed SMDs as MDs using a pooled SD for a common measure of the outcome from the included studies.⁴

We re-expressed ORs (and 95% CIs) as RRs using the median risk in the reference comparator arms, and as absolute effects (corresponding intervention risk and corresponding risk difference) for a high and low-risk population, using the highest and lowest risk among the reference comparator arms with more than 100 participants as the assumed comparator risks.⁴ By reference to other commonly used interventions in fields such as stroke prevention and hypertension we noted that Number Needed to Treat to Benefit (NNTB) for major outcomes was often between 50 and 100, and sometimes larger.²³⁻²⁵ Based on this we arbitrarily selected NNTB = 200 as a limit for important difference and used the corresponding risk difference for the high-risk population to define effect sizes as very small (5 per 1000), small (20 per 1000), moderate (40 per 1000), large (60 per 1000) or very large (100 or more per 1000).

Appendix 6. Excluded reports

Table 2 - Table of excluded reports

Excluded report	Reason for exclusion
ACTRN1260600042549 ²⁶	Final planned follow-up was before 24 weeks.
ACTRN12616000521426 ²⁷	The intervention was not initiated and provided in the community.
ACTRN12616001148460 ²⁸	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
ACTRN12618001188224 ²⁹	The intervention was not focused on sustaining the person's independence.
ACTRN12619000910101 ³⁰	Final planned follow-up was before 24 weeks.
ACTRN12619001055190 ³¹	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Adelman <i>et al.</i> ³²	The intervention was not targeted at the older person.
Ahmad <i>et al.</i> ³³	The intervention was not focused on sustaining the person's independence.
Aimonino Ricauda <i>et al.</i> ³⁴	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Akihiro <i>et al.</i> ³⁵	The study was not an RCT/cRCT.
Albert <i>et al.</i> ³⁶	The intervention was not focused on sustaining the person's independence.
Anders <i>et al.</i> ³⁷	The intervention was not initiated and provided in the community.
Andrew <i>et al.</i> ³⁸	The study was not an RCT/cRCT.
Anonymous ³⁹	The study was not an RCT/cRCT.
Anonymous ⁴⁰	The intervention was not focused on sustaining the person's independence.
Anttila <i>et al.</i> ⁴¹	The study was not an RCT/cRCT.
Applebaum <i>et al.</i> ⁴²	The intervention was not initiated and provided in the community.
Arendts <i>et al.</i> ⁴³	The intervention was not focused on sustaining the person's independence.
Aung <i>et al.</i> ⁴⁴	The intervention was not initiated and provided in the community.
Baker <i>et al.</i> ⁴⁵	The intervention was not focused on sustaining the person's independence.
Ball <i>et al.</i> ⁴⁶	The intervention did not include two or more components (practices, structural elements and contextual factors).
Ball <i>et al.</i> ⁴⁷	The intervention did not include two or more components (practices, structural elements and contextual factors).
Bandinelli <i>et al.</i> ⁴⁸	The intervention was not initiated and provided in the community.
Bardsley <i>et al.</i> ⁴⁹	The intervention was not focused on sustaining the person's independence.
Bauer ⁵⁰	The study was not an RCT/cRCT.
Bauer ⁵¹	The study was not an RCT/cRCT.
Baumann <i>et al.</i> ⁵²	The study was not an RCT/cRCT.
Beck <i>et al.</i> ⁵³	The intervention was not initiated and provided in the community.
Beck <i>et al.</i> ⁵⁴	The intervention was not initiated and provided in the community.
Beck <i>et al.</i> ⁵⁵	The intervention was not initiated and provided in the community.
Beck <i>et al.</i> ⁵⁶	The intervention was not initiated and provided in the community.
Beland <i>et al.</i> ⁵⁷	The intervention was not initiated and provided in the community.
Belchior <i>et al.</i> ⁵⁸	The intervention did not include two or more components (practices, structural elements and contextual factors).
Belleville <i>et al.</i> ⁵⁹	The intervention was not focused on sustaining the person's independence.
Belqaid <i>et al.</i> ⁶⁰	The intervention was not initiated and provided in the community.
Berglund <i>et al.</i> ⁶¹	The intervention was not initiated and provided in the community.
Bernabei <i>et al.</i> ⁶²	The intervention was not initiated and provided in the community.
Binder <i>et al.</i> ⁶³	The intervention was not initiated and provided in the community.
Blanchard <i>et al.</i> ⁶⁴	The participants were younger than 65 years on average.
Bondoc <i>et al.</i> ⁶⁵	The intervention was not initiated and provided in the community.
Bonnefoy <i>et al.</i> ⁶⁶	Final planned follow-up was before 24 weeks.
Bosch-Lenders <i>et al.</i> ⁶⁷	The intervention did not include two or more components (practices, structural elements and contextual factors).
Botosaneanu <i>et al.</i> ⁶⁸	The intervention was not initiated and provided in the community.
Boult <i>et al.</i> ⁶⁹	The intervention was not focused on sustaining the person's independence.
Brandon <i>et al.</i> ⁷⁰	The intervention was not focused on sustaining the person's independence.

Brazil <i>et al.</i> ⁷¹ NCT03902743 ⁷²	According to the trial register, the study was still recruiting as of 31 August 2021.
Buford <i>et al.</i> ⁷³	The intervention was not initiated and provided in the community.
Buford <i>et al.</i> ⁷⁴	The intervention was not initiated and provided in the community.
Burke <i>et al.</i> ⁷⁵	The intervention was not focused on sustaining the person's independence.
Burton <i>et al.</i> ⁷⁶	The intervention was not focused on sustaining the person's independence.
Burton <i>et al.</i> ⁷⁷	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
Burton <i>et al.</i> ⁷⁸	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
Burton <i>et al.</i> ⁷⁹	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
Burton <i>et al.</i> ⁸⁰	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
Buss <i>et al.</i> ⁸¹	The participants were not living at home.
Byles <i>et al.</i> ⁸²	The intervention was not focused on sustaining the person's independence.
Byles <i>et al.</i> ⁸³	The intervention was not focused on sustaining the person's independence.
Callahan <i>et al.</i> ⁸⁴	The intervention was not initiated and provided in the community.
Caplan <i>et al.</i> ⁸⁵	The intervention was not initiated and provided in the community.
Carrie <i>et al.</i> ⁸⁶	The intervention was not initiated and provided in the community.
Carrie <i>et al.</i> ⁸⁷	The intervention was not initiated and provided in the community.
Cartwright <i>et al.</i> ⁸⁸	The intervention was not focused on sustaining the person's independence.
Cavaillon ⁸⁹	The intervention was not initiated and provided in the community.
Cesari <i>et al.</i> ⁹⁰	The intervention was not initiated and provided in the community.
Chan <i>et al.</i> ⁹¹	The intervention was not initiated and provided in the community.
Chin <i>et al.</i> ⁹²	Final planned follow-up was before 24 weeks.
Ching Wong <i>et al.</i> ⁹³	Final planned follow-up was before 24 weeks.
Choi <i>et al.</i> ⁹⁴	The intervention did not include two or more components (practices, structural elements and contextual factors).
Clarke <i>et al.</i> ⁹⁵	The intervention was not focused on sustaining the person's independence.
Coburn <i>et al.</i> ⁹⁶	The intervention was not focused on sustaining the person's independence.
Cochrane <i>et al.</i> ⁹⁷	The intervention was not initiated and provided in the community.
Cornu <i>et al.</i> ⁹⁸	Final planned follow-up was before 24 weeks.
Corrado ⁹⁹	The study was not an RCT/cRCT.
Crandall <i>et al.</i> ¹⁰⁰	Final planned follow-up was before 24 weeks.
Crews <i>et al.</i> ¹⁰¹	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Ctri <i>et al.</i> ¹⁰²	The study was not an RCT/cRCT.
Cucinotta <i>et al.</i> ¹⁰³	The intervention was not focused on sustaining the person's independence.
Cunliffe <i>et al.</i> ¹⁰⁴	The comparator was not initiated and provided in the community.
Cwirlej-Sozanska <i>et al.</i> ¹⁰⁵	The intervention was not focused on sustaining the person's independence.
Czaja <i>et al.</i> ¹⁰⁶	The intervention was not focused on sustaining the person's independence.
Daffner <i>et al.</i> ¹⁰⁷	Final planned follow-up was before 24 weeks.
Damanti <i>et al.</i> ¹⁰⁸	The intervention was not focused on sustaining the person's independence.
Dangour <i>et al.</i> ¹⁰⁹	The intervention was not focused on sustaining the person's independence.
Danilovich <i>et al.</i> ¹¹⁰	The intervention did not include two or more components (practices, structural elements and contextual factors).
Danilovich <i>et al.</i> ¹¹¹	Final planned follow-up was before 24 weeks.
Dapp <i>et al.</i> ¹¹²	The intervention was not initiated and provided in the community.
Dapp <i>et al.</i> ¹¹³	The intervention was not initiated and provided in the community.
Dapp <i>et al.</i> ¹¹⁴	The intervention was not initiated and provided in the community.
Dapp <i>et al.</i> ¹¹⁵	The intervention was not initiated and provided in the community.
Dapp <i>et al.</i> ¹¹⁶	The intervention was not initiated and provided in the community.
Dapp <i>et al.</i> ¹¹⁷	The intervention was not initiated and provided in the community.
Dapp <i>et al.</i> ¹¹⁸	The intervention was not initiated and provided in the community.

Dapp <i>et al.</i> ¹¹⁹	The intervention was not initiated and provided in the community.
Darzins <i>et al.</i> ¹²⁰	The study was not an RCT/cRCT.
Datta <i>et al.</i> ¹²¹	The intervention was not initiated and provided in the community.
De Luca <i>et al.</i> ¹²²	The comparator was not initiated and provided in the community.
de Souto Barreto <i>et al.</i> ¹²³	The intervention was not initiated and provided in the community.
De Vreede <i>et al.</i> ¹²⁴	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
de Vreede <i>et al.</i> ¹²⁵	The intervention did not include two or more components (practices, structural elements and contextual factors).
De Vriendt <i>et al.</i> ¹²⁶	Final planned follow-up was before 24 weeks.
de Vries <i>et al.</i> ¹²⁷	The participants were not living at home.
Delbaere <i>et al.</i> ¹²⁸	The study was not an RCT/cRCT.
Delrieu <i>et al.</i> ¹²⁹	The intervention was not initiated and provided in the community.
Denny <i>et al.</i> ¹³⁰	Only a conference abstract is available. We cannot confirm the length of follow-up period was at least 24 weeks.
Di Pollina <i>et al.</i> ¹³¹	The intervention was not focused on sustaining the person's independence.
Docent <i>et al.</i> ¹³²	The study was not an RCT/cRCT.
Donelle <i>et al.</i> ¹³³ ISRCTN79884651 ¹³⁴	According to the trial register, the study recruitment ended in January 2020. The results were unavailable as of 31 August 2021 and intention to publish data was 31 March 2023.
Dotson <i>et al.</i> ¹³⁵	The intervention was not initiated and provided in the community.
DRKS00024638 ¹³⁶	Only the trial register record is available. We cannot confirm whether the intervention was initiated and provided in the community.
Dunn <i>et al.</i> ¹³⁷	The intervention was not focused on sustaining the person's independence.
Eekhof <i>et al.</i> ¹³⁸	The study was not an RCT/cRCT.
Elliott <i>et al.</i> ¹³⁹	The intervention was not initiated and provided in the community.
Englund <i>et al.</i> ¹⁴⁰	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
Espeland <i>et al.</i> ¹⁴¹	The intervention was not initiated and provided in the community.
Espeland <i>et al.</i> ¹⁴²	The intervention was not initiated and provided in the community.
Falvey <i>et al.</i> ¹⁴³ NCT02905370 ¹⁴⁴	According to the trial register, the study is still recruiting as of 31 August 2021.
Fasce <i>et al.</i> ¹⁴⁵ NCT02052401 ¹⁴⁶	Only the protocol and trial register records are available. We cannot confirm whether the participants aged 65 or over on average.
Feingold <i>et al.</i> ¹⁴⁷	The study was not an RCT/cRCT.
Feldman <i>et al.</i> ¹⁴⁸	The study was not an RCT/cRCT.
Feng <i>et al.</i> ¹⁴⁹	The intervention was not focused on sustaining the person's independence.
Ferrat <i>et al.</i> ¹⁵⁰	According to the trial register, the study was still recruiting as of 31 August 2021.
Ferreira ¹⁵¹	Only a conference abstract of the protocol is available. We cannot confirm whether the study has a focus of sustaining independence.
Fielding <i>et al.</i> ¹⁵²	The intervention was not initiated and provided in the community.
Finkelstein <i>et al.</i> ¹⁵³	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Finkelstein <i>et al.</i> ¹⁵⁴	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Finkelstein <i>et al.</i> ¹⁵⁵	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Fisher <i>et al.</i> ¹⁵⁶	The intervention was not focused on sustaining the person's independence.
Fletcher <i>et al.</i> ¹⁵⁷	The participants were not living at home.
Fletcher <i>et al.</i> ¹⁵⁸	The participants were not living at home.
Fontan ¹⁵⁹	The study was not an RCT/cRCT.
Fontan ¹⁶⁰	The study was not an RCT/cRCT.
Forbes ¹⁶¹	The study was not an RCT/cRCT.
France <i>et al.</i> ¹⁶²	The study was not an RCT/cRCT.
Fransé <i>et al.</i> ¹⁶³	The study was not an RCT/cRCT.
Frese <i>et al.</i> ¹⁶⁴	The study was not an RCT/cRCT.
Friedberg ¹⁶⁵	The study was not an RCT/cRCT.
Frieswijk <i>et al.</i> ¹⁶⁶	The intervention did not include two or more components (practices, structural elements and contextual factors).
Fritz <i>et al.</i> ¹⁶⁷	Final planned follow-up was before 24 weeks.

Gagnon <i>et al.</i> ¹⁶⁸	The comparator was not initiated and provided in the community.
Gasmann <i>et al.</i> ¹⁶⁹	The study was not an RCT/cRCT.
Geller <i>et al.</i> ¹⁷⁰	The intervention was not focused on sustaining the person's independence.
Giannini <i>et al.</i> ¹⁷¹	The study was not an RCT/cRCT.
Gillette ¹⁷²	The intervention was not initiated and provided in the community.
Gillette-Guyonnet <i>et al.</i> ¹⁷³	The intervention was not initiated and provided in the community.
Ginis <i>et al.</i> ¹⁷⁴	The intervention was not initiated and provided in the community.
Giudici <i>et al.</i> ¹⁷⁵	The intervention was not initiated and provided in the community.
Giudici <i>et al.</i> ¹⁷⁶	The intervention was not initiated and provided in the community.
Godwin <i>et al.</i> ¹⁷⁷	The intervention was not focused on sustaining the person's independence.
Godwin <i>et al.</i> ¹⁷⁸	The intervention was not focused on sustaining the person's independence.
Golas <i>et al.</i> ¹⁷⁹	The intervention was not focused on sustaining the person's independence.
Goldberg <i>et al.</i> ¹⁸⁰	The intervention was not focused on sustaining the person's independence.
Gorenberg ¹⁸¹	The study was not an RCT/cRCT.
Granbom <i>et al.</i> ¹⁸²	The intervention was not focused on sustaining the person's independence.
Green <i>et al.</i> ¹⁸³	The study was not an RCT/cRCT.
Groessler <i>et al.</i> ¹⁸⁴	The intervention was not initiated and provided in the community.
Gross <i>et al.</i> ¹⁸⁵	The intervention did not include two or more components (practices, structural elements and contextual factors).
Gross <i>et al.</i> ¹⁸⁶	The intervention did not include two or more components (practices, structural elements and contextual factors).
Gross <i>et al.</i> ¹⁸⁷	The intervention did not include two or more components (practices, structural elements and contextual factors).
Guerville <i>et al.</i> ¹⁸⁸	The intervention was not initiated and provided in the community.
Gunner-Svensson <i>et al.</i> ¹⁸⁹	The intervention was not focused on sustaining the person's independence.
Gunzelmann <i>et al.</i> ¹⁹⁰	The study was not an RCT/cRCT.
Guralnik <i>et al.</i> ¹⁹¹	The intervention was not focused on sustaining the person's independence.
Guyonnet Sophie <i>et al.</i> ¹⁹²	The intervention was not initiated and provided in the community.
Hagen <i>et al.</i> ¹⁹³	The study was not an RCT/cRCT.
Hall ¹⁹⁴	The study was not an RCT/cRCT.
Hammar <i>et al.</i> ¹⁹⁵	The intervention was not initiated and provided in the community.
Hansen <i>et al.</i> ¹⁹⁶	The study was not an RCT/cRCT.
Hansen <i>et al.</i> ¹⁹⁷	The study was not an RCT/cRCT.
Hansen <i>et al.</i> ¹⁹⁸	The intervention was not focused on sustaining the person's independence.
Henderson <i>et al.</i> ¹⁹⁹	The intervention was not focused on sustaining the person's independence.
Henderson <i>et al.</i> ²⁰⁰	The intervention was not focused on sustaining the person's independence.
Henderson <i>et al.</i> ²⁰¹	The intervention was not initiated and provided in the community.
Hernandez-Ascanio <i>et al.</i> ²⁰²	The intervention was not focused on sustaining the person's independence.
Hinkka <i>et al.</i> ²⁰³	The intervention was not initiated and provided in the community.
Hirani <i>et al.</i> ²⁰⁴	The intervention was not focused on sustaining the person's independence.
Hitzel <i>et al.</i> ²⁰⁵	The intervention was not initiated and provided in the community.
Hochhalter <i>et al.</i> ²⁰⁶	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Hooper <i>et al.</i> ²⁰⁷	The intervention was not initiated and provided in the community.
Hopp <i>et al.</i> ²⁰⁸	The intervention was not focused on sustaining the person's independence.
Hsieh <i>et al.</i> ²⁰⁹	The intervention was not focused on sustaining the person's independence.
Hsieh <i>et al.</i> ²¹⁰	The intervention was not initiated and provided in the community.
Hsin <i>et al.</i> ²¹¹	Final planned follow-up was before 24 weeks.
Hsu <i>et al.</i> ²¹²	The intervention was not initiated and provided in the community.
Hughes <i>et al.</i> ²¹³	The intervention was not initiated and provided in the community.
ISRCTN13927531 ²¹⁴	According to the trial register, the overall trial end data is 31 May 2023.
ISRCTN16123291 ²¹⁵	According to the trial register, the overall trial end data is 30 March 2023.
ISRCTN52788952 ²¹⁶	The study was not an RCT/cRCT.

ISRCTN54268283 ²¹⁷	According to the trial register, the study was still recruiting as of 31 August 2021.
ISRCTN57066881 ²¹⁸	Final planned follow-up was before 24 weeks.
Jackson <i>et al.</i> ²¹⁹	The study was not an RCT/cRCT.
JPRN-UMIN000003877 ²²⁰	Final planned follow-up was before 24 weeks.
JPRN-UMIN000004767 ²²¹	Final planned follow-up was before 24 weeks.
JPRN-UMIN000022992 ²²²	Final planned follow-up was before 24 weeks.
JPRN-UMIN000026448 ²²³	Final planned follow-up was before 24 weeks.
June <i>et al.</i> ²²⁴	The study was not an RCT/cRCT.
Kallio <i>et al.</i> ²²⁵	The study was not an RCT/cRCT.
Katula <i>et al.</i> ²²⁶	The intervention was not initiated and provided in the community.
Kerr <i>et al.</i> ²²⁷	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Kerse <i>et al.</i> ²²⁸	The intervention was not focused on sustaining the person's independence.
Kerse <i>et al.</i> ²²⁹	The intervention was not focused on sustaining the person's independence.
Kim <i>et al.</i> ²³⁰	The intervention was not focused on sustaining the person's independence.
Kim <i>et al.</i> ²³¹	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
King <i>et al.</i> ²³²	The study was not an RCT/cRCT.
Kinney <i>et al.</i> ²³³	The intervention was not focused on sustaining the person's independence.
Kivipelto <i>et al.</i> ²³⁴	The intervention was not initiated and provided in the community.
Kivipelto <i>et al.</i> ²³⁵	The study was not an RCT/cRCT.
Kivipelto <i>et al.</i> ²³⁶	The intervention was not initiated and provided in the community.
Klompstra <i>et al.</i> ²³⁷	The intervention was not initiated and provided in the community.
Kolbe-Alexander <i>et al.</i> ²³⁸	The study was not an RCT/cRCT.
Kravitz <i>et al.</i> ²³⁹	The study was not an RCT/cRCT.
Kristensson <i>et al.</i> ²⁴⁰	The intervention was not focused on sustaining the person's independence.
Kwon <i>et al.</i> ²⁴¹	The intervention was not focused on sustaining the person's independence.
Latham <i>et al.</i> ²⁴²	The intervention was not initiated and provided in the community.
Lewin <i>et al.</i> ²⁴³	The study was not an RCT/cRCT.
Li <i>et al.</i> ²⁴⁴	The intervention was not initiated and provided in the community.
Liang <i>et al.</i> ²⁴⁵	The intervention was not initiated and provided in the community.
LIFE Study Investigators ²⁴⁶	The intervention was not initiated and provided in the community.
Lihavainen <i>et al.</i> ²⁴⁷	The participants were not living at home.
Lilamand <i>et al.</i> ²⁴⁸	The intervention was not initiated and provided in the community.
Lim <i>et al.</i> ²⁴⁹	The intervention was not initiated and provided in the community.
Lin <i>et al.</i> ²⁵⁰	The intervention did not include two or more components (practices, structural elements and contextual factors).
Lin <i>et al.</i> ²⁵¹	The intervention did not include two or more components (practices, structural elements and contextual factors).
Liu <i>et al.</i> ²⁵²	The intervention was not initiated and provided in the community.
Liu <i>et al.</i> ²⁵³	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
Liu <i>et al.</i> ²⁵⁴	Final planned follow-up was before 24 weeks.
Lohman <i>et al.</i> ²⁵⁵	The intervention did not include two or more components (practices, structural elements and contextual factors).
Lorig <i>et al.</i> ²⁵⁶	The intervention was not focused on sustaining the person's independence.
Luger <i>et al.</i> ²⁵⁷	The intervention was not focused on sustaining the person's independence.
Lum <i>et al.</i> ²⁵⁸	The intervention was not focused on sustaining the person's independence.
Lurie <i>et al.</i> ²⁵⁹	The intervention was not targeted at the older person.
Lyndon <i>et al.</i> ²⁶⁰	According to the trial register, the study results were unavailable as of 31 August 2021 and intention to publish data is 30 April 2022.
ISRCTN74345449 ²⁶¹	
Mangin <i>et al.</i> ²⁶²	The intervention was not focused on sustaining the person's independence.
Mankowski <i>et al.</i> ²⁶³	The intervention was not initiated and provided in the community.
Marcusson <i>et al.</i> ²⁶⁴	The study was not an RCT/cRCT.
Marsh <i>et al.</i> ²⁶⁵	The intervention was not initiated and provided in the community.

Marsh <i>et al.</i> ²⁶⁶	The intervention was not initiated and provided in the community.
Martin <i>et al.</i> ²⁶⁷	The participants were not living at home.
Martin Lesende ²⁶⁸	The study was not an RCT/cRCT.
Matthews <i>et al.</i> ²⁶⁹	The intervention was not initiated and provided in the community.
Mayer <i>et al.</i> ²⁷⁰	The intervention was not focused on sustaining the person's independence.
McDermott <i>et al.</i> ²⁷¹	The intervention was not initiated and provided in the community.
McDougall <i>et al.</i> ²⁷²	The intervention was not focused on sustaining the person's independence.
McDowell <i>et al.</i> ²⁷³	Final planned follow-up was before 24 weeks.
McEwan <i>et al.</i> ²⁷⁴	The participants were not living at home.
McFarland ²⁷⁵	The study was not an RCT/cRCT.
McMurdo <i>et al.</i> ²⁷⁶	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
McWilliam <i>et al.</i> ²⁷⁷	The intervention was not focused on sustaining the person's independence.
Meiling ²⁷⁸	The study was not an RCT/cRCT.
Melin <i>et al.</i> ²⁷⁹	The comparator was not initiated and provided in the community.
Melin <i>et al.</i> ²⁸⁰	The comparator was not initiated and provided in the community.
Melin <i>et al.</i> ²⁸¹	The comparator was not initiated and provided in the community.
Merete Pedersen <i>et al.</i> ²⁸²	The intervention was not initiated and provided in the community.
Meuleman ²⁸³	The study was not an RCT/cRCT.
Meziere ²⁸⁴	Final planned follow-up was before 24 weeks.
Miller <i>et al.</i> ²⁸⁵	The comparator was not initiated and provided in the community.
Mohd Suffian <i>et al.</i> ²⁸⁶	According to the trial register, the study has not started recruitment as of 31 August 2021.
Moller <i>et al.</i> ²⁸⁷	The intervention was not focused on sustaining the person's independence.
Moon <i>et al.</i> ²⁸⁸	The intervention was not initiated and provided in the community.
Mor <i>et al.</i> ²⁸⁹	The participants were younger than 65 years on average.
Mortenson <i>et al.</i> ²⁹⁰	Final planned follow-up was before 24 weeks.
Mortsiefer <i>et al.</i> ²⁹¹ DRKS00015055 ²⁹²	According to the trial register, the study recruitment closed on 30 June 2021 and the study was ongoing as of 31 August 2021.
Mountain <i>et al.</i> ²⁹³	The intervention was not focused on sustaining the person's independence.
Mugueta-Aguinaga <i>et al.</i> ²⁹⁴	The intervention did not include two or more components (practices, structural elements and contextual factors).
Mugueta-Aguinaga <i>et al.</i> ²⁹⁵	The intervention did not include two or more components (practices, structural elements and contextual factors).
NCT00452465 ²⁹⁶	The intervention was not focused on sustaining the person's independence.
NCT00672685 ²⁹⁷	The intervention was not initiated and provided in the community.
NCT01345032 ²⁹⁸	Final planned follow-up was before 24 weeks.
NCT02021565 ²⁹⁹	Final planned follow-up was before 24 weeks.
NCT02335177 ³⁰⁰	Final planned follow-up was before 24 weeks.
NCT02545257 ³⁰¹	The intervention was not focused on sustaining the person's independence.
NCT02554838 ³⁰²	The intervention was targeted at specific conditions, rather than addressing independence more generally.
NCT02582138 ³⁰³	The intervention was not initiated and provided in the community.
NCT02847871 ³⁰⁴	The intervention was not initiated and provided in the community.
NCT02923843 ³⁰⁵	The intervention was not initiated and provided in the community.
NCT02942992 ³⁰⁶	The intervention did not include two or more components (practices, structural elements and contextual factors).
NCT03147625 ³⁰⁷	According to the trial register, the study recruitment status was unknown and no results were available as of 31 August 2021.
NCT03180606 ³⁰⁸	The study was not an RCT/cRCT.
NCT03212859 ³⁰⁹	The participants were not living at home.
NCT03336320 ³¹⁰	The intervention was not focused on sustaining the person's independence.
NCT03342976 ³¹¹	The study was not an RCT/cRCT.
NCT03394495 ³¹²	The intervention was not focused on sustaining the person's independence.
NCT03394534 ³¹³	According to the trial register, the study was still recruiting as of 31 August 2021.
NCT03456128 ³¹⁴	According to the trial register, the study was still recruiting as of 31 August 2021.

NCT03474380 ³¹⁵	The intervention was not initiated and provided in the community.
NCT03568084 ³¹⁶	The intervention did not include two or more components (practices, structural elements and contextual factors).
NCT03577002 ³¹⁷	The intervention was not focused on sustaining the person's independence.
NCT03591055 ³¹⁸	According to the trial register, the study recruitment status was unknown and not results were available as of 31 August 2021.
NCT03634033 ³¹⁹	The comparator was not targeted at the older person.
NCT03649698 ³²⁰	According to the trial register, the study was still recruiting as of 31 August 2021.
NCT03797352 ³²¹	The intervention was not focused on sustaining the person's independence.
NCT03814161 ³²²	The study was not an RCT/cRCT.
NCT03824106 ³²³	According to the trial register, the study has not started recruitment as of 31 August 2021.
NCT03952858 ³²⁴	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
NCT03979560 ³²⁵	According to the trial register, the study recruitment status was unknown and not results were available as of 31 August 2021.
NCT04076319 ³²⁶	The study was not an RCT/cRCT.
NCT04416815 ³²⁷	According to the trial register, the study was still recruiting as of 31 August 2021.
NCT04460742 ³²⁸	According to the trial register, the study was still recruiting as of 31 August 2021.
NCT04500366 ³²⁹	According to the trial register, the study was still recruiting as of 31 August 2021.
NCT04531852 ³³⁰	The intervention was not focused on sustaining the person's independence.
NCT04574271 ³³¹	Only the trial register record is available. We cannot confirm whether the study is an RCT, and whether the intervention is initiated and provided in the community.
NCT04628754 ³³²	The intervention was not focused on sustaining the person's independence.
Nelson <i>et al.</i> ³³³	The intervention was not focused on sustaining the person's independence.
Neumann <i>et al.</i> ³³⁴	The intervention was not initiated and provided in the community.
Newbury <i>et al.</i> ³³⁵	The study was not an RCT/cRCT.
Ngandu <i>et al.</i> ³³⁶	The intervention was not initiated and provided in the community.
Nice ³³⁷	The study was not an RCT/cRCT.
Nicklas <i>et al.</i> ³³⁸	The intervention was not initiated and provided in the community.
Nielsen <i>et al.</i> ³³⁹	The intervention was not focused on sustaining the person's independence.
O'Connell <i>et al.</i> ³⁴⁰	The participants were younger than 65 years on average.
O'Connor <i>et al.</i> ³⁴¹	The intervention was targeted at specific conditions, rather than addressing independence more generally.
O'Connor <i>et al.</i> ³⁴²	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Oksman <i>et al.</i> ³⁴³	The intervention was not focused on sustaining the person's independence.
Olesen <i>et al.</i> ³⁴⁴	The intervention was not focused on sustaining the person's independence.
Oliva ³⁴⁵	The intervention was not focused on sustaining the person's independence.
Ollonqvist <i>et al.</i> ³⁴⁶	The intervention was not initiated and provided in the community.
Ollonqvist <i>et al.</i> ³⁴⁷	The intervention was not initiated and provided in the community.
Olsson <i>et al.</i> ³⁴⁸	The intervention was not focused on sustaining the person's independence.
Olsson Möller <i>et al.</i> ³⁴⁹	The intervention was specifically a falls prevention programme.
Olsson Möller <i>et al.</i> ³⁵⁰	The intervention was specifically a falls prevention programme.
Opendacker <i>et al.</i> ³⁵¹	The intervention was not focused on sustaining the person's independence.
Opendacker <i>et al.</i> ³⁵²	The intervention was not focused on sustaining the person's independence.
Ory <i>et al.</i> ³⁵³	The study was not an RCT/cRCT.
Osborn <i>et al.</i> ³⁵⁴	The participants were not living at home.
Osborn <i>et al.</i> ³⁵⁵	The participants were not living at home.
Osborn <i>et al.</i> ³⁵⁶	The participants were not living at home.
Oswald <i>et al.</i> ³⁵⁷	The study was not an RCT/cRCT.
Oswald <i>et al.</i> ³⁵⁸	The study was not an RCT/cRCT.
Oswald <i>et al.</i> ³⁵⁹	The study was not an RCT/cRCT.
Oswald <i>et al.</i> ³⁶⁰	The study was not an RCT/cRCT.
Overbeek <i>et al.</i> ³⁶¹	The participants were not living at home.

Overbeek <i>et al.</i> ³⁶²	The participants were not living at home.
Pacini <i>et al.</i> ³⁶³	The intervention was not focused on sustaining the person's independence.
Palacholla <i>et al.</i> ³⁶⁴	The intervention was not focused on sustaining the person's independence.
Pardessus <i>et al.</i> ³⁶⁵	The intervention was not initiated and provided in the community.
Parsons <i>et al.</i> ³⁶⁶	The participants were not living at home.
Peak <i>et al.</i> ³⁶⁷	The study was not an RCT/cRCT.
Pedersen <i>et al.</i> ³⁶⁸	Final planned follow-up was before 24 weeks.
Peri <i>et al.</i> ³⁶⁹	According to the trial register, study recruitment was completed in February 2019 and the final follow-up is 4 years post-intervention; no results were available as of 31 August 2021.
Perkel <i>et al.</i> ³⁷⁰	The study was not an RCT/cRCT.
Perman <i>et al.</i> ³⁷¹	The study was not an RCT/cRCT.
Persson <i>et al.</i> ³⁷²	Final planned follow-up was before 24 weeks.
Petersson <i>et al.</i> ³⁷³	The study was not an RCT/cRCT.
Phillips <i>et al.</i> ³⁷⁴	The intervention was not initiated and provided in the community.
Picarsic <i>et al.</i> ³⁷⁵	The intervention was not initiated and provided in the community.
Prosegger <i>et al.</i> ³⁷⁶	The intervention was not focused on sustaining the person's independence.
Rantanen <i>et al.</i> ³⁷⁷	The intervention was not focused on sustaining the person's independence.
Rebok <i>et al.</i> ³⁷⁸	The intervention did not include two or more components (practices, structural elements and contextual factors).
Rebok <i>et al.</i> ³⁷⁹	The intervention did not include two or more components (practices, structural elements and contextual factors).
Rejeski <i>et al.</i> ³⁸⁰	The intervention was not initiated and provided in the community.
Rejeski <i>et al.</i> ³⁸¹	The intervention was not initiated and provided in the community.
Reuben <i>et al.</i> ³⁸²	The intervention was not focused on sustaining the person's independence.
Reuben ³⁸³	The intervention was not initiated and provided in the community.
Rexroth <i>et al.</i> ³⁸⁴	The intervention did not include two or more components (practices, structural elements and contextual factors).
Ribera <i>et al.</i> ³⁸⁵	The study was not an RCT/cRCT.
Richardson <i>et al.</i> ³⁸⁶	The intervention was not initiated and provided in the community.
Rietkerk <i>et al.</i> ³⁸⁷	The study was not an RCT/cRCT.
Rikard <i>et al.</i> ³⁸⁸	The intervention did not include two or more components (practices, structural elements and contextual factors).
Ristolainen <i>et al.</i> ³⁸⁹	The intervention was not focused on sustaining the person's independence.
Rivas-Ruiz <i>et al.</i> ³⁹⁰ ISRCTN17143761 ³⁹¹	According to the trial register, study recruitment was suspended; no results were available as of 31 August 2021.
Robichaud <i>et al.</i> ³⁹²	Final planned follow-up was before 24 weeks.
Rodrigues <i>et al.</i> ³⁹³	The study was not an RCT/cRCT.
Rollins ³⁹⁴	The study was not an RCT/cRCT.
Rosie <i>et al.</i> ³⁹⁵	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
Rosstad <i>et al.</i> ³⁹⁶	The participants were not living at home.
Rubenstein <i>et al.</i> ³⁹⁷	The participants were younger than 65 years on average.
Ruikes <i>et al.</i> ³⁹⁸	The study was not an RCT/cRCT.
Rydwick <i>et al.</i> ³⁹⁹	The study was not an RCT/cRCT.
Rydwick <i>et al.</i> ⁴⁰⁰	The study was not an RCT/cRCT.
Rydwick <i>et al.</i> ⁴⁰¹	The study was not an RCT/cRCT.
Saeterbakken <i>et al.</i> ⁴⁰²	The intervention was not focused on sustaining the person's independence.
Sahlen <i>et al.</i> ⁴⁰³	The study was not an RCT/cRCT.
Saito <i>et al.</i> ⁴⁰⁴	The intervention was not focused on sustaining the person's independence.
Salem <i>et al.</i> ⁴⁰⁵	The participants were younger than 65 years on average.
Sandberg <i>et al.</i> ⁴⁰⁶	The intervention was not focused on sustaining the person's independence.
Sandberg <i>et al.</i> ⁴⁰⁷	The intervention was not focused on sustaining the person's independence.
Sanders <i>et al.</i> ⁴⁰⁸	The intervention was not focused on sustaining the person's independence.
Sanjuan <i>et al.</i> ⁴⁰⁹	The participants were not living at home.
Santanasto <i>et al.</i> ⁴¹⁰	The intervention was not initiated and provided in the community.

Sato <i>et al.</i> ⁴¹¹	The intervention did not include two or more components (practices, structural elements and contextual factors).
Schraeder <i>et al.</i> ⁴¹²	The intervention was not focused on sustaining the person's independence.
Scott <i>et al.</i> ⁴¹³	The study was not an RCT/cRCT.
Senior <i>et al.</i> ⁴¹⁴	The intervention was not initiated and provided in the community.
Sherwood ⁴¹⁵	The intervention was not initiated and provided in the community.
Sink <i>et al.</i> ⁴¹⁶	The intervention was not initiated and provided in the community.
Sisco <i>et al.</i> ⁴¹⁷	The intervention did not include two or more components (practices, structural elements and contextual factors).
Smeeth <i>et al.</i> ⁴¹⁸	The participants were not living at home.
Smeeth <i>et al.</i> ⁴¹⁹	The participants were not living at home.
Smith <i>et al.</i> ⁴²⁰	Final planned follow-up was before 24 weeks.
Spoelstra <i>et al.</i> ⁴²¹	The comparator was not targeted at the older person.
Spoelstra <i>et al.</i> ⁴²²	The comparator was not targeted at the older person.
Spoorenberg <i>et al.</i> ⁴²³	The participants were not living at home.
Spoorenberg <i>et al.</i> ⁴²⁴	The participants were not living at home.
Stathi <i>et al.</i> ⁴²⁵ Withall <i>et al.</i> ⁴²⁶ ISRCTN45627165 ⁴²⁷	According to the trial register, the overall trial end data was 31 May 2020; the intention to publish date was 22 June 2021, but results were unavailable as of 31 August 2021.
Steventon <i>et al.</i> ⁴²⁸	The intervention was not focused on sustaining the person's independence.
Steventon <i>et al.</i> ⁴²⁹	The intervention was not focused on sustaining the person's independence.
Stewart <i>et al.</i> ⁴³⁰	The intervention was not focused on sustaining the person's independence.
Summers <i>et al.</i> ⁴³¹	The study was not an RCT/cRCT.
Tarazona-Santabalbina <i>et al.</i> ⁴³²	The study was not an RCT/cRCT.
Taube <i>et al.</i> ⁴³³	The intervention was not focused on sustaining the person's independence.
Teh <i>et al.</i> ⁴³⁴	According to the trial register, the study data collection ended in September 2020; no results were available as of 31 August 2021.
Tennstedt <i>et al.</i> ⁴³⁵	The intervention was not focused on sustaining the person's independence.
Tennstedt <i>et al.</i> ⁴³⁶	The intervention did not include two or more components (practices, structural elements and contextual factors).
Thom <i>et al.</i> ⁴³⁷	The intervention was not focused on sustaining the person's independence.
Tieland <i>et al.</i> ⁴³⁸	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
Timonen <i>et al.</i> ⁴³⁹	The intervention was not initiated and provided in the community.
Toivo <i>et al.</i> ⁴⁴⁰	The intervention was not focused on sustaining the person's independence.
Toledano-González <i>et al.</i> ⁴⁴¹	The participants were not living at home.
Townsend <i>et al.</i> ⁴⁴²	The intervention was not initiated and provided in the community.
Trombini-Souza <i>et al.</i> ⁴⁴³	The intervention did not include two or more components (practices, structural elements and contextual factors).
Turunen <i>et al.</i> ⁴⁴⁴	The intervention was not focused on sustaining the person's independence.
Uittenbroek <i>et al.</i> ⁴⁴⁵	The participants were not living at home.
Uittenbroek <i>et al.</i> ⁴⁴⁶	The participants were not living at home.
Ukawa <i>et al.</i> ⁴⁴⁷	The intervention was not focused on sustaining the person's independence.
Ukawa <i>et al.</i> ⁴⁴⁸	The intervention was not focused on sustaining the person's independence.
Ukawa <i>et al.</i> ⁴⁴⁹	Final planned follow-up was before 24 weeks.
Ukawa <i>et al.</i> ⁴⁵⁰	The intervention was not focused on sustaining the person's independence.
van de Sant <i>et al.</i> ⁴⁵¹	The participants were not living at home.
van den Helder <i>et al.</i> ⁴⁵²	The intervention was not focused on sustaining the person's independence.
van den Helder <i>et al.</i> ⁴⁵³	The comparator did not include two or more components (practices, structural elements and contextual factors). intervention
van Haaren ⁴⁵⁴	The study was not an RCT/cRCT.
van Haaren ⁴⁵⁵	The study was not an RCT/cRCT.
Vaz Fragoso <i>et al.</i> ⁴⁵⁶	The intervention was not initiated and provided in the community.
Vaz Fragoso <i>et al.</i> ⁴⁵⁷	The intervention was not initiated and provided in the community.
Vaz Fragoso <i>et al.</i> ⁴⁵⁸	The intervention was not initiated and provided in the community.
Vellas <i>et al.</i> ⁴⁵⁹	The intervention was not initiated and provided in the community.

Venturelli <i>et al.</i> ⁴⁶⁰ }	The participants were not living at home.
Vetter <i>et al.</i> ⁴⁶¹	The intervention was not focused on sustaining the person's independence.
Vienna ⁴⁶²	Final planned follow-up was before 24 weeks.
von Renteln-Kruse <i>et al.</i> ⁴⁶³	The intervention was not initiated and provided in the community.
Wadley <i>et al.</i> ⁴⁶⁴	The intervention did not include two or more components (practices, structural elements and contextual factors).
Wagner <i>et al.</i> ⁴⁶⁵	The intervention was specifically a falls prevention programme.
Walker <i>et al.</i> ⁴⁶⁶	The intervention was targeted at specific conditions, rather than addressing independence more generally.
Walker <i>et al.</i> ⁴⁶⁷	The intervention was not focused on sustaining the person's independence.
Wallace <i>et al.</i> ⁴⁶⁸	The intervention did not include two or more components (practices, structural elements and contextual factors).
Wallen <i>et al.</i> ⁴⁶⁹	The study was not an RCT/cRCT.
Wan <i>et al.</i> ⁴⁷⁰	The intervention was not initiated and provided in the community.
Wang <i>et al.</i> ⁴⁷¹	The intervention was not initiated and provided in the community.
Wasson <i>et al.</i> ⁴⁷²	The intervention was not initiated and provided in the community.
Watanabe <i>et al.</i> ⁴⁷³	The intervention was not focused on sustaining the person's independence.
Watanabe <i>et al.</i> ⁴⁷⁴	Final planned follow-up was before 24 weeks.
White <i>et al.</i> ⁴⁷⁵	The participants were not living at home.
Whitehead <i>et al.</i> ⁴⁷⁶	The intervention did not include two or more components (practices, structural elements and contextual factors).
Whitehead <i>et al.</i> ⁴⁷⁷	The intervention did not include two or more components (practices, structural elements and contextual factors).
Wilber <i>et al.</i> ⁴⁷⁸	The intervention was not focused on sustaining the person's independence.
Wilhelmson <i>et al.</i> ⁴⁷⁹	The intervention was not initiated and provided in the community.
Williams <i>et al.</i> ⁴⁸⁰	The intervention was not focused on sustaining the person's independence.
Williamson <i>et al.</i> ⁴⁸¹	The intervention was not initiated and provided in the community.
Willis <i>et al.</i> ⁴⁸²	The intervention did not include two or more components (practices, structural elements and contextual factors).
Wilson <i>et al.</i> ⁴⁸³	The participants were younger than 65 years on average.
Wolf <i>et al.</i> ⁴⁸⁴	Final planned follow-up was before 24 weeks.
Wolinsky <i>et al.</i> ⁴⁸⁵	The intervention did not include two or more components (practices, structural elements and contextual factors).
Wong <i>et al.</i> ⁴⁸⁶	The intervention was not initiated and provided in the community.
Wong <i>et al.</i> ⁴⁸⁷	The intervention was not focused on sustaining the person's independence.
Wong <i>et al.</i> ⁴⁸⁸	Final planned follow-up was before 24 weeks.
Wooldridge <i>et al.</i> ⁴⁸⁹	The study was not an RCT/cRCT.
Xie <i>et al.</i> ⁴⁹⁰	Final planned follow-up was before 24 weeks.
Yao <i>et al.</i> ⁴⁹¹	The intervention was not initiated and provided in the community.
Yeo <i>et al.</i> ⁴⁹²	The intervention was not initiated and provided in the community.
Yim <i>et al.</i> ⁴⁹³	The intervention was not initiated and provided in the community.
Yoon <i>et al.</i> ⁴⁹⁴	The intervention was not initiated and provided in the community.
Young <i>et al.</i> ⁴⁹⁵	The study was not an RCT/cRCT.
Yu <i>et al.</i> ⁴⁹⁶	The intervention was not focused on sustaining the person's independence.
Zaragoza ⁴⁹⁷	The intervention did not include two or more components (practices, structural elements and contextual factors).
Zauszniewski <i>et al.</i> ⁴⁹⁸	Final planned follow-up was before 24 weeks.
Zhu <i>et al.</i> ⁴⁹⁹	The intervention was not initiated and provided in the community.
Zijlstra <i>et al.</i> ⁵⁰⁰	The intervention was not focused on sustaining the person's independence.
Zillich <i>et al.</i> ⁵⁰¹	The intervention was not focused on sustaining the person's independence.
Zimmer <i>et al.</i> ⁵⁰²	The intervention was not focused on sustaining the person's independence.

Appendix 7. Included studies and reports

Table 3 - Summary characteristics of 129 included studies .⁵⁰³⁻⁶³¹

Study	Design	Enrolment began	Country	Population frailty	Population age, years	enrolled	Interventions	Controls	Funding
Alegria 2019 ^{503,632,633}	RCT	2015	USA	P	60-64: 7%; ≥65: 93%	307	exrc & psyc	ac	NC
Arthanat 2019 ^{504,634,635}	RCT	> 2005	USA	U	76 (7); ≥65	97	comm	ac	NC
Auvinen 2020 ^{505,636-638}	RCT	2015	FIN	F	84 (7); ≥65	512	hmcr & med	hmcr	NC
Balaban 1988 ⁵⁰⁶	RCT	1981	USA	F	68; 17-99*; ≥65: 72%	198	mfa-(w/med)	ac	NC
Barenfeld 2018 ^{507,639-642}	RCT	2012	SWE	all	74 (3); 70-84	131	educ	ac	NC
Bernabei 1998 ^{508,643,644}	RCT	1995	ITA	F	81 (7); ≥65	200	hmcr & mfar(w/med)	hmcr	NC
Bleijenberg 2016 ^{509,645-653}	cRCT	2010	NLD	P,F	74 (8); ≥60	m:39; 3092	rsk-mfa-; rsk-mfa-	ac	NC
Blom 2016 ^{510,652,654,655}	cRCT	2009	NLD	all	~83 [79-87]; ≥75	m:59; 1379	mfa-(w/med+slfm)	ac	NC
Borrows 2013 ⁵¹¹	RCT	2008	GBR	U	70 (14); ≥16	36	aids	mfa-	NC
Botjes 2013 ^{512,656,657}	RCT	2011	NLD	U	77 (7); ≥65	218	mfa-	ac	NC
Bouman 2008 ^{513,658-662}	RCT	2002	NLD	P,F	76 (4); ≥70	330	mfar(w/med)	ac	NC
Brettschneider 2015 ^{514,663-666}	RCT	2007	DEU	F	85 (4); ≥80	336	mfar(w/med)	ac	NC
Cameron 2013 ^{515,667-676}	RCT	2008	AUS	F	83 (6); ≥70	241	exrc & mfar(w/med+slfm)	ac	NC
Carpenter 1990 ⁵¹⁶	RCT	< 2006	GBR	all	≥75	539	rsk-m+fa-	ac	NC
Cesari 2014 ^{517,677-682}	RCT	> 2005	FRA	U	73 (8); ≥60	?	mfar(w/med)	ac	NC
Challis 2004 ^{518,683}	RCT	1998	GBR	F	82 (8); ≥60	256	mfar(w/med)	mfar	NC
Clark 1997 ^{519,684-688}	RCT	1994	USA	R,P	74 (7); ≥60	361	eng & educ	ac	Mx
Clark 2012 ^{520,689-694}	RCT	2004	USA	U	75 (8); 60-95	460	eng & educ	ac	NC
Coleman 1999 ⁵²¹	cRCT	< 2006	USA	F	≥65	m:9; 169	educ & mfar(w/med+slfm)	ac	NC
Counsell 2007 ^{522,695-699}	cRCT	2002	USA	U	72 (6); ≥65	m:164; 951	educ & mfar(w/med+slfm)	ac	NC
Cutchin 2009 ^{523,700}	RCT	2008	USA	U	82 (5); ≥75	110	mfar	ac	NC
Dalby 2000 ^{524,701}	RCT	< 2006	CAN	F	79 (6); ≥70	142	mfar(w/med)	ac	NC
de Craen 2006 ^{525,702-704}	RCT	2000	NLD	all	≥85	402	mfa-	ac	NC
Dorresteijn 2016 ^{526,705-708}	RCT	2009	NLD	U	78 (5); ≥70	389	ADL	ac	NC
Dupuy 2017 ^{527,709}	RCT	> 2005	FRA	P,F	82 (2); ≥70	32	hmcr & aids & comm	hmcr	NC
Fabacher 1994 ⁵²⁸	RCT	< 2006	USA	all	73 (6); ≥70	254	mfar(w/med)	ac	NC
Fairhall 2015 ^{529 710,711}	RCT	2013	AUS	P	82 (5); ≥70	230	mfar(w/med)	ac	NC
Faul 2009 ^{530,712}	RCT	?	USA	R,P	77 (7); ≥65	81	educ & exrc & mfar(w/med+slfm); exrc & mfa-(w/med+slfm)		NC
Fernandez-Barres 2017 ^{531,713,714}	RCT	2010	ESP	F	85 (7); ≥65	173	hmcr & ntr	hmcr	NC
Fischer 2009 ^{532,715}	RCT	2004	DEU	all	67-80	4224	eng & mfa-(w/slfm)	ac	?
Ford 1971 ^{533,716}	RCT	1963	USA	P,F	72; 50-94	300	mfar(w/med)	ac	NC
Fox 1997 ⁵³⁴	RCT	1994	USA	all	50-69: 53%; ≥70: 47%	237	mfar(w/med+slfm)	mfar(w/med)	NC
Fristedt 2019 ^{535,717}	RCT	2015	SWE	F	85 (6); ≥75	62	hmcr & mfar(w/med)	hmcr	NC
Gene Huguet 2018 ⁵³⁶	RCT	2016	ESP	P	85 (5); ≥80	200	med & ntr & exrc	ac	NC
Gill 2002 ^{537,718-721}	RCT	< 2006	USA	P,F	83 (5); ≥75	188	ADL & exrc	ac	NC
Giné-Garriga 2020 ^{538,722-732}	RCT	2016	EEE	R	75 (6); ≥65	1360	exrc	ac	NC

Study	Design	Enrolment began	Country	Population frailty	Population age, years	enrolled	Interventions	Controls	Funding
Gitlin 2006 ^{539,733-743}	RCT	2003	USA	P,F	79 (6); ≥70	319	ADL & aids & exrc	ac	NC
Grimmer 2013 ^{540,744}	RCT	2014	AUS	U	≥65	?	mfa-	ac	?
Gustafson 2021 ^{541,745,746}	RCT	2013	USA	all	77 (7); ≥65	390	aids & educ & comm	ac	Mx
Gustafsson 2013 ^{542,639,747-754}	RCT	2007	SWE	all	~86; 80-97	491	educ & mfa-; educ	ac	NC
Hall 1992 ⁵⁴³	RCT	1986	CAN	F	78 (7); ≥65	167	hmcr & mfar(w/slfm)	hmcr & mfar	?
Harari 2008 ^{544 755-769}	RCT	2000	GBR	all	75 (6); ≥65	2503	mfar(w/med)	ac	NC
Hattori 2019 ^{545,770}	RCT	2018	JPN	P,F	≥65	375	educ & mfar(w/slfm)	mfar	NC
Hay 1998 ^{546,771}	RCT	<2006	CAN	U	75 (6); ?	619	mfa-	ac; ac	NC
Hebert 2001 ⁵⁴⁷	RCT	<2006	CAN	P,F	80 (4); ≥75	503	mfar(w/med)	ac	NC
Henderson 2005 ^{548,772}	cRCT	2002	AUS	R	82 (5); 75-94	m:16; 167	mfar	ac	NC
Hendriksen 1984 ^{549,773-775}	RCT	1980	DNK	all	~78; 75-96	600	mfar	ac	NC
Hogg 2009 ^{550,776-780}	RCT	2004	CAN	U	71; ≥50	241	mfar(w/med)	ac	NC
Holland 2005 ^{551,781,782}	RCT	2001	USA	U	73 (5); ≥65	504	educ & exrc & mfar(w/slfm)	ac	NC
Howel 2019 ^{552,783-785}	RCT	2011	GBR	all	71 (7); ≥60	755	wlfr	ac	NC
Imhof 2012 ^{553,653}	RCT	2008	CHE	all	85 (4); ≥80	461	mfar	ac	NC
Jing 2018 ⁵⁵⁴	RCT	2016	CHN	F	75 (6); 60-85	80	psyc; exrc & psyc		?
Jitapunkul 1998 ⁵⁵⁵	RCT	1993	THA	U	76 (6); ≥70	160	rsk-mfa-	ac	NC
Kerse 2014 ^{556,786-790}	cRCT	2008	NZL	P,F	80 (5); ≥65*	m:60; 3893	rsk-mfa-	ac	NC
King 2012 ^{557,791-793}	cRCT	2006	NZL	P,F	79 (7); ≥65	m:21; 186	hmcr & ADL & mfar(w/slfm)	hmcr	NC
Kono 2016 ^{558,794,795}	RCT	2011	JPN	P	79 (6); ≥65	360	mfar(w/med)	mfar	NC
Kono 2004 ⁵⁵⁹	RCT	2000	JPN	P,F	83 (7); ≥65	119	mfar	ac	NC
Kono 2012 ^{560,796-798}	RCT	2008	JPN	P	80 (7); ≥65	323	mfar	mfar	NC
Kukkonen-Harjula 2017 ^{561,799-803}	RCT	2014	FIN	P,F	83 (6); ≥65	300	ADL & ntr & exrc	ac	NC
Lambotte 2018 ^{562,804-811}	RCT	2017	BEL	P,F	75 (9); ≥60	871	mfar	ac	NC
Leung 2004 ^{563,812}	RCT	2000	HKG	all	75 (7); ≥60	260	mfar(w/med)	ac	?
Leveille 1998 ^{564,813,814}	RCT	1995	USA	U	77 (5); ≥70	201	educ & exrc & mfar(w/med+slfm)	ac	NC
Lewin 2013 ^{565,815-817}	RCT	2005	AUS	F	82 (8); ≥65	750	hmcr & educ & mfar	hmcr	NC
Liddle 1996 ⁵⁶⁶	RCT	<2006	AUS	U	82 (6); 69-94	105	aids & mfar	ac	NC
Liimatta 2019 ^{567,818-820}	RCT	2013	FIN	R,P	81 (4); ≥75	422	exrc & mfa-(w/med)	ac	NC
Loh 2015 ^{568,821,822}	cRCT	2014	MYS	U	68 (6); ≥60	m:8; 256	ntr & exrc	ac	NC
Lood 2015 ⁵⁶⁹	RCT	2012	SWE	R,P	76 (3); 71-85	40	educ	ac	NC
Mann J 2021 ^{570,823-827}	cRCT	2018	AUS	all	~81 [77-85]; ≥50*	m:14; 92	mfa-(w/med)	ac	NC
Mann WC 1999 ⁵⁷¹	RCT	<2006	USA	F	73 (8); ?	104	hmcr & aids	hmcr	NC
Markle-Reid 2006 ^{572,828,829}	RCT	2001	CAN	F	≥75	288	hmcr & mfar(w/med+slfm)	hmcr & mfar	NC
Melis 2008 ^{573,830-836}	RCT	2003	NLD	F	82 (6); 69-99	155	mfar(w/med)	ac	NC
Meng 2005 ^{574,837-843}	RCT	1998	USA	F	80 (8); ?	1786	educ & vchr & mfar(w/med+slfm); educ & mfar(w/med+slfm); vchr	ac	NC
Messens 2014 ^{575,844,845}	RCT	2011	EEE	P,F	≥65	208	aids & cgn & comm & mntr-mfa-	ac	NC
Metzelthin 2013 ^{576,652,846-851}	cRCT	2009	NLD	F	77 (5); ≥70	m:12; 346	educ & mfar(w/med+slfm)	ac	NC
Moll van Charante 2016 ^{577,852-862}	cRCT	2006	NLD	all	75 (3); ≥70	m:116; 3526	educ & mfar(w/slfm)	ac	NC

Study	Design	Enrolment began	Country	Population frailty	Population age, years	enrolled	Interventions	Controls	Funding
Monteserin Nadal 2008 ^{578,863}	RCT	2004	ESP	all	80; 75–94	620	educ & rsk-mfa-	ac	NC
Morey 2006 ^{579,864,865}	RCT	<2006	USA	all	78 (5); 70–94	179	exrc; exrc	exrc	NC
Morey 2009 ^{580,866-869}	RCT	2004	USA	U	78 (5); ≥70	400	exrc	ac	NC
Morgan 2019 ^{581,870-872}	RCT	2014	GBR	P	65.3–88.1	51	exrc	ac	NC
Newbury 2001 ^{582,873}	RCT	1998	AUS	U	80 (4); 75–91	100	mfa-(w/med)	ac	NC
Newcomer 2004 ^{583,874,875}	RCT	2001	USA	U	≥65*	3079	educ & mfar(w/med)	ac	Mx
Ng 2015 ^{584,876,877}	RCT	2009	SGP	P,F	70 (5); ≥65	246	egn & ntr & exrc	ac	NC
Parsons J 2012 ^{585,878,879}	cRCT	2007	NZL	P,F	78 (7); ≥55*	m:?: 205	hmcr & mfar(w/slfm)	hmcr & mfa-	NC
Parsons M 2017 ^{586,880-883}	RCT	2003	NZL	F	83 (7); ≥55*	113	hmcr & ADL & mfar(w/slfm)	hmcr & mfa-	NC
Parsons M 2012 ^{587,880-883}	cRCT	2003	NZL	F	81 (7); ≥55*	m:55; 351	hmcr & mfar	hmcr & mfa-	NC
Pathy 1992 ⁵⁸⁸	RCT	<2006	GBR	all	73 (6); ≥65	725	rsk-mfa-	ac	NC
Phelan 2007 ⁵⁸⁹	cRCT	2002	USA	all	82 (5); ≥75	m:31; 874	mfar(w/med+slfm)	ac	NC
Ploeg 2010 ^{590,884}	RCT	2004	CAN	P,F	81 (4); ≥75	719	educ & mfar(w/med)	ac	NC
Profener 2016 ^{591,885-887}	RCT	2007	DEU	F	67–100	553	educ & mfar	ac	NC
Rockwood 2000 ^{592,888}	RCT	<2006	CAN	F	82 (7); ?	182	mfa-(w/med)	ac	NC
Romera-Liebana 2018 ^{593,889,890}	RCT	2013	ESP	P,F	77 (7); ≥65	352	egn & med & ntr & exrc	ac	NC
Rooijackers 2021 ^{594,891-895}	cRCT	2017	NLD	F	82 (7); ≥65	m:10; 264	hmcr & ADL & mfar(w/slfm)	hmcr	NC
Rubenstein 2007 ⁵⁹⁵	RCT	<2006	USA	F	74 (6); ≥65	792	mfar(w/med)	ac	NC
Ryvicker 2011 ^{596,896}	cRCT	2005	USA	U	76 (13); ?	m:45; 3290	hmcr & mfar	hmcr & mfar	NC
Serra-Prat 2017 ^{597,897}	RCT	2013	ESP	P	78 (5); ≥70	172	ntr & exrc	ac	NC
Shapiro 2002 ⁵⁹⁸	RCT	1998	USA	F	77; ?	108	hmcr & mfar	ac	NC
Sherman 2016 ^{599,898}	cRCT	2006	SWE	all	≥75	m:16; 583	mfa-(w/med)	ac	NC
Siemonsma 2018 ^{600,899,900}	RCT	2009	NLD	F	~84 [80-88]; ≥75	155	ADL	mfa-	NC
Stewart 2005 ^{601,901,902}	RCT	2000	GBR	P,F	81 (7); ≥65	321	mfa-	mfa-	NC
Stuck 1995 ^{602,903-907}	RCT	1988	USA	all	81 (4); ≥75	414	educ & mfar(w/med)	ac	NC
Stuck 2000 ^{603,908-911}	RCT	1993	CHE	all	82 (5); ≥75	791	mfar(w/med)	ac	NC
Stuck 2015 ^{604,766-769,912}	RCT	2000	CHE	R,P	75 (6); ≥65	2284	educ & mfar(w/med+slfm)	ac	NC
Suijker 2016 ^{605,913-918}	cRCT	2010	NLD	F	≥70	m:24; 2283	mfar(w/med)	ac	NC
Szanton 2011 ^{606,919,920}	RCT	2010	USA	P,F	78 (8); ≥65	40	ADL & aids & educ & exrc & mfar(w/med+slfm)	ac	NC
Szanton 2019 ^{607,919,921-930}	RCT	2012	USA	P,F	76 (8); ≥65	300	ADL & aids & educ & exrc & mfar(w/med+slfm)	ac	NC
Takahashi 2012 ^{608,931-937}	RCT	2009	USA	F	80 (8); ≥60	205	mnr-mfa-	ac	Mx
Teut 2013 ^{609,938}	cRCT	2009	DEU	F	79 (11); ?	m:8; 58	hmcr & hmnt & exrc	hmcr	Mx
Thiel 2019 ^{610,939,940}	RCT	2017	DEU	F	≥65	?	exrc & mfar(w/med)	ac	NC
Thomas 2007 ⁶¹¹	RCT	2001	CAN	P,F	81 (4); ≥75	520	mfar(w/med); mfar(w/med)	ac	?
Tomita 2007 ⁶¹²	RCT	<2006	USA	F	74 (5); ≥60	124	aids	ac	NC
Tulloch 1979 ⁶¹³	RCT	1972	GBR	all	≥70	339	mfar(w/med)	ac	?
Tuntland 2015 ^{614,941-943}	RCT	2012	NOR	U	79 (10); ≥18	61	hmcr & ADL & aids & mfa-(w/slfm)	hmcr & mfa-	NC
van der Pols-Vijlbrief 2017 ^{615,944}	RCT	2013	NLD	F	83 (8); ≥65	155	hmcr & ntr & mfar	hmcr	NC
van Dongen 2020 ^{616,945-948}	RCT	2016	NLD	all	75 (6); ≥65	168	ntr & exrc	ac	Mx
van Heuvelen 2005 ^{617,949}	RCT	2001	NLD	P,F	≥65	233	exrc & psyc	ac	NC

Study	Design	Enrolment began	Country	Population frailty	Population age, years	enrolled	Interventions	Controls	Funding
van Hout 2010 ^{618,950,951}	RCT	2002	NLD	F	81 (4); ≥75	658	mfar(w/med)	ac	NC
van Leeuwen 2015 ^{619,952-956}	cRCT	2010	NLD	F	81 (8); ≥65	m:35; 1147	mfar(w/med+slfm)	ac	NC
van Lieshout 2018 ^{620,957}	RCT	2011	NLD	P,F	74 (7); ≥65	710	ADL & med & ntr & sst	ac	NC
van Rossum 1993 ^{621,958,959}	RCT	1988	NLD	all	≥75	580	mfar	ac	NC
Vass 2005 ^{622,960-980}	cRCT	1999	DNK	all	≥75	m:34; 4060	mfar(w/med)	mfar	NC
Vetter 1984 ⁶²³	RCT	1980	GBR	all	≥70	1148	mfar	ac	NC
von Bonsdorff 2008 ^{624,981-986}	RCT	2003	FIN	R	78 (2); ≥75	632	exrc	ac	NC
Wallace 1998 ^{625,814}	RCT	<2006	USA	all	72 (5); ≥65	100	exrc & mfar	ac	NC
Walters 2017 ^{626,987,988}	RCT	2015	GBR	P	80 (7); 67–91	51	mfar(w/slfm)	ac	NC
Whitehead 2016 ^{627,989,990}	RCT	2014	GBR	F	82 (11); ≥18	30	hmcr & ADL & aids & mfa-	hmcr & mfa-	NC
Williams 1992 ^{628,991}	RCT	<2006	GBR	all	≥75	470	mfar	mfa-	NC
Wolter 2013 ^{629,992-994}	cRCT	2007	DEU	F	79; ?	m:69; 920	hmcr & mfar(w/med)	hmcr	NC
Wong 2019 ^{630,995-998}	RCT	2016	HKG	all	78 (8); 60–105	540	mfar(w/slfm)	ac	NC
Yamada 2003 ⁶³¹	RCT	1999	JPN	P,F	79 (7); ≥65	368	mfar(w/med)	ac	NC

Note that some reports provide information about multiple studies and are therefore cited more than once.

RCT: Randomised Controlled Trial; cRCT: cluster RCT.

Countries, territories, or areas of geographical interest, are indicated with ISO 3166-1 alpha-3 codes, except EEE to indicate a study in multiple European countries: AUS, Australia; BEL, Belgium; CAN, Canada; CHE, Switzerland; CHN, China; DEU, Germany; DNK, Denmark; ESP, Spain; FIN, Finland; FRA, France; GBR, United Kingdom; HKG, Hong Kong; ITA, Italy; JPN, Japan; MYS, Malaysia; NLD, Netherlands; NOR, Norway; NZL, New Zealand; SGP, Singapore; SWE, Sweden; THA, Thailand; USA, United States of America.

all: All frailty groups; R: Robust; P: Pre-frail; F: Frail, U, Unclassified.

Population age in years is provided as mean (SD), or alternatively ~median [IQR]; range, or minimum age, or percentage within age categories around 65 years based on available data.

* indicates that the minimum age criteria differed in conjunction with ethnicity,^{556,585-587} medical condition,⁵⁸³ both,⁵⁷⁰ or living alone.⁵⁰⁶

m indicates the number of clusters assigned for cluster RCTs.

Intervention and control group abbreviations are a combination of the following:- ac: available care; ADL: activities of daily living training; aids: provision of aids and adaptations; cgn: cognitive training; comm: technology for communication and engagement; educ: health education; eng: engagement in meaningful activities; exrc: physical exercise; hmcr: formal homecare; hmnt: alternative medicine; med: medication-review; mfa: multifactorial-action; mfar: multifactorial-action and follow-on routine review; mntr-mfa: monitoring, which may trigger multifactorial-action; ntr: nutritional support; psyc: psychological therapy; rsk-mfa: risk screening, which may trigger multifactorial-action; sst: social skills training; vchr: care voucher provision; wlfr: welfare rights advice; w/med: with medication-review; w/slfm: with self-management.

Funding:- C: Commercial; Mx: Mixed; NC: Non-Commercial; ? Unclear

Appendix 8. Risk of bias in results of interest

We assessed risk of bias in 860 results of interest across 113 studies using version 2 of the Cochrane risk-of-bias tool for randomised trials (RoB2)⁹⁹⁹⁻¹⁰⁰². Thirty-four of the assessed results were unsuitable for inclusion in analyses and therefore we detail risk of bias in 826 results of interest here. The data associated with these assessments are available as supplementary data from <https://doi.org/10.5518/1386> and the relevant data for each analysis is summarised in appendix 11.

Although we assessed risk of bias for each result of interest, we assessed the allocation domain per study and the judgments were the same across results per study in the ‘deviations from the intended intervention’ domain for all but four studies (described below). Therefore, we have summarised the risk of bias in these domains here on a per-study basis (see Figure 1). Risks of bias arising in the other domains varied according to the result assessed.

Summary of study-level risk of bias



Figure 1 - Summary of study-level risk of bias for the domains related to allocation and deviations from the intended intervention in the 113 studies with results of interest. Four studies had results at differing risk of bias in domain 2 so we have used the highest risk in this figure.

8.1 Study-level risk of bias for individually-randomised studies

8.1.1 Risk of bias due to the randomisation process (individual)

Among individually-randomised studies, we judged the randomisation process to present a low risk of bias for 36 studies, some concerns for 51 studies and a high risk in seven studies. Of those at high risk of bias, we were concerned that allocation was predictable in three due to small-block randomisation^{503,519,630}, the process was reported to have been subverted in two^{506,565}, there was unexplained imbalance in baseline characteristics in one⁶¹² and participants were allocated prior to recruitment in one⁵³⁵.

8.1.2 Risk of bias due to deviations from the intended interventions

We judged the risk of bias due to deviations from the intended interventions to present some concerns in 80 individually-randomised studies. Two studies were judged to have low risk of bias because they had investigated whether the control group had deviated from their assigned intervention due to the trial context. Twelve studies presented a high risk of bias in this domain for at least one result: six due to post-randomisation exclusions^{503,546,564,574,598,617}, four due to risk or detection of contamination^{507,544,566,604}, one due to a combined risk of contamination and the reassignment of intervention participants to control following non-engagement⁵⁶⁵, and one due to substantial modifications in the intervention from what was originally intended⁵⁰⁶.

Four of the studies with some results in this domain at high risk of bias due to post-randomisation exclusions also reported results for other outcomes that we judged some concerns because participants were not excluded, we could incorporate those excluded in the analysis, or the number of exclusions was too small to substantially affect the results^{546,564,574,598}.

8.2 Study-level risk of bias for cluster-randomised studies

8.2.1 Risk of bias due to the randomisation process (cluster)

We judged the randomisation process in cluster-randomised trials to present low risk of bias in 12 studies, some concerns in five studies and high risk of bias in two studies. We judged that there was a high risk of bias in the randomisation process of Bleijenberg 2016⁵⁰⁹ because, despite reportedly being computer-randomised from a complete list stratified by cluster size, there was a substantial and unexplained imbalance in cluster size, education level and socioeconomic status. We reached the same judgment for Blom 2016⁵¹⁰ where the cluster-randomisation process and an additional individual randomisation within the intervention arm were not detailed and there was also substantial and unexplained imbalance in cluster size.

8.2.2 Risk of bias due to identification or recruitment of participants into clusters

We judged the identification or recruitment of participants into clusters to present low risk of bias in nine studies, some concerns in seven studies and high risk of bias in three studies. In the three studies at high risk of bias, participant recruitment took place after cluster allocation; in two studies the recruiters and participants appeared to know the allocation prior to recruitment^{548,589}, while in Parsons J 2012⁵⁸⁵ this was unclear and we were concerned by imbalances in participant characteristics.

8.2.3 Risk of bias due to deviations from the intended interventions

We judged the risk of bias due to deviations from the intended interventions to present low risk of bias in two studies, some concerns in 16 studies and high risk of bias in one study. In the studies at low risk of bias it seemed unlikely that there were

deviations due to the trial context despite awareness of the intervention^{548,570}. Sherman 2016⁵⁹⁹ was at high risk in this domain because participants who did not receive the intervention were excluded from the analysis.

8.3 Risk of bias in results of interest

Risks of bias arising in the other domains varied according to the result being assessed. These are summarised in Figure 2. For missing outcome data, differences particularly related to whether the outcome was continuous or dichotomous and the proportion of people experiencing the event, with rare, dichotomous outcomes more likely to be at higher risk. For bias in measurement of the outcome, differences largely related to whether the outcome was self-reported or sourced from records and whether the self-reporting was about the individual's perception (such as depressive symptoms) or memorable, observable events (such as hospitalisation). For bias in selection of the reported result, we very rarely had access to a sufficiently detailed analysis plan, so differences largely related to whether we had access to numbers of events and cases where there were no plausible alternative definitions for the measure such that the same data could not be recut into different groups, such as mortality as a defined outcome.

Summary of result-level risk of bias (domains 3-5)

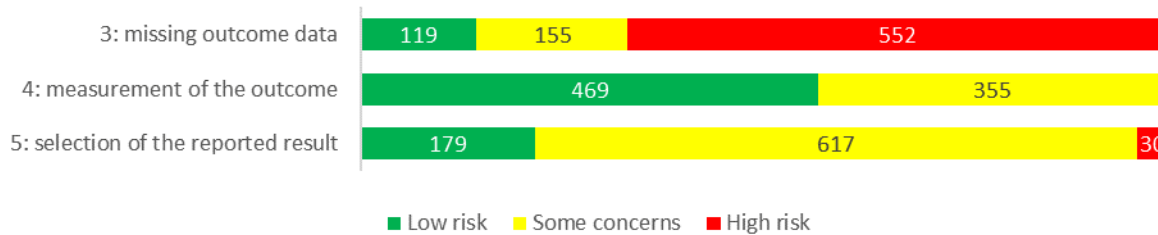


Figure 2 - Summary of result-level risk of bias for the domains related to missing outcome data, measurement of the outcome and selection of the reported result in the 826 results of interest suitable for analyses.

8.4 Overall risk of bias

Overall, no results of interest were judged to have low risk of bias, there were some concerns about 28%, with the remaining 72% at high risk of bias. We further judged those results at high risk of bias to present either serious concerns (53% of results) or very serious concerns (19% of results). Because there were differences in risk of bias by outcome, some outcomes were reported by more studies, and different studies report different outcomes, we have not presented a more detailed breakdown here. Results were included in analyses regardless of risk of bias, but we conducted sensitivity analyses excluding results for which we had very serious concerns. We judged whether to downgrade our certainty in the evidence for an effect estimate based on the contributions of results judged as serious concerns or very serious concerns about risk of bias.

Appendix 9. Description of the components and aspects of components used to determine intervention groups, organised by topic

Topic	Brief name (abbreviation)	Public-facing name	Plain language description
Activities	ADL (ADL)	Practise day-to-day activities	The person is offered support to practise carrying out day-to-day activities, for example dressing or taking the bus. The person may also be offered recommendations on how to carry out day-to-day activities safely or better. For example, this may include using appropriate footwear, removing loose rugs, cords, and clutter in walking paths or improvement of lighting. The person may receive an assessment to create a tailored day-to-day activities plan.
Activities	Aids (aids)	Get equipment and technology to support day-to-day activities	The person is offered equipment or technology to aid in day-to-day activities. This may include ramps, walking frames, grab rails, or a system of sensors that turn on the lights when the person gets up from the bed, for example. The person may receive an assessment to choose specific equipment or technology.
Activities	Meaningful activities (eng)	Identify and engage in meaningful activities	The person is offered support to identify and participate in activities that they find meaningful. Examples may include leisure activities, crafts, volunteering, but the focus is on the activities being ones that the person finds meaningful. The activities may be organized for the person, be done by the person alone, or be community activities that were already in place, for example.
Brain training	Cognitive training (cgn)	Do brain training	The person is offered training in thinking tasks such as memorising, paying attention or planning, among others. The training includes practical exercises and information about strategies to help thinking tasks.
Diet/nutrition	Nutrition (ntr)	Get dietary advice and support	The person is offered recommendations about diet and/or food supplements in group sessions or one-to-one. This is different from receiving information about nutrition as part of “Find out more information about health” because there is a greater focus on providing specialized nutrition/dietary advice and related activities. For example, the person may also participate in writing a food diary, cooking certain types of meals, and weight monitoring. They may be provided with particular foods or supplements. The person may receive an assessment to create a tailored nutrition plan.
Financial support	Care voucher (vchr)	Get a health and care voucher	The person is offered a voucher to pay for health and personal care services and support on how to use the voucher.
Financial support	Welfare (wlfr)	Get advice about welfare services with follow-up	The person is offered tailored advice about the welfare services and benefits they can access. This is based on an assessment. Afterwards, the person is offered support in putting the plan in practice and accessing the services and benefits they are entitled to.
General health information	Education (educ)	Find out more information about health	The person is offered information about a set of health topics. The topics may include many areas, for example, oral health, nutrition, physical activity. The information may also focus on areas that are more important for the person. The way the information is provided is more structured than the particular advice someone may receive as part of a clinical consultation with a health professional. The person may be offered information in group sessions or on one-to-one contact.

Topic	Brief name (abbreviation)	Public-facing name	Plain language description
Homecare	Homecare (hmcr)	Receive formal home care	The person is offered support services at home by health or care professionals. The services include, for example, nursing care or support with household tasks.
Individualised care	Medication review (med)	Optimise my medication	The person is offered recommendations to change medication. For example, someone may be on too many medicines and be recommended to stop some. The changes to the medication can be provided on their own or as part of a more complete assessment and recommendations (see “Take part in individualised care planning based on an assessment” for more details).
Individualised care	Monitoring (mntr)	Get care planning from health monitoring (including providing equipment)	If a health need is identified from monitoring, the person is offered an individualised care plan (see “Take part in individualised care planning” for more details). To check for needs, the person participates in screening and monitoring of their bodily function, for example blood pressure, and heart rate. This happens at least weekly. The person is offered equipment to record their bodily function.
Individualised care	Multifactorial action (mfa)	Take part in individualised care planning	The person is offered an individualised care plan that includes recommendations for future action. The care plan is based on an assessment of the person’s needs and preferences and may include a variety of actions (related with physical exercise, diet, mood, etc.). The assessment structure may be set in advance or guided by the experience of a clinician. The person may receive support to carry out actions, for example, with referrals to certain services. The person may also receive support from a care coordinator, who helps to deal with different services and/or professionals.
Individualised care	Review [in relation to multifactorial action] (mfar)	Have regular follow ups [after individualised care planning]	The person is regularly followed up after receiving an individualised care plan based on an assessment. The follow up may include encouraging the person to carry out previous recommendations. The person may also be offered a new assessment of their needs and other relevant changes, and an updated individualised care plan.
Individualised care	Risk screening (rsk)	Get care planning following screening for possible health problems	A tool to indicate possible health problems is used routinely and, if indicated, the person is offered an individualised care plan (see “Take part in individualised care planning” for more details). The tool and the results that indicate problems are standardised, such as a questionnaire score or analysis of electronic health records.
Individualised care	Self-management [in multidomain assessment and care planning] (slfm)	Do activities to motivate taking good care of myself [when taking part in individualised care planning]	The person is engaged in conversations or activities designed to motivate them to care for themselves. The person may also be offered guided practice in some techniques, for example, to help them set up personal goals and solve problems.
Alternative medicine	Alternative medicine (hmnt)	Get alternative medicine	The person is offered alternative medicine such as homeopathic or naturopathic consultation and treatment.

Topic	Brief name (abbreviation)	Public-facing name	Plain language description
Physical exercise	Exercise (exrc)	Do physical exercise	The person is offered support to carry out physical exercise. The exercise may be on their own or in training sessions. This is different from receiving information about physical activity as part of “Find out more information about health” because there is a greater focus on providing specialized physical exercise advice and related activities. Physical exercises are activities done by a person to build up or maintain physical fitness (such as strength, balance, among others). The person may also receive an assessment to create a tailored exercise plan.
Social communication	Social skills (sst)	Practise social interaction	The person is offered information and support to improve their ability to relate with other people. This may include practising or discussing different ways of communicating.
Social communication	Telecoms (comm)	Get technology for communication and engagement	The person is offered technology to enable communication with friends, family, neighbours, or the community. For example, a mobile phone, or tablet, as well as applications such as email or social media. The person will usually receive support in using the applications.
Wellbeing	Psychology (psyc)	Get wellbeing advice and support	The person is offered support for their wellbeing in areas like feeling low and dealing with worries. The support includes information about how we usually think and feel, and information and activities to deal with what we think and feel, such as noticing and learning how to overcome unhelpful thoughts.

Appendix 10. TIDieR descriptions of intervention groups with more than one intervention

Group: ADL

There are two interventions in this group: Dorresteijn 2016⁵²⁶, Siemonsma 2018⁶⁰⁰

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: Both interventions had a focus on encouraging and enhancing independent living for older people. One was focused upon those who had a fear of falls which reduced and restricted their activity levels. This intervention also aimed to reduce burden on the healthcare services. The other intervention was focused upon increasing physical activity to prevent decline in a sustainable way.</p> <p>Rationale: One intervention is based upon previous programme effectiveness. Both interventions have grounding in cognitive theories related to self-efficacy and control. The sustainability of the intervention was rationalised as likely due to embedding exercises within routine activity in one report. The other saw provision at home as beneficial to sustainability.</p>
3. What (materials)	One intervention is vague in describing intervention material referring only to training materials for the providers of the intervention. The other intervention listed DVD's with case studies of challenges and solutions, printed materials including educational leaflets, checklists and worksheets, action planning documentation, standardised assessments and an evaluation questionnaire for participants.
4. What (procedures)	The descriptions of the processes for carrying out the interventions were varied. Both interventions mention an aspect of cognitive restructuring, motivational interviewing or confidence building. Training was provided in both interventions in a targeted and supervised way. One mentions how this training could be monitored and adapted over time and was to focus on daily tasks. One is focused on reducing fear of falling. One intervention mentions the input of caregivers. One also mentions accessibility to usual care by a multidisciplinary team.
5. Who provided	Both interventions were delivered by healthcare professionals with specialised intervention training. One was delivered by community/geriatric nurses. The other by physiotherapists. Usual care was provided by relevant professionals.
6. How	Provision was face-to-face and to individuals or with a significant other present. One intervention included input over the telephone; the other describes home based contact only.
6b. How organised	One report does not mention intervention organisation, the other places organisation on the facilitator and the participants' significant other to undertake activities.
7. Where	Both interventions were implemented in The Netherlands, and in the participants' home.
8. When and how much	<p>Eligibility for the interventions varied. One intervention was accessible on referral. The other was available to people over 70 living in their own homes, identified by a postal screening questionnaire as having a fear of falling and fair to poor self-perceived health with a level of frailty.</p> <p>The nature, duration and frequency of delivery varied. One intervention comprised seven sessions, three of which were face-to-face around 60-75 minutes in duration and four of which were over the telephone about 35 minutes in duration. The other intervention was delivered over a maximum of 18 sessions. One intervention duration was ten weeks, the other three months.</p>
9. Tailoring	Both interventions were tailored to the needs, abilities and preferences of the individuals. One intervention aimed to provide tailored training on a feared activity of the participants' choice. The other intervention was tailored to the participants' home environment and was monitored and adapted throughout the programme.
10. Modifications	Neither report described modifications to the intervention.

11. How well (planned)	One report does not mention any plans for adherence or fidelity assessment. The other report conducted an evaluation of acceptability and feasibility by the participant. They also aimed to collect information on adherence to the intervention protocol, the time spent on delivery of the intervention and identify any barriers to implementation.
12. How well (actual)	One report did not undertake adherence or fidelity assessment. The other found that the intervention was perceived as feasible and acceptable by deliverers and participants. The intervention protocol was broadly adhered to. Action planning decreased over the duration of the intervention from over 70% to just above 50%. It was noted that training on a feared activity was problematic as this feared activity was often hard to identify.

Group: ADL, aids, education, exercise, multifactorial-action and review with medication review and self-management

There are two interventions in this group: Szanton 2011⁶⁰⁶, Szanton 2019⁶⁰⁷

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: Both interventions were targeted at both intrinsic (personal) and extrinsic (environmental) factors which contribute to disability in older people. In addition both interventions were targeted at those who were living on a low income. Both interventions had a focus on function, either by improvement in function or reducing functional difficulties. One intervention also mentioned reducing disability and the use of person centred goal setting to improve overall health, wellbeing and quality of life.</p> <p>Rationale: Both reports mention the value of person centred approaches to care provision. One intervention refers to the need to address multiple factors which contribute to the decline of older people with a multi-component intervention, with consideration of the idea that such factors often interact to increase the impact on disability. This intervention also noted the need to reduce healthcare costs. The other intervention attributed the higher level of disability in lower income adults to a range of factors including environmental ones. This intervention was theoretically grounded and based on the success of piloting work.</p>
3. What (materials)	Both interventions used a similar material base. A client/clinical assessment protocol, home modifications and assistive devices, letters and/or referrals from nurses to primary care providers. Additionally a DVD of Tai Chi exercises was provided in both interventions. One intervention also mentioned a health passport. The other intervention included the provision of a medication calendar and a Community Aging in Place - Advancing Better Living for Elders (CAPABLE) notebook to participants. In addition to the above one intervention described training materials for the providers, including a manual, audio tapes to record the sessions, a checklist to review the sessions and reminders regarding upcoming sessions.
4. What (procedures)	Both interventions included a multi-domain assessment with subsequent planning and arrangement of care based upon this. This assessment focused upon a range of domains including function, depression, pain, strength, medication and environmental factors among others. Physical exercise training and health related education provision on various topics including medication management, falls risk and self-management strategies were part of both interventions. The provision, fitting and relevant training on the use of adaptations to the environment was part of both interventions. Both interventions included access to relevant additional support such as Tai Chi training and mental health support for depression. Both interventions included routine reviewing and refinement of planning as well as access to usual care. One intervention also described the training and supervision of providers.
5. Who provided	Both interventions were delivered by nurses and occupational therapists. The adaptations were made by handymen. One intervention described input from a primary care provider and the other from relevant professionals of a multidisciplinary team as required.
6. How	The intervention was provided at home to individuals face-to-face. One intervention mentioned the collaborative development of care planning between providers and the inclusion of motivational interviewing to participants.

6b. How organised	In both interventions the care plans were designed to be delivered by a multidisciplinary team; occupational therapists and home modification co-ordinators organised and facilitated the housing adaptations. Both interventions involved planning documentation and appropriate letters and referrals to be sent by nurses. One intervention mentioned the staggering of intervention delivery to give participants time to engage with components. The other intervention used a secure share-site for the ease of sharing documentation across providers.
7. Where	Both interventions were undertaken in the USA, and were delivered at home.
8. When and how much	<p>Both interventions targeted those who were from low income circumstances, with at least one limitation to activities of daily living and two limitations to instrumental activities of daily living. One intervention was location specific and participants were recruited from a waiting list for home based services. The participants were contacted by post.</p> <p>The nature, duration and frequency of intervention delivery was similar across interventions, both involving around six visits from occupational therapists, four visits from nurses, each of around 60 to 90 minutes in duration. One intervention lasted six months, the other four months. Both interventions describe home visits to provide adaptations over as many visits as required.</p>
9. Tailoring	Both interventions were tailored to the participant's goals, preferences, and risk level. This included the number and nature of visits as well as the development of strategies. One intervention described the tailoring of the training, the adaptations at home and the behavioural plan. The other intervention included a medical alert if polypharmacy was a significant concern.
10. Modifications	No modifications were mentioned in either report.
11. How well (planned)	One report did not mention the intention to measure fidelity or evaluate the intervention. The other included staff training, reminders for participants, supervised learning of exercises and the supervision of providers to improve adherence.
12. How well (actual)	One report did not mention report on fidelity or evaluate the intervention effectiveness. The other intervention noted that 92.8% of participants received at least eight sessions, less than 4% received less than three sessions, which had been defined as a minimum threshold for treatment. There was a mean of 9.1 visits per participant.

Group: Aids

There are two interventions in this group: Borrows 2013⁵¹¹, Tomita 2007⁶¹²

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: One intervention had one clear goal, to reduce disability; whilst the other goal and rationale was focused upon decreasing dependence to sustain living at home, and to enable informed decision making by older people on equipment and products to maintain living at home.</p> <p>Rationale: One report did not distinguish between the goal and rationale; however the implication was that independent living centres provide an opportunity to support informed decision making and safe use of aids and adaptations to maintain living at home. The other intervention was based on previous studies showing the benefit of assistive technology in sustaining living at home, additionally the technology of choice was based upon evidence due to ease of installation and use.</p>
3. What (materials)	A range of materials were provided to participants in these interventions. One intervention was focused upon assistive technology, providing X10 Active Home kits including the necessary software, other standalone products, activity monitoring software and a computer and internet access as required. The other intervention was orientated to physical supportive equipment such as toileting and bathing equipment, medical equipment

	was also available on loan. Additionally this intervention provided information and advice on the safe use of equipment to maintain independence at home.
4. What (procedures)	Both interventions involved an assessment of needs; one specifies this as an assessment of both the individual and their home setting. One intervention included the installation of equipment, training on the safe use of this and ongoing support. The other intervention used the assessment to identify appropriate equipment which the participant was required to fit, although they could try out demonstration equipment at the independent living centre, which they received transportation to. Advice on other supportive service options was also identified during this assessment.
5. Who provided	One intervention was provided by an Occupational Therapist or nurse, with a geriatric nurse providing support. Equipment was fitted by a computer engineer. This report explicitly mentioned intervention specific training. The other intervention is provided by an Occupational Therapist assistant.
6. How	Both interventions were provided individually and face-to-face, however one was at home and provided additional support by telephone. The other intervention was provided in the independent living centre.
6b. How organised	Organisation was not always entirely clear in one intervention but stated that there was a cost limit of \$400. The other intervention was organised by the British Red Cross.
7. Where	One intervention was undertaken in the USA and in the participant's home and the other in the independent living centre(s) in the UK.
8. When and how much	<p>One intervention had clear eligibility criteria, participants had to be 60 years of age, living alone, have impairments to activities of daily living or instrumental activities of daily living, to be interested in technology and have no cognitive impairments. The other intervention simply mentioned access to be two weeks after randomisation.</p> <p>The assessments for the intervention varied in length, one involved a 90 minute assessment, the other a 150 minute assessment. The technology intervention allowed for three to nine hours for engineer to install the equipment at the participant's home, with this intervention support was given as required.</p>
9. Tailoring	Both reports describe the interventions being tailored to the needs, preferences, and also the safe capacity of the participant. One intervention mentioned follow up support being as required, the other mentioned training on the equipment being tailored.
10. Modifications	Neither report mention modification to the intervention.
11. How well (planned)	One report did not mention work to assess fidelity or adherence. The other intervention mentioned that fidelity to the intervention was promoted. Additionally this study collected data on the type of technology which was provided, as well as problems encountered and solutions to those problems.
12. How well (actual)	One study did not report on fidelity or adherence. The other reported that 100% of participants received software, although there was variation in what support items they accessed. Two years later 65% of participants were still using one or multiple pieces of assistive technology. Lack of use of the equipment was usually related to a failure of the equipment, either meaning functional failure, the equipment not meeting the needs of the participants or the participant's inability to use it.

Group: Available care

There are 98 interventions in this group: Alegria 2019⁵⁰³, Arthanat 2019⁵⁰⁴, Balaban 1988⁵⁰⁶, Barenfeld 2018⁵⁰⁷, Bleijenberg 2016⁵⁰⁹, Blom 2016⁵¹⁰, Botjes 2013⁵¹², Bouman 2008⁵¹³, Brettschneider 2015⁵¹⁴, Cameron 2013⁵¹⁵, Carpenter 1990⁵¹⁶, Cesari 2014⁵¹⁷, two arms of Clark 1997⁵¹⁹, Clark 2012⁵²⁰, Coleman 1999⁵²¹, Counsell 2007⁵²², Cutchin 2009⁵²³, Dalby 2000⁵²⁴, de Craen 2006⁵²⁵, Dorresteyn 2016⁵²⁶, Fabacher 1994⁵²⁸, Fairhall 2015⁵²⁹, Fischer 2009⁵³², Ford 1971⁵³³, Gene Huguet 2018⁵³⁶, Gill 2002⁵³⁷, Giné-Garriga 2020⁵³⁸, Gitlin 2006⁵³⁹, Grimmer 2013⁵⁴⁰, Gustafson 2021⁵⁴¹, Gustafsson 2013⁵⁴², Harari 2008⁵⁴⁴, two arms of Hay 1998⁵⁴⁶, Hebert 2001⁵⁴⁷, Henderson 2005⁵⁴⁸, Hendriksen 1984⁵⁴⁹, Hogg 2009⁵⁵⁰, Holland 2005⁵⁵¹, Howel 2019⁵⁵², Imhof 2012⁵⁵³, Jitapunkul 1998⁵⁵⁵, Kerse 2014⁵⁵⁶, Kono 2004⁵⁵⁹, Kukkonen-Harjula 2017⁵⁶¹, Lambotte 2018⁵⁶², Leung 2004⁵⁶³, Leveille 1998⁵⁶⁴, Liddle 1996⁵⁶⁶, Liimatta 2019⁵⁶⁷, Loh 2015⁵⁶⁸, Lood 2015⁵⁶⁹, Mann J 2021⁵⁷⁰, Melis 2008⁵⁷³, Meng 2005⁵⁷⁴, Messens 2014⁵⁷⁵, Metzelthin 2013⁵⁷⁶, Moll van Charante 2016⁵⁷⁷, Monteserin Nadal 2008⁵⁷⁸, Morey 2009⁵⁸⁰, Morgan 2019⁵⁸¹, Newbury 2001⁵⁸²,

Newcomer 2004⁵⁸³, Ng 2015⁵⁸⁴, Pathy 1992⁵⁸⁸, Phelan 2007⁵⁸⁹, Ploeg 2010⁵⁹⁰, Profener 2016⁵⁹¹, Rockwood 2000⁵⁹², Romera-Liebana 2018⁵⁹³, Rubenstein 2007⁵⁹⁵, Serra-Prat 2017⁵⁹⁷, Shapiro 2002⁵⁹⁸, Sherman 2016⁵⁹⁹, Stuck 1995⁶⁰², Stuck 2000⁶⁰³, Stuck 2015⁶⁰⁴, Suijker 2016⁶⁰⁵, Szanton 2011⁶⁰⁶, Szanton 2019⁶⁰⁷, Takahashi 2012⁶⁰⁸, Thiel 2019⁶¹⁰, Thomas 2007⁶¹¹, Tomita 2007⁶¹², Tulloch 1979⁶¹³, van Dongen 2020⁶¹⁶, van Heuvelen 2005⁶¹⁷, van Hout 2010⁶¹⁸, van Leeuwen 2015⁶¹⁹, van Lieshout 2018⁶²⁰, van Rossum 1993⁶²¹, Vetter 1984⁶²³, von Bonsdorff 2008⁶²⁴, Wallace 1998⁶²⁵, Walters 2017⁶²⁶, Wong 2019⁶³⁰, Yamada 2003⁶³¹

TIDieR item	Description
1. Brief name	
2. Why	Around 22 reports included some rationalisation and goals in their description of the intervention. Four referred to an ageing or frail population living with unmet needs or in some stage of functional decline. Three others describe current care, including the need to limit costs, provide quality care and to compare standard primary care with the specialist care of geriatricians. Two reports indicated a need to promote independence in the older population. Five reports mentioned standardised care, whilst eight described access to actions that were not intended or anticipated to affect an individual's independence such as attention control, placebo, and assessments or social interaction.
3. What (materials)	Twenty-seven reports make some mention of materials required. Ten studies used various assessments, some of which were standardised. Eight described written materials provided to participants, a further study provided intervention materials to control participants at the end of the research process and another provided participants with placebo nutritional supplements. Four reports mentioned access to usual care equipment and services. At least ten reports described the sharing of information gleaned during assessment with other healthcare professionals through referrals etc. for ethical purposes. Materials for provider training and the assessment of fidelity were also mentioned in a small number of reports.
4. What (procedures)	A large majority of reports had some description of the procedure for the intervention. In 82 cases this included reference to usual available care, which a participant would access of their own accord. Ten reports described the assessment of participants, six mentioned social contact with the research team and referred to this as increased attention. Seven studies explained that identification of emergency needs required this information to be shared with other professionals as an ethical or moral obligation. Some studies provided non-active components to participants, in one case this was a placebo nutritional supplement, in five others this was written materials and eight interventions included peer contact, such as workshops or educational lectures.
5. Who provided	Almost half, around 43 reports, did not mention the providers. However, thirty-nine did refer to the provision of usual care by the expected professionals, while 15 mentioned the participants own GP or physician. It was not always clear if this was related to an aspect of the intervention which would be beyond usual care or not. Five reports explicitly referred to input from the research team. Additional providers mentioned were nurses, social workers, occupational therapists, non-trained or non-medical personnel, health educators and students, these last were usually when an intervention involved some non-active components such as placebo social interaction.
6. How	Sixty-four reports did not describe how 'available care' was delivered. At least thirteen of the remaining number referred to usual care being provided in the most appropriate way, for example in clinics and at home, through distanced or face-to-face methods. Some reports are less clear though a small percentage have face-to-face and individual contact for assessments, three used the postal service to provide information or collect assessments from participants, five conducted telephone calls and three had workshop or group sessions as part of a placebo, non-active component of the control.
6b. How organised	The majority, over 60, reports did not describe organisation. However around one third made some reference to organisation for funding. This was usually the nationally recognised approach to care funding in which the study was practising, be that state funded care or through varied insurance plans. GPs and primary care physicians were mentioned as involved in organisation in at least 14 reports. This was often in a gatekeeper role, recommending care and referring on to other services. Two reports mentioned explicit input in organisation of study including a nurse and a research assistant.
7. Where	All reports gave some indication of the location in which the studies were undertaken, though the country of one of these was unclear. Ninety-four studies were carried out in one country alone, whilst two were multi-site studies in four different countries. One study was carried out in Denmark, Northern Ireland, Germany and Spain: the other in Belgium, Spain, Ireland and Italy. Of the remaining studies the majority were also European, including 16 in The Netherlands, eight in the UK, four each in Germany, Spain and Finland. Three

were carried out in Sweden, three in Switzerland and one each in France, Denmark and Belgium. A significant amount were also Northern American, including 26 in the USA and eight in Canada. Seven were carried out in Australia and one in New Zealand. Seven were undertaken in Asian countries, two in Japan, two in Hong Kong, one each in Thailand, Malaysia and Singapore.

8. When and how much	<p>Most of the studies had set inclusion and exclusion criteria, although ten were not described at all. Fifty-nine studies involved those with identified specific needs, be that level of frailty, a diagnosis of a specific chronic condition or limitations to activities of daily living. Another common inclusion criterion was a minimum age limit. Fifty-three studies used age limits, usually just a minimum age, the lowest being 50 years and over, the highest being 85 years and over. Other common inclusion criteria were involvement in a service, which was mentioned in 26 reports, specific socio-economic factors, mentioned in at least nine reports, recent hospital attendance and involvement in a research cohort. Multiple studies excluded participants based on cognition and end of life status.</p> <p>Few reports mentioned frequency of input given the nature of available care, however five did mention the contact of those administering assessments and ten described to some extent the nature of non-active components such as social telephone calls or workshop sessions.</p>
9. Tailoring	<p>Only ten of the 97 reports detailed any tailoring. Five mentioned that tailoring would be enacted by the participant themselves in line with their own care needs. Three studies explicitly described processes to access emergency services should the need be identified through the research process. Four studies had non-active or control components which involved tailoring, such as a social activity tailored to the participants preferences.</p>
10. Modifications	<p>Only one report mentioned modifications which related to reformation of service provision during the project.</p>
11. How well (planned)	<p>Very few reports detailed any steps to ensure fidelity to the intervention. Three of these were related to the recording and supervision of contacts participants had with providers to ensure delivery was as per protocol. Two reports also mentioned training of providers to ensure experimental intervention components were not administered to control participants, and one conducted inter-rater-reliability evaluation between experimental and control group's receipt of the assessment. At least two reports described steps taken to limit control participant access to the components of the experimental intervention, a further report detailed that any cross-contamination was measured. Two reports detailed steps to ensure participant compliance with attention control or placebo.</p>
12. How well (actual)	<p>Very few reports detailed success of delivery. Two reports noted that a substantial proportion of participants allocated to available care accessed components of the experimental intervention privately, while two others noted that participants accessed at least some aspects of the experimental intervention by some means. One reported on high levels of attrition, one explained that some participants had been referred to care due to initial assessments revealing emergency need. Three studies with placebo or attention-control components found compliance with these to be reasonably good. Inter-rater-reliability was 0.79-0.94 for the study which measured assessments between control and experimental groups across providers. One study noted that the intervention was delivered as intended.</p>

Group: Education

There are three interventions in this group: Barenfeld 2018⁵⁰⁷, Gustafsson 2013⁵⁴², Lood 2015⁵⁶⁹

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: All three interventions had very similar goals, focused around the prevention or delay of deterioration in health and quality of life of older people. Two were focused upon the prevention of frailty and morbidity, one of these was also to support ageing in place. Two interventions were aiming to reduce the consumption of care. Two interventions were also targeting minority groups with language barriers.</p> <p>Rationale: Person-centred care approaches were the core rationale for two of the interventions, as was the premise that peer learning would prove beneficial. All three interventions were based upon previous research,</p>

	including RCT's of group education. In one intervention it was put forth that a multidisciplinary team was well placed to provide health education and benefit the health outcomes of older people.
3. What (materials)	All three interventions provided health advice information in a written format. One also provided the information in audio format. Two interventions provided information in different languages as well as the native language. One intervention also mentioned documentation materials and referrals as required. One other intervention described how usual care needs were to be met with regards to equipment provision.
4. What (procedures)	All three interventions worked with a group session format, where health and social care professionals delivered a specific session. Sessions provided education and a forum for peer discussion which was relevant to participants and required their input and exchange of experiences. All interventions provided group sessions then a follow up of one individual session at home. All interventions enabled access to usual care, including home care and medical services. One intervention also described how providers were supported, and one other described the input of interpreters.
5. Who provided	All three interventions were provided by a multidisciplinary team including an Occupational Therapist, a Nurse, a Physiotherapist and a Social Worker. Usual care was provided by a range of staff as required. One intervention also required the input of supportive staff such as translators.
6. How	All three interventions were delivered face-to-face in group sessions of four to six participants and then with one session delivered individually.
6b. How organised	Organisation for the intervention was described in varying detail. All three describe the input of the four key professionals and the participant. One intervention described the training of providers and some of the auditing processes, this intervention and one other also mention the funding from the state and the other describes input from the university. One intervention stated the importance of provider continuity.
7. Where	All three interventions were undertaken in Sweden, individual sessions were delivered at the home of the participant, however the location of the group session delivery was unclear in the reports.
8. When and how much	All three interventions require participants to not have existing support to carry out activities of daily living. Two interventions have a minimum age requirement of 70 years and to be a migrant to Sweden. The other intervention required participants to be classified as prefrail. It appears that the interventions were location specific. All three interventions were delivered through four weekly sessions, lasting between one and half and two hours. The follow up individual sessions were delivered about two to three weeks after the final group session.
9. Tailoring	All three interventions describe tailoring to the needs of the participant. In the group sessions this involved pertinent discussion for the group and follow up was tailored to the individual's needs. The two interventions aimed at supporting migrants could tailor language as required.
10. Modifications	None of the reports described modifications to the interventions.
11. How well (planned)	All three reports described steps taken to improve adherence and monitor fidelity. All three developed their intervention with input from stakeholders including representatives of the participant group. One intervention also described training for providers and a priori approval of deviations from protocol. One other intervention implicated the use of consistent providers for continuity. The other intervention improved attendance by goal setting at registration and predefining minimum participation levels of 50% of meetings to be attended by participants.
12. How well (actual)	Intervention attendance was monitored and reported for all interventions. One intervention had 73% attendance at 3 or more sessions, one other had 99% attendance at 3 or more sessions while the other had 100% attendance at 3 or more sessions.

Group: Education, exercise, multifactorial-action and review with medication review and self-management strategies

There are two interventions in this group: Faul 2009⁵³⁰, Leveille 1998⁵⁶⁴

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: To reduce the risk of frailty, disability and dependence by enhancing existing care models with the promotion of self-management strategies.</p> <p>Rationale: Both interventions were theoretically driven and evidence based. Drawing upon previous work implicating the benefits of such programmes with older people of reducing risk of decline by empowering and informing older people.</p>
3. What (materials)	Both interventions developed care planning based on an assessment of the participant and advice sheets were provided to the participant. One intervention provided a self-management workbook and referrals to services. The other used standardised assessments, accessed existing care notes and also provided an exercise software programme. This intervention also used scripting for their telephone contact.
4. What (procedures)	Both interventions required a comprehensive assessment, although the content of the data collected was only described for one, which focused on function, mobility, mental health, medication and the home environment. A tailored care plan was developed in both interventions, according to the needs and preferences of the participant. This included a tailored exercise plan. Both interventions provided information on health behaviour. One intervention also explicitly mentions referrals on to mental health and substance misuse services. Both interventions describe follow up input and telephone contact. One intervention used peer support mentoring, for which training was undertaken.
5. Who provided	One intervention was provided by an interdisciplinary team, led by a physical therapist and working with a physical therapist student and a social work student. The other was overseen by a geriatric nurse practitioner and required the input from health mentors, lay leaders, primary care physicians, dietitians and social workers as required.
6. How	Both interventions have individual provision, one also used group sessions. Provision was face-to-face, both interventions were conducted within the home and used telephone contact, one also appears to have been in senior centres.
6b. How organised	Organisation varied, one intervention was overseen by the interdisciplinary team, students were supervised, aims were to forge community links. Reports were shared with participant's primary care physicians. The other intervention depended upon a number of large health providers for the development and implementation of the intervention as well as access to participants.
7. Where	Both interventions were provided at home, one was also provided in a senior centre. Both interventions were run in the USA.
8. When and how much	<p>Inclusion and exclusion criteria varied between interventions. One had a minimum age of 65, requirement for participants to have a permanent address, to be literate and have a primary care physician. The other intervention required referral based on one or more chronic condition. One study excluded those living in long-term care, those with acute needs or recent serious health events, or those in receipt of home care. The other study excluded those living with dementia or with terminal conditions.</p> <p>The interventions varied in number of visits: one conducted three, while the other conducted between one and eight. The duration of visits was mentioned in one study as 1-2 hours. One study had a requirement of eight phone calls, the other had between one and 22 calls. The duration and frequency of group sessions was noted for one study.</p>
9. Tailoring	Both interventions required the tailoring of care and exercise routine planning based on needs and preference of the participant. One study had tailored referrals
10. Modifications	This was not mentioned in the reports.
11. How well (planned)	One report describes the use of training and supervision to intervention providers to ensure fidelity. The other intervention promoted home exercise sessions to improve compliance with this aspect of the intervention.

12. How well (actual)	This was not reported in detail for either study. One report mentioned that generic issues rather than self-management strategies were more commonly discussed in contact sessions. The other intervention found that participants were reasonably willing to attend sessions but participation at exercise classes was lower than anticipated.
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Group: Education, multifactorial-action and review with medication review

There are three interventions in this group: Newcomer 2004⁵⁸³, Ploeg 2010⁵⁹⁰, Stuck 1995⁶⁰²

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: All three interventions had a goal of reducing health resource use and thus lowering health care costs. Two interventions aimed to provide timely and comprehensive care and improve patient health. One of these and the remaining intervention aimed to prevent decline by reducing risk factors, increasing quality life years and improving health and wellbeing.</p> <p>Rationale: Two interventions were based on previous research findings. Proactive and preventative approaches and appropriate use of health services and beneficial relationships with health care professionals were mentioned by these two interventions also. One of these interventions believed improved access and awareness of preventative health planning would be advantageous, whilst the other suggested that home-based care provision would be of benefit. The third intervention simply stated that the intervention would improve quality of life and reduce mortality compared to usual care.</p>
3. What (materials)	All three interventions utilised referrals based upon need. Two used standardised screening measures. All three used types of recording and documentation, in care planning including one which described electronic records. Two interventions described the provision of information, one of these was about local community resources. One intervention provided aids and equipment as and when needed.
4. What (procedures)	All three interventions involved a multidomain assessment, referrals from this, as well as some form of care planning process following the assessment. Additionally, all three interventions provided educational materials in some form. Two reports described the monitoring process. Three reports described interaction to promote empowerment of participants, including coaching and encouragement from the providers. One intervention included communication from the participant to the primary care provider, one mentioned involvement of the family physician and one described the review process.
5. Who provided	All three interventions were primarily provided by Nurses, though each was described differently, one as a Nurse Case Manager, one as a Home Care Nurse and one as a Geriatric Nurse. Two reports mentioned the input of the Family Physician or Primary Care Physician, other input on these two interventions came from health care professionals as needed. Research Assistant input was required for one intervention.
6. How	Two interventions involved the initial assessment being undertaken face-to-face at the home of the participant. Follow up contact could be by telephone. In the other intervention initial screening was undertaken by post, with the option for telephone or face-to-face assessments if required.
6b. How organised	All three interventions described the bulk of organisation by the nurse provider and some input organisationally by various health care professionals as needed following referrals. Medication reviews were part of all interventions and two mention specialist input. One intervention required input from project geriatricians, another mentioned the participants taking an active role. Two mentioned input from the family doctor.
7. Where	<p>Two interventions were undertaken in the USA and one in Canada.</p> <p>Two interventions were undertaken at home, one predominantly involved self-assessment. Follow up care was provided in a variety of locations one was specifically at home, while one other described community care settings.</p>

8. When and how much	<p>Only one report described detailed inclusion criteria, while one invited participants from the voter registry. The one which described inclusion criteria included those who were enrolled on a specific health insurance programme for a minimum of a year, had a high risk of adverse health outcomes and were aged 80 and over or 65 and over with one chronic health condition.</p> <p>The nature, duration and frequency of contact was very variable across the interventions. One involved the potential for daily contact for a period of time while others only had three required contacts. All three reports mentioned that contact was as per requirement but in addition to routine reviews.</p>
9. Tailoring	All three interventions mentioned some tailoring to the need of the participant. One varied the mode of assessment (postal, telephone or face-to-face) to need. The frequency and nature of contact was tailored to need as were the referrals to services in all three interventions.
10. Modifications	Only one report described modification, this was to care protocols during the research project.
11. How well (planned)	One report did not describe any steps taken to measure fidelity or promote adherence. Two interventions described the documentation of adherence to treatment or appointment by participants and reasons for not adhering. The process of care was described as collected in one report as was physician co-operation in adherence.
12. How well (actual)	One intervention described how 42 participants were contacted to establish reasons for non-adherence. Another inferred that the bulk of participants received the minimum required visits (n=3), as three was the mean average number of visits received. In the other report detailed descriptions were made of adherence by both participants and the professionals involved. Five thousand six hundred and ninety-four recommendations were made across all participants with an average of 28.8 per participant, over half of these were not fully complied with although adherence was stable across the duration of the study. Major problems were more likely to be identified in the first year of involvement, while therapeutic and preventative recommendations were similar over time. Adherence was better from physicians than referrals to other professionals or community services or those requiring self-care.

Group: Education, multifactorial-action and review with medication review and self-management strategies

There are five interventions in this group: Coleman 1999⁵²¹, Counsell 2007⁵²², Meng 2005⁵⁷⁴, Metzelthin 2013⁵⁷⁶, Stuck 2015⁶⁰⁴

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: The goals of the five interventions were closely aligned, though differently described. Three interventions were clearly seeking to improve the health, function and quality of life of older people, two of these sought to do this by identifying risk factors for decline, two of these three also sought to promote self-management of health. Of the other two interventions one sought to change how primary care was delivered, increasing ancillary support to manage unmet needs in the chronically ill. The other was focused on improving geriatric care, driving down costs and reducing long-term care admissions. Reducing care costs was mentioned by three reports in all.</p> <p>Rationale: All studies were rationalised through previous research, three through existing study findings and four through reviews. At least three had also got a theoretical grounding, often in behaviour change theory. One had used intervention mapping from existing findings. One study was heavily grounded in the idea of person-centred care and the need to manage frequently undiagnosed geriatric syndromes. One study was also informed by policy recommendations.</p>
3. What (materials)	A range of materials were used in the five interventions. Four reports describe training materials and protocols for providers. Two of these and the remaining other used treatment strategies for specific conditions. Two interventions utilised existing health records while one described their use of validated assessments. At least two reports described referrals and communication with professionals. One mentioned case management and care planning materials. Two interventions explained the input of the participant, one

	of these provided self-management videos to study participants, another used motivational interview materials.
4. What (procedures)	All five interventions were based around an initial assessment of needs, four of these were described as multidomain, one of which is formulated from electronic software designed to draw information from pre-existing patient records. Information from assessments was discussed by a multidisciplinary team in four interventions, three of which explicitly described planning from this assessment. Four interventions explained the review process and timing which varied. Three of these and the remaining other described the provision of self-management advice, though again the approach to delivering this varied. One intervention mentioned the process by which pharmacist input was implemented, though all assessments incorporated an aspect of medication review. One report described the provision of assistive devices, and one detailed the input of family members in care planning and post intervention care planning. Four reports detail usual care access.
5. Who provided	All five interventions had major input from nurses, four of these had GP or primary care physician input as well. Other professionals were involved to varying degrees including Physiotherapists, Occupational Therapists, Pharmacists and Social Workers. Multidisciplinary input was described to varying degrees as being when it was required. Three reports explicitly refer to the provision of specialist training on delivery of the intervention.
6. How	For one intervention provision was not reported. For the remaining four, all were provided face-to-face and at home with some provision over the telephone in all instances. Three interventions were provided individually, one of these with a family care giver if one was available.
6b. How organised	Organisation of the five interventions varied, although all five required organisational input from nurses to some degree. Three of these also required organisational input from GPs or primary care physicians, these same three place responsibility on the multidisciplinary team for organisation of sessions and ongoing care needs. Two reports described case conference sessions while one detailed the organisation of clinics.
7. Where	Three interventions were undertaken in the USA, one in The Netherlands and one in Switzerland. Four interventions took place in the participant's home, while the other was carried out in clinics and practice rooms at the health care facility undertaking the study.
8. When and how much	A variety of inclusion and exclusion criteria were listed for the studies. Three had minimum age limits, two of these being 65 years of age and over and one being 70 and over. Three studies required the participant to be identified as at risk of increase care needs, two included frailty status as part of their inclusion criteria. One included those with a reduced income level, while two others were limited to specific primary care practices. One study excluded those with limitations on basic activities of daily living, cognitive impairments or terminal diagnosis, while two others included those with some limitations on (instrumental) activities of daily living.
9. Tailoring	All five reports described how the intervention was tailored to the participants needs in line with their assessment. Three also incorporated the preferences of the participant. Four interventions provided contact levels ad hoc so these were also varied. The intervention with group sessions tailored discussion to the needs of the group.
10. Modifications	Only one intervention described modifications made during delivery. This was necessary due to changes to funding and reassignment of services. Steps were taken to ensure that delivery was as close to randomisation as possible.
11. How well (planned)	All five reports described steps taken to improve adherence and measure efficacy and fidelity to the intervention, although some to a minimal degree. Four reports detailed the use of trained providers and two of these also used ongoing supervision to improve fidelity. Two also used existing record keeping processes to improve adherence. Two interventions included a process evaluation, one of which had been supported by feasibility work. One other intervention had also undertaken feasibility studies.
12. How well (actual)	Studies had varied success with their intervention implementation. One study found that although no benefit could be shown in results, participants expressed satisfaction with the intervention. One other study reported high levels of adherence to meeting requirements and care planning, suggesting that non-adherence to care planning was often related to participant reluctance. A third study found that most aspects of the intervention were well complied with, and home visits were well received, however some aspects were not complied with by providers or participants. This was similarly seen in the fourth report, where implementing the full

protocol was problematic, assessments were conducted but care planning not always successful. Though participants were most often considered as committed to the plans. For the final study, which was undertaken through self-assessment, over 85% of assessments were returned and almost 60% of participants remained in the project for a full two years, although some aspects of the intervention were not as successfully adhered to as others.

Group: Education, multifactorial-action and review with self-management strategies.

There are two interventions in this group: Hattori 2019⁵⁴⁵, Moll van Charante 2016⁵⁷⁷

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: One case was focussed on improving independence by encouraging self-management skills whilst the other case was focussed on reducing the incidence of dementia and cardiovascular disease, and the burden of functional disability in the elderly.</p> <p>Rationale: Both cases were based on previous research. One case was based on the association between vascular and lifestyle risk of dementia and the potential to prevent dementia if risk factors are agreed. The other case on the other hand was based on effectiveness of multicomponent interventions</p>
3. What (materials)	Varied devices used in both cases. Both cases used equipment to measure care goal activities. One case used original assessment for comprehensive clinical assessment, assessment sheet for self-management and booklet for preventing long-term care needs. The other case used detailed protocol which guided recommendations and referrals.
4. What (procedures)	Both cases started with comprehensive clinical assessments and a joint discussion of care goals and planning. Both cases involved training of staff during intervention provision.
5. Who provided	One case had intervention provided by a rehabilitation specialist such as an OT or physiotherapist with training by a care manager. The other case involved a practice nurse with supervision of a GP. Both cases had other professionals like dietitians, dental hygienists and other specialised health professionals also participating when required.
6. How	One case was delivered individually but the other case was presumed to be individually delivered.
6b. How organised	In all cases, mechanisms were in place to facilitate care coordination including meetings to discuss patients' goals with at least one case conference and a practice nurse under supervision of a GP who coordinated the intervention.
7. Where	One case was in The Netherlands in general practices organised in health centres and the other case was in Neyagawa, Osaka, Japan in a long-term care insurance system for people with mild to severe disability. One case was delivered face-to-face and the other case was presumed to be delivered face-to-face.
8. When and how much	In one case, the intervention was for five months which included one home-visit, up to 12 modules weekly lasting two to three hours and one review module. The other case was a nurse-led intervention every four months for six years and a total of 18 visits to the GP.
9. Tailoring	The care plan for both cases were tailored based on the participant's needs assessment and goals.
10. Modifications	Not mentioned in both cases.
11. How well (planned)	In both cases, measures were taken to promote fidelity through supervision and monitoring of the interventions. One case monitored the intervention through regular visits to the practice nurses. The other case did not state specifically who did the monitoring and supervision.

12. How well (actual)	One case had a high attendance rate with 76% attending at least one module and 66% attended at least seven modules. The other case had a relatively high drop-out rate with 544 participants receiving less than two visits per year before the end of study.
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Group: Exercise

There are seven interventions in this group: Giné-Garriga 2020⁵³⁸, three arms of Morey 2006⁵⁷⁹, Morey 2009⁵⁸⁰, Morgan 2019⁵⁸¹, von Bonsdorff 2008⁶²⁴

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: Two reports did not discuss the goal of their intervention. The remaining five all stated that a primary goal was to increase physical activity, one also mentioned the reduction of sedentary behaviour. Further aims included the improvement of health, function, quality of life and retention of independence, the reduction in disability and need for supportive services are also mentioned. One intervention explicitly refers to long-term behaviour change.</p> <p>Rationale: Six reports refer to a theoretical basis for behaviour change and motivational techniques. Two reports refer to reviews undertaken to ground their intervention, while three discuss evidence-based effectiveness. Two studies were based upon feasibility or previous interventions. The benefit of motivational support is highlighted in three reports and at least three used recommendations and guidelines for healthy physical activity to ground development of their intervention.</p>
3. What (materials)	A variety of materials were used across interventions. A core component was the provision of written materials to the participant, in five interventions these were based on physical activity promotion, either exercise tips or advice about physical activity services in the area. Two interventions provided materials unrelated to physical activity such as general health promotion. Four interventions mention activity planning in their materials used. Access to care notes to include activity planning or to gather information as required in five interventions. Three studies provided pedometers to participants, two provided training equipment. Documentation to track activity was provided to participants in two studies. Progress reporting was mentioned in two interventions. Referrals were mentioned in one study. Three reports mention manuals and scripting or fidelity assessment in their reports.
4. What (procedures)	All seven interventions involve the development of a tailored plan to promote physical activity, five studies explicitly mention input from participants on the development of this. Two studies also describe a focus on strength and walking or balance training. A pedometer was provided in two interventions. Support to set and maintain goals is mentioned in five studies. Follow up support and review were also mentioned by at least five studies, although how this was provided (either by post, phone or face-to-face) is not always clear. The provision of health-related information is mentioned by three reports, three reports explicitly refer to behaviour change techniques. Usual care is mentioned as available in three interventions. One study mentions using referrals as part of the intervention.
5. Who provided	The intervention was provided by a range of individuals. Six reports detail the need for providers to be trained in the specifics of the intervention. Five interventions had input from primary care physicians or GPs and four from health counsellors. Two studies involved nurses or healthcare workers. Others involved in delivery included a qualified fitness instructor and a physiotherapist.
6. How	All seven interventions were provided individually and face-to-face. Five interventions also use telephone contact and two used the postal system. Group contact is mentioned in two interventions and one explicitly refers to the follow up process. One intervention preferred participants to have the support of a family member or loved one. Motivational interviewing and strategies for motivation, problem solving, goal setting and self-management are mentioned as key in five reports.
6b. How organised	One report does not mention how the intervention was organised. The six other interventions involve primary care providers or GP input, counsellors had an organisational role in three interventions and participant input was required in four interventions. A university, trained facilitators, the physiotherapist, and the local health

and social services had input in one intervention. It was noted in three reports that the intervention was underway during a time of change in health promotion services.

7. Where	<p>Interventions were delivered in a range of locations; although it was not always clear what was undertaken in each place. Veterans' health clinics are mentioned in four interventions, primary care centres are mentioned in three, additionally, GP surgeries and leisure centres are identified locations in one intervention each.</p> <p>Four interventions were delivered in the USA. The remaining three were in various European locations, one in the UK, one in Finland, and one was delivered in four countries including Denmark, Northern Ireland, Germany and Spain.</p>
8. When and how much	<p>The criteria for inclusion in the intervention were varied. Five interventions carried a minimum age, one was 65 years and over, the remaining four were 70 years and over. Four involved veterans only, one recruited old volunteers. Three studies assessed physical ability to safely take part and three required participants to have high levels of sedentary behaviour. Two studies required participants to not have dementia or at least be cognitively intact. Four studies excluded those with high physical activity levels. Four excluded those with terminal diagnoses or specific health conditions.</p> <p>The nature, duration and frequency of input varied over the interventions. One intervention provided 32 face-to-face exercise sessions, twice weekly for 16 weeks. While the majority (four) only mention one face-to-face contact. Telephone contact varied between three and 13 calls. One intervention mentions mailed updates. Intervention duration ranged from 16 weeks to two years.</p>
9. Tailoring	<p>All seven reports detail some level of tailoring in line with the participant's ability and capacity. One describes tailoring following progress by the participant. One suggests the involvement of friends of family is optional.</p>
10. Modifications	<p>Not mentioned in any of the reports.</p>
11. How well (planned)	<p>One study did not mention how they were promoting adherence or measuring implementation fidelity. Adherence to the intervention was promoted through the telephone contacts in at least two interventions. Involvement of the primary care provider was also seen as beneficial to adherence in one report. Implementation and fidelity to the intervention was measured and analysed in at least two interventions. One report explicitly mentions the use of qualitative approaches such as interviews to evaluate the intervention.</p>
12. How well (actual)	<p>One study did not mention how well the intervention was implemented. Four reports mention positive endorsement by the service provider. Three interventions report on flexibility with phone call delivery. Two interventions report that all participants received baseline input. One describes minimum dosage input being received by all participants. One report states that the anticipated duration of delivery was as intended. Call delivery was above 90% in one intervention, another reported that at least 302 of 318 participants received a minimum of four calls.</p>

Group: Exercise and psychology

There are three interventions in this group: Alegria 2019⁵⁰³, Jing 2018⁵⁵⁴, van Heuvelen 2005⁶¹⁷

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: to improve physical and psychological health / reduce physical and mental disability.</p> <p>Rationale: Previous demonstration of effectiveness of each component, including psychological benefits of physical exercise. The combination was expected to provide further additional benefits.</p>
3. What (materials)	<p>Some provided equipment and instructions for the exercises and materials to support the psychological tasks.</p>

4. What (procedures)	<p>All the interventions provided exercise sessions and psychological training.</p> <p>One intervention additionally provided encouragement calls to continue practising.</p> <p>One intervention additionally provided regular mood screening.</p> <p>Staff were provided with training prior to intervention in two studies, and regular supervision in one.</p>
5. Who provided	<p>In some cases, specialists in exercise or psychological training provide the relevant component. In others the provider is a community health worker or nursing student.</p>
6. How	<p>Both physical exercise and psychological training were provided individually and in group sessions in different combinations.</p> <p>The interventions included face-to-face contact as well as telephone calls. In one intervention, the two components were provided as parts of one session.</p>
6b. How organised	<p>Few details of organisation provided.</p>
7. Where	<p>China, The Netherlands and USA.</p> <p>The intervention took place in community facilities and at the participant's home.</p>
8. When and how much	<p>Started in different circumstances:</p> <ul style="list-style-type: none"> (a) participants did not have cognitive impairment and were not very active; (b) participants were housebound; (c) participants had low mood and mild-moderate disability. <p>Physical exercise session frequency was between three times per week and once every two weeks for approximately 3 months. Sessions continued at greater or lesser frequency or not at all after this for an additional 6 weeks to 3 months.</p> <p>Psychological training occurred for 18 weeks to 6 months, at a frequency of every 2 to 2.5 weeks for at least 3 months, with step-down to monthly training for the last 3 months in one.</p>
9. Tailoring	<p>The psychological training was tailored to individuals' problems in two interventions. Optional remote delivery was available in one intervention depending on participants' circumstances.</p>
10. Modifications	<p>Not mentioned</p>
11. How well (planned)	<p>One provided feedback on delivery, which was recorded. One encouraged participation by offering transport and sending newsletters. Encouragement calls or personal attention were also detailed in two interventions.</p>
12. How well (actual)	<p>Most participants did not attend all sessions in the two studies that reported details.</p>

Group: Homecare

There are 12 interventions in this group: Auvinen 2020⁵⁰⁵, Bernabei 1998⁵⁰⁸, Dupuy 2017⁵²⁷, Fernandez-Barres 2017⁵³¹, Fristedt 2019⁵³⁵, King 2012⁵⁵⁷, Lewin 2013⁵⁶⁵, Mann WC 1999⁵⁷¹, Rooijackers 2021⁵⁹⁴, Teut 2013⁶⁰⁹, van der Pols-Vijlbrief 2017⁶¹⁵, Wolter 2013⁶²⁹

TIDieR item	Description
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1. Brief name	
2. Why	<p>Goal: Only three of 12 interventions mentioned an explicit Goal, where the goal was to provide care and support to older people enabling them to stay at home. One added the goal of continuity of care for older people.</p> <p>Rationale: Ten reports made no mention of the rationale for the intervention, one mentioned the importance of responding to the needs of older people and the other identified that caregivers were an important resource for the care of older people.</p>
3. What (materials)	Eight reports did not mention the materials used for the intervention. One intervention mentioned the use of fake sensors as this was a control group, another mentioned care plans to identify support needs, one mentioned likely equipment for carrying out usual care and one other provided participants with a healthy diet brochure.
4. What (procedures)	In all interventions there was some reference to the provision of usual care, including home care services. Two reports mention assessments being carried out as part of usual care practice and one of these interventions developed care plans from this assessment.
5. Who provided	Intervention provision was by a range of practitioners. In four interventions this was by nurses, one of these was supported by a doctor. Four other interventions were provided by paid care support workers. External co-ordination was mentioned in two other interventions. Five interventions mentioned the input of a range of health and social care professionals to carry out care as required.
6. How	Delivery was not always described. Eight interventions were delivered individually and ten face-to-face. One intervention mentioned that some group input may be part of some intervention input.
6b. How organised	In one report the organisation was not described. Of the remaining 11, four were organised by home care providers, two had external coordination, two had state input mentioned in reference to organisation. Other individuals mentioned include nurses, home care staff, care providers and nurses.
7. Where	One report does not state a location of provision. Of the remaining 11, eight were undertaken in European locations, including Germany, Spain, The Netherlands, Finland, Sweden, Italy and France. One intervention was based in the USA, one in New Zealand and one in Australia. Whilst it was not always explicitly mentioned the nature of provision suggests that the intervention was provided in the participant's home.
8. When and how much	<p>There were various inclusion and exclusion criteria for eligibility to the intervention. Ten reports mention that participants needed to be in receipt of usual care. Additionally age limits of age 65 and over or age 75 and over were prerequisites for eligibility in three instances. Additional requirements for inclusion were that no previous assessments were undertaken on the participant, that they had high level need or polypharmacy, that they were house bound, that they had a frailty level which indicated decline over the preceding six months, that they resided within a certain housing community or that they were undernourished. Only three interventions specified exclusion criteria, one excluded those with the highest level of need, two excluded those with cognitive impairments, one of these also excluded those who were terminally ill or bedbound.</p> <p>The nature and frequency of contact was rarely described, for four reports it was and then it was assumed that this would vary according to need.</p>
9. Tailoring	Four interventions mention that provision would be tailored according to the need of participants. The remaining eight do not describe tailoring.
10. Modifications	No reports mention modification to their intervention.
11. How well (planned)	No reports mention steps taken to improve implementation or adherence to the intervention.
12. How well (actual)	Not mentioned in many reports though one report found that home care staff promoted reablement principles that were not part of the intervention.

Group: Homecare and multifactorial-action

There are five interventions in this group: Parsons J 2012⁵⁸⁵, Parsons M 2012⁵⁸⁷, Parsons M 2017⁵⁸⁶, Tuntland 2015⁶¹⁴, Whitehead 2016⁶²⁷

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: Although the goals of the interventions were differently described the overall focus was to enable older people who were identified as requiring support to live at home, to maintain home living. Identification of the appropriate level of care appears to be a key aim across interventions. The promotion of health related quality of life, independence and social connectedness was mentioned as an explicit aim of one intervention. Rehabilitation as set at an appropriate level was mentioned by another. One other mentioned reducing care costs was an aim.</p> <p>Rationale: Two reports did not explicitly state a rationale. One is somewhat ambiguous stating that there is a need for appropriate home care service provision. One intervention was based on evidence that older people often lose function when in hospital and those who do lose function often fail to regain it. This intervention suggests that home care has the potential to improve this situation. One intervention is based on Care Act guidelines around care provision and that a key component of this is empowerment and reablement.</p>
3. What (materials)	Materials were minimally described in the reports. Three of the interventions described using standardised assessments. One mentioned the development of care planning with client input. Two others describe accessing services or equipment through referral systems as required.
4. What (procedures)	The process of the intervention was not always clearly described. Four interventions describe an assessment process; one of these is at a six week time point to identify continuing needs. Care planning following from the assessment is stated by one intervention. Four interventions explicitly refer to access to standard home care service provision and other healthcare services remaining in place. One intervention described little other than to indicate that the care package was designed to include input from family and community services.
5. Who provided	Assessments were conducted by needs assessors and processed by healthcare co-ordinators for two interventions. One of these also mentions the input of the research team. Home care aide input is mentioned explicitly by two interventions. The role of those undertaking assessments is not clearly specified in three interventions. One intervention mentions reablement workers and social care managers. Input from additional healthcare professionals as required is mentioned in the delivery of all five interventions.
6. How	It is not always clear how assessments were undertaken, two interventions mention this being an individual assessment but with no indication that it was face-to-face. Three interventions mention the provision of care being face-to-face and individual in nature. One other clearly states that provision of care is face-to-face and at home.
6b. How organised	A range of organisations and individuals were involved in the organisation of the interventions, three interventions utilised an assessment agency with needs assessors to undertake assessments. One of these interventions also had organisational input from the research team, home care co-ordinators and home care aides. Two interventions had healthcare organisation input, one of these reports mention funding by the health district board. One intervention mentions organisation by the relevant healthcare professional providing care. Another was organised by reablement workers for an initial six weeks, then an Occupational Therapist and home care service should continued care be required.
7. Where	<p>Three interventions were implemented in New Zealand, one in Norway and one in the United Kingdom.</p> <p>Four interventions mention delivery of the intervention at home.</p>
8. When and how much	Eligibility to all five interventions was after referral to home care services. One of these required this to be on hospital discharge.

	The nature, duration and frequency of intervention input was not always mentioned. Two interventions note that input frequency and duration was varied. One states that there was no time limit to input. However one other conducted six weeks of reablement followed by homecare as required after this time point.
9. Tailoring	All five interventions were tailored in line with the needs of the individual. One mentions consideration of the preferences of the individual, whilst another was tailored to the effort given by the individual. Three mention flexibility over the duration of input.
10. Modifications	Four reports do not mention any modifications. One intervention required modifications to be made following changes to the recruitment approach of Occupational Therapists in the service.
11. How well (planned)	Three reports do not mention any plans for adherence or fidelity assessment. One report describes the collection and analysis of the care planning documentation. The other conducted a cost analysis identifying the number of contacts, the provision of equipment and individual reported additional service use.
12. How well (actual)	Three reports did not undertake adherence or fidelity assessments. One intervention found that 15% of care plans documented individualised activity related to functional improvement. The other intervention remarked on changes to the intervention due to changes in the recruitment of staff.

Group: Homecare, ADL, multifactorial-action from care-planning and review with self-management strategies

There are three interventions in this group: King 2012⁵⁵⁷, Parsons M 2017⁵⁸⁶, Rooijackers 2021⁵⁹⁴

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: The three interventions all aimed to improve, restore, promote or maintain independence or function. One intervention also had a goal of improving wellbeing of participants. All three interventions desired improved service provision. One intervention aimed to reduce admission to long-term care.</p> <p>Rationale: All three interventions were based on previous studies or existing models of working which showed benefit to older people. Studies mentioned a theoretical basis in the evidence for restorative approaches and social theories.</p>
3. What (materials)	All three interventions used a range of assessments over a number of domains, one explicitly referred to psychological, social and physical components. Two reports detailed training materials for staff and one intervention mentioned goal setting documentation, action planning documentation and exercise booklets for participants.
4. What (procedures)	All three interventions required a multidomain assessment to be undertaken, all three were also co-ordinated by a nurse. Goal setting, care planning and tailored exercise planning is also part of all three interventions. Regular review, referrals and staff training are each mentioned as part of one intervention. Usual care is available across all interventions.
5. Who provided	Registered nurses and support workers are involved in the provision of all three interventions. One intervention involved multidisciplinary input as well. Training was important for providers of all three interventions.
6. How	All three interventions were provided face-to-face, three mention this being on an individual basis. One intervention mentions telephone contact as well.
6b. How organised	All three interventions appear to have nurse co-ordinators as a core organisational feature. Support worker input is key across all three interventions as well. Hospital staff were involved in one intervention, a physiotherapist or occupational therapist in another. Funding is through healthcare insurance for one intervention while one other mentions input from charitable services.
7. Where	All three interventions were delivered at home. Two interventions mention involvement of one key healthcare provider.

Two studies were undertaken in New Zealand, one in The Netherlands.

8. When and how much	<p>All three interventions required participants to be in receipt of home care. One had an age limit of 65 years and over. One recruited those with high levels of need placing them at risk of long-term care admission. One study placed a language restriction on participants. Only one study excluded those with serious or terminal illness or cognitive impairment.</p> <p>The duration and frequency of contact varied across the three interventions. Contact ranged from multiple daily contacts to a minimum of once a fortnight. One mentions four-six months of input, and one mentions 12 months duration. Two interventions mention reassessment, one at 12 months one at six.</p>
9. Tailoring	All three interventions included tailored care planning according to the assessment of participants. Two mention this being in conjunction with the participant. One describes the adaptation of visits according to need.
10. Modifications	This was not mentioned by any of the reports.
11. How well (planned)	One study did not mention any attempt to assess implementation or fidelity. The two other studies both delivered training and support to intervention providers. One study undertook feasibility work. One promoted adherence through prompts to providers. One report details a process evaluation through the collection of documents about records and qualitative methods.
12. How well (actual)	One study did not mention any attempt to assess implementation or fidelity. A variety of findings were reported by the remaining two studies. One was delivered during the expected timeframe, follow up calls were received between 70-89% of the time, although over 50% of initial assessments did not identify tasks. The other intervention describes barriers to implementation such as low staffing and resistance from clients, whilst additional funding and digital care planning facilitated implementation. Compliance measured as 73%-86% for attendance at over half of the meetings, over 50% of assignments were completed by team members. Staff were noted as perceiving change as positive due to the intervention.

Group: Homecare, multifactorial-action and review

There are six interventions in this group: Hall 1992⁵⁴³, Markle-Reid 2006⁵⁷², Parsons M 2012⁵⁸⁷, two arms of Ryvicker 2011⁵⁹⁶, Shapiro 2002⁵⁹⁸

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: The six interventions had a number of goals, four of which promoted the improvement of function in older people with some level of dependency through home care to enable independent living for as long as possible. Two reports indicated that reducing service duplication and integration of services by promoting better across service communication as additional aims. Improving the home care service by optimising the role and enhancing retention was an aim of one other intervention. One other intervention indicated the early input of interventions to promote proactive care as a goal.</p> <p>Rationale: one report did not describe the rationale for their intervention. Two interventions suggested that integrated care approaches appear beneficial to support the holistic care needs of older people. Two interventions were based on previous research. One intervention suggested that there are barriers to providing successful home care and this impacts on home care worker retention and the outcomes of those using the service. One other report identified the potential that home care provision has to improve the wellbeing of older people.</p>
3. What (materials)	Two reports did not describe the materials used in their intervention. The remaining four all described a variety of assessments for older people, some of these were routinely undertaken in usual care, others were specifically developed for the intervention. One intervention also accessed medical records to complete assessments. One intervention developed guidance called 'Five Promises' to aid with communication

between older people and the staff providing care. One intervention also described documentation used in the supervision of staff who delivered the intervention.

4. What (procedures)	All six interventions used an assessment to identify needs, one of these specifically involved patients' preferences. Care-planning was explicitly developed from this assessment in four interventions, one involving family caregivers in this process. A further four describe the review process, with one again including patients preferences in this. Services were arranged as part of three interventions. Training and supervision are described in the reports of two interventions. Additionally, access to usual care is noted in four reports.
5. Who provided	A range of professionals were involved in the provision of the interventions; many by multiple individuals and roles. Nurses were involved in three interventions and case workers in three as well. Access to a multidisciplinary team was mentioned in four interventions, though this was sometimes in conducting assessments and at other times in carrying out care. A personal support worker was mentioned in one intervention. Another mentioned the need to ensure providers were trained in intervention delivery.
6. How	One report did not describe how the intervention was delivered. Four interventions were delivered face-to-face, four at home and four individually (although these were not always the same four). One intervention also used telephone contact and another required input from a caregiver.
6b. How organised	Organisation was variable. One intervention required little planning and organisation. Two interventions relied upon case managers to organise the intervention, clinicians were involved in care planning for three interventions. Nurse input was described as key in three interventions as was the home care team in two of these. The family caregiver had some input in one intervention.
7. Where	Five of the six interventions were undertaken in North America; two in Canada, three in the USA. The remaining intervention was carried out in New Zealand. Four of the six reports described delivery at home, one mentioned specific care settings, whilst the other does not state the location of intervention delivery.
8. When and how much	All six interventions commenced following on from assessment indicating that the older person required home care. Two of the interventions required evidence on the assessment for capacity for improvement, whilst one other required a specific level of ill-being. One intervention had a minimum age requirement of 75 years of age.
8. When and how much	The nature, frequency and duration of the interventions was not well described, four reports described an initial assessment and then all six refer to review of this assessment, although for some this was at specific time points and others it was ongoing or as required. Only one report described duration and this was 18 months long.
9. Tailoring	All six interventions were designed to be tailored to the needs and capacity of the participant identified at assessment. Two interventions tailored according to participant's wishes also. One intervention was tailored to the caregiver as well; this intervention also tailored the supportive contact according to need.
10. Modifications	Four reports did not mention any modifications. One mentioned that there were changes to the criteria to assess support changed during implementation, impacting on the service provision. One report mentioned that there were changes made to the hours provided by home care over the duration of the intervention.
11. How well (planned)	Only two reports described steps taken to assess fidelity and adherence, the remaining four did not. The two that did carried out a survey on the intervention, used both standardised intervention materials and training materials for providers. They both also conducted interviews with delivery team managers and carried out observations of meetings.
12. How well (actual)	Four interventions were not assessed for fidelity. One report described components of the intervention were widely accepted, although some components were not considered feasible the 'Five Promises' guidance was seen to show benefit. Training was seen to be inconsistent and Clinician and commitment to support the intervention was variable. The other report described how there was little capacity to implement the intervention.

Group: Homecare, multifactorial-action from care-planning and review with medication review

There are three interventions in this group: Bernabei 1998⁵⁰⁸, Fristedt 2019⁵³⁵, Wolter 2013⁶²⁹

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: All three interventions had a goal of reducing institutional admissions be that to hospital or long-term care, one also sought to reduce the cost of providing care to older people. Two reports mentioned the aim of improving function, one report implied this would improve quality of life for older people. One report describes the need to improve communication between services.</p> <p>Rationale: One report mentioned the need to integrate social and medical services to provide clarity over their purpose, this intervention was also grounded in policy recommendations and the wishes of older people themselves. The two other interventions were developed following on from previous research showing the benefit of such interventions. One of these was part of a government policy to improve quality of care, the other was to identify deficits in current care processes.</p>
3. What (materials)	All three interventions included assessments of need, though these varied in type they were designed to cover multiple domains of need, with a requirement for sufficient data to develop a care plan. Two interventions required access to existing medical records, one of which also required agreement for care planning with the participants GP. Two interventions mention equipment required by staff such as transportation and a laptop in one intervention, and a protocol for conducting assessments in another.
4. What (procedures)	All three interventions conducted multidomain assessments. Two explicitly refer to care planning from this. One intervention describes the monitoring process following assessment in detail while the other two mention reviewing. Two interventions mentioned the staff training process and one describes the need for agreement of care plans with the participants care providers. All interventions included access to usual care services, although one does replace some existing service provision with the intervention multidisciplinary team.
5. Who provided	One intervention is provided by a case manager and the participants GP as well as a specialist trained multidisciplinary team. A multidisciplinary team provides one other intervention, while the third is provided by home care nurses and staff. All reports mentioned the input of multidisciplinary team members as per usual care needs.
6. How	All interventions were provided individually and face-to-face. One intervention mentioned that some of the services accessed may be in different locations and in group contexts as was relevant. Another intervention required collaboration with participants and/or their relative(s).
6b. How organised	The interventions were organised differently. Although two interventions relied upon some level of state involvement. One of these involved input from existing services, case managers and the GP and used weekly sessions to discuss the intervention implementation. The other of these the geriatrician for the intervention took over the primary care responsibilities for the participants. The third intervention was organised by the home care service and nurses.
7. Where	All three interventions were undertaken in Europe, one in Germany, one in Sweden and one in Italy. All three were implemented at home. Two reports mentioned the system of care in which they were operating, this was varied, and integration of services was mixed.
8. When and how much	<p>Two interventions were accessible to participants upon receipt of home care services, although one of these specified no previous assessment and planning to be undertaken. The other interventions criteria were participants being over 75 years or age and having a level frailty which indicated decline over the previous six months.</p> <p>The nature, duration and frequency of input was not described in detail by the reports. One intervention lasted for 12 months with input over alternate months; another intervention had an assessment visit then varied amounts of contact over the following 15 weeks. The other report does not mention input explicitly, although reassessment is mentioned.</p>

9. Tailoring	All interventions could be tailored to the needs of the participant, one was also tailored to the needs of the relatives. Two interventions also mentioned the provision of support from providers being tailored to needs and wishes of participants.
10. Modifications	There were no mentions of modifications to the interventions in any reports.
11. How well (planned)	Two reports did not mention any steps taken to improve fidelity or measure adherence. However, one explicitly mentioned that staff providing the intervention received training and advice, and support was on hand to improve fidelity.
12. How well (actual)	Two reports did not describe fidelity or implementation of the intervention. The other report however described how the intervention saw an increase in the level of care planning and in keeping care plans up to date. Although, implementation of the intervention varied between providers, some being able to implement well or rapidly (optimal) and others unable to implement even over a longer period of time (sub-optimal). Nurses feedback indicated that a year was needed to implement. Further analysis indicated that there were certain factors associated with improved implementation including services with higher levels of qualified staff, staff having lower workloads, and smaller services were more likely to implement well.

Group: Homecare, multifactorial-action and review with self-management strategies

There are two interventions in this group: Hall 1992⁵⁴³, Parsons J 2012⁵⁸⁵

TIDieR item	Description
1. Brief name	
2. Why	<p>Goals: The goals of the two interventions were broadly aligned. One intervention stated assisting frail older people to live at home for longer and sustain their total wellbeing as a goal, the other focused on the restoration and maintenance of function as well as engagement with community services. Both interventions focused on the empowerment of older people to take control of their own lives, one intervention also wished to change the philosophy of home care provision from increasing dependence to promoting independence.</p> <p>Rationale: one study was based on previous work which showed a gap in existing home care interventions. The other intervention was also based on existing evidence, suggesting that hospitalised older people often lose function and then do not regain this once back at home, identifying home care as having potential to improve this situation.</p>
3. What (materials)	One intervention used a protocol to guide care planning formulation and then referrals to services. The other intervention developed and used a specific tool called Towards Achieving Realistic Goals in Elders tool (TARGET), standardised assessments care planning and client reviewing are also mentioned as materials in this report.
4. What (procedures)	Both interventions use multidomain assessments the planning and arrangement/organisation of care and a regular review component. One intervention stated that review was monthly. Both interventions also used supported goal-setting and had access to usual care, and home care specific to their needs based on standard existing assessments. One intervention also mentions the training of deliverers ahead of providing the intervention.
5. Who provided	The interventions were provided by different teams. One used nurses to conduct the assessment and carry out care. The other used trained needs assessors, home care coordinators, and home care aides as well as the research team in the delivery of their intervention. Both reports mention access to healthcare professionals as needed.
6. How	Both interventions are provided to individuals, however only one states that this is face-to-face, the nature of the assessment for the other intervention is unclear.
6b. How organised	Organisation of the intervention also differed. One is organised by a nurse who provides referrals based on their assessment then community services arrange relevant services. The other intervention requires the assessment agency to conduct needs assessments, the home care agency to coordinate this, and the

	coordinators to plan and review the relevant care to be provided by home care aides. The research team are also mentioned as having organisational input in one intervention.
7. Where	One intervention was conducted in Canada, the other in New Zealand
8. When and how much	Eligibility for both interventions was on enrolment or referral for personalised care at home. In both cases this was based on standardised assessments identifying this need, visits and support were according to need. One intervention mentioned specific review at three and 12+ months.
9. Tailoring	In both cases care planning was tailored to need and with preferences identified by the participant based on their multidomain assessment. One intervention also mentions that usual care was also based on the need of the client.
10. Modifications	Modifications were not mentioned in either report.
11. How well (planned)	One intervention did not mention any plans for adherence or fidelity assessment. In the other intervention support plans and details of services accessed were collected and analysed, the number of reviews undertaken by home care coordinators was also gathered.
12. How well (actual)	One intervention did not report on adherence or fidelity. The other intervention identified almost 2/3rds of planning included activity targeting functional improvement. However, the review process was not increased by use of TARGET. 85% of participants engaged in goal setting and 10 referrals to allied health professionals were made.

Group: Meaningful activities and education

There are two interventions in this group: Clark 1997⁵¹⁹, Clark 2012⁵²⁰

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: The Interventions were both designed to benefit the physical, psychological and functional health of older people. One also mentioned attending to cognitive health as well. Both interventions had the aim of reducing decline; this was to be targeted through engaging people in meaningful activities. One study mentioned education to inform better health practice in older people. The other intervention mentioned that they targeted an ethnically diverse population, and a desire to embed the intervention in everyday routine.</p> <p>Rationale: Both interventions were developed based on previous study, additionally both interventions mention occupation specifically as part of successful ageing. One of the interventions rationalised development through an occupational science theoretical basis, acknowledging that occupation is socially generative and productive. Previous study had been used to select components of this intervention for evidence based benefit. The other intervention indicated that activity and lifestyle are modifiable factors for targeting change.</p>
3. What (materials)	One report did not specify the materials they provided although it was noted that they were culturally adapted for the population. The other intervention provided educational materials including '25 ways to stay healthy' which was developed by participants, a life redesign journal and an instructional video on crime prevention.
4. What (procedures)	Both interventions consisted of the same procedures. This was to provide educational sessions on various topics to groups of older people. Additionally individual education sessions were provided which could be tailored to the participant. Interventions provided opportunities to take part in activity sessions. Functional training was available to enable easier engagement with activities and usual care was also noted as available to participants.
5. Who provided	Both interventions were provided by occupational therapists, particularly trained in supporting older people. These were able to speak appropriate languages as required. One intervention also mentioned a session being delivered by a police officer.

6. How	Both interventions were provided face-to-face and using both group and individual settings. Interventions aimed to facilitate peer interaction and were using psychological approaches to ensure intervention efficacy.
6b. How organised	One intervention report mentioned the funding source as the National Institute of Health and the American Occupational Therapy Foundation. The other intervention suggested that continuity in provision was key, and that money was available to compensate participants for taking part in activities.
7. Where	Both interventions were undertaken in the USA. The individual components of the interventions were provided at home. The group sessions were provided at community based sites for one intervention although the location of the group sessions in the other intervention is unspecified.
8. When and how much	<p>One intervention was available to older people living in specific locations following a health assessment by a physician. The other intervention was undertaken with people over 60 years of age, recruited through various approaches within a specific location, for example targeting senior housing and community centres. Both interventions were aiming to reach culturally and ethnically diverse populations where there was an assumed health disparity.</p> <p>Both interventions provided two hourly group sessions once a week, one provided hourly individual sessions once a month, the other made up to ten hours of individual sessions available, this intervention lasted six months the other nine.</p>
9. Tailoring	Both interventions were tailored according to the needs and activity preferences of the individuals. These activities could be adapted over the intervention period. Both interventions could be tailored to the language of the participant.
10. Modifications	Neither report detailed modifications made to the intervention.
11. How well (planned)	Both reports detail efforts to maintain fidelity and assess adherence to the intervention. Both reports describe training to the providers. One intervention also asked participants to refrain from speaking to each other about their activity involvement to avoid contamination across activities. One intervention took steps to ensure that providers were continuous across the intervention delivery. In addition reminders were sent about activities taking place and contamination across activity provision was measured.
12. How well (actual)	For one intervention 65% of the participants attended at least half of the sessions. For the other intervention on average, participants attended 56% of the scheduled sessions. Whilst 17% of individuals did not attend any intervention sessions. There was some cultural variation in attendance, conflict was seen across participants but this was well managed by intervention providers.

Group: Multifactorial-action

There are nine interventions in this group: Borrows 2013⁵¹¹, Botjes 2013⁵¹², de Craen 2006⁵²⁵, Grimmer 2013⁵⁴⁰, Hay 1998⁵⁴⁶, Siemonsma 2018⁶⁰⁰, two arms of Stewart 2005⁶⁰¹, Williams 1992⁶²⁸

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: One report did not mention an explicit goal of their intervention, the remaining eight had a variable focus around promoting independence or preventing and/or delaying dependence or functional decline in older people. For three interventions this was also to maintain living at home, and for another this was to ensure that older people could continue to contribute to society. Three interventions had an additional aim of reducing the cost of care provision. One desired the promotion of health and wellbeing for older people.</p> <p>Rationale: There were mixed rationales for the interventions, one report did not state a rationale. Four interventions were based on previous research or evidence in the literature. One of these was also theoretically driven by the perceived benefit of patient involvement in care decision making. Three other interventions were based on the perceived benefit of their approach, be that by utilising specific staff expertise or by implementing specific ways of working. Further rationalisations were evident including the</p>

need for working proactively, which was mentioned twice, adherence to policy recommendations or that certain patient groups were specifically at risk.

3. What (materials)	One report did not mention the materials that were used in their intervention. For six interventions assessment documentation, be that electronic or paper based, was described. Three interventions mentioned the provision of appropriate therapy, equipment or adaptations. Two interventions described communication with health care professionals and participants in their materials. One study required access to patient clinical records and referrals. The provision of information to participants was mentioned in one report; one other describes the use of a protocol to guide care. As one intervention was based on the internet, a computer and internet access were required for this.
4. What (procedures)	All nine interventions described an assessment of need, for four reports this was described in more detail as being multidomain. Six interventions describe the implementation of appropriate recommendations, referrals, therapy or adaptations in line with this assessment. One of these six and one other mentioned care or action planning following assessment. Three interventions required the participants to have input on the solutions to their care needs. Three also mention access to usual care. Two reports mentioned processes designed to sustain the programme by developing community partnerships and improved communication between different support services.
5. Who provided	Eight of the nine interventions were provided by professionals. Three of these were occupational therapist led, one of these may have been an occupational therapist assistant at times. One intervention was physiotherapist led while another was provided by physiotherapists and occupational therapists. One was led by a research nurse, one by a health visitor and one by a social worker. The remaining intervention was conducted online however there was a volunteer on hand to provide support if required, although their background was not specified.
6. How	Not all reports clearly describe how the intervention was delivered. In six reports it was evident that provision was face-to-face, and in five this was individually provided. One intervention was provided both face-to-face and over the telephone. Another intervention was less clear in detailing how it was provided, although the setting appeared to be clinically based. One intervention was conducted online with the option of support for those struggling to complete the assessment questionnaire.
6b. How organised	For one intervention organisation was not mentioned, for the remaining eight interventions there was varied input. State or local authority input was mentioned in three reports. The relevant provider such as the occupational therapist, social worker, research nurse or health visitor was responsible for organisation in most instances. Established care providers and GP's were also involved in three interventions. Additionally, the older person was seen to have some responsibility for organisation in two interventions.
7. Where	Seven interventions were undertaken in Europe, four in the UK, three in The Netherlands. One intervention was implemented in Australia and one in Canada. Six interventions were carried out at the participant's home, one mentioned attending clinic and one a location befitting the participants therapy requirements.
8. When and how much	<p>The eligibility requirements for inclusion were varied, though four had a minimum age requirement, this ranged from 65 and over to 85 and over. Five specified that participants had to have an evident need or referral to services. Two were following hospital discharge, although one was upon discharge from emergency services and the other from inpatient care. One intervention required participants to have a level of frailty, although the assessment was unspecified, one recruited through a pre-existing cohort. Another specified that participants have mental capacity to be included.</p> <p>The nature, frequency of input and duration of the interventions was rarely described in any detail. Contacts ranged from one to 18 occasions. The duration of the intervention was only mentioned in three reports ranging from three weeks to six months.</p>
9. Tailoring	All interventions involved tailoring to participants need. Two also mentioned tailoring of support level according to need and two others mentioned attending to the preferences of the participant.
10. Modifications	None of the reports described modifications to their interventions.
11. How well (planned)	Five interventions did not report taking steps to measure or promote fidelity or adherence. One intervention conducted a process evaluation of the experience of the intervention by participants. One documented

compliance with referrals. Whilst two others promoted adherence and interest with regular contact and meetings.

12. How well (actual) Four reports do not describe the success of intervention implementation. One intervention found that 60/109 participants were able to take part, and of these over 90% received a care plan. Non-compliance was explored and found to be related to lack of support or access to computer equipment. Although the experience was seen to be beneficial at times some of the suggestions were not welcomed by participants. In one other intervention 66/147 showed need, of which approximately 50% accepted support offered, of those who did not the proposed solutions was not seen as likely to help by participants. Another intervention identified that compliance for first appointments was quite good although uptake dropped off after this, however healthcare professionals rated compliance with the intervention as high for those who did attend appointments. For the two interventions which promoted adherence and interest with regular contact and meetings these were poorly attended.

Group: Multifactorial-action and review

There are 15 interventions in this group: Challis 2004⁵¹⁸, Cutchin 2009⁵²³, Hattori 2019⁵⁴⁵, Henderson 2005⁵⁴⁸, Hendriksen 1984⁵⁴⁹, Imhof 2012⁵⁵³, Kono 2004⁵⁵⁹, two arms of Kono 2012⁵⁶⁰, Kono 2016⁵⁵⁸, Lambotte 2018⁵⁶², van Rossum 1993⁶²¹, Vass 2005⁶²², Vetter 1984⁶²³, Williams 1992⁶²⁸

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: Not all reports identified a goal of their intervention, however the majority did. Goals most often focused upon older people, improvement of their health and function being a goal of seven interventions, quality of life and wellbeing a part of three of these and an aim of a further two. Supporting independent living was an aim of two, promoting self-care a focus of one other. The identification of needs was a goal of five interventions, one simply stating that older people had needs, two others identifying that these were often unmet and of a medical and social nature, two others suggested early identification of these needs was key. Other primary goals were to reduce health resource use in six interventions, in particular for long-term admissions in two reports. Four interventions also identified that accessing care and support was vital for older people.</p> <p>Rationale: Not all reports were rationalised, and one was unclear in rationale. Eight interventions were based on previous research which showed benefit, four in particular focusing on proactive and preventative approaches to care. Evidence that unmet needs lead to acute care admissions was the foundation for two interventions. Two interventions had grounding in theory. One intervention was policy informed, one suggested that social care could manage many needs of older people better than primary care providers. One of the reports highlighted that they had developed their intervention collaboratively.</p>
3. What (materials)	Four interventions did not describe any materials they provided. Seven described the assessment documentation they used, five used referrals and communications to other services. Four others mentioned documentation relating to summaries of the assessments, such as care plans or feedback to participants and families. Four interventions described the use of protocols, instructions, or manuals by providers. One intervention developed and used a coding system to aid with carrying out the intervention. One also described the loan of assistive equipment to participants.
4. What (procedures)	All interventions consisted of some kind of assessment, some described these in some detail, others used specific validated assessments, but all 15 were defined as covering multiple domains, such as physical, social, psychological and cognitive aspects. Six of these assessments resulted in the production of care plans in collaboration with participants, one of these also included family in care planning. Seven interventions provided information and advice to participants, five also provided referrals on to other services. Thirteen reports described the review process in some detail. Twelve interventions explicitly mentioned that access to usual care would be sustained for participants.
5. Who provided	The interventions were provided by a range of individuals. Eight interventions were provided by more than one person, the remaining seven appeared to be unidisciplinary. Ten interventions had some Nurse input although the specialisms of the Nurses was varied, including Community Psychiatric Nurses, Advanced Practise Nurses, Public Health Nurses and Community Care or District Nurses. Social services personnel

were involved in four interventions and Health Visitors involved in two. Occupational Therapists involved in two others, one of these also involved a Physiotherapist. Other professional input came from a medical student, a geriatric specialist, a Care Manager and a GP. Four reports also described the specific training given to intervention providers.

6. How	Although provision was not always described, face-to-face delivery was implied in all reports. At least 11 interventions were provided to the participant at home, and 14 appeared to have had some individual provision. One intervention also notes that some group delivery may have occurred depending on the nature of the recommendations made to the participant. Six interventions also used telephone calls to contact participants, however one of these interventions required the telephone call to be initiated by the participant or their family member. One intervention also posted out recommendations and required the participant to act on those recommendations. One intervention explicitly stated that providers were continuous for each participant, to aid in building a rapport.
6b. How organised	Organisation of the intervention was by a range of individuals, however in at least 12 instances this was the professional providing the intervention, be that a Nurse, Occupational Therapist, Physiotherapist, Health Visitor or other professional. Funding was described in four reports, this came from the state and in one case was supported by research funds. Although many interventions describe input of multiple professionals including GPs, four explain that decision making was to be unidisciplinary. Four interventions mentioned that the participant had to take responsibility for organising care in line with recommendations.
7. Where	<p>Thirteen interventions were described as being provided in the participant's home.</p> <p>Eight interventions were undertaken in Europe, three in the UK, two in Denmark, one in Switzerland, one in Belgium and one in The Netherlands. One intervention was undertaken in Australia, another in the USA and five others were carried out in Japan.</p>
8. When and how much	<p>For one intervention it was not stated when input commenced. For the other reports inclusion and exclusion criteria were wide ranging. Five interventions were to start following assessment which indicated a specific level of need. Four were specific to location but that the participants own accommodation, their GP surgery or upon their discharge from hospital. One required their participants to be registered with the welfare authority. Seven had minimum age requirements, these ranged from 60 and over to 80 and over. One required a specific level of frailty in their participants and four required a level of ADL limitation but with capacity to ambulate. Participants were excluded if they had a severe cognitive impairment or dementia in two studies and were at the end of their life in of these. One other report excluded those who had used welfare services in the preceding three months in three studies.</p> <p>The nature, frequency and duration of input was varied across interventions and was not always clear. The longest visits were up to two hours in length. The longest intervention duration was three years, while the shortest stated was nine months. Input over this duration was varied, 12 visits was the most contacts a participant could expect to have though most interventions ranged between quarterly and bi-annually contacts. Other contacts included scheduled and ad hoc telephone calls. One intervention appeared to have also included ad hoc visits as required and upon request.</p>
9. Tailoring	One report did not mention any tailoring to the intervention, the remaining 14 all indicated tailoring of provision was in response to the participants needs assessment. Five interventions considered the preferences and wishes of the participant, one of these also considered family input. Four interventions tailored additional contact to need. One report mentioned that participants had the right to decline recommendations.
10. Modifications	None of the reports described any modifications made to the intervention.
11. How well (planned)	Seven reports did not describe if or how they took steps to improve or measure adherence to, or the efficacy of, their intervention. Three reports described supervision, training and monitoring of providers. At least three described the role of a detailed protocol and system of working in consistent delivery by different providers. One study ensured that providers could raise questions and queries to enhance their practice and one other carried out quality assessments on the data collection process. At least two documented contacts and actions made during planning. One intervention was piloted, and one other conducted qualitative investigation alongside the trial.

12. How well (actual)	Seven reports did not describe how well their intervention was implemented. Four interventions examined participant compliance with visits, all four suggested this was at least 60%, one was as high as 98%, although one other study found that the number of visits per participant varied widely in their intervention. Actions and recommendations from their assessment were measured in three studies, compliance was over 50% in two studies, however for the other intervention, almost 80% of the time no recorded action was made in a visit. Consistency in provision was considered good in one study, in another a provider left and had to be replaced and in a third the intervention delivery was very varied across the two providers.
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Group: Multifactorial-action and review with medication review

There are 24 interventions in this group: Bouman 2008⁵¹³, Brettschneider 2015⁵¹⁴, Cesari 2014⁵¹⁷, Challis 2004⁵¹⁸, Dalby 2000⁵²⁴, Fabacher 1994⁵²⁸, Fairhall 2015⁵²⁹, Ford 1971⁵³³, Fox 1997⁵³⁴, Harari 2008⁵⁴⁴, Hebert 2001⁵⁴⁷, Hogg 2009⁵⁵⁰, Kono 2016⁵⁵⁸, Leung 2004⁵⁶³, Melis 2008⁵⁷³, Rubenstein 2007⁵⁹⁵, Stuck 2000⁶⁰³, Suijker 2016⁶⁰⁵, two arms of Thomas 2007⁶¹¹, Tulloch 1979⁶¹³, van Hout 2010⁶¹⁸, Vass 2005⁶²², Yamada 2003⁶³¹

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: Most interventions had the goal of maintaining and improving the function of older people, additional aims included improving quality of life and reducing negative outcomes. Reducing the costs associated with health resource use and long-term care admissions were also identified goals of half of the interventions. Six interventions explicitly described the importance of identification of health needs over a number of physical, psychological and social domains. Behaviour change and self-management promotion was mentioned by four reports. Other goals of interventions included reducing care-giver burden, promoting appropriate health care access and increasing human interaction within care provision.</p> <p>Rationale: An ageing population and current complexity with the identification of risk, as well as the prevalence of unmet need and treatable conditions. Furthermore, variations in screening and appropriate service provision were seen as important to address by interventions. The majority of interventions claimed to be based upon previous evidence regarding the benefits of multidisciplinary screening, multidisciplinary or specialist input on outcomes for older people. More than half of the studies were based on previous study findings and/or pilot work. Home visits were believed to be key to success in at least 11 interventions. The importance of the nurse role was mentioned by two reports. Other rationalisation included the perceived benefits of behaviour change techniques and care-giver support.</p>
3. What (materials)	One study did not report on the materials used. Over 20 interventions described the use of assessment tools which covered a range of domains. The delivery of these appears to have been by a healthcare professional in most cases, although one was posted to participants and their caregivers to complete. Care note access was required in nine interventions. Over half of interventions mention access to referrals. Eight interventions communicated recommendations to GPs, five to participants. Four interventions listed training for staff and five provided guidelines. Three interventions refer to the provision of resource information. Participants were provided with equipment for the monitoring of health conditions in one intervention. One intervention explicitly refers to equipment used to assess a participant for use by a healthcare professional. Recording documentation which was used by health care professionals, the research team and the participant was mentioned in six reports.
4. What (procedures)	All interventions involved multi-domain assessments although one was carried out as self-assessment by post; the majority were undertaken by trained healthcare staff. A range of domains were incorporated including, among others, physical health, cognition, mental health, medication and social aspects. All interventions develop some sort of care planning; nine interventions explicitly refer to consultation and agreement on this planning with the participant. Reviewing of the planning was mentioned across the interventions, however the way in which this took place was varied, sometimes with face-to-face contact at home while others placed telephone calls. Actions from the assessment and planning were often related to referrals on to other services, and/or the provision of the information and advice, be that to the participant or caregiver or other healthcare staff. Five interventions explicitly refer to the need for participants to take actions themselves. Nine describe support from others to sustain the recommendations and actions. Multidisciplinary discussion was mentioned by at least three interventions. Access to usual care was described as maintained in at least 13 interventions.
5. Who provided	Nurses, including those with more general and specific skill sets were the main implementers of the intervention in 17 descriptions. Geriatrician input was part of eight interventions; GPs were significant contributors to five interventions. Other professionals defined as involved included social workers and

	physicians' assistants. Multidisciplinary input was often described in the interventions as accessed when required; this would be from dietitians, physiotherapists, pharmacists and health visitors among others.
6. How	Intervention provision was primarily to the participant on an individual basis. Twenty-one interventions describe face-to face contact, 16 are explicitly at the participant's own home. Nine explicitly describe telephone contact with participants at some point in the process, be that initial assessment or follow-up. Two studies were conducted in clinics and two others were primarily utilising routine care note data. One was conducted through self-assessment by post. Three interventions describe the need for family or caregiver involvement.
6b. How organised	Organisation of the intervention was not always clear or explicitly stated. The intervention was organised by a range of individuals most frequently, in at least 14 cases, this was by a nurse. Having the input of a range of individuals was mentioned in eight reports; GP input was mentioned in twelve reports, although at times this was suggested as not required. The participant or their caregiver was expected to co-ordinate their response to the assessment in at least four interventions. Geriatricians took a lead role in organisation for three interventions.
7. Where	<p>At least some of the intervention was provided to the participants at their home in 21 described studies. Health care settings including rehabilitation centres and clinics were also delivery sites in at least seven reports.</p> <p>Eleven interventions were provided in European countries, including The Netherlands, the UK, Germany, France, Denmark and Switzerland. The USA and Canada were the location of a further nine interventions. Three interventions were provided in Asian locations, Hong Kong and Japan. Australia was the site of one intervention.</p>
8. When and how much	<p>Not all reports described the inclusion and exclusion criteria for involvement. Studies varied significantly on how they recruited and involved participants. Some used age as a limitation, however this varied from 50 years and over to 80 years and over. Some studies included those who had been recently discharged from hospital or were awaiting other service input. Some studies used assessment of frailty level or disability as an inclusion criterion. Some studies excluded individuals who were severely ill or living with dementia or severe cognitive impairments. Other exclusions were based on the intervention being supported by the GP or geographical limitations.</p> <p>The frequency, duration and nature of input across interventions was highly variable. In some reports this was unclear. Some interventions provided a minimum of one contact at assessment only, whilst others provided a range of contacts based on need. Length of involvement in the intervention was also varied, from a minimum of seven weeks to four years; most interventions were around 1-2 years. Frequency of contact ranged from bi-weekly to annual input. Visit length was described in at least nine reports, the duration of visits being between 20 minutes and two hours. The nature of the follow up interaction was less formally described and often appeared to be tailored.</p>
9. Tailoring	All intervention reports described some level of tailoring. Twenty-three interventions reflected tailoring to the needs identified for the participant during their assessment. Most of this included the number and duration of contacts. Nine interventions described collaboration with the participant, whilst four had a preference for input from caregivers or family as well. Four interventions mention contribution from GP's or Pharmacists as and when required. Flexibility about the location of the intervention delivery was also mentioned in two reports.
10. Modifications	Only one intervention described a required modification, this was due to a lack of equipment and the need to adjust the aim of the intervention.
11. How well (planned)	Approaches to measuring how well the intervention worked were described in 16 reports, the remaining eight did not have descriptions of this. To promote adherence and fidelity seven studies describe training and supervision of providers, three studies implemented follow up contact, three had used piloting work to improve the feasibility of the intervention, two used other pre-existing groups to enhance the intervention, two used family input to promote compliance, one used a small team of nurses to promote good relationships, one used goal setting approaches and a postal questionnaire included stamped addressed envelopes to promote questionnaire return. Various approaches to measuring adherence were described while around ten studies just described this generally, five mention specific documentation on assessment or follow-up visits and discussions with participants, three describe analysis of the recommendations, and three refer to the collection of barriers and facilitators. Only one report described evaluation of the intervention by the participant.
12. How well (actual)	Eight studies did not report on how well the interventions actually worked. This information was compiled in variable ways including a measurement of compliance. Full compliance was reported for seven studies, varying between 13% and 90%. Partial compliance was reported for eight studies, varying between 42% and 97%. Three studies reported on the number of problems identified. Two collected information on the time

spent by nurses at visits, or the number of visits undertaken. One study reported on sustainability over time. A number of other studies described barriers to their intervention including resistance from other clinicians in three studies, a lack of motivation to change or disagreement from participants was mentioned by two studies, logistic issues in one study, feasibility perception in one study, lack of financial resources for participants to act on recommendations in one study, and variability in the provider working-style in one study. Three studies described variation in adherence to the recommendations, for example medication change had a higher adherence rate than changing smoking/alcohol use behaviours.

Group: Multifactorial-action and review with medication review and self-management strategies

There are three interventions in this group: Fox 1997⁵³⁴, Phelan 2007⁵⁸⁹, van Leeuwen 2015⁶¹⁹

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: The goals of the three interventions were broadly aligned and similar in nature. All three sought to improve health and reduce disability and poor health outcomes. One intervention was aiming to increase adherence to healthy behaviour advice. While the two others wanted to improve the quality of care and reduce hospitalisations. One of these interventions was also seeking to improve quality of life and reduce carer burden.</p> <p>Rationale: Three interventions were rationalised on the premise that provision of health information may promote better self-care. Two interventions were based on evidence of success from similar approaches, one of these and one other had a behaviour change theory to ground the intervention development. One intervention was also based on policy recommendations, one on the idea that professionals trained in geriatric care were best placed to advise on supporting older people. The third suggested that there were benefits to early intervention and integrated care between various professionals and their patients.</p>
3. What (materials)	<p>There were a number of materials used in delivery of the interventions. All three interventions described care planning documentation. One also mentioned documentation to collect health history, a food and fluid diary, equipment to collect physiological data, various health advice materials and referrals. This and one other describe materials used to record meeting information. Two interventions described health assessments in some detail relating to validation and standardisation. One of these also ensured that the patient and GP received documentation of care planning.</p>
4. What (procedures)	<p>All three interventions utilised a multidomain assessment. All three also had a follow up or review procedure, although how this was conducted varied. Two interventions provided individualised health information and advice, one of these also described risk identification, referrals and behaviour change or motivational sessions. Two interventions created action or care plans, one described how specialist input from geriatricians and geropharmacists was enacted, including family caregiver involvement. Two reports detailed access to usual care.</p>
5. Who provided	<p>All three interventions had input from nurses, though these came from various specialisms including public health and geriatrics. Two interventions involved various gerontological specialists including geriatricians, and one also involved a geropharmacist. One intervention included a primary care practitioner.</p>
6. How	<p>All three interventions were provided face-to-face and individually with additional telephone contact.</p>
6b. How organised	<p>All three interventions were organised by team members, generally led by the nurses. Patient input was required in organisation of the intervention as well. The geriatric team described were required to support with organisation for two interventions. Two reports mentioned funding, one was by the state and the other was by a large health organisation.</p>
7. Where	<p>Two interventions took place in the USA, and one in The Netherlands. Two interventions were undertaken in clinics or community hubs. The other took place at the participant's home.</p>
8. When and how much	<p>Two interventions had minimum age limits; one was aged 60 years and over, this intervention was targeted at those with lower wealth and utilising the public health service for the first time. The other intervention limited by age was open to those aged 75 and over and using a particular health organisation. The third study targeted those who were identified as frail coexistent with polypharmacy.</p> <p>The nature and duration of input was somewhat varied across interventions, though all included an initial assessment. The review period was not always stated, however for one intervention this was every six months. One intervention required referrals to be enacted within three months.</p>

9. Tailoring	All three interventions tailored planning in line with the needs and preferences of the participant. The frequency of follow up visits or review processes was also tailored in two interventions, specifically with an additional visit at three months on one study should this be required.
10. Modifications	No reports described modifications to the interventions.
11. How well (planned)	All three studies took some steps to increase adherence and fidelity. One intervention documented the recommendations made, and the implementation of these. One other engaged with supportive measures for providers to support with troubleshooting. The third intervention standardised processes to improve adherence, and measured implementation at the participant, provider and organisational level. In addition to this the third intervention also undertook qualitative work to identify barriers and facilitators to implementation.
12. How well (actual)	All three reports described how well their intervention was delivered to some extent. One found that around ¾ of participants were at least moderately adherent to the intervention recommendations, economic limits were identified as a barrier to adherence. Another intervention found almost ¾ of those invited received a visit, on average participants received two visits and six phone calls. The third intervention found that adherence for some components increased over time, while others decreased. Additionally, there was some variation in delivery between different providers. Of the providers who received the training, the motivational interview training was seen to be beneficial to practice, however the training on the assessment was not.

Group: Multifactorial-action and review with self-management strategies

There are two interventions in this group: Walters 2017⁶²⁶, Wong 2019⁶³⁰

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: Both interventions aimed to support older people to live independently through addressing health and social problems proactively.</p> <p>Rationale: Evidence bases such as literature reviews and stakeholder opinions identified that multifaceted strategies would optimise self-management change. Additionally, a range of theories and approaches exist for promoting successful ageing, self-efficacy, care management and behaviour change among others.</p>
3. What (materials)	A range of materials were required for the interventions. One was manualised and used a range of health educational materials, equipment for exercise and planning documentation. The other used a structured assessment, and health educational materials, promotion of self-management through identification with older celebrities, and referral systems.
4. What (procedures)	The interventions both used care planning to identify relevant services and referrals. Self-efficacy and behaviour change techniques were used to promote monitoring and self-care. Additionally, regular routine follow up and review as well as access to all standardised care were features of both procedures. One intervention explicitly emphasised exercise, education and environmental change (i.e., home adaptation) as part of the assessment process, but this was not provided to all participants.
5. Who provided	One intervention was provided by a non-specialist support worker with training in behaviour change techniques. The other intervention used intervention-trained nurse case managers and community workers under the supervision of the nurse case managers.
6. How	Both interventions were focused on face-to-face interaction at assessment. One intervention explicitly involved a family carer in this. Other contacts could be undertaken by remote methods such as telephone or video calling. Techniques to promote self-care were focused on self-efficacy and behaviour change approaches.
6b. How organised	The interventions involved the nurse or support worker organising care in conjunction with the participant, in relation to the care planning. With one intervention this was explicitly reviewed and modified as required.
7. Where	One intervention was undertaken in a district of Hong Kong, the other in two regions of the UK. The intervention was carried out at home.
8. When and how much	With one intervention, participants were eligible for involvement if they were 60 years or more and not engaged in other health or social programmes. The other intervention recruited those who were 65 years or more and classified as mildly frail.

	The number, frequency and duration of visits differed between the interventions. Face-to-face contacts ranged from 30-120 minutes, with an expectation of a minimum of six contacts. Telephone contacts were mentioned as being 6-12 minutes long by one intervention.
9. Tailoring	The interventions were tailored based on the co-developed care plan which identified the participants' needs, goals and wishes. One intervention also tailored the behaviour change technique to the participant.
10. Modifications	Not mentioned
11. How well (planned)	For both interventions, fidelity and adherence were promoted through training providers in intervention delivery and recording and documenting the contact sessions with participants. One intervention also included case conference meetings, the other involved consultation with stakeholders to facilitate intervention delivery.
12. How well (actual)	Only one study reported on actual adherence. For this intervention, delivery was largely as intended with coverage of a range of domains and tailored goals identified. 96% of participants identified at least one goal, fidelity to the intervention at appointments was assessed at 72.1%, attendance at appointments was 91.3%.

Group: Multifactorial-action with medication review

There are five interventions in this group: Balaban 1988⁵⁰⁶, Mann J 2021⁵⁷⁰, Newbury 2001⁵⁸², Rockwood 2000⁵⁹², Sherman 2016⁵⁹⁹

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: Although goals were varied common aims were to identify those who were at risk of having unmet needs, often including social needs, could benefit from additional care and support with a goal of improving wellbeing, reducing admissions to hospital and retaining functional independent living in the community. Some interventions utilised goal setting and tailoring approaches to improve the likelihood to success.</p> <p>Rationale: Evidence indicates there is unmet need in the older population which may lead to higher level resource use. Identification of those at risk and person-centred planning may be an appropriate preventative measure in improving health outcomes for older people as well as reducing admissions to hospital.</p>
3. What (materials)	Materials required were not mentioned in one study. However, for the remaining four a range of approaches were used to undertake assessments. Some assessments were completed using routinely collected data, all involved Nurse or clinician visits to carry out a physical assessment and questionnaires. The process was usually documented in participants' patient records and relevant prescriptions and referrals to services were made. One intervention used goal setting as part of the process.
4. What (procedures)	Procedures were different across the interventions although all carried out an assessment of needs, usually this was explicitly undertaken at the participant's home, this was primarily focused upon medical and social needs, however a psychosocial and functional approach was taken with one assessment. Assessments were usually undertaken by Nurses, sometimes with multidisciplinary input as well. Medication checks were included in all five assessments. One intervention took a person-centred approach and explicitly incorporated the wishes of the participant, another intervention also undertook goal setting at assessment. The provision of the recommended care was sometimes the role of the participants own GP, other times this was provided as part of the intervention. In one intervention it was unclear who would act on recommendations made. Follows were mentioned as part of two intervention procedures.
5. Who provided	<p>Primarily interventions were provided by nurses, some of whom were specialised in geriatric care. Two interventions involved geriatricians in the assessment phase. One used a programme physician.</p> <p>One intervention explicitly referred to the involvement of physiotherapists, Occupational Therapists, Social Workers, Dietitians, Audiologists and Speech and Language Therapists as part of the care carried out following assessment. Other interventions relied on GPs to enact required care.</p>
6. How	Only one study mentions how participants were initially contact this was by letter and telephone. All studies refer to contact with clinicians, for most interventions this was at the participant's home and presumably therefore was face-to-face.
6b. How organised	In four interventions there was significant nurse input. Although with one study it was not clear who was in charge of the care planning process, this was usually undertaken by a nurse, with support from physicians or

	specialist geriatricians in two studies. The recommendations were at times carried out as part of the intervention and other times were sent to the participant's GP.
7. Where	A range of international locations were involved, including Australia, Sweden and Canada. Interaction with participants was usually at home or in a primary care facility.
8. When and how much	Identification of participants varied. Three studies involved people based on age, those 75 and over for two of these and the other involved those aged 70 plus, or 50 plus who appeared at risk due to physical and/or social needs limiting their access to services or increasing risk of ill health. The two remaining interventions were access based on their risk of decline related to health or social illbeing. All studies had a minimum of one visit, the remaining contact was based on needs identified.
9. Tailoring	All reports mention some elements of tailoring, given that assessments were aiming to identify specific needs. The need for follow up care and recommendations were mentioned as tailored in four of the interventions. The timing and location of assessment (and if necessary, the follow up) was also mentioned as flexible in three reports.
10. Modifications	Only one intervention mentioned modifications - the nature of these was not specified.
11. How well (planned)	Three reports explicitly refer to training to enhance fidelity, additionally two of these also used reliability checks on the assessments made. One intervention had also been part of a feasibility pilot.
12. How well (actual)	Studies varied in reporting how well the intervention worked. Two made no reference to implementation effectiveness. One stated that on average participants who were able received on average 2.0-3.8 visits. Another reported on inter-rater reliability of assessments being between 0.79-0.94 across assessors. One other intervention was reported as carried out as planned and the process was straightforward.

Group: Nutrition and exercise

There are three interventions in this group: Loh 2015⁵⁶⁸, Serra-Prat 2017⁵⁹⁷, van Dongen 2020⁶¹⁶

TIDieR item	Description
1. Brief name	
2. Why	Goal: The long-term aim of the three interventions was to improve frailty status, physical functioning and/or reduce loss of independence. For one intervention good oral care was implicated. Rationale: Previous research implicates muscle wastage as a contributing factor to frailty; insufficient or poor diet also contributes to this health state. Evidence supports the use of multicomponent nutritional and exercise programme in enhancing physical functioning.
3. What (materials)	The interventions primarily used a combination of leaflets and educational information such as DVDs describing or promoting physical exercise and providing nutritional advice. In addition to this some interventions provided referrals to nutritional units, training sessions and checklists relating to physical exercise and nutritional exercise undertaken, and oral care advice. One intervention provided cash rewards for involvement in sessions.
4. What (procedures)	A range of processes were seen across the interventions. Screening and identification of particular risk was seen in one of the interventions. All interventions involved an exercise session with provision of an exercise programme to be undertaken at home, one of the interventions provided a more tailored programme. Nutritional advice provision was more varied, involving screening and referral, workshops and a tailored diet provision or group advice sessions. Interventions provided a range of other activities designed to promote adherence including phone calls, training and support for healthcare professionals, goal setting and peer engagement.
5. Who provided	Who provided the intervention was not always clear. When stated, a range of healthcare professionals were seen to be involved. Nutritional advice was provided by dietitians or nutritionists, physical activity training was provided by physiotherapists or trained fitness instructors. Other professionals, including health promotion employees were involved to facilitate involvement.
6. How	Although not always clear in the reporting, physical training and nutritional exercise appears to have been provided face-to-face. Some of these sessions were group or workshop based. Some sessions had motivational techniques built in. Additional educational supplements were supplied. Telephone calls were provided to enhance adherence and for additional consultation purposes.

6b. How organised	This was either not mentioned or somewhat unclear in reporting for two interventions, suggesting involvement by various disciplines in executing relevant aspects such as the nutritional assessment, overseen by the research nurse. One intervention was partially coordinated by care sport collaborators who connected primary care services and the sports sector.
7. Where	The interventions were carried out in Spain, The Netherlands and Malaysia. In some reports there is little detail about the locations of the intervention, it is suggested that primary care centres were used. Two of the interventions detailed either the use of local sports settings and/or community facilities.
8. When and how much	<p>Only two interventions provide details relating to eligibility, one intervention was aimed at those 60 and over, the other stipulated 70 and over with prefrailty.</p> <p>There was variation in the number frequency, duration and nature of contact across the interventions. The exercise component varied in input from one session with recommendation to follow an exercise plan at home, to 24 weeks of sessions which decreased from hourly bi-weekly sessions to weekly sessions. The nutritional component varied from input only upon referral to 6, 30-minute sessions. The intervention which provided oral care advice included 2 sessions.</p>
9. Tailoring	This was not always reported upon. One intervention provided referral to dietary services if their nutritional assessment showed a risk. One intervention provided tailoring to all components including tailored exercise programmes and dietary advice. Additionally, participants could choose to attend additional activities that were offered.
10. Modifications	Not mentioned in any of the reports
11. How well (planned)	The reporting of this varied across interventions. From a planned process evaluation to detail attendance, satisfaction, enablers and barriers to involvement, to attendance records for physical activity and dietary intake and/or telephone contact to monitor compliance.
12. How well (actual)	This was not reported for all interventions. For one study 47.5% were considered to have adhered at 12 month follow up. One intervention found that attendance was high at intensive support sessions (first 12 weeks), between 98.8% and 83.6%, but lower at (later) moderate support sessions, between 59.8% and 56.1%. Protein intake improved from baseline to 12 weeks and still remained higher than baseline at 24 weeks follow up.

Group: Risk-screening

There are six interventions in this group: two arms of Bleijenberg 2016⁵⁰⁹, Carpenter 1990⁵¹⁶, Jitapunkul 1998⁵⁵⁵, Kerse 2014⁵⁵⁶, Pathy 1992⁵⁸⁸

TIDieR item	Description
1. Brief name	
2. Why	<p>Goal: to preserve daily functioning and enhance their quality of life and maintain community living. Two interventions clearly mention the identification of those at risk of decline or with unmet needs</p> <p>Rationale: based on evidence that there are older people living with unmet needs and identification of those at risk and with unmet needs through appropriate screening targeted action planning can be achieved in other similar programmes and pilot work.</p>
3. What (materials)	<p>A range of screening assessments or electronic patient records were used in the identification of risk and unmet needs including frailty measures, at least one of these assessments was explicitly by postal self-report.</p> <p>Guidelines on the appropriate prescription of aids, medication or referral to health and social services following assessment varied across the interventions.</p>
4. What (procedures)	<p>Identification through the screening of patient records or using questionnaires and assessments either delivered by a range of individuals, from volunteers to trained health care professionals, for at least one intervention this was undertaken through self-assessment by the older person.</p> <p>Identification of those deemed at risk or with unmet need resulted in a protocol to be enacted for accessing appropriate care. This was usually through needs based tailored referrals to health and social care services, prescriptions and access to aids.</p>
5. Who provided	Screening assessments were undertaken by a range of individuals from volunteers to nurses, non-professionals and trained staff. One study mentioned interpretation of the screening assessment by a trained

	nurse. All but one intervention detailed that the reports generated were to be acted upon by the participant's GP or a geriatrician. Other health and social care professionals were to be involved with enactment of care as was relevant.
6. How	For one intervention this was not described. For at least three interventions the initial assessment is done at distance, usually by post. One described an at home face-to-face assessment. The follow up of any required care based on the screening assessments was explicitly to be undertaken individually and at home by relevant clinicians in two interventions. Location and type of follow-up care is less clear in two further interventions, and not mentioned in the remaining two.
6b. How organised	Organisation of the screening process was by a range of individuals or was unstated for some of the interventions. Organisation of the subsequent care was often undertaken by the participants GP or members of the GP practice such as health visitors or nurses. The interventions varied as to whether the care was unidisciplinary or multidisciplinary. One intervention explicitly refers to organisation by the research team and facilitation by the district health board.
7. Where	Four of the interventions were based in Europe, two in the UK, two in The Netherlands. One was in New Zealand and one in Thailand. Two interventions do not specify a location for carrying out the intervention, one states that some assessment will be carried out at home, three others mention that the intervention is based in the participant's home.
8. When and how much	Eligibility for intervention involvement varied across studies, one did not mention a minimum age, two recruited at 60 years and over with an indication of multimorbidity, polypharmacy or lack of contact with services, one recruited at 65 and over, one at 75 and over, whilst another recruited at varying ages depending on ethnicity. Repetition of the screening process was mentioned as being annual in one study or every three years in another. Input from services according to need varied, four interventions explicitly mention follow up support being needs based, ranging from a minimum of one visit to quarterly visits for three years to as required.
9. Tailoring	One intervention did not mention any tailoring. The remaining five mention tailoring based on the assessments undertaken. Additional tailoring to the specific needs and required input by service for individuals including the nature and frequency of follow up visits and contact was also mentioned.
10. Modifications	Only one report describes modifications which were required due to reforms to geriatric services
11. How well (planned)	Only two reports describe approaches to maintain fidelity. One refers to use of manualised training of the staff involved, the other refers to use of manualised training and supervision of staff, collection of information on barriers and facilitators of the intervention and the undertaking of a 6 week pilot study.
12. How well (actual)	This was not mentioned by two of the reports. The feasibility of the interventions was variable and information relating to this differs. One intervention, while perceived as feasible by staff, only managed to deliver follow up care to a third of those assessed as in need or at risk. Referral rates in the study group exceeded the control group until the final year of the study for one intervention. One study saw assessment completion and return rates of 88%. Another study reported that 40% of those screened were not in need of visits.

Appendix 11. Results of network meta-analyses

11.1 Summary of network meta-analyses

Table 4 - Summary of network meta-analyses

Outcome	Reference comparator	Timeframe	Analysis	Total studies	Total nodes	Total participants	Heterogeneity (τ)	Wald test (p)	Node splitting (p)
Living at home	Available care	Short	Main	8	8	4013	inestimable	0.24	all > 0.05
			Sensitivity (RoB)	21	14	16,937	8.56×10^{-2}	0.80	all > 0.05
		Medium	Main	17	11	15,457	7.71×10^{-2}	0.51	all > 0.05
			Frailty meta-regression	18	12	13,418	3.86×10^{-7}	0.70	all > 0.05
	Homecare	Long	Main	13	10	14,843	9.92×10^{-7}	not tested	not tested
			Sensitivity (RoB)	4	4	704	2.85×10^{-7}	not tested	not tested
		Short	Main	4	4	704	2.85×10^{-7}	not tested	not tested
			Sensitivity (RoB)	5	6	1978	inestimable	not tested	not tested
		Medium	Main	5	6	1978	inestimable	not tested	not tested
Frailty meta-regression	4	5	1234	inestimable	not tested	not tested			
IADL	Available care	Short	Main	6	7	1155	inestimable	not tested	not tested
			Sensitivity (RoB)	16	14	5309	6.91×10^{-8}	not tested	not tested
		Medium	Main	16	14	5309	6.91×10^{-8}	not tested	not tested
			Frailty meta-regression	11	9	3369	1.39×10^{-8}	not tested	not tested
	Homecare	Long	Main	15	13	4997	1.22×10^{-7}	not tested	not tested
			Sensitivity (RoB)	6	5	1727	5.31×10^{-6}	not tested	not tested
		Short	Main	6	5	1727	5.31×10^{-6}	not tested	not tested
			Sensitivity (RoB)	4	5	970	inestimable	not tested	not tested
		Medium	Main	4	5	970	inestimable	not tested	not tested
Frailty meta-regression	6	5	1401	1.41×10^{-1}	not tested	not tested			
PADL	Available care	Short	Main	8	9	4075	inestimable	not tested	not tested
			Sensitivity (RoB)	20	16	8583	3.10×10^{-1}	0.47	all > 0.05
		Medium	Main	20	16	8583	3.10×10^{-1}	0.47	all > 0.05
			Frailty meta-regression	14	11	3613	3.35×10^{-1}	not tested	not tested
	Homecare	Long	Main	18	15	8182	6.64×10^{-7}	0.99	all > 0.05
			Sensitivity (RoB)	7	7	2095	3.87×10^{-8}	0.74	all > 0.05
		Short	Main	7	7	2095	3.87×10^{-8}	0.74	all > 0.05
			Sensitivity (RoB)	4	5	775	inestimable	0.90	all > 0.05
		Medium	Main	4	5	775	inestimable	0.90	all > 0.05
Frailty meta-regression	4	5	632	inestimable	0.41	all > 0.05			
Hospitalisation	Available care	Medium	Main	3	4	368	inestimable	0.78	all > 0.05
			Sensitivity (RoB)	15	10	9569	1.57×10^{-6}	0.38	all > 0.05
			Frailty meta-regression	11	8	6896	1.94×10^{-5}	0.30	all > 0.05
Care-home placement	Available care	Short	Main	13	8	6314	1.58×10^{-7}	0.79	all > 0.05
			Sensitivity (RoB)	7	8	3672	inestimable	not tested	not tested
		Medium	Main	7	8	3672	inestimable	not tested	not tested
			Sensitivity (RoB)	20	14	16,055	2.44×10^{-1}	0.82	all > 0.05
	Homecare	Long	Main	15	11	12,326	3.15×10^{-1}	0.81	all > 0.05
			Frailty meta-regression	17	12	12,648	2.05×10^{-5}	0.88	all > 0.05
		Short	Main	14	10	13,638	5.18×10^{-6}	not tested	not tested
			Sensitivity (RoB)	4	5	1567	inestimable	not tested	not tested
		Medium	Main	4	5	1567	inestimable	not tested	not tested
Health status	Available care	Medium	Main	8	7	2631	9.95×10^{-2}	not tested	not tested
			Sensitivity (RoB)	7	6	1787	9.95×10^{-2}	not tested	not tested
			Frailty meta-regression	8	7	2631	3.16×10^{-2}	not tested	not tested

Outcome	Reference comparator	Timeframe	Analysis	Total studies	Total nodes	Total participants	Heterogeneity (τ)	Wald test (p)	Node splitting (p)
Depression	Available care	Medium	Main	15	13	7245	1.05×10^{-1}	0.16	all > 0.05
			Sensitivity (RoB)	10	9	2893	8.64×10^{-6}	0.66	all > 0.05
			Frailty meta-regression	13	12	7046	5.42×10^{-3}	0.99	all > 0.05
"	Homecare	Medium	Main	6	7	996	inestimable	0.25	all > 0.05
			Sensitivity (RoB)	3	4	368	inestimable	0.79	all > 0.05
Mortality	Available care [†]	Medium	Main	65	41	38,351	9.53×10^{-2}	0.30	all > 0.05
			Sensitivity (RoB)	46	26	30,425	1.08×10^{-1}	0.39	all > 0.05
	Homecare	Medium	Frailty meta-regression	55	37	32,272	1.49×10^{-1}	0.20	all > 0.05
			Sensitivity (RoB)	11	10	2479	3.23×10^{-7}	0.91	all > 0.05

IADL: instrumental activities of daily living. PADL: personal activities of daily living. Reference comparator was either available care or homecare as the network was split for all outcome-timeframe combinations except mortality in the medium term. Timeframes:- short: 24 weeks to 9 months; medium: >9 months to 18 months; long: >18 months. Heterogeneity (τ) was inestimable when a network contained only a single study measuring each comparison, and therefore a common-effect model was fitted. Tests of the consistency assumption (Wald test and node splitting) could not be tested when the network contained no loops; a 'consistency' model was fitted, setting the inconsistency parameter in the model to zero for all comparisons.

[†] For mortality in the medium term, homecare studies were not disconnected from the available care network in the main analysis and frailty meta-regression, so all were compared with available care. Therefore there is not a separate homecare network for either of these analyses. The sensitivity analysis for risk of bias removed the linking comparison and therefore we conducted separate available care and homecare analyses.

11.2 Living at home

11.2.1 Living at home available care network, short-term timeframe

Table 5 - Short-term living at home available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Challis 2004 ⁵¹⁸	frail	256	mfar(w/med)	mfar	-	-	+	+	+	-
Imhof 2012 ⁵⁵³	all	448	mfar	ac	-	-	+	+	-	-
Kukkonen-Harjula 2017 ⁵⁶¹	pre-frail and frail	292	ADL & ntr & exrc	ac	+	-	+	+	-	-
Liddle 1996 ⁵⁶⁶	unclassifiable	105	aids & mfar	ac	-	x	+	+	-	xx
Metzelthin 2013 ⁵⁷⁶	frail	341	educ & mfar(w/med+slfm)	ac	-/-	-	+	+	-	-
Suijker 2016 ⁶⁰⁵	frail	2031	mfar(w/med)	ac	+/-	-	-	+	-	-
Szanton 2011 ⁶⁰⁶	pre-frail and frail	39	ADL&aids&educ&exrc& mfar(w/med+slfm)	ac	-	-	+	+	-	-
Wong 2019 ⁶³⁰	all	501	mfar(w/slfm)	ac	x	-	-	+	-	x

Table 6 - Living at home in the short term: comparisons with available care summary of findings table.

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: living at home

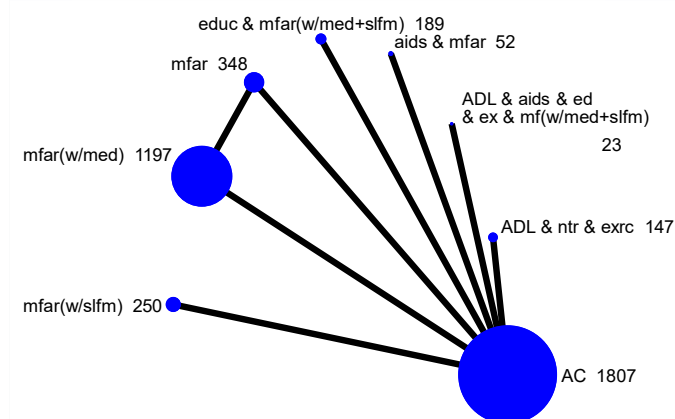
Timeframe: short term; range of follow up 24 weeks to 6 months

Setting: Community

Total studies: 8

Total participants: 4013

Comparator rank: Mean 4.7, 95% CI 2 to 7



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network summary estimate	Calculated risk ratio ^a	High-risk population (952 per 1000 with ac)		Low-risk population (980 per 1000 with ac)				
			With intervention	Difference	With intervention	Difference			
Multifactorial-action and review (mfar)	OR 1.34 (0.75 to 2.39) Mixed estimate	RR 1.01 (0.99 to 1.02)	964 per 1000 (937 to 979)	12 more per 1000 (15 fewer to 27 more)	985 per 1000 (974 to 992)	5 more per 1000 (6 fewer to 12 more)	⊕⊕⊕⊖ Low ^b	3.1 (1 to 6)	may result in a very slight increase in chance of living at home
ADL, nutrition and exercise (ADL & ntr & exrc)	OR 1.01 (0.25 to 4.13) Mixed estimate	RR 1.00 (0.92 to 1.02)	953 per 1000 (831 to 988)	1 more per 1000 (121 fewer to 36 more)	980 per 1000 (924 to 995)	0 per 1000 (56 fewer to 15 more)	⊕⊕⊕⊖ Low ^b	4.5 (1 to 8)	may result in little to no difference in chance of living at home
Multifactorial-action and review with medication-review (mfar(w/med))	OR 0.95 (0.58 to 1.55) Mixed estimate	RR 1.00 (0.98 to 1.01)	949 per 1000 (920 to 969)	3 fewer per 1000 (32 fewer to 17 more)	979 per 1000 (966 to 987)	1 fewer per 1000 (14 fewer to 7 more)	⊕⊕⊕⊖ Low ^b	5.0 (2 to 7)	may result in little to no difference in chance of living at home
Education, multifactorial-action and review with medication-review and self-management strategies (educ & mfar(w/med+slfm))	OR 0.52 (0.13 to 2.06) Mixed estimate	RR 0.98 (0.85 to 1.01)	912 per 1000 (725 to 976)	40 fewer per 1000 (227 fewer to 24 more)	962 per 1000 (867 to 990)	18 fewer per 1000 (113 fewer to 10 more)	⊕⊕⊕⊖ Low ^b	6.2 (2 to 8)	may result in a reduction in chance of living at home
Aids, multifactorial-action and review (aids & mfar)	OR 3.06 (0.31 to 30.42) Mixed estimate	RR 1.02 (0.94 to 1.03)	984 per 1000 (859 to 998)	32 more per 1000 (93 fewer to 46 more)	993 per 1000 (938 to 999)	13 more per 1000 (42 fewer to 19 more)	⊕⊖⊖⊖ Very low ^{b,c}	2.2 (1 to 7)	the evidence is very uncertain about the effect on chance of living at home
Multifactorial-action and review with self-management strategies (mfar(w/slfm))	OR 1.34 (0.56 to 3.25) Mixed estimate	RR 1.01 (0.98 to 1.02)	964 per 1000 (917 to 985)	12 more per 1000 (35 fewer to 33 more)	985 per 1000 (965 to 994)	5 more per 1000 (15 fewer to 14 more)	⊕⊖⊖⊖ Very low ^{b,d}	3.4 (1 to 7)	the evidence is very uncertain about the effect on chance of living at home

ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management strategies (ADL & aids & ed & ex & mf(w/med+slfm))	OR 0.18 (0.01 to 3.69) Mixed estimate	RR 0.89 (0.24 to 1.02)	779 per 1000 (145 to 987)	173 fewer per 1000 (807 fewer to 35 more)	897 per 1000 (295 to 994)	83 fewer per 1000 (685 fewer to 14 more)	⊕⊖⊖⊖ Very low ^e	7.0 (1 to 8)	the evidence is very uncertain about the effect on chance of living at home
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- a: Calculated from OR and an assumed comparator risk of 0.972, the median available care risk among these studies.
- b: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.
- c: very serious concerns about risk of bias due to significant contamination in both groups, particularly in the intervention arm where serious deviations from the intended interventions happened. Already downgraded twice for imprecision, therefore downgrade once.
- d: serious concerns about risk of bias due to randomisation process. Downgrade once.
- e: extremely serious concerns about imprecision as confidence interval is extremely wide. Downgrade three levels.

Table 7 - Results of living at home: short-term available care network

							1.34 (0.56,3.25)
1.42 (0.52,3.90)	mfar(w/med)	0.62 (0.38,1.02)					1.11 (0.63,1.95)
1.00 (0.35,2.89)	0.71 (0.45,1.11)	mfar					0.87 (0.35,2.19)
2.57 (0.50,13.10)	1.81 (0.42,7.76)	2.56 (0.58,11.33)	educ & mfar(w/med+slfm)				0.52 (0.13,2.06)
0.44 (0.04,5.14)	0.31 (0.03,3.24)	0.44 (0.04,4.68)	0.17 (0.01,2.48)	aids & mfar			3.06 (0.31,30.42)
7.58 (0.32,178.38)	5.34 (0.25,115.36)	7.55 (0.34,165.59)	2.95 (0.11,82.25)	17.24 (0.38,774.20)	ADL&aids&ed&ex&mf(w/med+slfm)		0.18 (0.01,3.69)
1.33 (0.25,6.97)	0.93 (0.21,4.14)	1.32 (0.29,6.04)	0.52 (0.07,3.67)	3.02 (0.20,44.55)	0.18 (0.01,4.95)	ADL & ntr & exrc	1.01 (0.25,4.13)
1.34 (0.56,3.25)	0.95 (0.58,1.55)	1.34 (0.75,2.39)	0.52 (0.13,2.06)	3.06 (0.31,30.42)	0.18 (0.01,3.69)	1.01 (0.25,4.13)	ac

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. An OR>1 favours the upper left intervention; an OR<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 8 - Intervention rankings for living at home: short-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
aids & mfar	82.8	63.9	2.2	1	7
mfar	70.3	9.2	3.1	1	6
mfar(w/slfm)	66.0	13.0	3.4	1	7
adl & ntr & exrc	50.5	8.2	4.5	1	8
ac	47.7	0.4	4.7	2	7
mfar(w/med)	43.5	0.2	5.0	2	7
educ & mfar(w/med+slfm)	25.5	1.4	6.2	2	8
adl&aids&ed&ex&mf(w/med+slfm)	13.6	3.7	7.0	1	8

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

11.2.2 Living at home available care network, medium-term timeframe

Table 9 - Medium-term living at home available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Blom 2016 ⁵¹⁰	all	1105	mfa-(w/med+slfm)	ac	x/+	-	x	+	-	xx
Dalby 2000 ⁵²⁴	frail	139	mfar(w/med)	ac	-	-	+	+	+	-
Fabacher 1994 ⁵²⁸	all	229	mfar(w/med)	ac	-	-	x	+	+	x
Hall 1992 ⁵⁴³	frail	167	hmcr & mfar(w/slfm)	hmcr & mfar	-	-	+	+	+	-
Harari 2008 ⁵⁴⁴	all	2425	mfar(w/med)	ac	+	x	+	+	-	x
Hay 1998 ⁵⁴⁶	unclassifiable	485	mfa-	ac	-	-	x	+	-	x
Hebert 2001 ⁵⁴⁷	pre-frail and frail	494	mfar(w/med)	ac	-	-	+	+	-	-
Henderson 2005 ⁵⁴⁸	robust	136	mfar	ac	+/x	+	x	+	-	xx
Kerse 2014 ⁵⁵⁶	pre-frail and frail	3712	rsk-mfa-	ac	+/+	-	+	+	-	-
Kono 2004 ⁵⁵⁹	pre-frail and frail	117	mfar	ac	-	-	+	+	-	-
Kono 2016 ⁵⁵⁸	pre-frail	313	mfar(w/med)	mfar	+	-	-	+	+	-
Kukkonen-Harjula 2017 ⁵⁶¹	pre-frail and frail	287	ADL & ntr & exrc	ac	+	-	+	+	-	-
Metzelthin 2013 ⁵⁷⁶	frail	325	educ & mfar(w/med+slfm)	ac	-/-	-	-	+	-	-
Monteserin Nadal 2008 ⁵⁷⁸	all	516	educ & rsk-mfa-	ac	-	-	x	+	+	x
Newbury 2001 ⁵⁸²	unclassifiable	100	mfa-(w/med)	ac	-	-	+	+	-	-
Newcomer 2004 ⁵⁸³	unclassifiable	2934	educ & mfar(w/med)	ac	-	-	+	+	-	-
Ploeg 2010 ⁵⁹⁰	pre-frail and frail	665	educ & mfar(w/med)	ac	+	-	x	+	-	x
Romera-Liebana 2018 ⁵⁹³	pre-frail and frail	342	cgn & med & ntr & exrc	ac	+	-	+	+	-	-
Shapiro 2002 ⁵⁹⁸	frail	72	hmcr & mfar	ac	-	x	x	+	-	xx
Suijker 2016 ⁶⁰⁵	frail	1873	mfar(w/med)	ac	+/-	-	-	+	-	-
van Hout 2010 ⁶¹⁸	frail	501	mfar(w/med)	ac	+	-	x	+	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 10 - Results of living at home: medium-term available care network

													0.90 (0.70,1.17)
0.74 (0.49,1.11)	mfar(w/med)	1.22 (0.36, 4.07)											1.22 (0.96, 1.56)
0.79 (0.39,1.60)	1.06 (0.55,2.06)	mfar											1.18 (0.50, 2.79)
0.90 (0.52,1.57)	1.22 (0.72,2.07)	1.15 (0.52,2.53)	mfa- (w/med+slfm)										1.00 (0.65, 1.53)
0.35 (0.08,1.52)	0.48 (0.11,2.04)	0.45 (0.09,2.15)	0.39 (0.09,1.75)	mfa-(w/med)									2.55 (0.62, 10.49)
0.41 (0.11,1.49)	0.55 (0.15,2.00)	0.52 (0.12,2.13)	0.45 (0.12,1.73)	1.14 (0.17,7.69)	mfa-								2.23 (0.64, 7.82)
0.10 (0.02,0.49)	0.14 (0.03,0.66)	0.13 (0.02,0.69)	0.11 (0.02,0.56)	0.29 (0.04,2.34)	0.25 (0.03,1.85)	hmcr & mfar(w/slfm)	1.56 (0.63, 3.82)						
0.16 (0.04,0.57)	0.21 (0.06,0.76)	0.20 (0.05,0.81)	0.18 (0.05,0.66)	0.45 (0.07,2.96)	0.39 (0.07,2.30)	1.56 (0.62,3.88)	hmcr & mfar						5.71 (1.67, 19.60)
0.83 (0.42,1.63)	1.12 (0.58,2.17)	1.05 (0.43,2.54)	0.92 (0.43,1.96)	2.33 (0.50,10.98)	2.04 (0.50,8.31)	8.13 (1.55,42.75)	5.23 (1.31,20.88)	educ & rsk- mfa-					1.09 (0.61, 1.96)
2.22 (0.74,6.69)	3.00 (1.01,8.93)	2.82 (0.82,9.73)	2.46 (0.78,7.79)	6.26 (1.06,36.96)	5.48 (1.05,28.53)	21.84 (3.36,141.97)	14.04 (2.74,71.90)	2.68 (0.79,9.10)	educ & mfar(w/med+sl fm)				0.41 (0.14, 1.16)
1.03 (0.63,1.68)	1.39 (0.85,2.27)	1.31 (0.61,2.79)	1.14 (0.63,2.07)	2.90 (0.66,12.69)	2.54 (0.68,9.53)	10.12 (2.06,49.65)	6.51 (1.77,23.91)	1.24 (0.61,2.55)	0.46 (0.15,1.43)	educ & mfar(w/med)			0.93 (0.55, 1.58)
0.47 (0.18,1.21)	0.63 (0.25,1.61)	0.59 (0.20,1.79)	0.52 (0.19,1.42)	1.32 (0.24,7.11)	1.15 (0.24,5.45)	4.59 (0.77,27.46)	2.95 (0.64,13.73)	0.56 (0.19,1.67)	0.21 (0.05,0.85)	0.45 (0.17,1.21)	cg & med & ntr & exrc		1.93 (0.80, 4.69)
0.50 (0.18,1.40)	0.68 (0.25,1.87)	0.64 (0.20,2.06)	0.56 (0.19,1.64)	1.42 (0.25,8.00)	1.24 (0.25,6.15)	4.96 (0.80,30.82)	3.19 (0.66,15.50)	0.61 (0.19,1.93)	0.23 (0.05,0.96)	0.49 (0.17,1.40)	1.08 (0.29,4.08)	ADL & ntr & exrc	1.79 (0.68, 4.69)
0.90 (0.66,1.23)	1.22 (0.93,1.59)	1.15 (0.60,2.18)	1.00 (0.63,1.58)	2.55 (0.61,10.60)	2.23 (0.63,7.91)	8.89 (1.90,41.63)	5.71 (1.65,19.83)	1.09 (0.60,2.01)	0.41 (0.14,1.17)	0.88 (0.60,1.29)	1.93 (0.79,4.77)	1.79 (0.67,4.76)	ac

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR>1 favours the upper left intervention; a OR<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 11 - Intervention rankings for living at home: medium-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & mfar(w/slfm)	95.8	70.5	1.5	1	4
hmcr & mfar	89.1	12.5	2.4	1	5
mfa-(w/med)	72.1	8.7	4.6	1	13
mfa-	69.7	5.7	4.9	1	13
cgn & med & ntr & exrc	66.6	0.6	5.3	2	12
ADL & ntr & exrc	62.5	1.9	5.9	2	13
mfar(w/med)	49.7	0.0	7.5	5	11
mfar	42.7	0.1	8.4	4	13
educ & rsk-mfa-	39.1	0.0	8.9	4	13
mfa-(w/med+slfm)	32.5	0.0	9.8	5	13
ac	31.8	0.0	9.9	7	12
rsk-mfa-	22.6	0.0	11.1	7	13
educ & mfar(w/med)	21.9	0.0	11.2	6	14
educ & mfar(w/med+slfm)	3.9	0.0	13.5	8	14

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

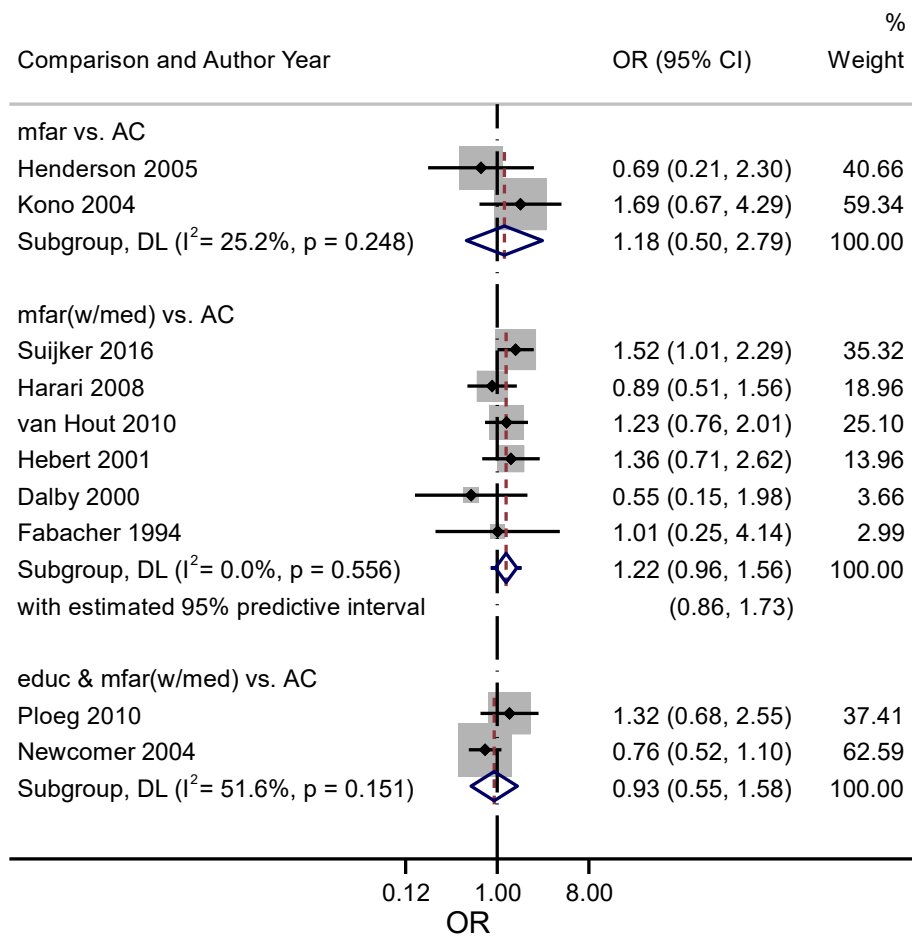


Figure 3 - Pairwise meta-analysis for living at home: medium-term available care network (pooling comparisons with greater than one study reporting results)

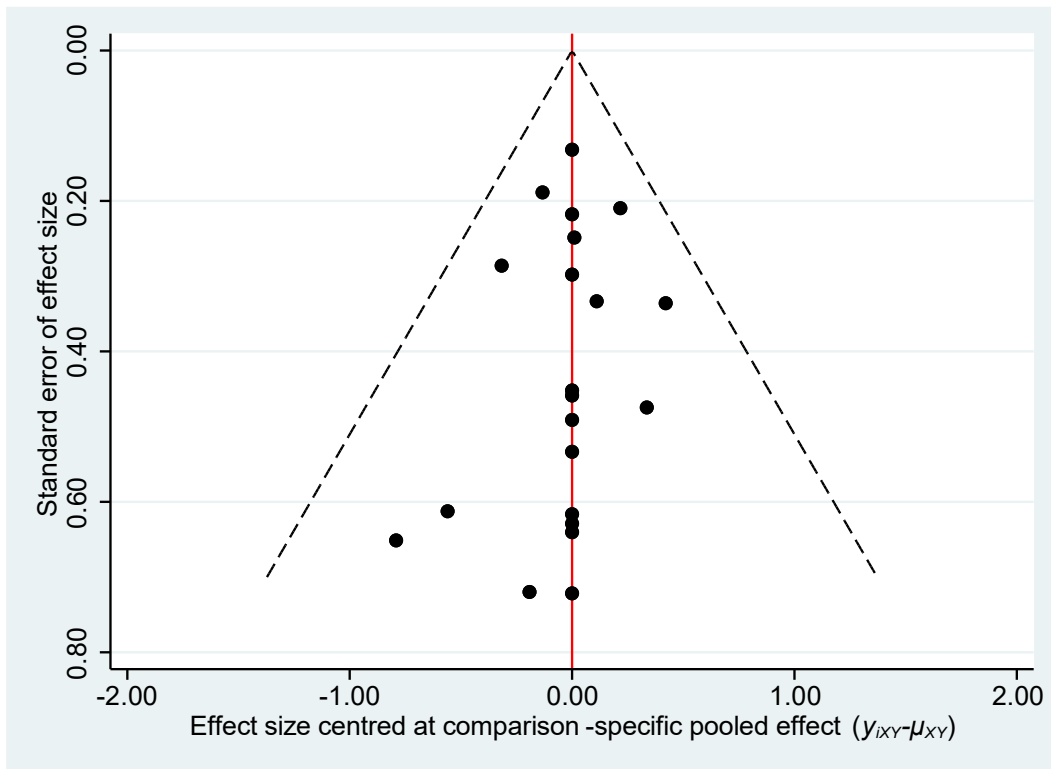


Figure 4 - Comparison-adjusted funnel plot for living at home: medium-term available care network

11.2.3 Living at home available care network, long-term timeframe

Table 12 - Long-term living at home available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Carpenter 1990 ⁵¹⁶	all	515	rsk-mfa-	ac	-	-	-	+	-	-
Fischer 2009 ⁵³²	all	4165	eng & mfa-(w/slfm)	ac	+	-	-	+	+	-
Ford 1971 ⁵³³	pre-frail and frail	300	mfar(w/med)	ac	+	-	+	+	+	-
Hay 1998 ⁵⁴⁶	unclassifiable	386	mfa-	ac	-	-	x	+	-	x
Kerse 2014 ⁵⁵⁶	pre-frail and frail	3629	rsk-mfa-	ac	+/+	-	-	+	-	-
Kono 2016 ⁵⁵⁸	pre-frail	302	mfar(w/med)	mfar	+	-	-	+	+	-
Kukkonen-Harjula 2017 ⁵⁶¹	pre-frail and frail	299	ADL & ntr & exrc	ac	+	-	+	+	+	-
Metzelthin 2013 ⁵⁷⁶	frail	315	educ & mfar(w/med+slfm)	ac	-/-	-	x	+	-	x
Stuck 1995 ⁶⁰²	all	414	educ & mfar(w/med)	ac	+	-	+	+	+	-
Stuck 2015 ⁶⁰⁴	robust and pre-frail	2154	educ & mfar(w/med+slfm)	ac	+	-	x	+	+	x
Suijker 2016 ⁶⁰⁵	frail	1955	mfar(w/med)	ac	+/-	-	-	+	-	-
Tomita 2007 ⁶¹²	frail	110	aids	ac	x	-	x	+	-	xx
Tulloch 1979 ⁶¹³	all	299	mfar(w/med)	ac	-	-	-	+	-	-

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 13 - Living at home in the long term: comparisons with available care summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: living at home

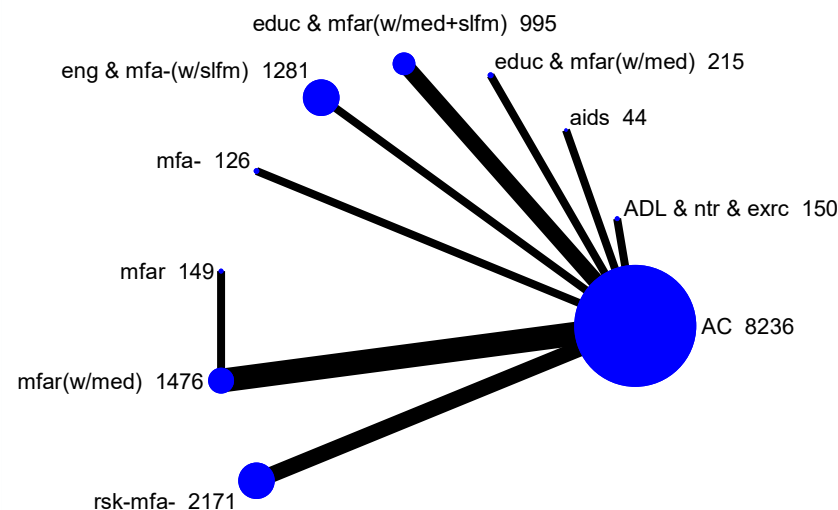
Timeframe: long term; range of follow up 24 to 43 months

Setting: Community

Total studies: 13

Total participants: 14,843

Comparator rank: Mean 7.5, 95% CI 5 to 9



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (607 per 1000 with ac)		Low-risk population (932 per 1000 with ac)				
			With intervention	Difference	With intervention	Difference			
Multifactorial-action and review (mfar)	OR 1.29 (0.63 to 2.63) Indirect estimate	RR 1.04 (0.90 to 1.13)	665 per 1000 (492 to 803)	58 more per 1000 (115 fewer to 196 more)	946 per 1000 (896 to 973)	14 more per 1000 (36 fewer to 41 more)	⊕⊕⊕⊖ Low ^b	5.0 (1 to 10)	may result in an increase in chance of living at home
Education, multifactorial-action and review with medication-review (educ & mfar(w/med))	OR 1.23 (0.72 to 2.10) Mixed estimate	RR 1.04 (0.93 to 1.11)	654 per 1000 (525 to 764)	47 more per 1000 (82 fewer to 157 more)	944 per 1000 (908 to 966)	12 more per 1000 (24 fewer to 34 more)	⊕⊕⊕⊖ Low ^b	5.2 (2 to 10)	may result in an increase in chance of living at home
Multifactorial-action and review with medication-review (mfar(w/med))	OR 1.17 (0.94 to 1.47) Mixed estimate	RR 1.03 (0.99 to 1.06)	645 per 1000 (592 to 694)	38 more per 1000 (15 fewer to 87 more)	942 per 1000 (928 to 953)	10 more per 1000 (4 fewer to 21 more)	⊕⊕⊕⊖ Low ^b	5.2 (3 to 9)	may result in a slight increase in chance of living at home
ADL, nutrition and exercise (ADL & ntr & exrc)	OR 1.15 (0.64 to 2.05) Mixed estimate	RR 1.02 (0.91 to 1.10)	639 per 1000 (499 to 760)	32 more per 1000 (108 fewer to 153 more)	940 per 1000 (898 to 966)	8 more per 1000 (34 fewer to 34 more)	⊕⊕⊕⊖ Low ^b	5.8 (2 to 10)	may result in a slight increase in chance of living at home
Meaningful-activities and multifactorial-action with self-management strategies (eng & mfa-(w/slfm))	OR 1.03 (0.85 to 1.25) Mixed estimate	RR 1.01 (0.97 to 1.04)	614 per 1000 (567 to 658)	7 more per 1000 (40 fewer to 51 more)	934 per 1000 (921 to 945)	2 more per 1000 (11 fewer to 13 more)	⊕⊕⊕⊖ Low ^b	6.9 (3 to 10)	may result in a very slight increase in chance of living at home

Risk-screening (rsk-mfa-)	OR 0.91 (0.77 to 1.07) Mixed estimate	RR 0.98 (0.95 to 1.01)	584 per 1000 (543 to 624)	23 fewer per 1000 (64 fewer to 17 more)	926 per 1000 (913 to 936)	6 fewer per 1000 (19 fewer to 4 more)	⊕⊕⊖⊖ Low ^b	8.8 (6 to 10)	may result in a slight reduction in chance of living at home
Aids (aids)	OR 2.64 (1.02 to 6.88) Mixed estimate	RR 1.13 (1.00 to 1.19)	803 per 1000 (611 to 914)	196 more per 1000 (4 more to 307 more)	973 per 1000 (933 to 990)	41 more per 1000 (1 more to 58 more)	⊕⊖⊖⊖ Very low ^{c,d}	1.8 (1 to 7)	the evidence is very uncertain about the effect on chance of living at home
Multifactorial-action (mfa-)	OR 2.13 (0.85 to 5.33) Mixed estimate	RR 1.11 (0.97 to 1.18)	767 per 1000 (568 to 892)	160 more per 1000 (39 fewer to 285 more)	967 per 1000 (921 to 986)	35 more per 1000 (11 fewer to 54 more)	⊕⊖⊖⊖ Very low ^{b,c}	2.5 (1 to 9)	the evidence is very uncertain about the effect on chance of living at home
Education, multifactorial-action and review with medication-review and self-management strategies (educ & mfar(w/med+slfm))	OR 1.08 (0.78 to 1.49) Mixed estimate	RR 1.01 (0.95 to 1.06)	625 per 1000 (547 to 697)	18 more per 1000 (60 fewer to 90 more)	937 per 1000 (915 to 953)	5 more per 1000 (17 fewer to 21 more)	⊕⊖⊖⊖ Very low ^{b,c}	6.3 (3 to 10)	the evidence is very uncertain about the effect on chance of living at home

a: Calculated from OR and an assumed comparator risk of 0.816, the median available care risk among these studies.

b: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.

c: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.

d: serious concerns about imprecision as no closed loop and direct comparison is based on 110 persons which does not meet optimal information size. Downgrade once (already downgraded twice for risk of bias).

e: serious concerns about risk of bias due to missing outcome data. Downgrade once.

Table 14 - Results of living at home: long-term available care network

rsk-mfa-									0.91 (0.77, 1.07)
0.77 (0.58,1.02)	mfar(w/med)	0.91 (0.46, 1.81)							1.17 (0.94, 1.47)
0.71 (0.34,1.48)	0.91 (0.46,1.81)	mfar							
0.43 (0.17,1.09)	0.55 (0.21,1.42)	0.60 (0.19,1.94)	mfa-						2.13 (0.85, 5.33)
0.88 (0.68,1.14)	1.14 (0.85,1.54)	1.25 (0.60,2.63)	2.07 (0.81,5.29)	eng & mfa- (w/slfm)					1.03 (0.85, 1.25)
0.84 (0.58,1.21)	1.09 (0.73,1.61)	1.19 (0.54,2.61)	1.97 (0.74,5.21)	0.95 (0.65,1.39)	educ & mfar (w/med+slfm)				1.02 (0.64, 1.63)
0.74 (0.42,1.30)	0.96 (0.54,1.72)	1.05 (0.43,2.57)	1.74 (0.60,5.03)	0.84 (0.47,1.48)	0.88 (0.47,1.65)	educ & mfar (w/med)			1.23 (0.72, 2.10)
0.34 (0.13,0.91)	0.44 (0.17,1.19)	0.49 (0.15,1.61)	0.81 (0.21,3.03)	0.39 (0.15,1.03)	0.41 (0.15,1.12)	0.46 (0.15,1.39)	aids		2.64 (1.02, 6.88)
0.79 (0.43,1.44)	1.02 (0.55,1.90)	1.12 (0.45,2.81)	1.85 (0.63,5.48)	0.90 (0.49,1.65)	0.94 (0.49,1.82)	1.07 (0.49,2.35)	2.30 (0.75,7.03)	ADL & ntr & exrc	1.15 (0.64, 2.05)
0.91 (0.77,1.07)	1.17 (0.94,1.47)	1.29 (0.63,2.63)	2.13 (0.85,5.33)	1.03 (0.85,1.25)	1.08 (0.78,1.49)	1.23 (0.72,2.10)	2.64 (1.02,6.88)	1.15 (0.64,2.05)	ac

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR>1 favours the upper left intervention; a OR<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 15 - Intervention rankings for living at home: long-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
aids	91.1	58.3	1.8	1	7
mfa-	83	33.1	2.5	1	9
mfar	55.8	4.8	5	1	10
educ & mfar(w/med)	53.2	2.2	5.2	2	10
mfar(w/med)	53.4	0.3	5.2	3	9
ADL & ntr & exrc	46.5	1.2	5.8	2	10
educ & mfar(w/med+slfm)	41.6	0.1	6.3	3	10
eng & mfa-(w/slfm)	34.9	0	6.9	3	10
ac	27.6	0	7.5	5	9
rsk-mfa-	12.9	0	8.8	6	10

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

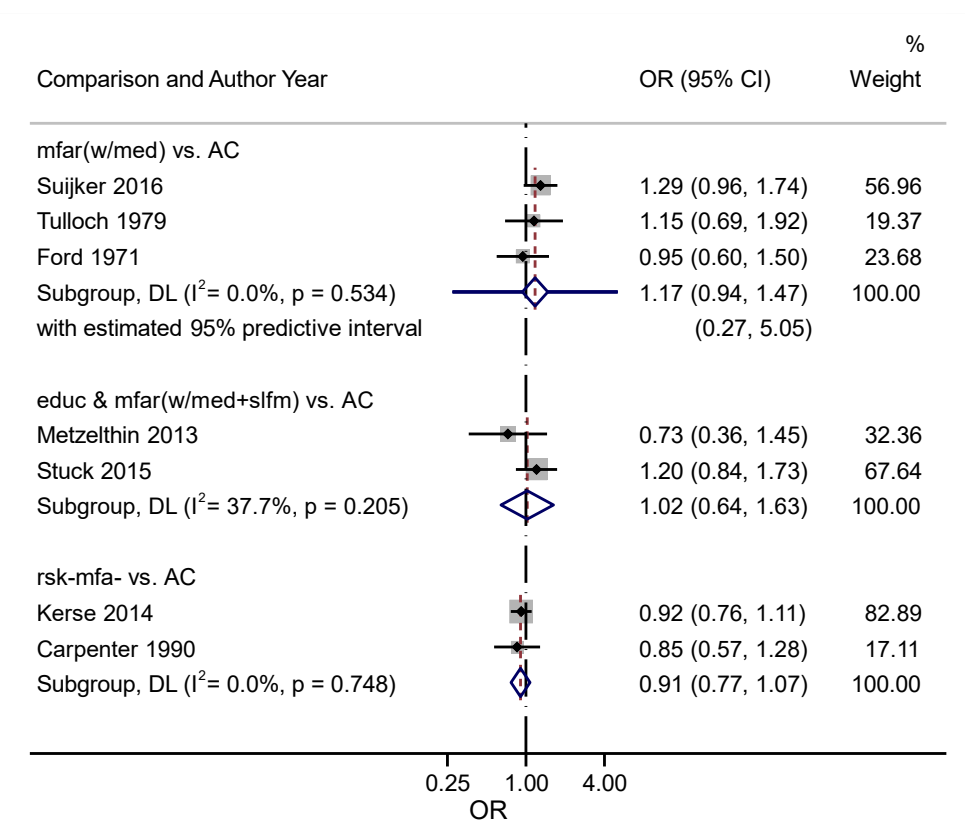


Figure 5 - Pairwise meta-analysis for living at home: long-term available care network (pooling comparisons with greater than one study reporting results)

11.2.4 Living at home homecare network, short-term timeframe

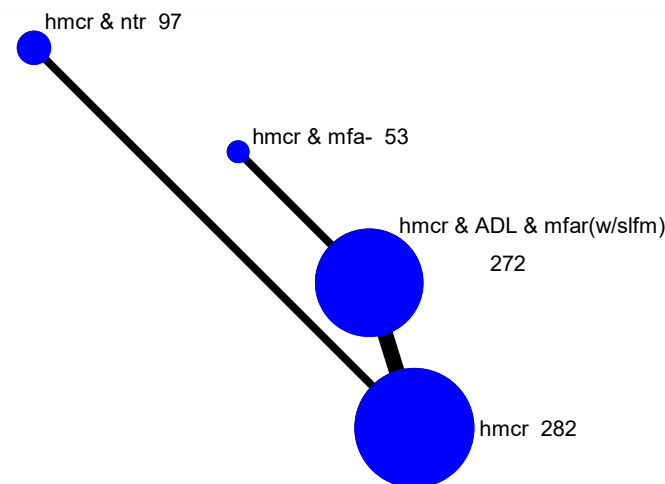
Table 16 - Short-term living at home homecare network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Fernandez-Barres 2017⁵³¹	frail	163	hmcr & ntr	hmcr	+	-	-	+	-	-
King 2012⁵⁵⁷	pre-frail and frail	174	hmcr & ADL & mfar(w/slfm)	hmcr	+/+	-	+	+	-	-
Parsons M 2017⁵⁸⁶	frail	104	hmcr & ADL & mfar(w/slfm)	hmcr & mfa-	-	-	x	+	+	x
Rooijackers 2021⁵⁹⁴	frail	263	hmcr & ADL & mfar(w/slfm)	hmcr	+/-	-	+	+	-	-

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 17 - Living at home in the short term: comparisons with homecare summary of findings table

Population: Older people
 Interventions: Community-based complex interventions
 Comparator: homecare (hmcr)
 Outcome: living at home
 Timeframe: short term; range of follow up 6 to 7 months
 Setting: Community
 Total studies: 4
 Total participants: 704
 Comparator rank: Mean 1.1, 95% CI



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (923 per 1000 with hmcr)		Low-risk population (953 per 1000 with hmcr)				
			With intervention	Difference	With intervention	Difference			
Homecare, ADL, multifactorial-action and review with self-management strategies (hmcr & ADL & mfar(w/slfm))	OR 0.63 (0.31 to 1.26) Mixed estimate	RR 0.96 (0.86 to 1.02)	882 per 1000 (789 to 938)	41 fewer per 1000 (134 fewer to 15 more)	927 per 1000 (863 to 962)	26 fewer per 1000 (90 fewer to 9 more)	⊕⊕⊖⊖ Low ^b	2.1 (1 to 3)	may result in a reduction in chance of living at home
Homecare and nutrition (hmcr & ntr)	OR 0.34 (0.12 to 0.95) Mixed estimate	RR 0.87 (0.64 to 1.00)	801 per 1000 (588 to 919)	122 fewer per 1000 (335 fewer to 4 fewer)	872 per 1000 (707 to 951)	81 fewer per 1000 (246 fewer to 2 fewer)	⊕⊕⊖⊖ Low ^c	3.2 (2 to 4)	may result in a reduction in chance of living at home
Homecare and multifactorial-action (hmcr & mfa-)	OR 0.26 (0.09 to 0.77) Indirect estimate	RR 0.82 (0.56 to 0.98)	756 per 1000 (512 to 902)	167 fewer per 1000 (411 fewer to 21 fewer)	840 per 1000 (639 to 940)	113 fewer per 1000 (314 fewer to 13 fewer)	⊕⊖⊖⊖ Very low ^{d,e}	3.6 (3 to 4)	the evidence is very uncertain about the effect on chance of living at home

- a: Calculated from OR and an assumed comparator risk of 0.924, the median available care risk among these studies.
- b: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.
- c: very serious concerns about imprecision as the optimal information size is not met. The confidence interval is very wide: OR CI ratio 8.0; 588 to 919 per 1000 in the high-risk population. There is no closed loop and the direct comparison is based on evidence from 163 persons. Downgrade twice.
- d: serious concerns about risk of bias due to missing outcome data. Downgrade once.
- e: very serious concerns about imprecision as the optimal information size is not met. The confidence interval is very wide: OR CI ratio 8.8; 512 to 902 per 1000 in the high-risk population. There is no direct evidence, the indirect evidence coming from the comparison of hmcr & mfa- vs hmcr & ADL & mfar(w/slfm) with 104 participants. Downgrade twice.

Table 18 - Results of living at home: short-term homecare network

hmcr & ntr			0.34 (0.12,0.95)
1.30 (0.29,5.85)	hmcr & mfa-	0.41 (0.18,0.95)	
0.54 (0.15,1.88)	0.41 (0.18,0.95)	hmcr & ADL & mfar(w/slfm)	0.63 (0.31,1.26)
0.34 (0.12,0.95)	0.26 (0.09,0.77)	0.63 (0.31,1.26)	hmcr

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR>1 favours the upper left intervention; a OR<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 19 - Intervention rankings for living at home: short-term homecare network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr	95.7	87.4	1.1	1	2
hmcr & ADL & mfar(w/slfm)	64.4	10.4	2.1	1	3
hmcr & ntr	26.2	2.1	3.2	1	4
hmcr & mfa-	13.6	0.1	3.6	3	4

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

hmcr & ADL & mfar(w/slfm) vs. hmcr

%

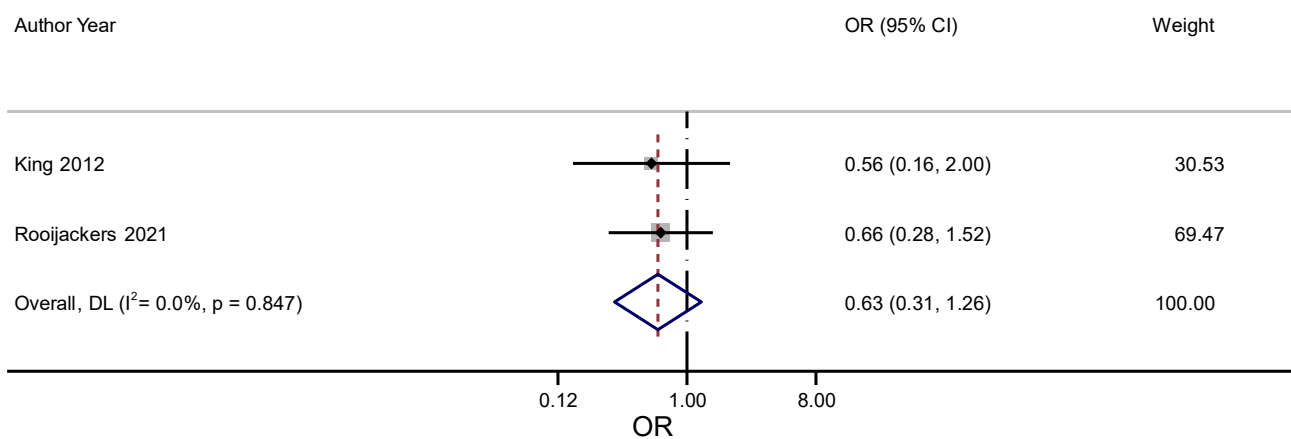


Figure 6 - Pairwise meta-analysis for living at home: short-term homecare network (pooling comparisons with greater than one study reporting results)

11.2.5 Living at home homecare network, medium-term timeframe

Table 20 - Medium-term living at home homecare network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Fernandez-Barres 2017 ⁵³¹	frail	156	hmcr & ntr	hmcr	+	-	x	+	-	x
Lewin 2013 ⁵⁶⁵	frail	744	hmcr & educ & mfar	hmcr	x	x	+	+	-	xx
Parsons M 2017 ⁵⁸⁶	frail	87	hmcr & ADL & mfar(w/slfm)	hmcr & mfa-	-	-	x	+	+	x
Rooijackers 2021 ⁵⁹⁴	frail	259	hmcr & ADL & mfar(w/slfm)	hmcr	+/-	-	+	+	-	-
Wolter 2013 ⁶²⁹	frail	732	hmcr & mfar(w/med)	hmcr	+/-	-	x	+	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only).

Table 21 - Living at home in the medium term: comparisons with homecare summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: homecare (hmcr)

Outcome: living at home

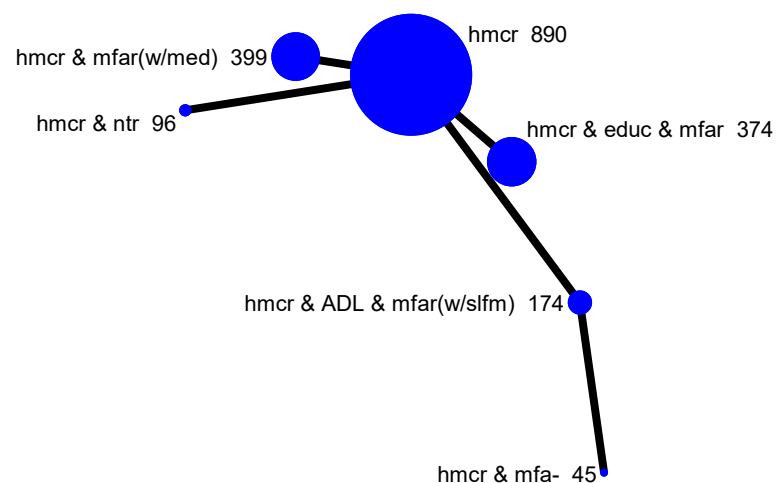
Timeframe: medium term; range of follow up 12 to 13 months

Setting: Community

Total studies: 5

Total participants: 1978

Comparator rank: Mean 3.0, 95% CI 1 to 5



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (649 per 1000 with hmcr)		Low-risk population (843 per 1000 with hmcr)				
			With intervention	Difference	With intervention	Difference			
Homecare, ADL, multifactorial-action and review with self-management strategies (hmcr & ADL & mfar(w/slfm))	OR 0.76 (0.40 to 1.45) Mixed estimate	RR 0.92 (0.72 to 1.09)	585 per 1000 (426 to 728)	64 fewer per 1000 (223 fewer to 79 more)	804 per 1000 (683 to 886)	39 fewer per 1000 (160 fewer to 43 more)	⊕⊕⊕⊖ Low ^b	3.8 (1 to 6)	may result in a reduction in chance of living at home
Homecare, education, multifactorial-action and review (hmcr & educ & mfar)	OR 1.17 (0.85 to 1.59) Mixed estimate	RR 1.04 (0.96 to 1.11)	683 per 1000 (612 to 747)	34 more per 1000 (37 fewer to 98 more)	862 per 1000 (821 to 895)	19 more per 1000 (22 fewer to 52 more)	⊕⊕⊕⊖ Very low ^{b,c}	1.8 (1 to 4)	the evidence is very uncertain about the effect on chance of living at home
Homecare, multifactorial-action and review with medication-review (hmcr & mfar(w/med))	OR 1.11 (0.82 to 1.51) Mixed estimate	RR 1.03 (0.94 to 1.10)	672 per 1000 (601 to 736)	23 more per 1000 (48 fewer to 87 more)	856 per 1000 (814 to 890)	13 more per 1000 (29 fewer to 47 more)	⊕⊕⊕⊖ Very low ^{b,d}	2.1 (1 to 4)	the evidence is very uncertain about the effect on chance of living at home
Homecare and multifactorial-action (hmcr & mfa-)	OR 0.51 (0.17 to 1.49) Indirect estimate	RR 0.80 (0.45 to 1.09)	485 per 1000 (243 to 734)	164 fewer per 1000 (406 fewer to 85 more)	732 per 1000 (483 to 889)	111 fewer per 1000 (360 fewer to 46 more)	⊕⊕⊕⊖ Very low ^{b,d}	5.1 (1 to 6)	the evidence is very uncertain about the effect on chance of living at home
Homecare and nutrition (hmcr & ntr)	OR 0.50 (0.23 to 1.07) Mixed estimate	RR 0.79 (0.54 to 1.02)	480 per 1000 (301 to 664)	169 fewer per 1000 (348 fewer to 15 more)	729 per 1000 (556 to 852)	114 fewer per 1000 (287 fewer to 9 more)	⊕⊕⊕⊖ Very low ^{b,d}	5.2 (2 to 6)	the evidence is very uncertain about the effect on chance of living at home

a: Calculated from OR and an assumed comparator risk of 0.738, the median available care risk among these studies.

b: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.

c: very serious concerns about risk of bias due to randomisation process and missing outcome data. Already downgraded twice for imprecision, downgrade once.

d: serious concerns about risk of bias due to missing outcome data. Downgrade once.

Table 22 - Results of living at home: medium-term homecare network

hmcr & ntr					0.50 (0.23,1.07)
0.45 (0.20,1.03)	hmcr & mfar(w/med)				1.11 (0.82,1.51)
0.98 (0.26,3.67)	2.18 (0.71,6.65)	hmcr & mfa-		0.67 (0.28,1.58)	
0.43 (0.19,0.98)	0.95 (0.61,1.47)	0.44 (0.14,1.33)	hmcr & educ & mfar		1.17 (0.85,1.59)
0.66 (0.24,1.78)	1.45 (0.71,2.96)	0.67 (0.28,1.58)	1.53 (0.75,3.13)	hmcr & ADL & mfar(w/slfm)	0.76 (0.40,1.45)
0.50 (0.23,1.07)	1.11 (0.82,1.51)	0.51 (0.17,1.49)	1.17 (0.85,1.59)	0.76 (0.40,1.45)	hmcr

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR>1 favours the upper left intervention; a OR<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 23 - Intervention rankings for living at home: medium-term homecare network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & educ & mfar	83.9	50.5	1.8	1	4
hmcr & mfar(w/med)	77.7	33.2	2.1	1	4
hmcr	60.3	3.6	3.0	1	5
hmcr & ADL & mfar(w/slfm)	43.4	7.9	3.8	1	6
hmcr & mfa-	18.7	3.9	5.1	1	6
hmcr & ntr	16.0	0.9	5.2	2	6

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

11.2.6 Living at home homecare network, long-term timeframe

No results as there were too few comparisons to conduct network meta-analysis.

11.3 Instrumental ADL

11.3.1 IADL available care network, short-term timeframe

Table 24 - Short-term IADL available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Clark 1997 ⁵¹⁹	robust and pre-frail	304	eng & educ	ac	x	-	x	-	x	xx
Gitlin 2006 ⁵³⁹	pre-frail and frail	300	ADL & aids & exrc	ac	+	-	x	-	-	x
Metzelthin 2013 ⁵⁷⁶	frail	316	educ & mfar(w/med+slfm)	ac	-/-	-	x	-	-	x
Morgan 2019 ⁵⁸¹	pre-frail	47	exrc	ac	+	-	-	x	-	x
Rockwood 2000 ⁵⁹²	frail	148	mfa-(w/med)	ac	-	-	x	-	-	x
Szanton 2011 ⁶⁰⁶	pre-frail and frail	40	ADL&aids&educ&exrc& mfar(w/med+slfm)	ac	-	-	x	-	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pr e-frail and frail.

Table 25 - IADL in the short term: comparisons with available care summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: independence in instrumental activities of daily living

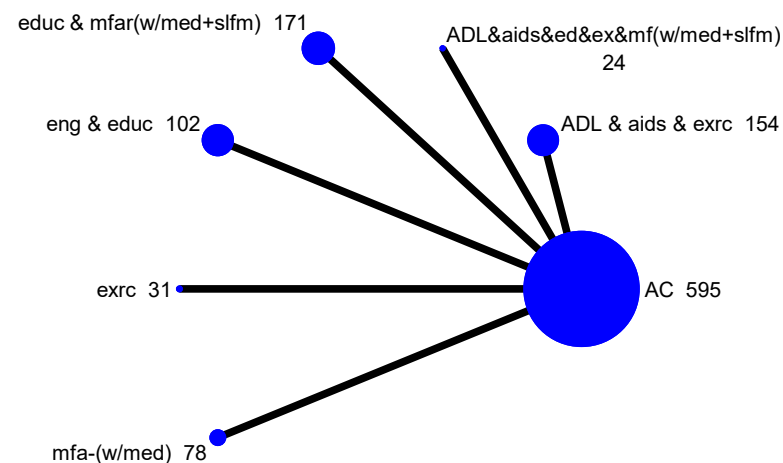
Timeframe: short term; range of follow up 24 weeks to 9 months

Setting: Community

Total studies: 6

Total participants: 1155

Comparator rank: Mean 4.4, 95% CI 2 to 6



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Lawton IADL 0 to 8) ^a			
Education, multifactorial-action and review with medication-review and self-management (educ & mfar(w/med+slfm))	SMD 0.22 lower (0.45 lower to 0.00) Mixed estimate	MD 0.59 lower (1.17 lower to 0.01 lower)	⊕⊕⊕⊖ Low ^{b,c}	6.5 (5 to 7)	may result in a slight reduction in IADL independence
ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management (ADL&aids&ed&ex&mf(w/med+slfm))	SMD 0.38 higher (0.26 lower to 1.01 higher) Mixed estimate	MD 0.98 higher (0.69 lower to 2.66 higher)	⊕⊖⊖⊖ Very low ^{b,d}	1.9 (1 to 7)	the evidence is very uncertain about the effect on IADL independence
ADL training, aids-adaptations and physical exercise (ADL & aids & excr)	SMD 0.14 higher (0.09 lower to 0.36 higher) Mixed estimate	MD 0.36 higher (0.24 lower to 0.95 higher)	⊕⊖⊖⊖ Very low ^{b,d}	2.8 (1 to 6)	the evidence is very uncertain about the effect on IADL independence
Meaningful-activities and education (eng & educ)	SMD 0.06 higher (0.18 lower to 0.30 higher) Mixed estimate	MD 0.16 higher (0.46 lower to 0.79 higher)	⊕⊖⊖⊖ Very low ^{c,f}	3.5 (1 to 6)	the evidence is very uncertain about the effect on IADL independence
Exercise (excr)	SMD 0.00 (0.60 lower to 0.60 higher) Mixed estimate	MD 0.00 (1.58 lower to 1.58 higher)	⊕⊖⊖⊖ Very low ^{d,g}	4.2 (1 to 7)	the evidence is very uncertain about the effect on IADL independence
Multifactorial-action with medication-review (mfa-(w/med))	SMD 0.05 lower (0.37 lower to 0.27 higher) Mixed estimate	MD 0.13 lower (0.98 lower to 0.71 higher)	⊕⊖⊖⊖ Very low ^{b,d}	4.8 (2 to 7)	the evidence is very uncertain about the effect on IADL independence

a: calculated from the estimated SMD using a standard deviation of 2.62, the pooled standard deviation across intervention groups reporting the Lawton IADL.

- b: serious concerns about risk of bias due to missing outcome data. Downgrade once.
- c: serious concerns about imprecision as no closed loop and direct comparison is based on 316 persons which does not meet optimal information size. Downgrade once.
- d: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.
- e: very serious concerns about risk of bias due to randomisation process, missing outcome data, and reported results were not analysed according to allocation. Downgrade twice.
- f: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.
- g: serious concerns about risk of bias due to ceiling effect in the outcome measurement for a substantial proportion of participants. Downgrade once.

Table 26 - Results of IADL: short-term available care network

mfa-(w/med)						-0.05 (-0.37,0.27)
-0.05 (-0.74,0.63)	exrc					0.00 (-0.60,0.60)
-0.11 (-0.51,0.29)	-0.06 (-0.71,0.59)	eng & educ				0.06 (-0.18,0.30)
0.17 (-0.22,0.56)	0.22 (-0.42,0.87)	0.29 (-0.04,0.61)	educ & mfar(w/med+slfm)			-0.22 (-0.45,-0.00)
-0.43 (-1.14,0.29)	-0.38 (-1.25,0.50)	-0.31 (-0.99,0.37)	-0.60 (-1.28,0.08)	ADL&aids&ed&ex&mf(w/med+slfm)		0.38 (-0.26,1.01)
-0.19 (-0.58,0.21)	-0.14 (-0.78,0.51)	-0.07 (-0.40,0.25)	-0.36 (-0.68,-0.04)	0.24 (-0.44,0.92)	ADL & aids & exrc	0.14 (-0.09,0.36)
-0.05 (-0.37,0.27)	-0.00 (-0.60,0.60)	0.06 (-0.18,0.30)	-0.22 (-0.45,-0.00)	0.38 (-0.26,1.01)	0.14 (-0.09,0.36)	ac

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 27 - Intervention rankings for IADL: short-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
ADL&aids&ed&ex&mf(w/med+slfm)	85.6	65.7	1.9	1	7
ADL & aids & exrc	70.3	13.2	2.8	1	6
Eng & educ	57.8	4.8	3.5	1	6
Exrc	46.7	13.7	4.2	1	7
available care	44.1	0.1	4.4	3	6
Mfa-(w/med)	36.6	2.4	4.8	1	7
Educ & mfar(w/med+slfm)	8.9	0.1	6.5	5	7

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

Disconnected Network

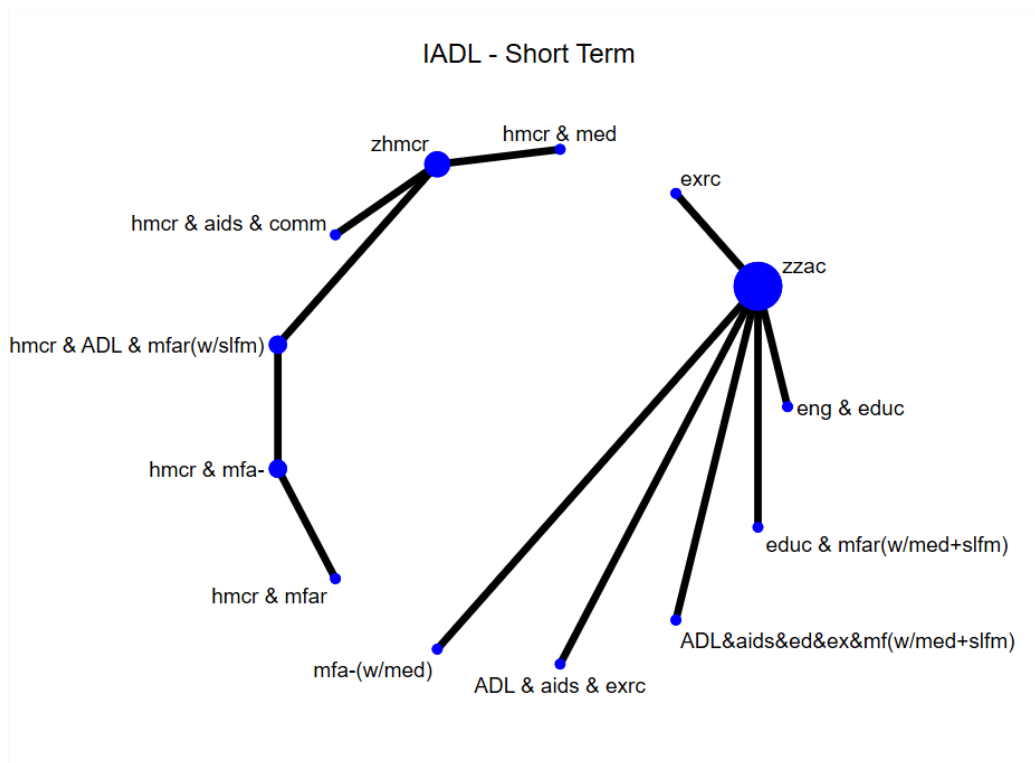


Figure 7 - Example of disconnected network for IADL short-term timeframe, showing separation between studies with available care (ac) comparator and homecare (hmcr) comparator

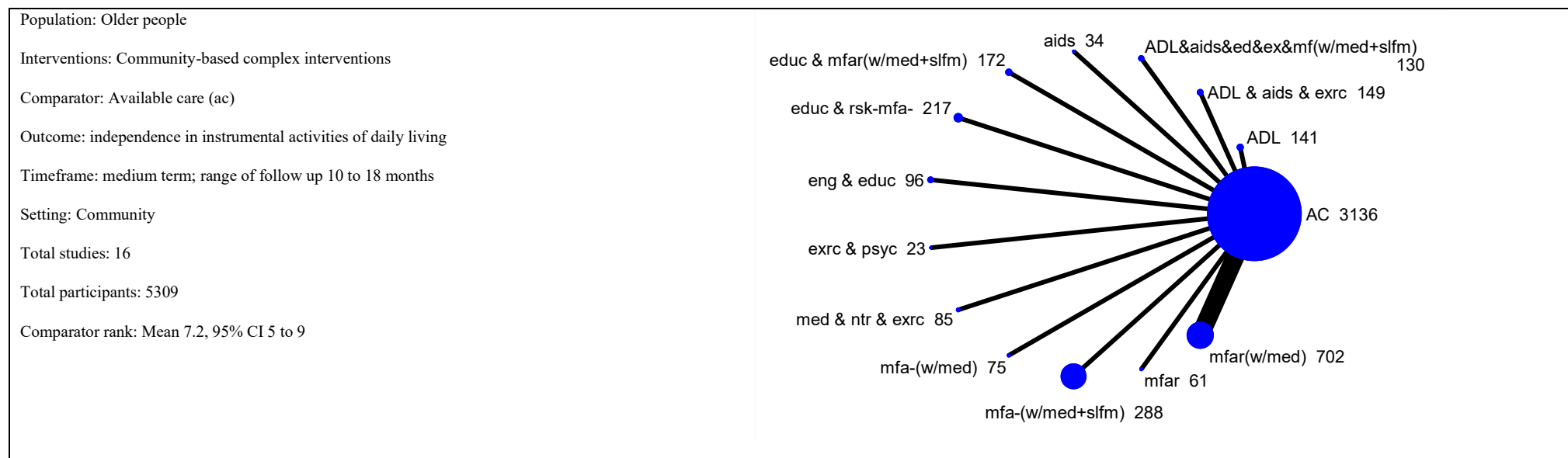
11.3.2 IADL available care network, medium-term timeframe

Table 28 - Medium-term IADL available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Blom 2016 ⁵¹⁰	all	1379	mfa-(w/med+slfm)	ac	x/+	-	x	-	-	xx
Bouman 2008 ⁵¹³	pre-frail and frail	293	mfar(w/med)	ac	+	-	x	-	-	x
Brettschneider 2015 ⁵¹⁴	frail	265	mfar(w/med)	ac	-	-	x	-	+	x
Clark 1997 ⁵¹⁹	robust and pre-frail	282	eng & educ	ac	x	-	x	-	x	xx
Dorresteijn 2016 ⁵²⁶	unclassifiable	312	ADL	ac	+	-	x	-	-	x
Fabacher 1994 ⁵²⁸	all	195	mfar(w/med)	ac	-	-	x	-	-	x
Gene Huguet 2018 ⁵³⁶	pre-frail	173	med & ntr & exrc	ac	-	-	x	-	-	x
Gitlin 2006 ⁵³⁹	pre-frail and frail	285	ADL & aids & exrc	ac	+	-	x	-	-	x
Henderson 2005 ⁵⁴⁸	robust	124	mfar	ac	+/x	+	x	+	-	xx
Metzelthin 2013 ⁵⁷⁶	frail	317	educ & mfar(w/med+slfm)	ac	-/-	-	x	-	-	x
Monteserin Nadal 2008 ⁵⁷⁸	all	430	educ & rsk-mfa-	ac	-	-	x	-	-	x
Rockwood 2000 ⁵⁹²	frail	145	mfa-(w/med)	ac	-	-	x	-	-	x
Rubenstein 2007 ⁵⁹⁵	frail	694	mfar(w/med)	ac	-	-	-	-	-	-
Szanton 2019 ⁶⁰⁷	pre-frail and frail	260	ADL&aids&educ&exrc&mfar(w/med+slfm)	ac	+	-	x	-	-	x
Tomita 2007 ⁶¹²	frail	78	aids	ac	x	-	x	-	-	xx
van Heuvelen 2005 ⁶¹⁷	pre-frail and frail	77	exrc & psyc	ac	-	x	x	-	-	xx

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 29 - IADL in the medium term: comparisons with available care summary of findings table



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Lawton IADL 0 to 8) ^a			
Multifactorial-action and review with medication-review (mfar(w/med))	SMD 0.11 higher (0.00 to 0.21 higher) Mixed estimate	MD 0.28 higher (0.01 higher to 0.55 higher)	⊕⊕⊕⊖ Moderate ^b	4.4 (2 to 7)	probably results in a very slight increase in IADL independence
ADL, aids and exercise (ADL & aids & exerc)	SMD 0.19 lower (0.42 lower to 0.04 higher) Mixed estimate	MD 0.50 lower (1.11 lower to 0.11 higher)	⊕⊕⊖⊖ Low ^{b,c}	11.2 (5 to 13)	may result in a slight reduction in IADL independence
ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management (ADL&aids&ed&ex&mf(w/med+slfm))	SMD 0.56 lower (0.81 lower to 0.31 lower) Mixed estimate	MD 1.47 lower (2.12 lower to 0.82 lower)	⊕⊕⊖⊖ Low ^{b,d}	13.9 (13 to 14)	may result in a reduction in IADL independence
Multifactorial-action and review (mfar)	SMD 0.50 higher (0.15 higher to 0.86 higher) Mixed estimate	MD 1.32 higher (0.38 higher to 2.26 higher)	⊕⊖⊖⊖ Very low ^{e,f}	1.2 (1 to 4)	the evidence is very uncertain about the effect on IADL independence
Medication-review, nutrition and exercise (med & ntr & exerc)	SMD 0.21 higher (0.08 lower to 0.51 higher) Mixed estimate	MD 0.56 higher (0.22 lower to 1.34 higher)	⊕⊖⊖⊖ Very low ^{b,g}	3.2 (1 to 10)	the evidence is very uncertain about the effect on IADL independence
ADL (ADL)	SMD 0.10 higher (0.12 lower to 0.33 higher) Mixed estimate	MD 0.27 higher (0.31 lower to 0.86 higher)	⊕⊖⊖⊖ Very low ^{b,g}	4.9 (2 to 10)	the evidence is very uncertain about the effect on IADL independence

Multifactorial-action with medication-review (mfa-(w/med))	SMD 0.02 higher (0.30 lower to 0.35 higher) Mixed estimate	MD 0.06 higher (0.79 lower to 0.92 higher)	⊕⊕⊕⊕ Very low ^{b,g}	6.7 (2 to 13)	the evidence is very uncertain about the effect on IADL independence
Education and risk-screening (educ & rsk-mfa-)	SMD 0.00 (0.19 lower to 0.19 higher) Mixed estimate	MD 0.00 (0.50 lower to 0.50 higher)	⊕⊕⊕⊕ Very low ^{b,g}	7.1 (3 to 12)	the evidence is very uncertain about the effect on IADL independence
Meaningful-activities and education (eng & educ)	SMD 0.01 lower (0.26 lower to 0.23 higher) Mixed estimate	MD 0.03 lower (0.68 lower to 0.61 higher)	⊕⊕⊕⊕ Very low ^{h,i}	7.5 (2 to 13)	the evidence is very uncertain about the effect on IADL independence
Exercise and psychology (exrc & psyc)	SMD 0.12 lower (0.60 lower to 0.37 higher) Mixed estimate	MD 0.30 lower (1.58 lower to 0.98 higher)	⊕⊕⊕⊕ Very low ^{i,j}	8.9 (2 to 14)	the evidence is very uncertain about the effect on IADL independence
Multifactorial-action with medication-review and self-management (mfa-(w/med+slfm))	SMD 0.07 lower (0.20 lower to 0.06 higher) Mixed estimate	MD 0.19 lower (0.53 lower to 0.15 higher)	⊕⊕⊕⊕ Very low ^{i,k}	9.2 (5 to 12)	the evidence is very uncertain about the effect on IADL independence
Aids (aids)	SMD 0.15 lower (0.60 lower to 0.30 higher) Mixed estimate	MD 0.39 lower (1.56 lower to 0.78 higher)	⊕⊕⊕⊕ Very low ^{i,k}	9.6 (2 to 14)	the evidence is very uncertain about the effect on IADL independence
Education, multifactorial-action and review with medication-review and self-management (educ & mfar(w/med+slfm))	SMD 0.13 lower (0.35 lower to 0.09 higher) Mixed estimate	MD 0.34 lower (0.92 lower to 0.24 higher)	⊕⊕⊕⊕ Very low ^{b,g}	10.1 (5 to 13)	the evidence is very uncertain about the effect on IADL independence

a: calculated from the estimated SMD using a standard deviation of 2.62, the pooled standard deviation across intervention groups reporting the Lawton IADL.

b: serious concerns about risk of bias due to missing outcome data. Downgrade once.

c: serious concerns about imprecision as confidence interval crosses the no effect line and includes substantial harm. Downgrade once.

d: serious concerns about imprecision as no closed loop and direct comparison is based on evidence from 260 persons which does not meet optimal information size. Downgrade once.

e: serious concerns about imprecision as no closed loop and direct comparison is based on evidence from 124 persons which does not meet optimal information size. Downgrade once.

f: very serious concerns about risk of bias due to recruitment of participants and missing outcome data. Downgrade twice.

g: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

h: very serious concerns about risk of bias due to the randomisation process, missing outcome data and selection of the reported result. Downgrade twice.

i: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.

j: very serious concerns about risk of bias due to excluding participants in per-protocol analysis and missing outcome data. Downgrade twice.

k: very serious concerns about risk of bias due to the randomisation process and missing outcome data. Downgrade twice.

Table 30 - Results of IADL: medium-term available care network

													0.11 (-0.00, 0.22)
-0.40 (-0.77,-0.03)	mfar												0.50 (0.15, 0.86)
0.18 (0.01,0.35)	0.58 (0.20,0.96)	mfa- (w/med+slf m)											-0.07 (-0.20, 0.06)
0.08 (-0.26,0.42)	0.48 (-0.00,0.96)	-0.10 (-0.45,0.25)	mfa-(w/med)										0.02 (-0.30, 0.35)
-0.11 (-0.42,0.21)	0.29 (-0.18,0.76)	-0.29 (-0.61,0.04)	-0.19 (-0.63,0.25)	med & ntr & exrc									0.21 (-0.08, 0.51)
0.22 (-0.28,0.72)	0.62 (0.01,1.23)	0.04 (-0.46,0.55)	0.14 (-0.45,0.73)	0.33 (-0.24,0.90)	exrc & psyc								-0.12 (-0.60, 0.37)
0.12 (-0.15,0.39)	0.52 (0.08,0.95)	-0.06 (-0.34,0.22)	0.04 (-0.37,0.44)	0.23 (-0.16,0.61)	-0.10 (-0.65,0.44)	eng & educ							-0.01 (-0.26, 0.23)
0.11 (-0.11,0.32)	0.50 (0.10,0.91)	-0.07 (-0.30,0.16)	0.02 (-0.35,0.40)	0.21 (-0.14,0.57)	-0.12 (-0.64,0.41)	-0.01 (-0.32,0.30)	educ & rsk- mfa-						0.00 (-0.19, 0.19)
0.24 (-0.01,0.48)	0.63 (0.21,1.06)	0.06 (-0.20,0.31)	0.15 (-0.24,0.55)	0.34 (-0.03,0.72)	0.01 (-0.52,0.55)	0.12 (-0.21,0.45)	0.13 (-0.16,0.42)	educ & mfar(w/med +slfm)					-0.13 (-0.35, 0.09)
0.26 (-0.20,0.72)	0.65 (0.08,1.23)	0.07 (-0.39,0.54)	0.17 (-0.38,0.73)	0.36 (-0.18,0.90)	0.03 (-0.63,0.70)	0.14 (-0.37,0.65)	0.15 (-0.34,0.64)	0.02 (-0.48,0.52)	aids				-0.15 (-0.60, 0.30)
0.67 (0.40,0.94)	1.07 (0.63,1.50)	0.49 (0.21,0.77)	0.59 (0.18,1.00)	0.78 (0.39,1.16)	0.45 (-0.10,0.99)	0.55 (0.20,0.90)	0.56 (0.25,0.87)	0.43 (0.10,0.76)	0.41 (-0.10,0.92)	ADL&aids&e d&ex&mf(w/ med+slfm)			-0.56 (-0.81, -0.31)
0.30 (0.04,0.55)	0.70 (0.27,1.12)	0.12 (-0.15,0.38)	0.22 (-0.18,0.62)	0.41 (0.03,0.79)	0.08 (-0.47,0.62)	0.18 (-0.16,0.52)	0.19 (-0.11,0.49)	0.06 (-0.26,0.38)	0.04 (-0.46,0.55)	-0.37 (-0.71,-0.03)	ADL & aids & exrc		-0.19 (-0.42, 0.04)
0.00 (-0.24,0.25)	0.40 (-0.02,0.82)	-0.18 (-0.44,0.08)	-0.08 (-0.48,0.31)	0.11 (-0.26,0.48)	-0.22 (-0.76,0.32)	-0.12 (-0.45,0.22)	-0.10 (-0.40,0.19)	-0.24 (-0.55,0.08)	-0.25 (-0.75,0.25)	-0.67 (-1.00,-0.33)	-0.30 (-0.62,0.03)	ADL	0.10 (-0.12, 0.33)
0.11 (0.00,0.21)	0.50 (0.15,0.86)	-0.07 (-0.20,0.06)	0.02 (-0.30,0.35)	0.21 (-0.08,0.51)	-0.12 (-0.60,0.37)	-0.01 (-0.26,0.23)	0.00 (-0.19,0.19)	-0.13 (-0.35,0.09)	-0.15 (-0.60,0.30)	-0.56 (-0.81,-0.31)	-0.19 (-0.42,0.04)	0.10 (-0.12,0.33)	ac

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 31 - Intervention rankings for IADL: medium-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
mfar	98.3	86.3	1.2	1	4
Med & ntr & exrc	83.1	8.7	3.2	1	10
Mfar(w/med)	73.9	0.6	4.4	2	7
ADL	70.2	1.1	4.9	2	10
Mfa-(w/med)	55.9	1.1	6.7	2	13
Educ & rsk-mfa-	52.7	0.2	7.1	3	12
ac	52.4	0.0	7.2	5	9
Eng & educ	50.3	0.2	7.5	2	13
Exrc & psyc	38.9	1.1	8.9	2	14
Mfa-(w/med+slfm)	37.3	0.0	9.2	5	12
aids	33.9	0.7	9.6	2	14
Educ & mfar(w/med+slfm)	30.4	0.0	10.1	5	13
ADL & aids & exrc	21.8	0.0	11.2	5	13
ADL&aids&ed&ex&mf(w/med+slfm)	0.9	0.0	13.9	13	14

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

mfar(w/med) vs. AC

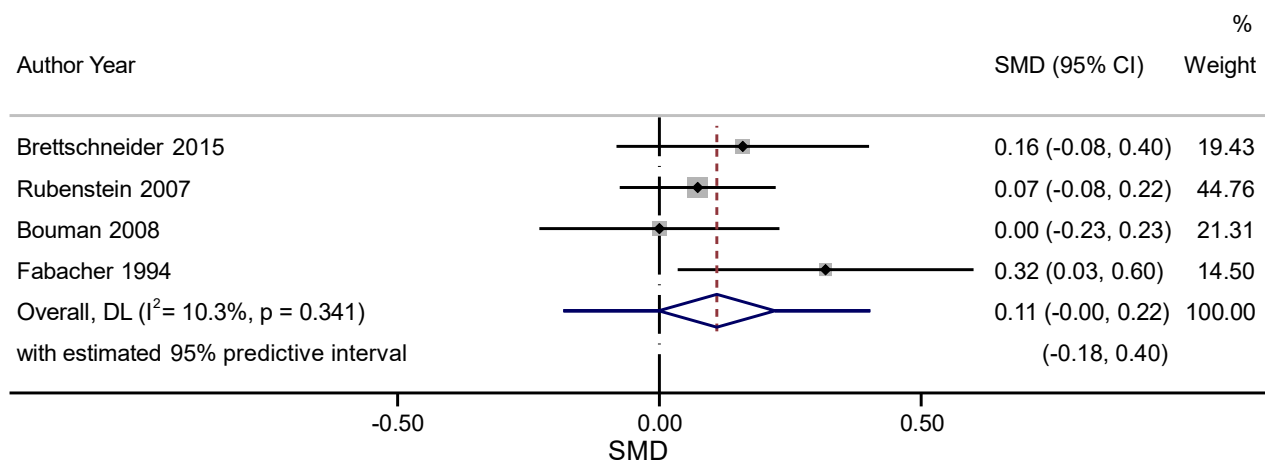


Figure 8 - Pairwise meta-analysis for IADL: medium-term available care network (pooling comparisons with greater than one study reporting results)

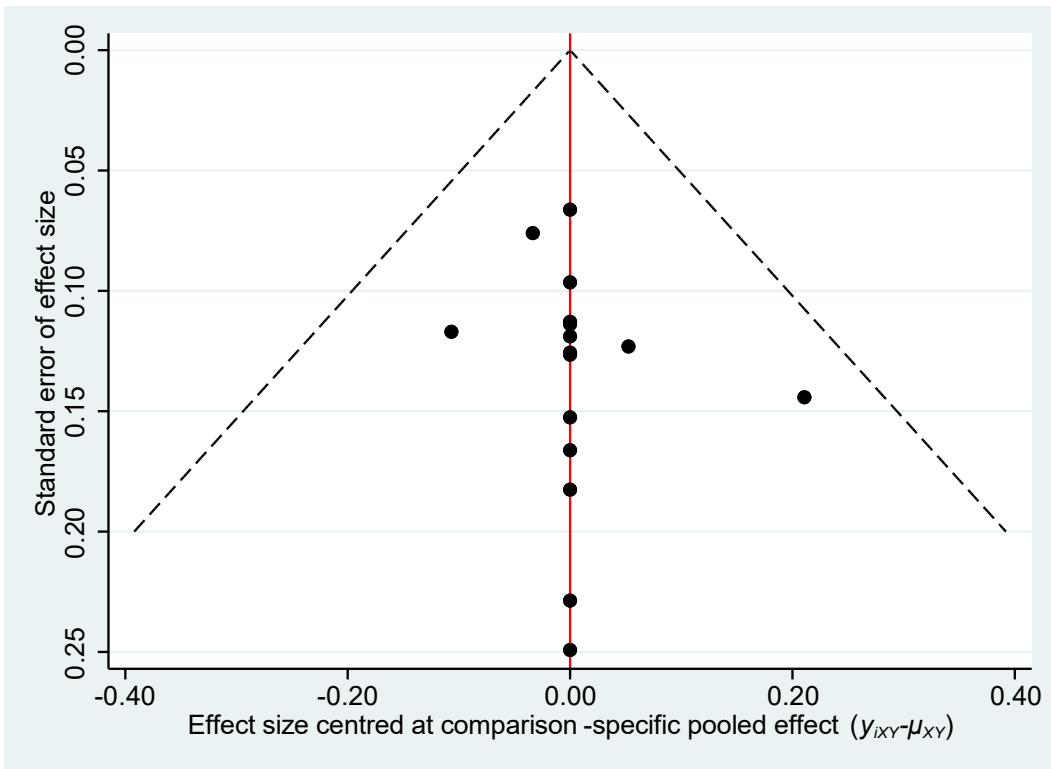


Figure 9 - Comparison-adjusted funnel plot for IADL: medium-term available care network

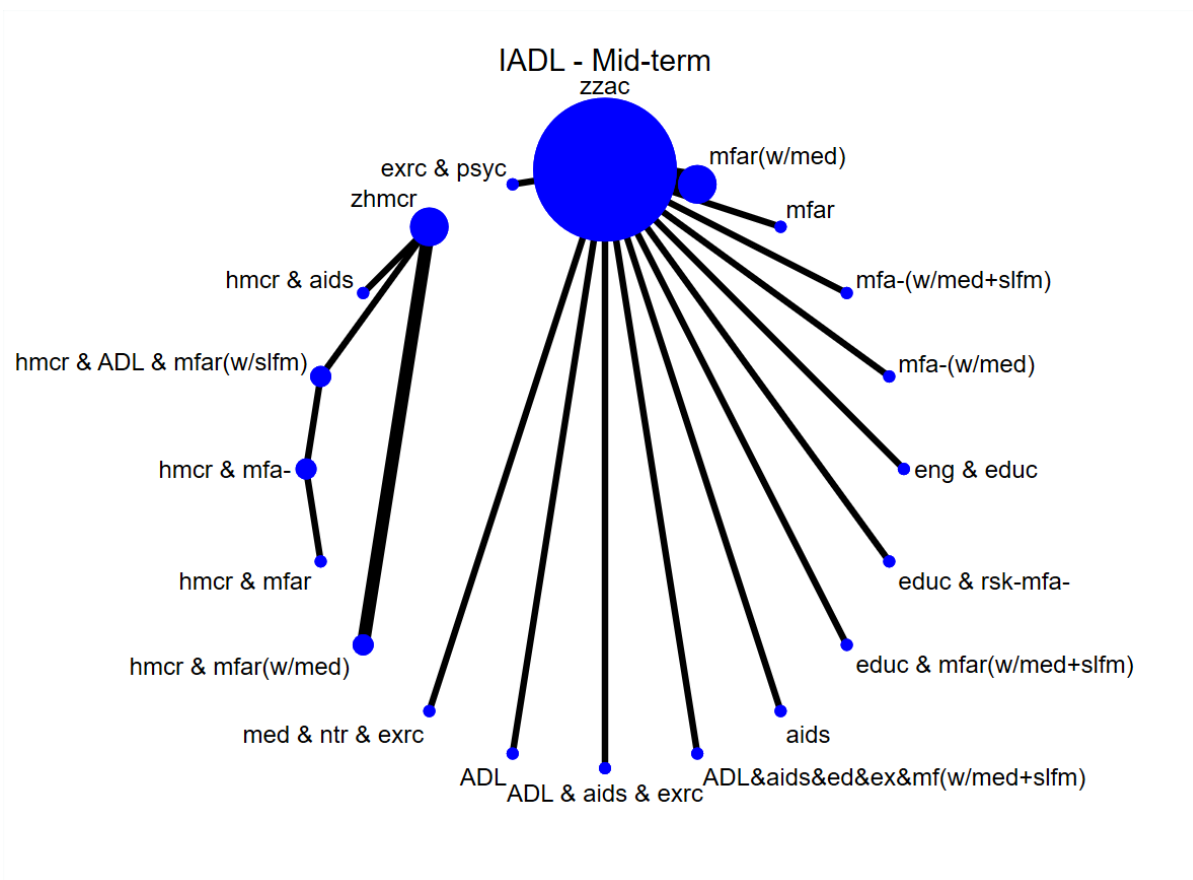


Figure 10 - Example of disconnected network for IADL medium-term timeframe, showing separation between studies with available care (ac) comparator and homecare (hmcrc) comparator

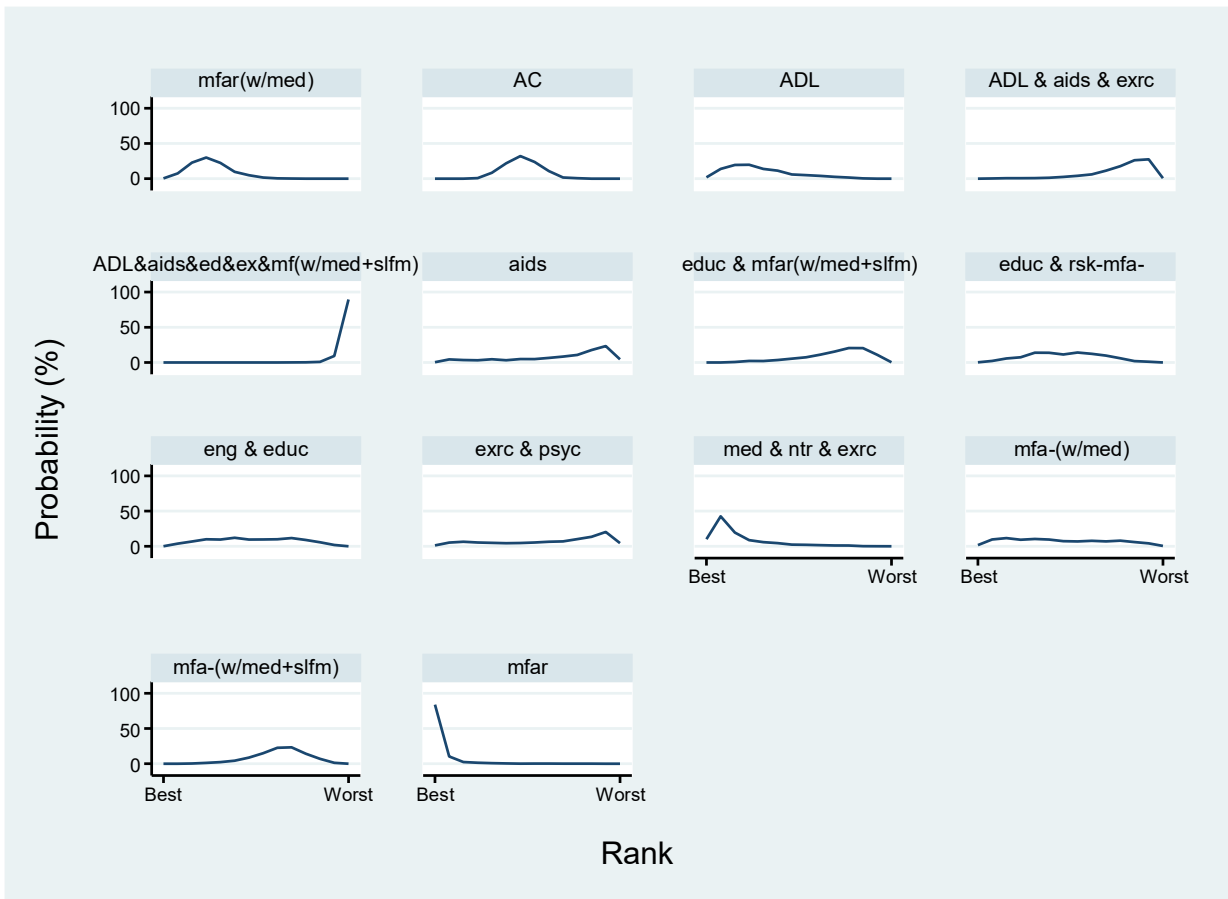


Figure 11 - Rankogram showing comparative effectiveness of interventions for IADL medium-term available care network. Results based on a simulation of 1000 replications.

Risk of Bias

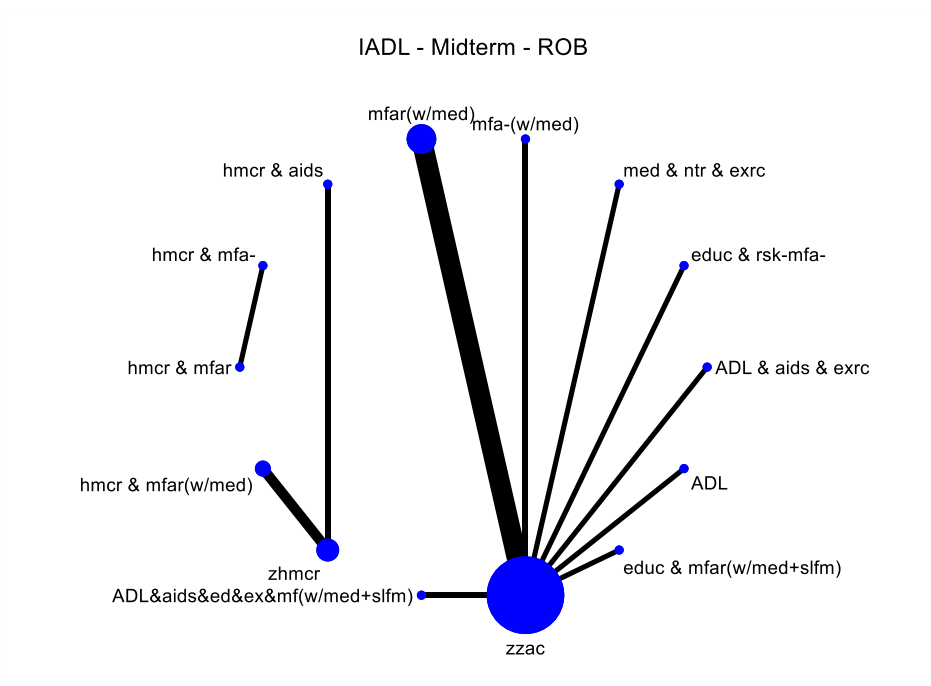


Figure 12 - Example of disconnected network for risk of bias sensitivity analysis for IADL medium-term timeframe, showing separation between studies with available care (ac) comparator and homecare (hmcr) comparator

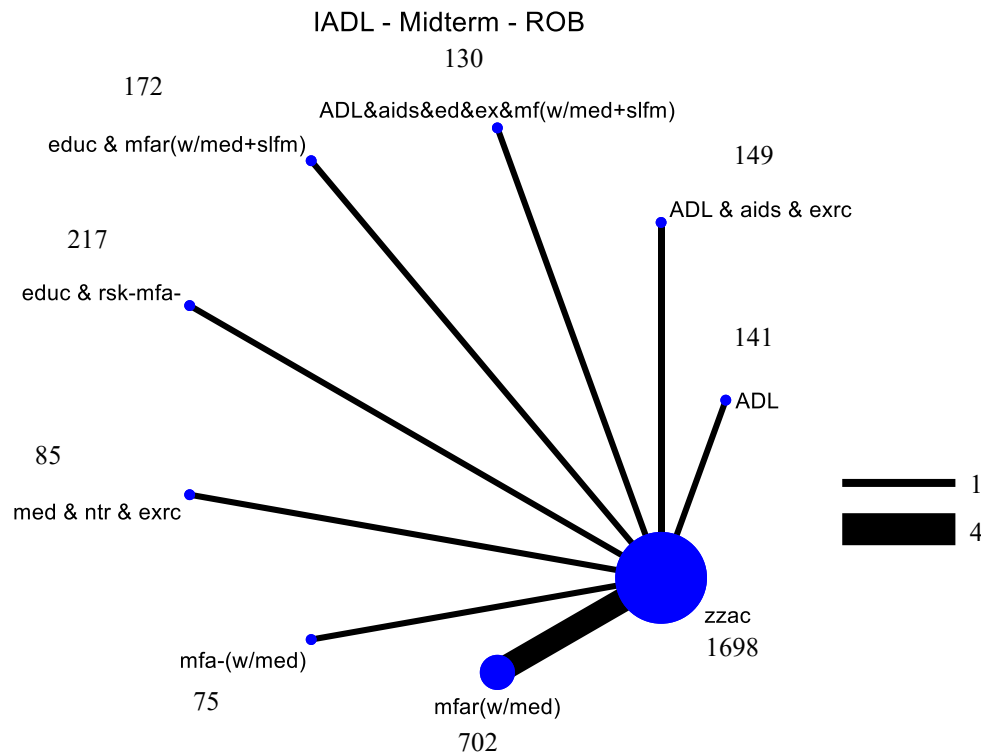


Figure 13 - Network diagram for risk of bias analysis for IADL medium-term timeframe with available care (ac) comparator

11.3.3 IADL available care network, long-term timeframe

Table 32 - Long-term IADL available-care network

Study	Frailty	n	Experimental group	Control group	ROB					
					D1	D2	D3	D4	D5	Overall
Bouman 2008 ⁵¹³	pre-frail and frail	293	mfar(w/med)	ac	+	-	x	-	-	x
Jitapunkul 1998 ⁵⁵⁵	unclassifiable	116	rsk-mfa-	ac	-	-	-	-	-	-
Metzelthin 2013 ⁵⁷⁶	frail	316	educ & mfar(w/med+slfm)	ac	-/-	-	x	-	-	x
Rubenstein 2007 ⁵⁹⁵	frail	607	mfar(w/med)	ac	-	-	-	-	-	-
Stuck 1995 ⁶⁰²	all	317	educ & mfar(w/med)	ac	+	-	-	-	-	-
Tomita 2007 ⁶¹²	frail	78	aids	ac	x	-	x	-	-	xx

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 33 - IADL in the long term: comparisons with available care summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: instrumental activities of daily living (higher is better)

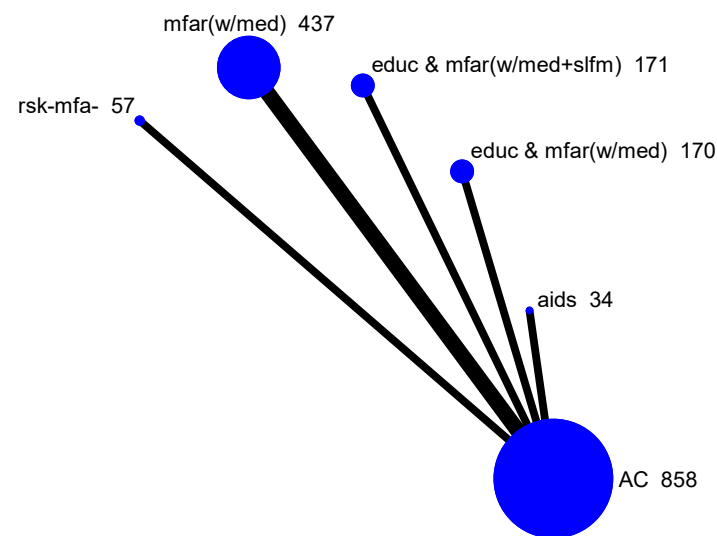
Timeframe: long term; range of follow up 24 to 36 months

Setting: Community

Total studies: 6

Total participants: 1727

Comparator rank: Mean 3.4, 95% CI 2 to 5



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Lawton IADL 0 to 8) ^a			
Multifactorial-action and review with medication-review (mfar(w/med))	SMD 0.08 lower (0.21 lower to 0.05 higher) Mixed estimate	MD 0.21 lower (0.56 lower to 0.13 higher)	⊕⊕⊕⊖ Moderate ^b	4.5 (3 to 6)	probably results in a very slight reduction in IADL
Risk-screening (rsk-mfa-)	SMD 0.23 higher (0.13 lower to 0.60 higher) Mixed estimate	MD 0.61 higher (0.35 lower to 1.57 higher)	⊕⊕⊕⊖ Low ^c	1.7 (1 to 5)	may result in a slight increase in IADL
Education, multifactorial-action and review with medication-review (educ & mfar(w/med))	SMD 0.14 higher (0.08 lower to 0.36 higher) Mixed estimate	MD 0.37 higher (0.21 lower to 0.95 higher)	⊕⊕⊕⊖ Low ^c	2.1 (1 to 5)	may result in a very slight increase in IADL
Education, multifactorial-action and review with medication-review and self-management (educ & mfar(w/med+slfm))	SMD 0.21 lower (0.44 lower to 0.01 higher) Mixed estimate	MD 0.56 lower (1.14 lower to 0.02 higher)	⊕⊕⊕⊖ Low ^{b,d}	5.5 (4 to 6)	may result in a slight reduction in IADL
Aids (aids)	SMD 0.03 lower (0.48 lower to 0.42 higher) Mixed estimate	MD 0.07 lower (1.25 lower to 1.10 higher)	⊕⊕⊕⊖ Very low ^{e,f}	3.8 (1 to 6)	the evidence is very uncertain about the effect on IADL

a: calculated from the estimated SMD using a standard deviation of 2.62, the pooled standard deviation across intervention groups reporting the Lawton IADL.

b: serious concerns about imprecision as confidence interval crosses the no effect line and includes substantial harm. Downgrade once.

c: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

d: serious concerns about risk of bias due to missing outcome data. Downgrade once.

e: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.

f: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.

Table 34 - Results of IADL: long-term available care network

rsk-mfa-					0.23 (-0.13,0.60)
0.32 (-0.07,0.70)	mfar(w/med)				-0.08 (-0.21,0.05)
0.45 (0.02,0.87)	0.13 (-0.13,0.39)	educ & mfar(w/med+slfm)			-0.21 (-0.44,0.01)
0.09 (-0.33,0.52)	-0.22 (-0.48,0.03)	-0.35 (-0.67,-0.04)	educ & mfar(w/med)		0.14 (-0.08,0.36)
0.26 (-0.32,0.84)	-0.05 (-0.52,0.41)	-0.19 (-0.69,0.31)	0.17 (-0.33,0.67)	aids	-0.03 (-0.48,0.42)
0.23 (-0.13,0.60)	-0.08 (-0.21,0.05)	-0.21 (-0.44,0.01)	0.14 (-0.08,0.36)	-0.03 (-0.48,0.42)	ac

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 35 - Intervention rankings for IADL: long-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
rsk-mfa-	86.5	61.9	1.7	1	5
educ & mfar(w/med)	77.3	25.5	2.1	1	5
ac	52.5	0.4	3.4	2	5
aids	44.3	11.9	3.8	1	6
mfar(w/med)	29.7	0.1	4.5	3	6
educ & mfar(w/med+slfm)	9.7	0.2	5.5	4	6

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

mfar(w/med) vs. AC

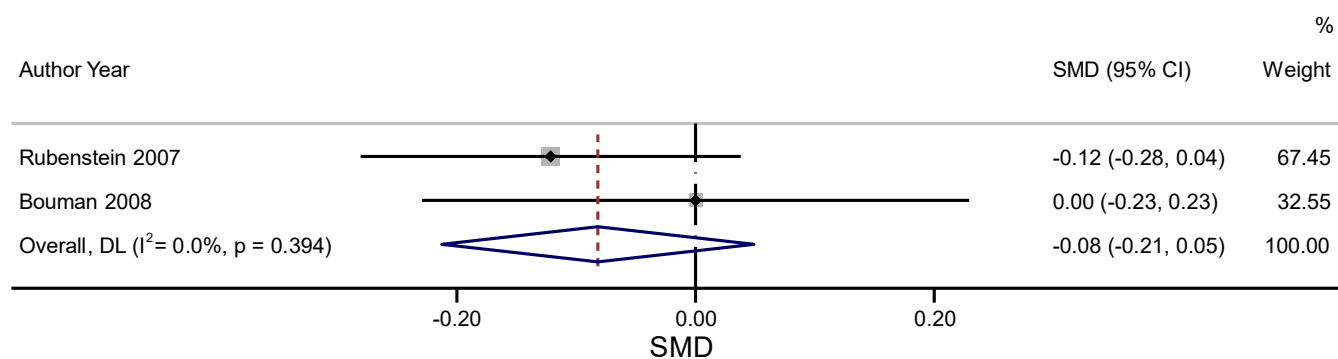


Figure 14 - Pairwise meta-analysis for IADL: long-term available care network (pooling comparisons with greater than one study reporting results)

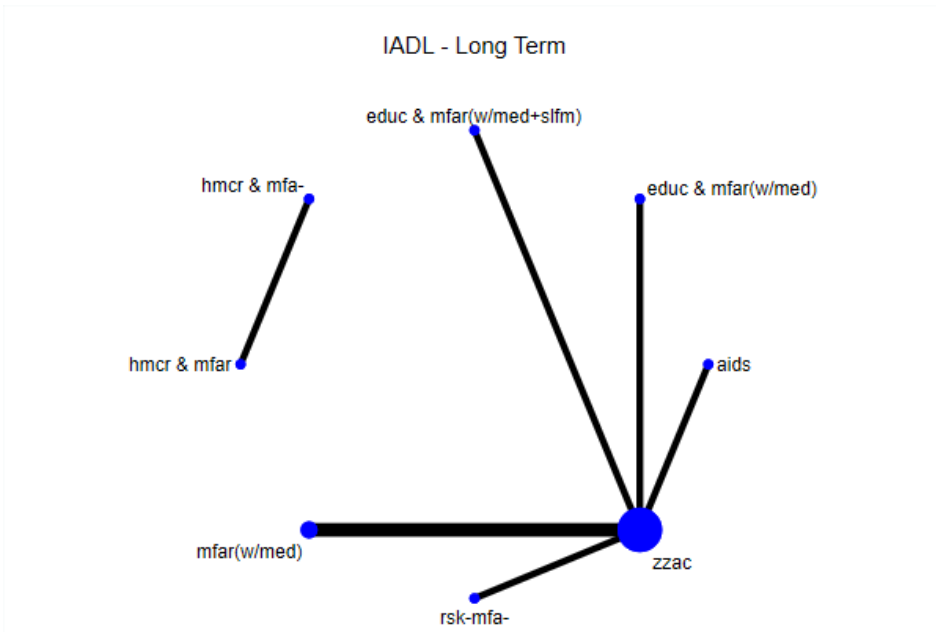


Figure 15 - Example of disconnected network for IADL long-term timeframe, showing separation between studies with available care (ac) comparator and homecare (hmcrc) comparator

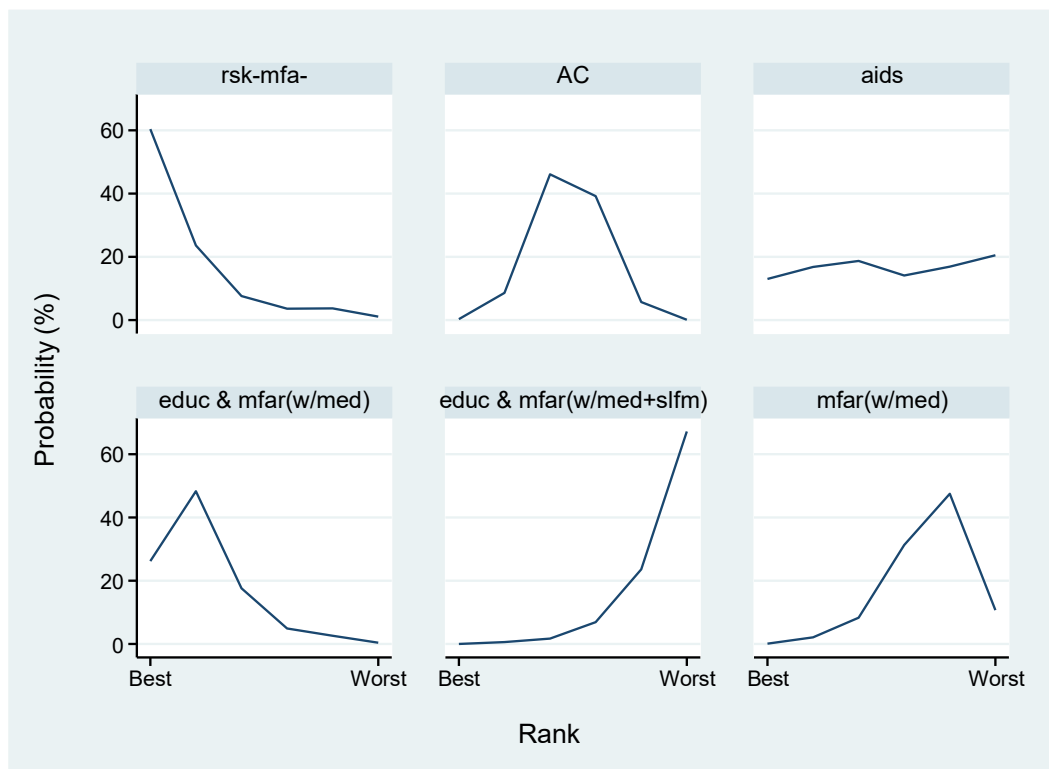


Figure 16 - Rankogram showing comparative effectiveness of interventions for IADL long-term available care network. Results based on a simulation of 1000 replications.

11.3.4 IADL homecare network, short-term timeframe

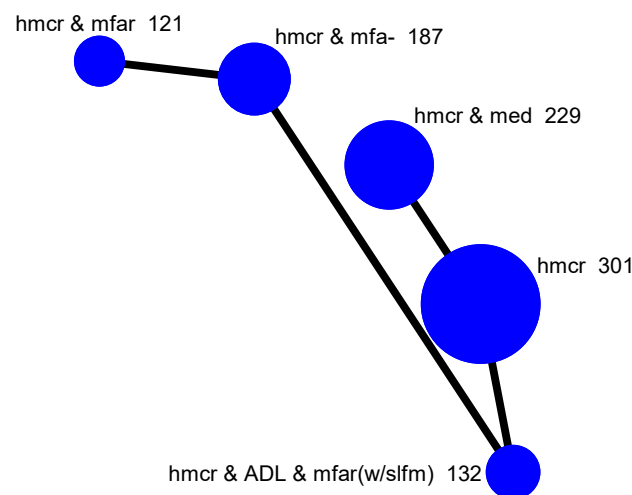
Table 36 - Short-term IADL homecare network

Study	Frailty	n	Experimental group	Control group	ROB					
					D1	D2	D3	D4	D5	Overall
Auvinen 2020 ⁵⁰⁵	frail	449	hmcr & med	hmcr	+	-	-	-	x	x
King 2012 ⁵⁵⁷	pre-frail and frail	157	hmcr & ADL & mfar(w/slfm)	hmcr	+/+	-	-	-	-	-
Parsons M 2012 ⁵⁸⁷	frail	251	hmcr & mfar	hmcr & mfa-	+/-	-	-	-	-	-
Parsons M 2017 ⁵⁸⁶	frail	113	hmcr & ADL & mfar(w/slfm)	hmcr & mfa-	-	-	x	-	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 37 - IADL in the short term: comparisons with homecare summary of findings table

Population: Older people
 Interventions: Community-based complex interventions
 Comparator: Formal homecare (hmcr)
 Outcome: independence in instrumental activities of daily living (higher is better)
 Timeframe: short term; range of follow up 6 to 7 months
 Setting: Community
 Total studies: 4
 Total participants: 970
 Comparator rank: Mean 2.5, 95% CI 1 to 4



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Lawton IADL 0 to 8) ^a			
Homecare, ADL, multifactorial-action and review with self-management (hmcr & ADL & mfar(w/slfm))	SMD 0.02 lower (0.33 lower to 0.29 higher) Mixed estimate	MD 0.06 lower (0.88 lower to 0.76 higher)	⊕⊕⊕⊕ Low ^b	2.8 (1 to 5)	may result in little to no difference in IADL independence
Homecare, multifactorial-action and review (hmcr & mfar)	SMD 0.04 higher (0.51 lower to 0.58 higher) Indirect estimate	MD 0.09 higher (1.33 lower to 1.52 higher)	⊕⊕⊕⊕ Very low ^{b,c}	2.4 (1 to 5)	the evidence is very uncertain about the effect on IADL independence
Homecare and multifactorial-action (hmcr & mfa-)	SMD 0.07 lower (0.55 lower to 0.42 higher) Indirect estimate	MD 0.18 lower (1.44 lower to 1.09 higher)	⊕⊕⊕⊕ Very low ^{b,d}	3.4 (1 to 5)	the evidence is very uncertain about the effect on IADL independence
Homecare and medication-review (hmcr & med)	SMD 0.13 lower (0.31 lower to 0.06 higher) Mixed estimate	MD 0.33 lower (0.82 lower to 0.15 higher)	⊕⊕⊕⊕ Very low ^{b,c}	3.9 (1 to 5)	the evidence is very uncertain about the effect on IADL independence

a: calculated from the estimated SMD using a standard deviation of 2.62, the pooled standard deviation across intervention groups reporting the Lawton IADL.

b: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

c: serious concerns about risk of bias due to missing outcome data in indirect evidence via the homecare, ADL, multifactorial-action and review with self-management vs homecare and multifactorial-action comparison. Downgrade once.

d: serious concerns about risk of bias due to missing outcome data. Downgrade once.

e: serious concerns about risk of bias because multiple analyses were conducted but the results from only one analysis were reported. Downgrade once.

Table 38 - Results of IADL: short-term homecare network

hmcr & mfar	0.10 (-0.14,0.35)			
0.10 (-0.14,0.35)	hmcr & mfa-		-0.05 (-0.41,0.32)	
0.16 (-0.41,0.74)	0.06 (-0.46,0.58)	hmcr & med		-0.13 (-0.31,0.06)
0.06 (-0.39,0.50)	-0.05 (-0.41,0.32)	-0.11 (-0.47,0.26)	hmcr & ADL & mfar(w/slfm)	-0.02 (-0.33,0.29)
0.04 (-0.51,0.58)	-0.07 (-0.55,0.42)	-0.13 (-0.31,0.06)	-0.02 (-0.33,0.29)	hmcr

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 39 - Intervention rankings for IADL: short-term homecare network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & mfar	64.7	41.5	2.4	1	5
hmcr	62.8	30.4	2.5	1	5
hmcr & ADL & mfar(w/s)	54.5	17.1	2.8	1	5
hmcr & mfa-	39.2	6.4	3.4	1	5
hmcr & med	28.7	4.6	3.9	1	5

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

11.3.5 IADL homecare network, medium-term timeframe

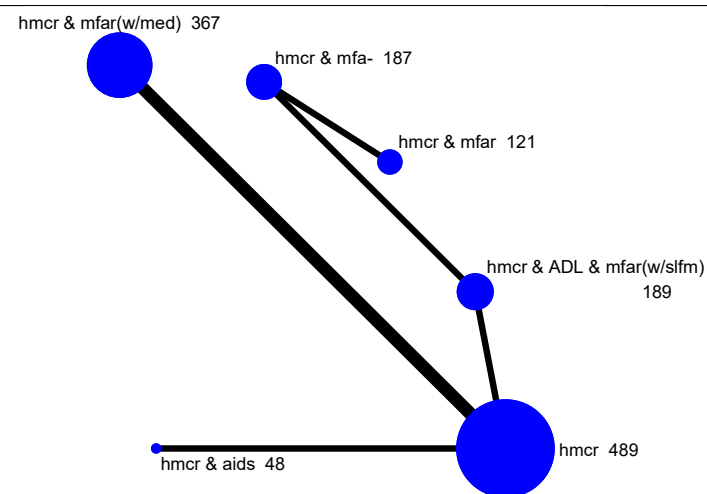
Table 40 - Medium-term IADL homecare network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Bernabei 1998 ⁵⁰⁸	frail	199	hmcr & mfar(w/med)	hmcr	-	-	x	-	-	x
Mann WC 1999 ⁵⁷¹	frail	90	hmcr & aids	hmcr	-	-	x	+	-	x
Parsons M 2012 ⁵⁸⁷	frail	251	hmcr & mfar	hmcr & mfa-	+/-	-	x	-	-	x
Parsons M 2017 ⁵⁸⁶	frail	113	hmcr & ADL & mfar(w/slfm)	hmcr & mfa-	-	-	x	-	-	xx
Rooijackers 2021 ⁵⁹⁴	frail	264	hmcr & ADL & mfar(w/slfm)	hmcr	+/-	-	x	+	x	xx
Wolter 2013 ⁶²⁹	frail	484	hmcr & mfar(w/med)	hmcr	+/-	-	x	+	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 41 - IADL in the medium term: comparisons with homecare summary of findings table

Population: Older people
 Interventions: Community-based complex interventions
 Comparator: homecare (hmcr)
 Outcome: independence in instrumental activities of daily living
 Timeframe: medium term; range of follow up 12 to 18 months
 Setting: Community
 Total studies: 6
 Total participants: 1401
 Comparator rank: Mean 4.7, 95% CI 2 to 6



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Lawton IADL 0 to 8) ^a			
Homecare and aids(hmcr & aids)	SMD 0.27 higher (0.23 lower to 0.77 higher) Mixed estimate	MD 0.71 higher (0.60 lower to 2.02 higher)	⊕⊕⊕⊕ Very low ^{b,c}	2.5 (1 to 6)	the evidence is very uncertain about the effect on IADL independence
Homecare, multifactorial-action and review (hmcr & mfar)	SMD 0.18 higher (0.52 lower to 0.88 higher) Indirect estimate	MD 0.47 higher (1.35 lower to 2.30 higher)	⊕⊕⊕⊕ Very low ^{d,c}	3.0 (1 to 6)	the evidence is very uncertain about the effect on IADL independence
Homecare, ADL training, multifactorial-action and review with self-management (hmcr & ADL & mfar(w/slfm))	SMD 0.16 higher (0.21 lower to 0.53 higher) Mixed estimate	MD 0.41 higher (0.55 lower to 1.38 higher)	⊕⊕⊕⊕ Very low ^{e,f}	3.1 (1 to 6)	the evidence is very uncertain about the effect on IADL independence
Homecare, multifactorial-action and review with medication-review (hmcr & mfar(w/med))	SMD 0.15 higher (0.11 lower to 0.41 higher) Mixed estimate	MD 0.38 higher (0.30 lower to 1.06 higher)	⊕⊕⊕⊕ Very low ^{b,c}	3.2 (1 to 6)	the evidence is very uncertain about the effect on IADL independence
Homecare and multifactorial-action (hmcr & mfa-)	SMD 0.01 lower (0.60 lower to 0.58 higher) Indirect estimate	MD 0.02 lower (1.57 lower to 1.52 higher)	⊕⊕⊕⊕ Very low ^{e,g}	4.5 (2 to 6)	the evidence is very uncertain about the effect on IADL independence

a: calculated from the estimated SMD using a standard deviation of 2.62, the pooled standard deviation across intervention groups reporting the Lawton IADL.

b: serious concerns about risk of bias due to missing outcome data. Downgrade once.

c: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

d: very serious concerns about risk of bias because of missing data and multiple analyses being conducted but the results from only one analysis reported in the indirect evidence via the comparisons of homecare and multifactorial-action (hmcr & mfa-) vs homecare, ADL, multifactorial-action and review with self-management (hmcr & ADL & mfar(w/slfm)); and, homecare, ADL, multifactorial-action and review with self-management (hmcr & ADL & mfar(w/slfm)) vs homecare (hmcr). Downgrade twice.

e: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.

f: very serious concerns about risk of bias because of missing data and multiple analyses being conducted but the results from only one analysis reported. Downgrade twice.

g: very serious concerns about risk of bias because of missing data and multiple analyses being conducted but the results from only one analysis reported in the in indirect evidence via homecare, ADL, multifactorial-action and review with self-management (hmcr & ADL & mfar(w/slfm)) vs homecare (hmcr). Downgrade twice.

Table 42 - Results of IADL: medium-term homecare network

hmc & mfar(w/med)					0.15 (-0.11,0.40)
-0.03 (-0.78,0.71)	hmc & mfar	0.19 (-0.06,0.44)			
0.16 (-0.49,0.80)	0.19 (-0.18,0.56)	hmc & mfa-		-0.17 (-0.54,0.20)	
-0.13 (-0.69,0.44)	-0.09 (-0.95,0.76)	-0.28 (-1.05,0.49)	hmc & aids		0.27 (-0.14,0.69)
-0.01 (-0.46,0.44)	0.02 (-0.57,0.61)	-0.17 (-0.63,0.29)	0.11 (-0.51,0.73)	hmc & ADL & mfar(w/slfm)	0.16 (-0.08,0.40)
0.15 (-0.11,0.41)	0.18 (-0.52,0.88)	-0.01 (-0.60,0.58)	0.27 (-0.23,0.77)	0.16 (-0.21,0.53)	hmc

Table 43 - Intervention rankings for IADL: medium-term homecare network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmc & aids	69	41.2	2.6	1	6
hmc & mfar	61.1	31.5	2.9	1	6
hmc & ADL & mfar(w/slfm)	58.5	11.7	3.1	1	6
hmc & mfar(w/med)	55.5	13.1	3.2	1	6
hmc & mfa-	30.2	2.2	4.5	2	6
hmc	25.7	0.3	4.7	2	6

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

hmc & mfar(w/med) vs. hmc

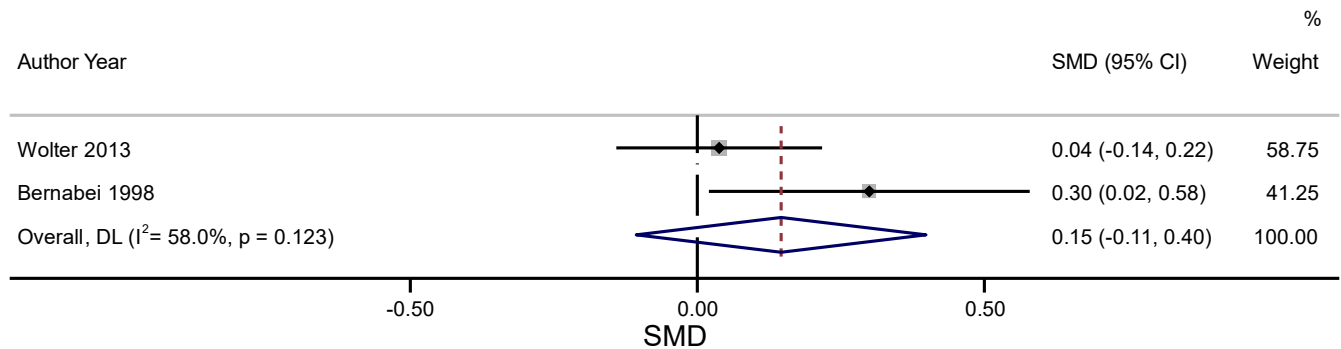


Figure 17 - Pairwise meta-analysis for IADL: medium-term homecare network (pooling comparisons with greater than one study reporting results)

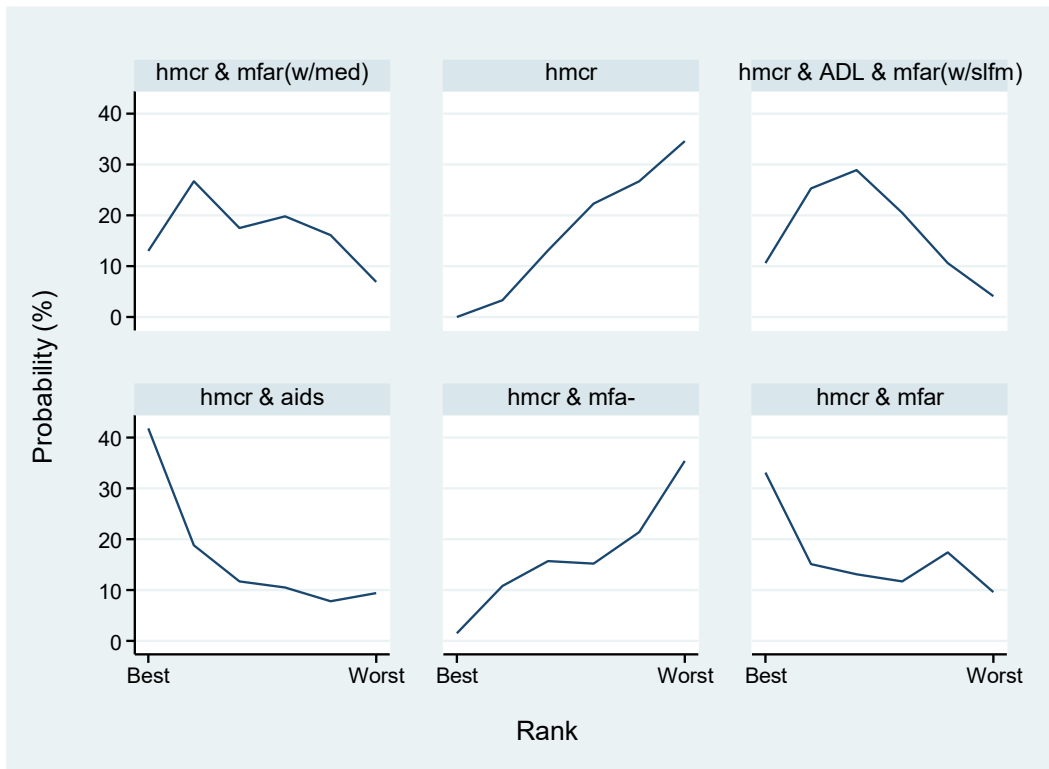


Figure 18 - Rankogram showing comparative effectiveness of interventions for IADL medium-term homecare network. Results based on a simulation of 1000 replications.

11.3.6 IADL homecare network, long-term timeframe

No results as there were too few comparisons to conduct network meta-analysis.

11.4 Personal ADL

11.4.1 PADL available care network, short-term timeframe

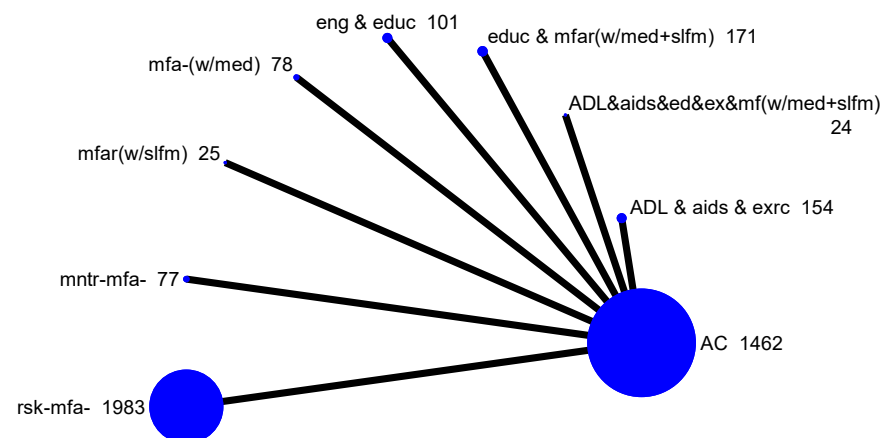
Table 44 - Short-term PADL available-care network

Study	Frailty	n	Experimental group	Control group	ROB					
					D1	D2	D3	D4	D5	Overall
Bleijenberg 2016 ⁵⁰⁹	pre-frail and frail	2754	rsk-mfa-	ac	x/+	-	x	+	-	xx
Clark 1997 ⁵¹⁹	robust and pre-frail	303	eng & educ	ac	x	-	x	-	x	xx
Gitlin 2006 ⁵³⁹	pre-frail and frail	300	ADL & aids & exrc	ac	+	-	x	-	-	x
Metzelthin 2013 ⁵⁷⁶	frail	316	educ & mfar(w/med+slfm)	ac	-/-	-	x	-	-	x
Rockwood 2000 ⁵⁹²	frail	148	mfa-(w/med)	ac	-	-	x	-	-	x
Szanton 2011 ⁶⁰⁶	pre-frail and frail	40	ADL&aids&educ&exrc& mfar(w/med+slfm)	ac	-	-	x	-	-	x
Takahashi 2012 ⁶⁰⁸	frail	166	mnr-mfa-	ac	-	-	x	-	-	x
Walters 2017 ⁶²⁶	pre-frail	48	mfar(w/slfm)	ac	+	-	x	-	x	xx

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 45 - PADL in the short term: comparisons with available care summary of findings table

Population: Older people
 Interventions: Community-based complex interventions
 Comparator: Available care (ac)
 Outcome: independence in personal activities of daily living
 Timeframe: short term; range of follow up 24 weeks to 9 months
 Setting: Community
 Total studies: 8
 Comparator rank: Mean 5.6, 95% CI 4 to 8



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Barthel Index 0 to 100) ^a			
Education, multifactorial-action and review with medication-review and self-management (educ & mfar(w/med+slfm))	SMD 0.25 lower (0.47 lower to 0.03 lower) Mixed estimate	MD 7.34 lower (13.91 lower to 0.76 lower)	⊕⊕⊕⊖ Low ^{b,c}	8.4 (6 to 9)	may result in a slight reduction in PADL independence
ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management (ADL&aids&ed&ex&mf(w/med+slfm))	SMD 0.87 higher (0.21 higher to 1.54 higher) Mixed estimate	MD 25.81 higher (6.17 higher to 45.46 higher)	⊕⊖⊖⊖ Very low ^{b,d}	1.4 (1 to 2)	the evidence is very uncertain about the effect on PADL independence
Multifactorial-action and review with self-management (mfar(w/slfm))	SMD 0.67 higher (0.09 higher to 1.26 higher) Mixed estimate	MD 19.94 higher (2.67 higher to 37.21 higher)	⊕⊖⊖⊖ Very low ^{c,f}	1.8 (1 to 4)	the evidence is very uncertain about the effect on PADL independence
ADL, aids and exercise (ADL & aids & excr)	SMD 0.14 higher (0.09 lower to 0.36 higher) Mixed estimate	MD 4.03 higher (2.68 lower to 10.74 higher)	⊕⊖⊖⊖ Very low ^{b,g}	3.7 (2 to 7)	the evidence is very uncertain about the effect on PADL independence
Risk-screening (rsk-mfa-)	SMD 0.03 higher (0.06 lower to 0.11 higher) Mixed estimate	MD 0.75 higher (1.71 lower to 3.21 higher)	⊕⊖⊖⊖ Very low ^{h,i}	4.9 (3 to 7)	the evidence is very uncertain about the effect on PADL independence
Meaningful-activities and education (eng & educ)	SMD 0.00 (0.24 lower to 0.24 higher) Mixed estimate	MD 0.00 (7.07 lower to 7.07 higher)	⊕⊖⊖⊖ Very low ^{i,j}	5.5 (3 to 9)	the evidence is very uncertain about the effect on PADL independence
Monitoring (mntr-mfa-)	SMD 0.09 lower (0.40 lower to 0.21 higher) Mixed estimate	MD 2.76 lower (11.79 lower to 6.28 higher)	⊕⊖⊖⊖ Very low ^{b,d}	6.7 (3 to 9)	the evidence is very uncertain about the effect on PADL independence
Multifactorial-action with medication-review (mfa-(w/med))	SMD 0.11 lower (0.44 lower to 0.21 higher) Mixed estimate	MD 3.38 lower (12.94 lower to 6.18 higher)	⊕⊖⊖⊖ Very low ^{b,d}	7.0 (3 to 9)	the evidence is very uncertain about the effect on PADL independence

a: calculated from the estimated SMD using a standard deviation of 29.6, the pooled standard deviation across intervention groups reporting the Barthel Index.

b: serious concerns about risk of bias due to missing outcome data. Downgrade once.

- c: serious concerns about imprecision as there is no closed loop and direct evidence is based on 316 persons which does not meet optimal information size. Downgrade once.
- d: very serious concerns about imprecision as there is no closed loop and direct evidence is based on 40 persons which does not meet optimal information size. Downgrade twice.
- e: very serious concerns about risk of bias because of missing data and multiple analyses being conducted but the results from only one analysis reported. Downgrade twice.
- f: very serious concerns about imprecision as there is no closed loop and direct evidence is based on 48 persons which does not meet optimal information size. Already downgraded twice, downgrade once.
- g: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.
- h: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.
- i: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.
- j: very serious concerns about risk of bias due to randomisation process, missing outcome data, and reported results not being analysed according to allocation. Downgrade twice.

Table 46 - Results of PADL: short-term available care network

rsk-mfa-								0.03 (-0.06,0.11)
0.12 (-0.20,0.43)	mntr-mfa-							-0.09 (-0.40,0.21)
-0.65 (-1.24,-0.06)	-0.77 (-1.42,-0.11)	mfar(w/slfm)						0.67 (0.09,1.26)
0.14 (-0.19,0.47)	0.02 (-0.42,0.47)	0.79 (0.12,1.45)	mfa-(w/med)					-0.11 (-0.44,0.21)
0.03 (-0.23,0.28)	-0.09 (-0.48,0.29)	0.67 (0.04,1.30)	-0.11 (-0.52,0.29)	eng & educ				0.00 (-0.24,0.24)
0.27 (0.04,0.51)	0.15 (-0.22,0.53)	0.92 (0.30,1.55)	0.13 (-0.26,0.53)	0.25 (-0.08,0.57)	educ & mfar(w/med+slfm)			-0.25 (-0.47,-0.03)
-0.84 (-1.51,-0.17)	-0.96 (-1.69,-0.23)	-0.20 (-1.08,0.69)	-0.98 (-1.72,-0.24)	-0.87 (-1.58,-0.16)	-1.12 (-1.82,-0.42)	ADL&aids&ed&ex&mf(w/med+slfm)		0.87 (0.20,1.53)
-0.11 (-0.35,0.13)	-0.23 (-0.61,0.15)	0.54 (-0.09,1.16)	-0.25 (-0.64,0.14)	-0.14 (-0.47,0.19)	-0.38 (-0.70,-0.07)	0.73 (0.03,1.43)	ADL & aids & exrc	0.14 (-0.09,0.36)
0.03 (-0.06,0.11)	-0.09 (-0.40,0.21)	0.67 (0.09,1.26)	-0.11 (-0.44,0.21)	0.00 (-0.24,0.24)	-0.25 (-0.47,-0.03)	0.87 (0.20,1.53)	0.14 (-0.09,0.36)	ac

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 47 - Intervention rankings for PADL: short-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
ADL&aids&ed&ex&mf(w/med+slfm)	95.1	67.2	1.4	1	2
mfar(w/slfm)	89.8	32.3	1.8	1	4
ADL & aids & exrc	66.3	0.3	3.7	2	7
rsk-mfa- eng & educ	50.8	0.0	4.9	3	7
ac	44.0	0.1	5.5	3	9
ac	42.5	0.0	5.6	4	8
mntr-mfa- mfa-(w/med)	28.3	0.0	6.7	3	9
mfa-(w/med)	25.6	0.1	7.0	3	9
educ & mfar(w/med+slfm)	7.5	0.0	8.4	6	9

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

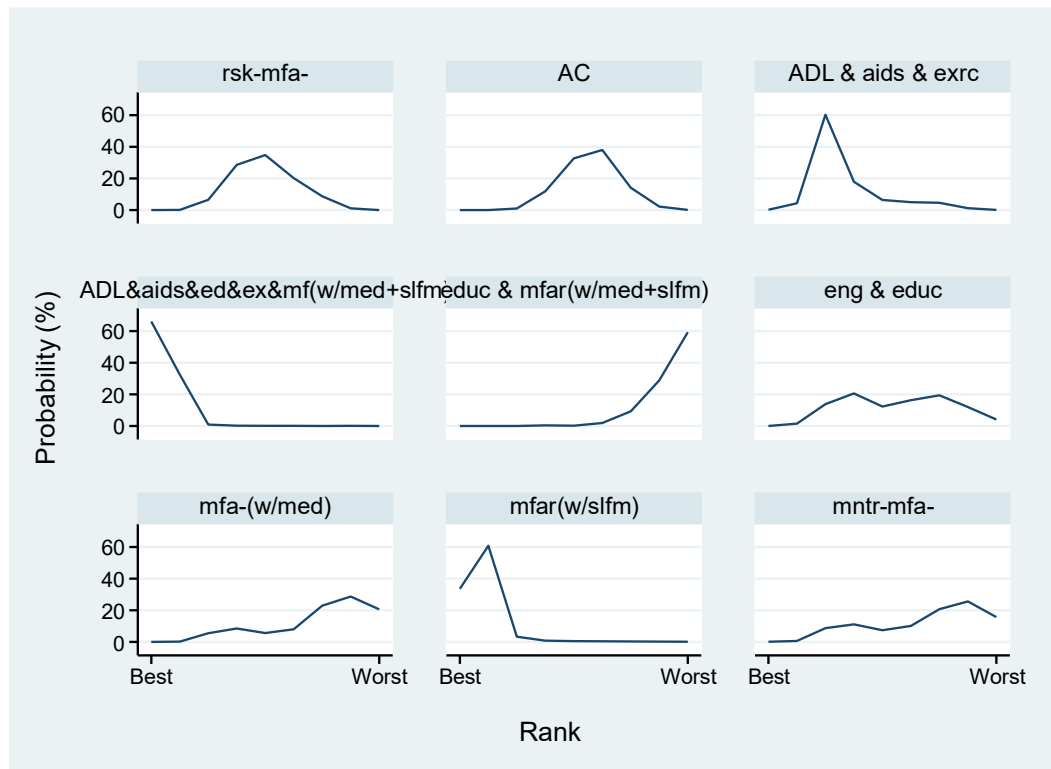


Figure 19 - Rankogram showing comparative effectiveness of interventions for PADL short-term available care network. Results based on a simulation of 1000 replications.

11.4.2 PADL available care network, medium-term timeframe

Table 48 - Medium-term PADL available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Bleijenberg 2016 ⁵⁰⁹	pre-frail and frail	2489	rsk-mfa-	ac	x/+	-	x	+	-	xx
Blom 2016 ⁵¹⁰	all	1379	mfa-(w/med+slfm)	ac	x/+	-	x	-	-	xx
Bouman 2008 ⁵¹³	pre-frail and frail	293	mfar(w/med)	ac	+	-	x	-	-	x
Brettschneider 2015 ⁵¹⁴	frail	262	mfar(w/med)	ac	-	-	x	-	+	x
Cameron 2013 ⁵¹⁵	frail	214	exrc & mfar(w/med+slfm)	ac	+	-	-	-	+	-
Clark 1997 ⁵¹⁹	robust and pre-frail	281	eng & educ	ac	x	-	x	-	x	xx
Dorresteijn 2016 ⁵²⁶	unclassifiable	312	ADL	ac	+	-	x	-	-	x
Fabacher 1994 ⁵²⁸	all	195	mfar(w/med)	ac	-	-	x	-	-	x
Gene Huguet 2018 ⁵³⁶	pre-frail	173	med & ntr & exrc	ac	-	-	x	-	-	x
Henderson 2005 ⁵⁴⁸	robust	124	mfar	ac	+/x	+	x	+	-	xx
Kono 2016 ⁵⁵⁸	pre-frail	360	mfar(w/med)	mfar	+	-	x	-	-	x
Metzelthin 2013 ⁵⁷⁶	frail	317	educ & mfar(w/med+slfm)	ac	-/-	-	x	-	-	x
Monteserin Nadal 2008 ⁵⁷⁸	all	620	educ & rsk-mfa-	ac	-	-	x	x	-	xx
Newbury 2001 ⁵⁸²	unclassifiable	89	mfa-(w/med)	ac	-	-	x	-	-	x
Rockwood 2000 ⁵⁹²	frail	145	mfa-(w/med)	ac	-	-	x	-	-	x
Rubenstein 2007 ⁵⁹⁵	frail	694	mfar(w/med)	ac	-	-	-	-	-	-
Serra-Prat 2017 ⁵⁹⁷	pre-frail	133	ntr & exrc	ac	-	-	x	-	-	x
Szanton 2019 ⁶⁰⁷	pre-frail and frail	260	ADL&aids&educ&exrc& mfar(w/med+slfm)	ac	+	-	x	-	-	x
Takahashi 2012 ⁶⁰⁸	frail	166	mnr-mfa-	ac	-	-	x	-	-	x
van Heuvelen 2005 ⁶¹⁷	pre-frail and frail	77	exrc & psyc	ac	-	x	x	-	-	xx

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 49 - PADL in the medium term: comparisons with available care summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: personal activities of daily living (higher is better)

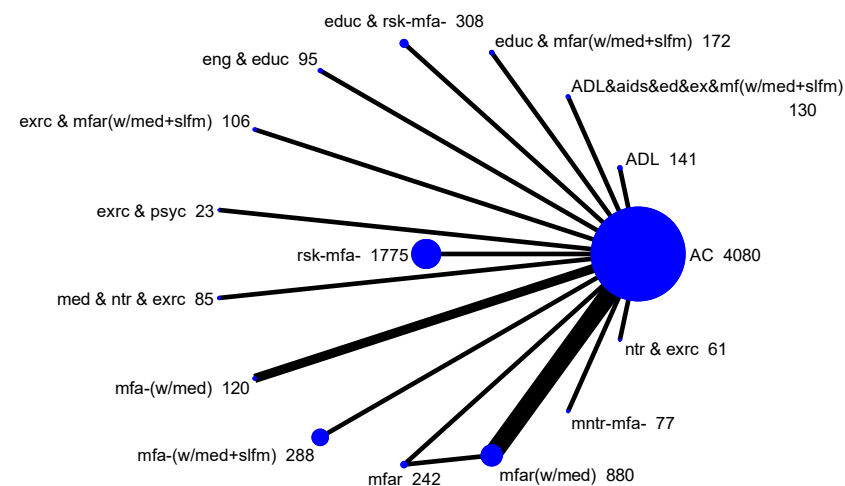
Timeframe: medium term; range of follow up 10 to 18 months

Setting: Community

Total studies: 20

Total participants: 8583

Comparator rank: Mean 9.2, 95% CI 6 to 12



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Barthel Index 0 to 100) ^a			
Exercise, multifactorial-action and review with medication-review and self-management (exrc & mfar(w/med+slfm))	SMD 0.16 higher (0.51 lower to 0.82 higher) Mixed estimate	MD 4.68 higher (15.01 lower to 24.37 higher)	⊕⊕⊕⊕ Low ^b	6.6 (1 to 16)	may result in a very slight increase in PADL independence
Multifactorial-action with medication-review (mfa-(w/med))	SMD 0.51 higher (0.00 to 1.02 higher) Mixed estimate	MD 15.08 higher (0.14 lower to 30.30 higher)	⊕⊕⊕⊕ Very low ^{c,d,e}	2.9 (1 to 10)	the evidence is very uncertain about the effect on PADL independence
Medication-review, nutrition and exercise (med & ntr & exrc)	SMD 0.31 higher (0.37 lower to 0.99 higher) Mixed estimate	MD 9.27 higher (10.81 lower to 29.36 higher)	⊕⊕⊕⊕ Very low ^{b,c}	5.3 (1 to 15)	the evidence is very uncertain about the effect on PADL independence
ADL (ADL)	SMD 0.22 higher (0.42 lower to 0.87 higher) Mixed estimate	MD 6.64 higher (12.55 lower to 25.84 higher)	⊕⊕⊕⊕ Very low ^{b,c}	6.3 (1 to 15)	the evidence is very uncertain about the effect on PADL independence
Risk-screening (rsk-mfa-)	SMD 0.13 higher (0.48 lower to 0.75 higher) Mixed estimate	MD 3.86 higher (14.34 lower to 22.06 higher)	⊕⊕⊕⊕ Very low ^{f,g}	7.4 (1 to 16)	the evidence is very uncertain about the effect on PADL independence
ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management (ADL&aids&ed&ex&mf(w/med+slfm))	SMD 0.07 higher (0.59 lower to 0.73 higher) Mixed estimate	MD 2.07 higher (17.33 lower to 21.47 higher)	⊕⊕⊕⊕ Very low ^{b,c}	8.1 (1 to 16)	the evidence is very uncertain about the effect on PADL independence
Multifactorial-action and review with medication-review (mfar(w/med))	SMD 0.05 higher (0.26 lower to 0.36 higher) Mixed estimate	MD 1.40 higher (7.71 lower to 10.51 higher)	⊕⊕⊕⊕ Very low ^{b,c}	8.4 (3 to 14)	the evidence is very uncertain about the effect on PADL independence

Exercise and psychology (exrc & psyc)	SMD 0.00 (0.78 lower to 0.78 higher) Mixed estimate	MD 0.00 (23.09 lower to 23.09 higher)	⊕⊕⊕⊕ Very low ^{g,h}	9.0 (1 to 16)	the evidence is very uncertain about the effect on PADL independence
Nutrition and exercise (ntr & exrc)	SMD 0.00 (0.70 lower to 0.70 higher) Mixed estimate	MD 0.00 (20.65 lower to 20.65 higher)	⊕⊕⊕⊕ Very low ^{b,c}	9.1 (1 to 16)	the evidence is very uncertain about the effect on PADL independence
Multifactorial-action with medication-review and self-management (mfa-(w/med+slfm))	SMD 0.04 lower (0.66 lower to 0.58 higher) Mixed estimate	MD 1.18 lower (19.60 lower to 17.24 higher)	⊕⊕⊕⊕ Very low ^g	9.5 (2 to 16)	the evidence is very uncertain about the effect on PADL independence
Education and risk-screening (educ & rsk-mfa-)	SMD 0.03 lower (0.66 lower to 0.60 higher) Mixed estimate	MD 0.95 lower (19.56 lower to 17.66 higher)	⊕⊕⊕⊕ Very low ^{g,i}	9.6 (2 to 16)	the evidence is very uncertain about the effect on PADL independence
Meaningful-activities and education (eng & educ)	SMD 0.05 lower (0.71 lower to 0.61 higher) Mixed estimate	MD 1.42 lower (20.87 lower to 18.03 higher)	⊕⊕⊕⊕ Very low ^{g,j}	10.1 (2 to 16)	the evidence is very uncertain about the effect on PADL independence
Monitoring (mntr-mfa-)	SMD 0.17 lower (0.85 lower to 0.51 higher) Mixed estimate	MD 5.14 lower (25.30 lower to 15.02 higher)	⊕⊕⊕⊕ Very low ^{b,c}	10.9 (3 to 16)	the evidence is very uncertain about the effect on PADL independence
Multifactorial-action and review (mfar)	SMD 0.14 lower (0.65 lower to 0.36 higher) Mixed estimate	MD 4.21 lower (19.14 lower to 10.72 higher)	⊕⊕⊕⊕ Very low ^{b,c}	11.2 (3 to 16)	the evidence is very uncertain about the effect on PADL independence
Education, multifactorial-action and review with medication-review and self-management (educ & mfar(w/med+slfm))	SMD 0.27 lower (0.92 lower to 0.38 higher) Mixed estimate	MD 7.91 lower (27.09 lower to 11.27 higher)	⊕⊕⊕⊕ Very low ^{b,c}	12.5 (3 to 16)	the evidence is very uncertain about the effect on PADL independence

a: calculated from the estimated SMD using a standard deviation of 29.6, the pooled standard deviation across intervention groups reporting the Barthel Index.

b: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

c: serious concerns about risk of bias due to missing outcome data. Downgrade once.

d: serious concerns about imprecision as confidence interval crosses the no effect line and includes substantial benefit. Downgrade once.

e: serious concerns about inconsistency (heterogeneity) between studies as confidence intervals do not overlap. Downgrade once.

f: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.

g: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.

h: very serious concerns about risk of bias due to excluding participants in per-protocol analysis and missing outcome data. Downgrade twice.

i: very serious concerns about risk of bias due to missing data and ceiling effect in the outcome measurement for a substantial proportion of participants. Downgrade twice.

j: very serious concerns about risk of bias due to randomisation process, missing outcome data, and reported results were not analysed according to allocation. Downgrade twice.

Table 50 - Results of PADL: medium-term available care network

															0.13 (0.04, 0.22)
0.13 (-0.80,1.06)	ntr & excr														0.00 (-0.34, 0.34)
0.30 (-0.61,1.22)	0.17 (-0.80,1.15)	mntr-mfa-													-0.17 (-0.48, 0.13)
0.08 (-0.60,0.77)	-0.05 (-0.81,0.71)	-0.22 (-0.97,0.53)	mfar(w/med)	0.03 (-0.18, 0.24)											0.11 (0.00, 0.21)
0.27 (-0.52,1.07)	0.14 (-0.72,1.00)	-0.03 (-0.88,0.81)	0.19 (-0.31,0.68)	mfar											-0.33 (-0.69, 0.02)
0.17 (-0.70,1.04)	0.04 (-0.89,0.97)	-0.13 (-1.05,0.79)	0.09 (-0.61,0.78)	-0.10 (-0.90,0.70)	mfa-(w/med+slfm)										-0.04 (-0.17, 0.09)
-0.38 (-1.18,0.42)	-0.51 (-1.37,0.36)	-0.68 (-1.53,0.17)	-0.46 (-1.06,0.14)	-0.65 (-1.37,0.07)	-0.55 (-1.35,0.26)	mfa-(w/med)									0.55 (-0.59, 1.70)
-0.18 (-1.10,0.73)	-0.31 (-1.29,0.66)	-0.49 (-1.45,0.47)	-0.27 (-1.01,0.48)	-0.46 (-1.30,0.39)	-0.35 (-1.27,0.57)	0.20 (-0.65,1.05)	med & ntr & excr								0.31 (0.01, 0.61)
0.13 (-0.86,1.12)	-0.00 (-1.05,1.05)	-0.17 (-1.21,0.86)	0.05 (-0.79,0.89)	-0.14 (-1.07,0.79)	-0.04 (-1.04,0.96)	0.51 (-0.42,1.44)	0.31 (-0.72,1.35)	excr & psyc							0.00 (-0.49, 0.49)
-0.03 (-0.93,0.88)	-0.16 (-1.12,0.80)	-0.33 (-1.28,0.62)	-0.11 (-0.84,0.62)	-0.30 (-1.13,0.53)	-0.20 (-1.11,0.71)	0.35 (-0.49,1.19)	0.16 (-0.79,1.10)	-0.16 (-1.18,0.87)	excr & mfar(w/med+slfm)						0.16 (-0.11, 0.43)
0.18 (-0.72,1.08)	0.05 (-0.91,1.00)	-0.13 (-1.07,0.82)	0.10 (-0.63,0.82)	-0.09 (-0.92,0.73)	0.01 (-0.90,0.91)	0.56 (-0.28,1.39)	0.36 (-0.58,1.30)	0.05 (-0.97,1.07)	0.21 (-0.73,1.14)	eng & educ					-0.05 (-0.30, 0.20)
0.16 (-0.72,1.04)	0.03 (-0.91,0.97)	-0.14 (-1.07,0.78)	0.08 (-0.62,0.78)	-0.11 (-0.91,0.69)	-0.01 (-0.89,0.88)	0.54 (-0.27,1.35)	0.35 (-0.58,1.27)	0.03 (-0.97,1.03)	0.19 (-0.72,1.10)	-0.02 (-0.92,0.89)	educ & rsk-mfa-				-0.03 (-0.19, 0.13)
0.40 (-0.49,1.29)	0.27 (-0.68,1.22)	0.09 (-0.84,1.03)	0.31 (-0.40,1.03)	0.13 (-0.69,0.94)	0.23 (-0.67,1.12)	0.78 (-0.05,1.60)	0.58 (-0.36,1.52)	0.27 (-0.75,1.28)	0.43 (-0.50,1.35)	0.22 (-0.70,1.14)	0.24 (-0.67,1.14)	educ & mfar(w/med+slfm)			-0.27 (-0.49, -0.05)
0.06 (-0.84,0.96)	-0.07 (-1.03,0.89)	-0.24 (-1.19,0.70)	-0.02 (-0.75,0.70)	-0.21 (-1.04,0.61)	-0.11 (-1.01,0.79)	0.44 (-0.39,1.27)	0.24 (-0.70,1.19)	-0.07 (-1.09,0.95)	0.09 (-0.84,1.02)	-0.12 (-1.04,0.81)	-0.10 (-1.01,0.80)	-0.34 (-1.26,0.58)	ADL&aids&ed&ex&mf(w/med+slfm)		0.07 (-0.17, 0.31)
-0.09 (-0.99,0.80)	-0.22 (-1.18,0.73)	-0.40 (-1.34,0.54)	-0.18 (-0.89,0.54)	-0.37 (-1.19,0.45)	-0.26 (-1.16,0.63)	0.28 (-0.54,1.11)	0.09 (-0.85,1.03)	-0.22 (-1.24,0.79)	-0.07 (-0.99,0.86)	-0.27 (-1.19,0.65)	-0.26 (-1.16,0.65)	-0.49 (-1.41,0.42)	-0.15 (-1.08,0.77)	ADL	0.22 (0.00, 0.45)
0.13 (-0.48,0.74)	0.00 (-0.70,0.70)	-0.17 (-0.85,0.51)	0.05 (-0.26,0.35)	-0.14 (-0.65,0.36)	-0.04 (-0.66,0.58)	0.51 (-0.01,1.02)	0.31 (-0.36,0.99)	0.00 (-0.78,0.78)	0.16 (-0.51,0.82)	-0.05 (-0.70,0.61)	-0.03 (-0.66,0.60)	-0.27 (-0.91,0.38)	0.07 (-0.58,0.72)	0.22 (-0.42,0.87)	ac

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 51 - Intervention rankings for PADL: medium-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
mfa-(w/med)	87.6	34.3	2.9	1	10
med & ntr & exerc	71.5	18.4	5.3	1	15
ADL	64.8	11	6.3	1	15
exerc & mfar(w/med+slfm)	62.5	9.7	6.6	1	16
rsk-mfa-	57.6	6.1	7.4	1	16
ADL&aids&ed&ex&mf(w/med+slfm)	52.4	4.2	8.1	1	16
mfar(w/med)	50.8	0.1	8.4	3	14
exerc & psyc	46.4	5.3	9	1	16
ntr & exerc	45.9	3.8	9.1	1	16
ac	45.1	0	9.2	6	12
mfa-(w/med+slfm)	43	1.9	9.5	2	16
educ & rsk-mfa-	42.9	1.5	9.6	2	16
eng & educ	39.4	1.7	10.1	2	16
mntr-mfa-	34.2	1	10.9	3	16
mfar	32.2	0.2	11.2	3	16
educ & mfar(w/med+slfm)	23.6	0.8	12.5	3	16

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

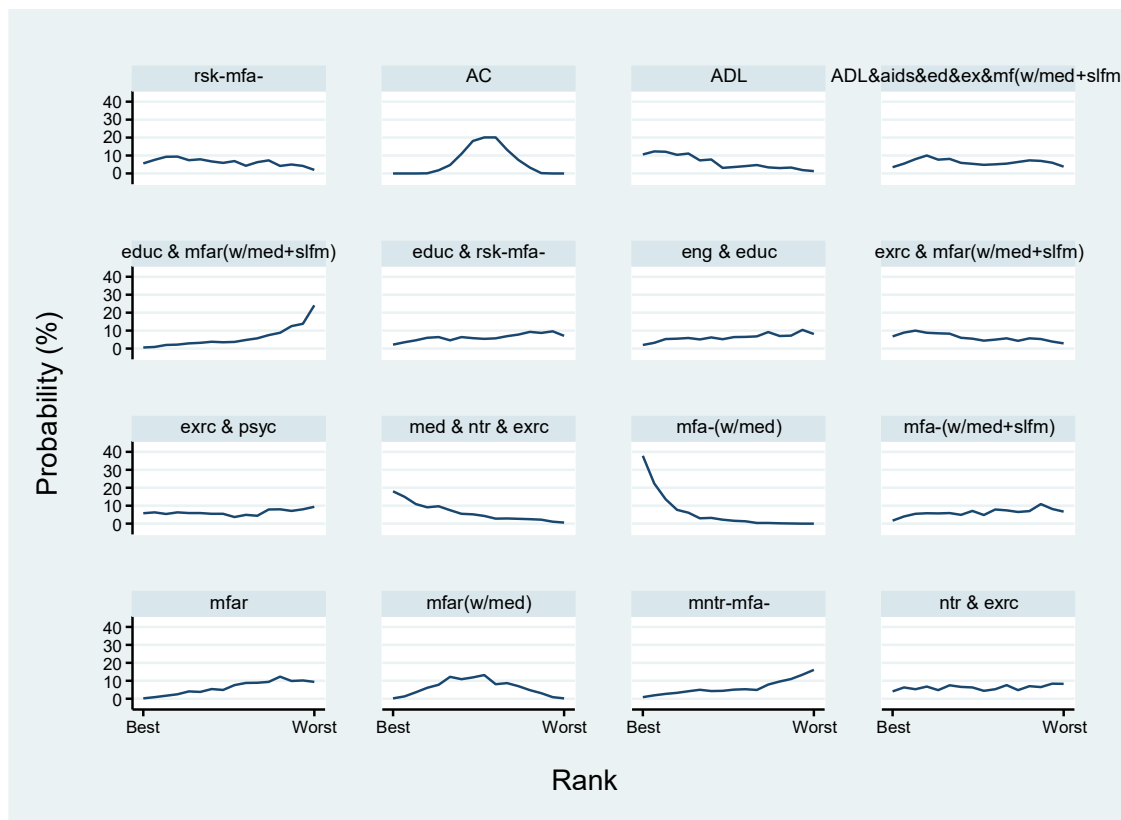


Figure 20 - Rankogram showing comparative effectiveness of interventions for PADL medium-term available care network. Results based on a simulation of 1000 replications.

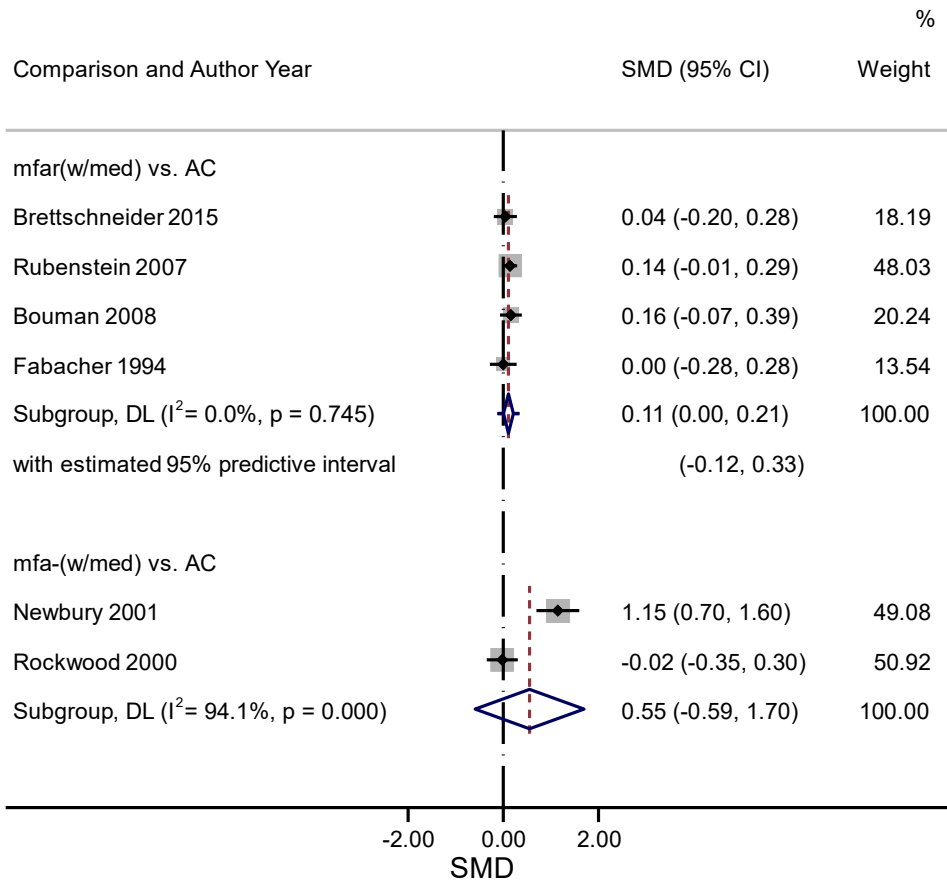


Figure 21 - Pairwise meta-analysis for PADL: medium-term available care network (pooling comparisons with greater than one study reporting results)

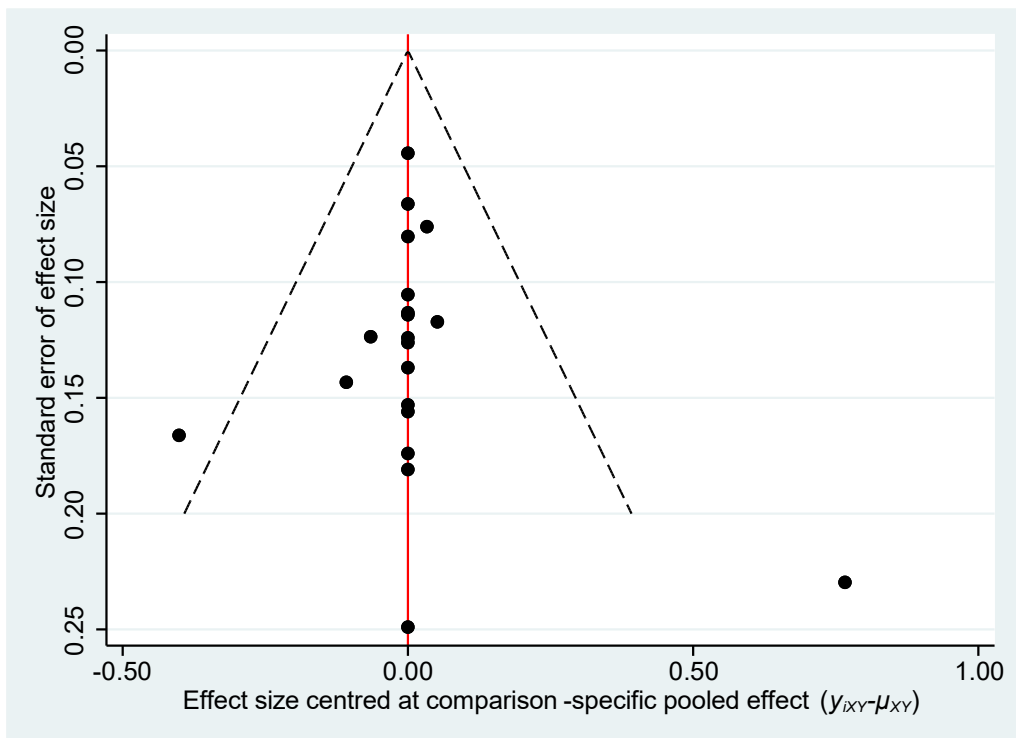


Figure 22 - Comparison-adjusted funnel plot for PADL medium-term timeframe

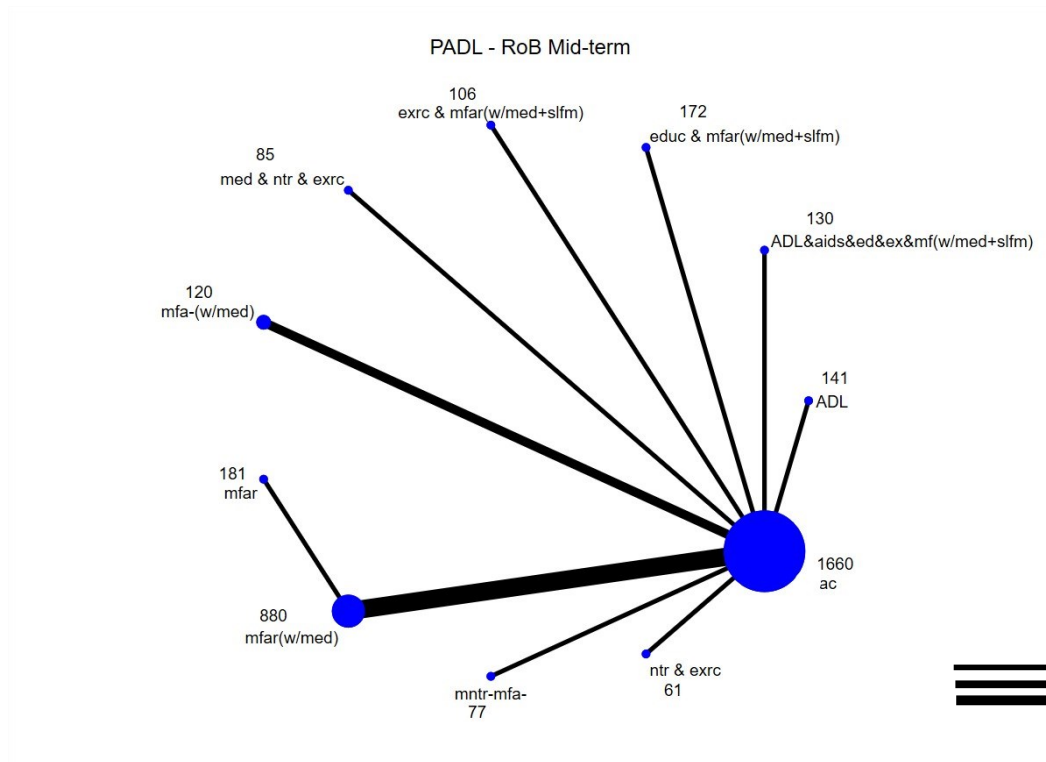


Figure 23 - Network plot for risk of bias analysis for PADL medium-term timeframe with available care (ac) comparator

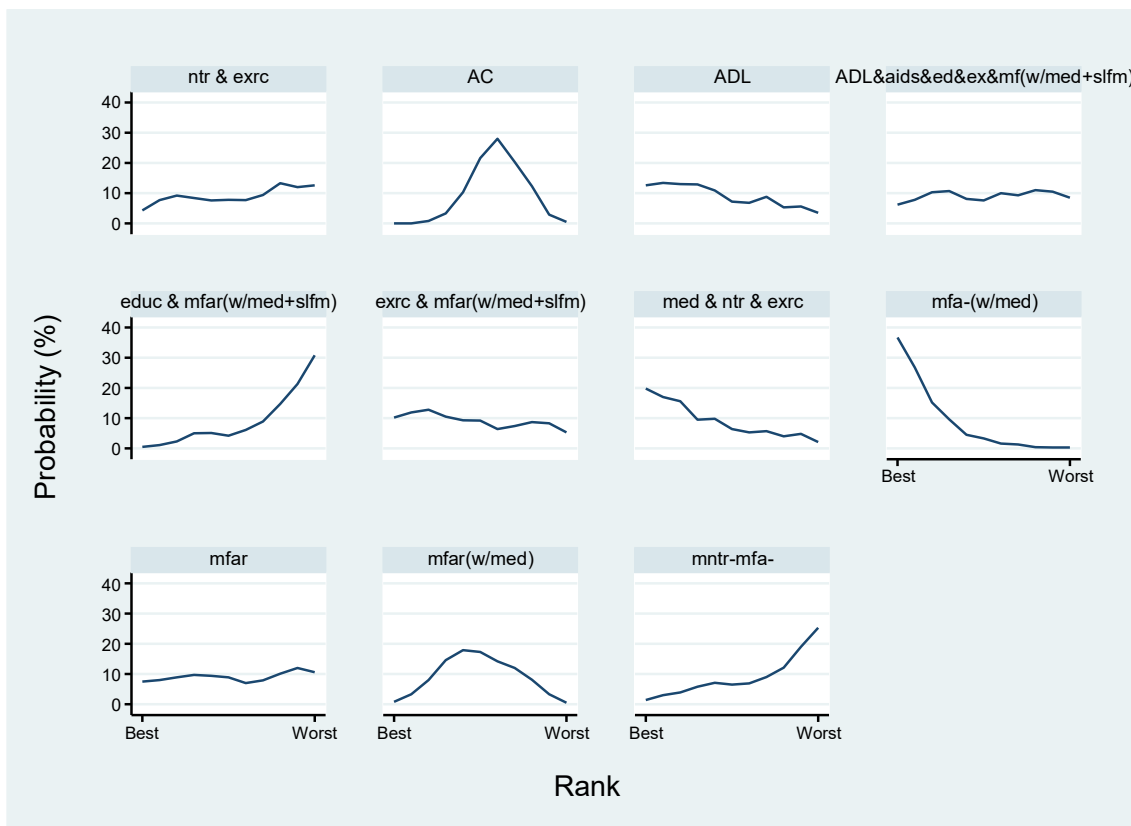


Figure 24 - Rankogram showing comparative effectiveness of interventions for risk of bias sensitivity analysis for PADL medium-term available care network. Results based on a simulation of 1000 replications.

11.4.3 PADL available care network, long-term timeframe

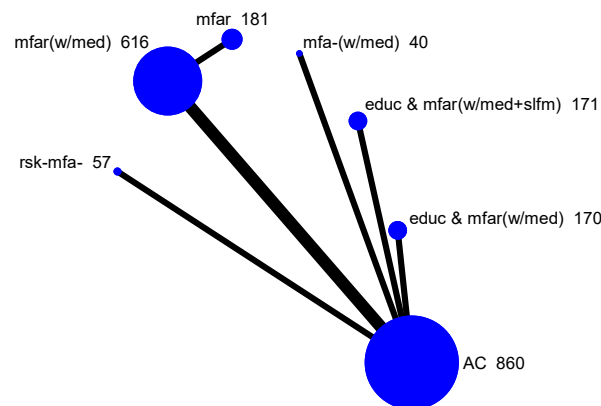
Table 52 - Long-term PADL available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Balaban 1988 ⁵⁰⁶	frail	86	mfa-(w/med)	ac	x	x	x	-	-	xx
Bouman 2008 ⁵¹³	pre-frail and frail	293	mfar(w/med)	ac	+	-	x	-	-	x
Jitapunkul 1998 ⁵⁵⁵	unclassifiable	116	rsk-mfa-	ac	-	-	-	-	-	-
Kono 2016 ⁵⁵⁸	pre-frail	360	mfar(w/med)	mfar	+	-	x	-	-	x
Metzelthin 2013 ⁵⁷⁶	frail	316	educ & mfar(w/med+slfm)	ac	-/-	-	x	-	-	x
Rubenstein 2007 ⁵⁹⁵	frail	607	mfar(w/med)	ac	-	-	-	-	-	-
Stuck 1995 ⁶⁰²	all	317	educ & mfar(w/med)	ac	+	-	-	-	-	-

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 53 - PADL in the long term: comparisons with available care summary of findings table

Population: Older people
 Interventions: Community-based complex interventions
 Comparator: Available care (ac)
 Outcome: Independence in personal activities of daily living (PADL)
 Timeframe: long term; range of follow up 24 to 36 months
 Setting: Community
 Total studies: 7
 Total participants: 2095
 Comparator rank: Mean 3.0, 95% CI 1 to 5



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Barthel Index 0 to 100) ^a			
Education, multifactorial-action and review with medication-review (educ & mfar(w/med))	SMD 0.11 higher (0.11 lower to 0.33 higher) Mixed estimate	MD 3.21 higher (3.33 lower to 9.75 higher)	⊕⊕⊕⊕ Low ^b	1.9 (1 to 5)	may result in a very slight increase in PADL independence
Risk-screening (rsk-mfa-)	SMD 0.06 higher (0.30 lower to 0.43 higher) Mixed estimate	MD 1.85 higher (8.92 lower to 12.63 higher)	⊕⊕⊕⊕ Low ^b	2.5 (1 to 6)	may result in a very slight increase in PADL independence
Multifactorial-action and review with medication-review (mfar(w/med))	SMD 0.03 lower (0.16 lower to 0.10 higher) Mixed estimate	MD 0.79 lower (4.66 lower to 3.08 higher)	⊕⊕⊕⊕ Low ^b	3.5 (1 to 5)	may result in little to no difference in PADL independence
Education, multifactorial-action and review with medication-review and self-management (educ & mfar(w/med+slfm))	SMD 0.27 lower (0.50 lower to 0.05 lower) Mixed estimate	MD 8.07 lower (14.65 lower to 1.49 lower)	⊕⊕⊕⊕ Low ^{c,d}	5.8 (4 to 7)	may result in a slight reduction in PADL independence
Multifactorial-action and review (mfar)	SMD 0.37 lower (0.62 lower to 0.13 lower) Indirect estimate	MD 11.06 lower (18.34 lower to 3.79 lower)	⊕⊕⊕⊕ Low ^{c,e}	6.5 (5 to 7)	may result in a slight reduction in PADL independence
Multifactorial-action with medication-review mfa-(w/med)	SMD 0.17 lower (0.60 lower to 0.25 higher) Mixed estimate	MD 5.09 lower (17.66 lower to 7.48 higher)	⊕⊕⊕⊕ Very low ^{f,g}	4.8 (1 to 7)	the evidence is very uncertain about the effect on PADL independence

a: calculated from the estimated SMD using a standard deviation of 29.6, the pooled standard deviation across intervention groups reporting the Barthel Index.

b: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

c: serious concerns about risk of bias due to missing outcome data. Downgrade once.

d: serious concerns about imprecision as no closed loop and direct comparison is based on 316 persons which does not meet optimal information size. Downgrade once.

e: serious concerns about imprecision as no closed loop and comparison is based on 360 persons in link between multifactorial-action and review and multifactorial-action and review with medication-review which does not meet optimal information size. Downgrade once.

f: very serious concerns about risk of bias due to randomisation process, deviations from the intended interventions, and missing data. Downgrade twice.

g: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.

Table 54 - Results of PADL: long-term available care network

rsk-mfa-						0.06 (-0.30, 0.43)
0.09 (-0.30,0.48)	mfar(w/med)	0.35 (0.14, 0.56)				-0.03 (-0.16, 0.10)
0.44 (-0.00,0.88)	0.35 (0.14,0.56)	mfar				
0.23 (-0.32,0.79)	0.15 (-0.30,0.59)	-0.20 (-0.69,0.29)	mfa-(w/med)			-0.17 (-0.60, 0.25)
0.34 (-0.09,0.76)	0.25 (-0.01,0.50)	-0.10 (-0.43,0.23)	0.10 (-0.38,0.58)	educ & mfar(w/med+slfm)		-0.27 (-0.50, -0.05)
-0.05 (-0.47,0.38)	-0.14 (-0.39,0.12)	-0.48 (-0.81,-0.15)	-0.28 (-0.76,0.20)	-0.38 (-0.69,-0.07)	educ & mfar(w/med)	0.11 (-0.11, 0.33)
0.06 (-0.30,0.43)	-0.03 (-0.16,0.10)	-0.37 (-0.62,-0.13)	-0.17 (-0.60,0.25)	-0.27 (-0.50,-0.05)	0.11 (-0.11,0.33)	AC

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 55 - Intervention rankings for PADL: long-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
educ & mfar(w/med)	85.4	46.2	1.9	1	5
rsk-mfa-	74.8	38.7	2.5	1	6
ac	65.9	3.4	3.0	1	5
mfar(w/med)	58.9	4.5	3.5	1	5
mfa-(w/med)	36.8	7.2	4.8	1	7
educ & mfar(w/med+slfm)	20.1	0.0	5.8	4	7
mfar	8.2	0.0	6.5	5	7

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

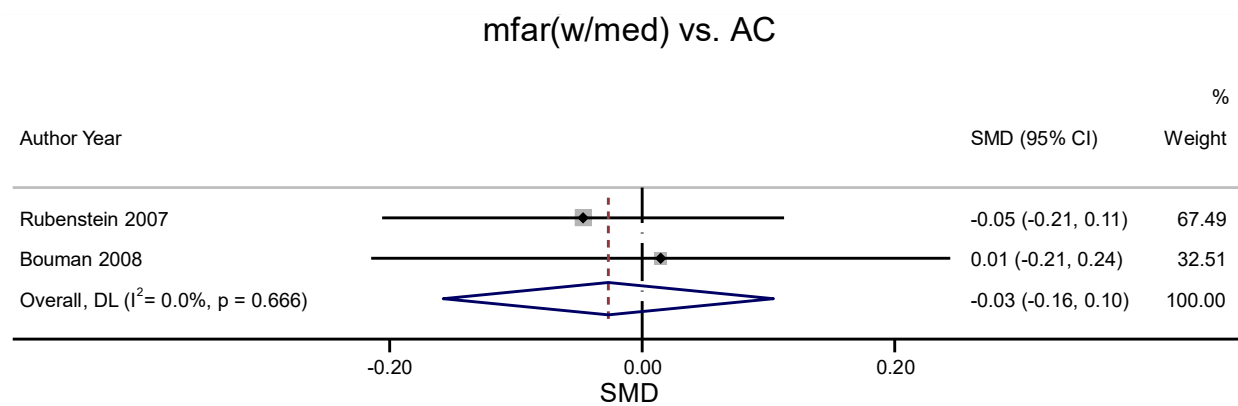


Figure 25 - Pairwise meta-analysis for PADL: long-term available care network (pooling comparisons with greater than one study reporting results)

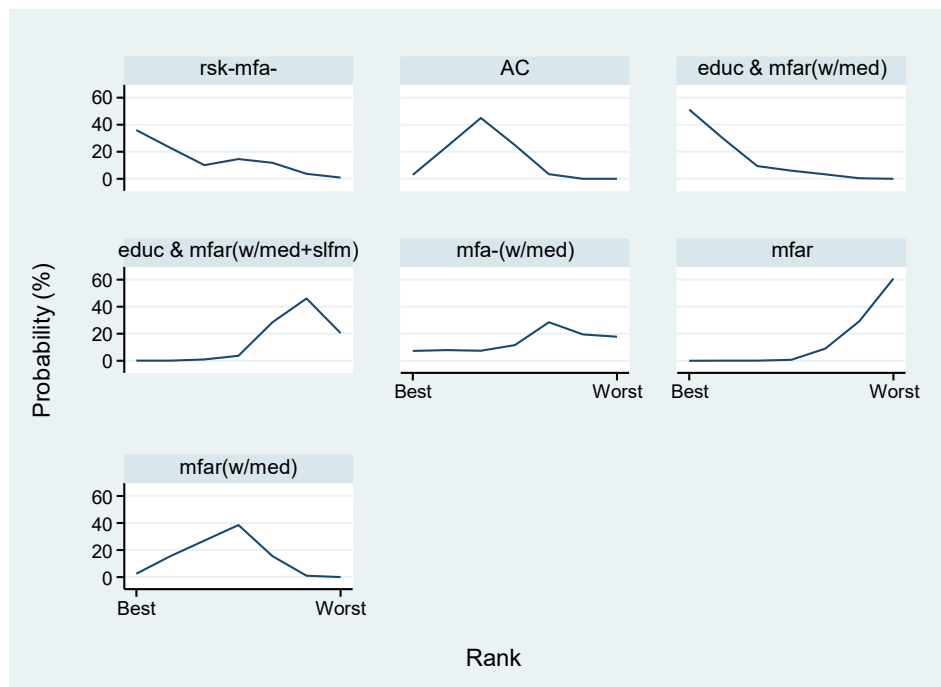


Figure 26 - Rankogram showing comparative effectiveness of interventions for PADL long-term available care network. Results based on a simulation of 1000 replications.

11.4.4 PADL homecare network, short-term timeframe

Table 56 - Short-term PADL homecare network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Auvinen 2020 ⁵⁰⁵	frail	449	hmcr & med	hmcr	+	-	-	-	x	x
Fernandez-Barres 2017 ⁵³¹	frail	111	hmcr & ntr	hmcr	+	-	x	-	-	x
King 2012 ⁵⁵⁷	pre-frail and frail	157	hmcr & ADL & mfar(w/slfm)	hmcr	+/+	-	-	-	-	-
Teut 2013 ⁶⁰⁹	frail	58	hmcr & hmnt & exrc	hmcr	+/+	-	x	-	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 57 - PADL in the short term: comparisons with homecare summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Homecare (hmcr)

Outcome: Independence in personal activities of daily living (PADL)

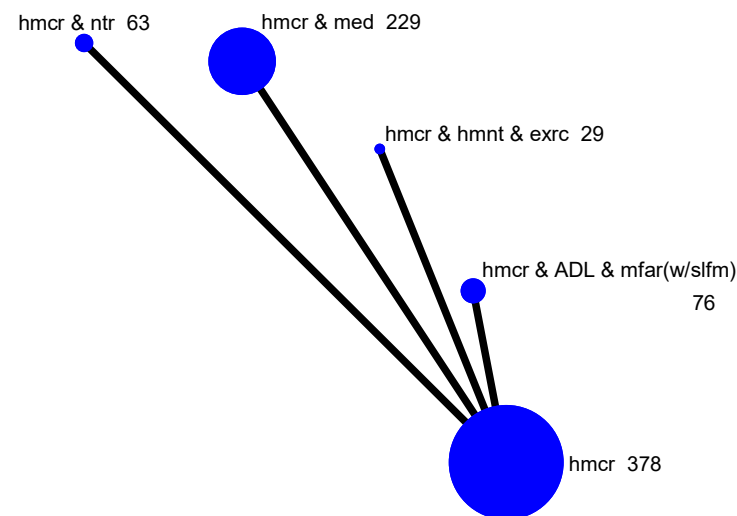
Timeframe: short term; range of follow up 6 to 7 months

Setting: Community

Total studies: 4

Total participants: 775

Comparator rank: Mean 3.4, 95% CI 2 to 5



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Barthel Index 0 to 100) ^a			
Homecare, ADL, multifactorial-action and review with self-management (hmcr & ADL & mfar(w/slfm))	SMD 0.11 higher (0.20 lower to 0.43 higher) Mixed estimate	MD 3.32 higher (5.95 lower to 12.59 higher)	⊕⊕⊕⊕ Low ^b	2.4 (1 to 5)	may result in a very slight increase in PADL independence
Homecare and nutrition (hmcr & ntr)	SMD 0.13 higher (0.24 lower to 0.51 higher) Mixed estimate	MD 3.92 higher (7.20 lower to 15.05 higher)	⊕⊕⊕⊕ Very low ^{b,c}	2.3 (1 to 5)	the evidence is very uncertain about the effect on PADL independence
Homecare, alternative-medicine and exercise (hmcr & hmnt & excr)	SMD 0.03 higher (0.48 lower to 0.55 higher) Mixed estimate	MD 0.91 higher (14.32 lower to 16.15 higher)	⊕⊕⊕⊕ Very low ^{b,c}	3.0 (1 to 5)	the evidence is very uncertain about the effect on PADL independence
Homecare and medication-review (hmcr & med)	SMD 0.05 lower (0.23 lower to 0.14 higher) Mixed estimate	MD 1.44 lower (6.92 lower to 4.03 higher)	⊕⊕⊕⊕ Very low ^{b,d}	3.9 (2 to 5)	the evidence is very uncertain about the effect on PADL independence

a: calculated from the estimated SMD using a standard deviation of 29.6, the pooled standard deviation across intervention groups reporting the Barthel Index.

b: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

c: serious concerns about risk of bias due to missing outcome data. Downgrade once.

d: serious concerns about risk of bias because multiple analyses were conducted but the results from only one analysis were reported. Downgrade once.

Table 58 - Results of PADL: short-term homecare network

hmcr & ntr				0.13 (-0.24,0.51)
0.18 (-0.24,0.60)	hmcr & med			-0.05 (-0.23,0.14)
0.10 (-0.54,0.74)	-0.08 (-0.63,0.47)	hmcr & hmnt & exrc		0.03 (-0.48,0.55)
0.02 (-0.47,0.51)	-0.16 (-0.52,0.20)	-0.08 (-0.68,0.52)	hmcr & ADL & mfar(w/slfm)	0.11 (-0.20,0.43)
0.13 (-0.24,0.51)	-0.05 (-0.23,0.14)	0.03 (-0.48,0.55)	0.11 (-0.20,0.43)	hmcr

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 59 - Intervention rankings for PADL: short-term homecare network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & ntr	66.7	37.9	2.3	1	5
hmcr & ADL & mfar(w/slfm)	66	29.2	2.4	1	5
hmcr & hmnt & exrc	50.1	28.5	3	1	5
hmcr	40.4	1.8	3.4	2	5
hmcr & med	26.8	2.6	3.9	2	5

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

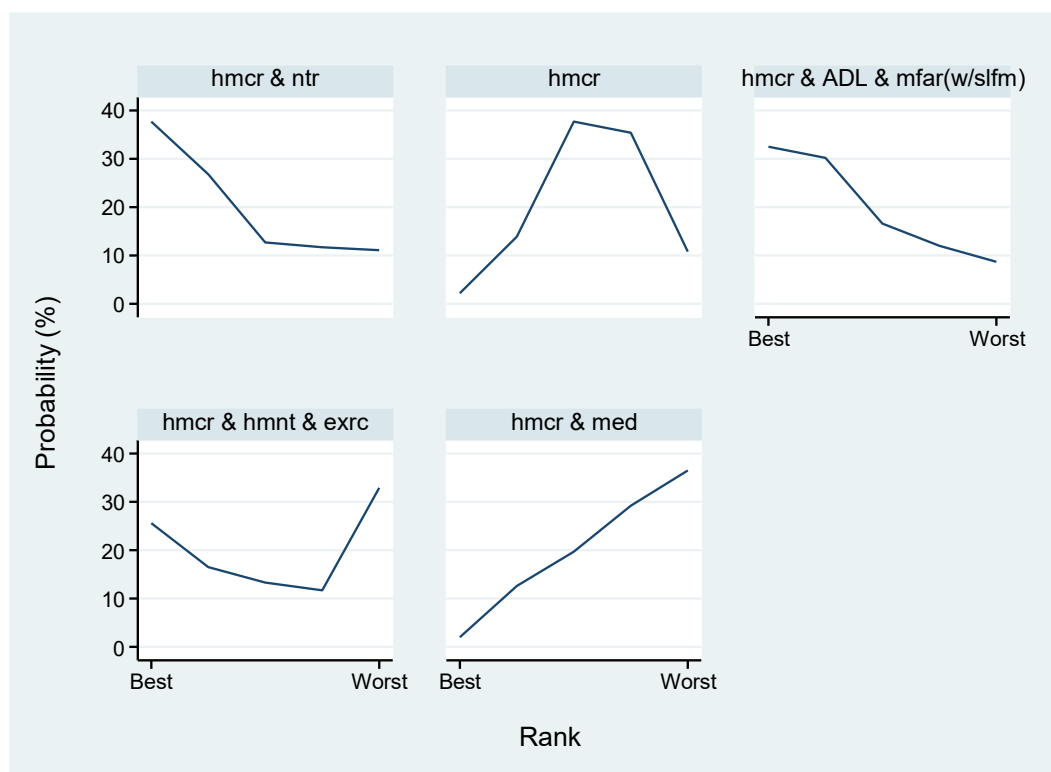


Figure 27 - Rankogram showing comparative effectiveness of interventions for PADL short-term homecare network. Results based on a simulation of 1000 replications.

11.4.5 PADL homecare network, medium-term timeframe

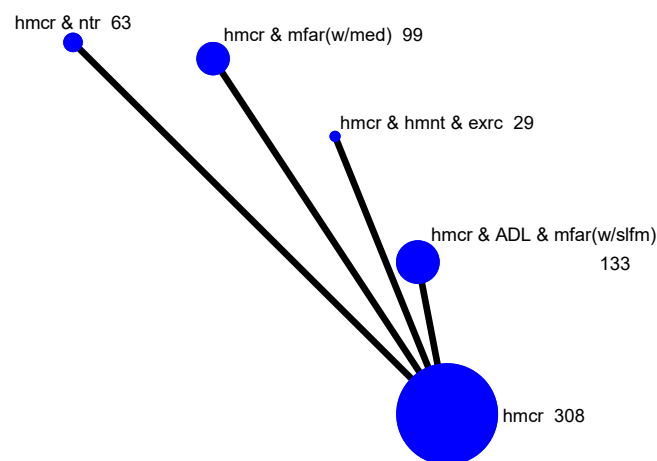
Table 60 - Medium-term PADL homecare network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Bernabei 1998 ⁵⁰⁸	frail	199	hmcr & mfar(w/med)	hmcr	-	-	x	-	-	x
Fernandez-Barres 2017 ⁵³¹	frail	111	hmcr & ntr	hmcr	+	-	x	-	-	x
Rooijackers 2021 ⁵⁹⁴	frail	264	hmcr & ADL & mfar(w/slfn)	hmcr	+/-	-	x	+	x	xx
Teut 2013 ⁶⁰⁹	frail	58	hmcr & hmnt & exrc	hmcr	+/+	-	x	-	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 61 - PADL in the medium term: comparisons with homecare summary of findings table

Population: Older people
 Interventions: Community-based complex interventions
 Comparator: Formal homecare (hmcr)
 Outcome: personal activities of daily living (higher is better)
 Timeframe: medium term; follow up at 12 months
 Setting: Community
 Total studies: 4
 Total participants: 632
 Comparator rank: Mean 4.4, 95% CI 3 to 5



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Barthel Index 0 to 100) ^a			
Homecare, multifactorial-action and review with medication-review (hmcr & mfar(w/med))	SMD 0.60 higher (0.32 higher to 0.88 higher) Mixed estimate	MD 17.74 higher (9.32 higher to 26.15 higher)	⊕⊕⊕⊕ Low ^{b,c}	1.1 (1 to 2)	may result in an increase in PADL
Homecare and nutrition (hmcr & ntr)	SMD 0.23 higher (0.15 lower to 0.60 higher) Mixed estimate	MD 6.70 higher (4.45 lower to 17.85 higher)	⊕⊕⊕⊕ Very low ^{b,d}	2.7 (1 to 5)	the evidence is very uncertain about the effect on PADL
Homecare, ADL, multifactorial-action and review with self-management (hmcr & ADL & mfar(w/slfm))	SMD 0.12 higher (0.13 lower to 0.36 higher) Mixed estimate	MD 3.42 higher (3.73 lower to 10.57 higher)	⊕⊕⊕⊕ Very low ^{e,f}	3.4 (2 to 5)	the evidence is very uncertain about the effect on PADL
Homecare, alternative-medicine and exercise (hmcr & hmnt & exrc)	SMD 0.10 higher (0.42 lower to 0.61 higher) Mixed estimate	MD 2.83 higher (12.41 lower to 18.08 higher)	⊕⊕⊕⊕ Very low ^{b,d}	3.4 (1 to 5)	the evidence is very uncertain about the effect on PADL

a: calculated from the estimated SMD using a standard deviation of 29.6, the pooled standard deviation across intervention groups reporting the Barthel Index.

b: serious concerns about risk of bias due to missing outcome data. Downgrade once.

c: serious concerns about imprecision as no closed loop and direct evidence is based on 99 persons in homecare, multifactorial-action and review with medication-review which does not meet optimal information size. Downgrade once.

d: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

e: very serious concerns about risk of bias due to missing outcome data and because reported results were not analysed in accordance with the protocol. Downgrade twice.

f: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.

Table 62 - Results of PADL: medium-term homecare network

hmcr & ntr				0.23 (-0.15,0.60)
-0.37 (-0.84,0.10)	hmcr & mfar(w/med)			0.60 (0.31,0.88)
0.13 (-0.51,0.77)	0.50 (-0.08,1.09)	hmcr & hmnt & excr		0.10 (-0.42,0.61)
0.11 (-0.34,0.56)	0.48 (0.11,0.86)	-0.02 (-0.59,0.55)	hmcr & ADL & mfar(w/slfm)	0.12 (-0.13,0.36)
0.23 (-0.15,0.60)	0.60 (0.31,0.88)	0.10 (-0.42,0.61)	0.12 (-0.13,0.36)	hmcr

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 63 - Intervention rankings for PADL: medium-term homecare network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & mfar(w/med)	97	89	1.1	1	2
hmcr & ntr	57.5	5.9	2.7	1	5
hmcr & ADL & mfar(w/slfm)	41.2	0.3	3.4	2	5
hmcr & hmnt & excr	39	4.8	3.4	1	5
hmcr	15.3	0	4.4	3	5

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

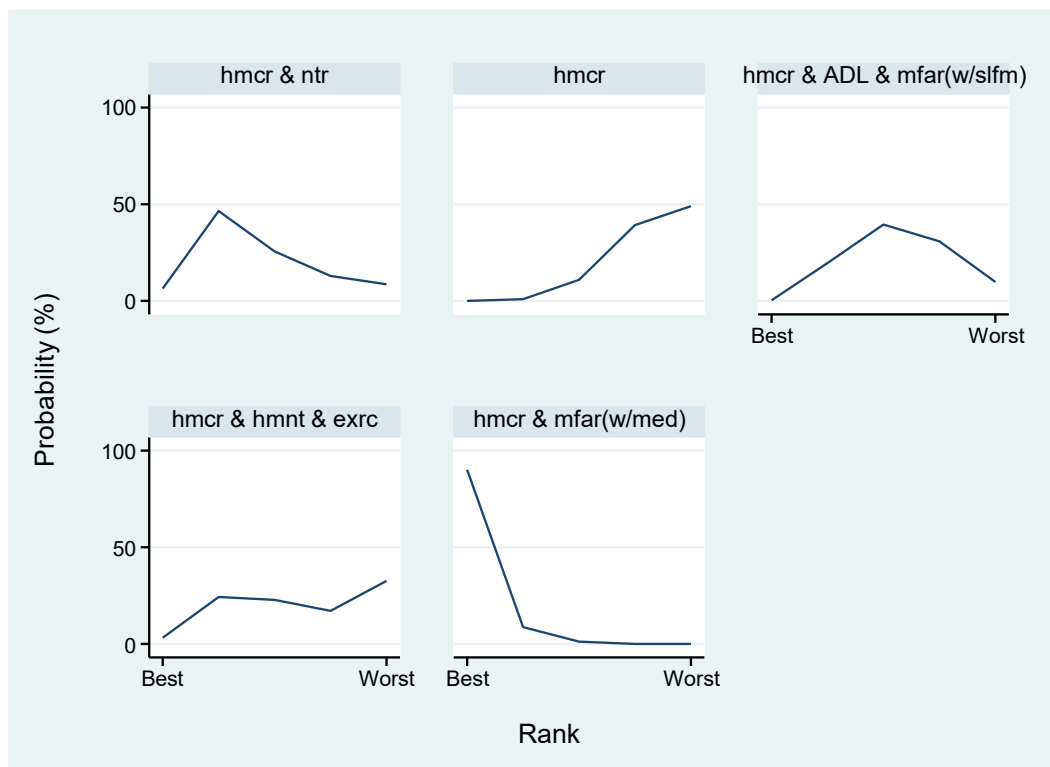


Figure 28 - Rankogram showing comparative effectiveness of interventions for PADL medium-term homecare network. Results based on a simulation of 1000 replications.

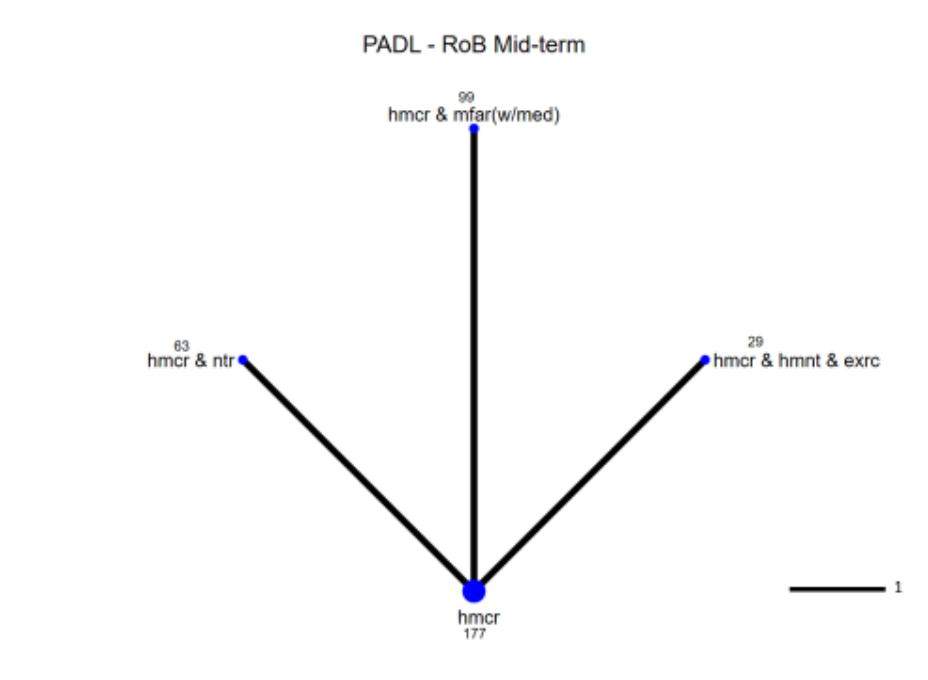


Figure 29 - Network plot for risk of bias analysis for PADL medium-term homecare network

Table 64 - Intervention rankings for risk of bias analysis for PADL: medium-term homecare network

Intervention group	SUCRA	PrBest	Mean Rank	95% CI for true rank
hmcrc & mfar(w/med)	96.1	89.4	1.1	1 - 2
hmcrc & ntr	53.1	5.6	2.4	1 - 4
hmcrc & hmnt & exrc	35.2	5	2.9	1 - 4
hmcrc	15.6	0	3.5	2 - 4

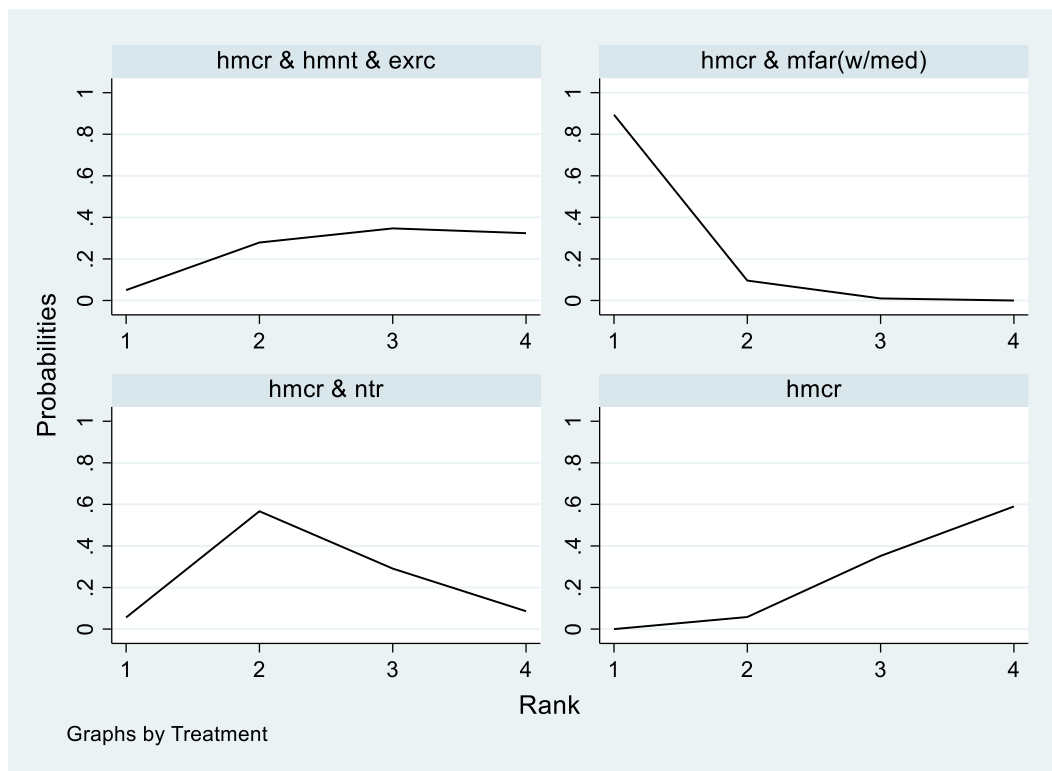


Figure 30 - Rankogram showing comparative effectiveness of interventions for risk of bias sensitivity analysis for PADL medium-term homecare network. Results based on a simulation of 1000 replications.

Table 65 - Results of risk of bias PADL: medium-term homecare network

hmc	-0.23 (-0.60,0.15)	-0.60 (-0.88,-0.32)	-0.10 (-0.61,0.42)
-0.23 (-0.60,0.15)	hmc & ntr		
-0.60 (-0.88,-0.32)	-0.37 (-0.84,0.10)	hmc & mfar(w/med)	
-0.10 (-0.61,0.42)	0.13 (-0.51,0.77)	0.50 (-0.08,1.09)	hmc & hmnt & exrc

11.4.6 PADL homecare network, long-term timeframe

No results as there were too few comparisons to conduct network meta-analysis.

11.5 Hospitalisation

11.5.1 Hospitalisation available care network (medium-term timeframe only)

Table 66 - Medium-term hospitalisation available-care network

Study	Frailty	n	Experimental group	Control group	ROB					
					D1	D2	D3	D4	D5	Overall
Bouman 2008 ⁵¹³	pre-frail and frail	330	mfar(w/med)	ac	+	-	+	+	-	-
Cameron 2013 ⁵¹⁵	frail	241	exrc & mfar(w/med+slfm)	ac	+	-	+	+	+	-
Harari 2008 ⁵⁴⁴	all	1969	mfar(w/med)	ac	+	x	x	+	+	xx
Henderson 2005 ⁵⁴⁸	robust	124	mfar	ac	+/x	+	x	+	-	xx
Hendriksen 1984 ⁵⁴⁹	all	543	mfar	ac	-	-	x	+	-	x
Kono 2016 ⁵⁵⁸	pre-frail	305	mfar(w/med)	mfar	+	-	x	+	-	x
Leveille 1998 ⁵⁶⁴	unclassifiable	200	educ & exrc & mfar(w/med+slfm)	ac	+	-	+	+	-	-
Newcomer 2004 ⁵⁸³	unclassifiable	3055	educ & mfar(w/med)	ac	-	-	-	+	-	-
Ng 2015 ⁵⁸⁴	pre-frail and frail	92	cgn & ntr & exrc	ac	+	-	x	+	-	x
Phelan 2007 ⁵⁸⁹	all	299	mfar(w/med+slfm)	ac	-/x	-	x	+	-	xx
Rubenstein 2007 ⁵⁹⁵	frail	694	mfar(w/med)	ac	-	-	x	+	-	x
Takahashi 2012 ⁶⁰⁸	frail	205	mntr-mfa-	ac	-	-	x	+	+	x
van Hout 2010 ⁶¹⁸	frail	651	mfar(w/med)	ac	+	-	-	+	-	-
van Lieshout 2018 ⁶²⁰	pre-frail and frail	281	ADL & med & ntr & sst	ac	-	-	x	+	-	xx
van Rossum 1993 ⁶²¹	all	580	mfar	ac	-	-	-	+	-	-

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 67 - Hospitalisation in the medium term: comparisons with available care summary of findings table.

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: hospitalisation

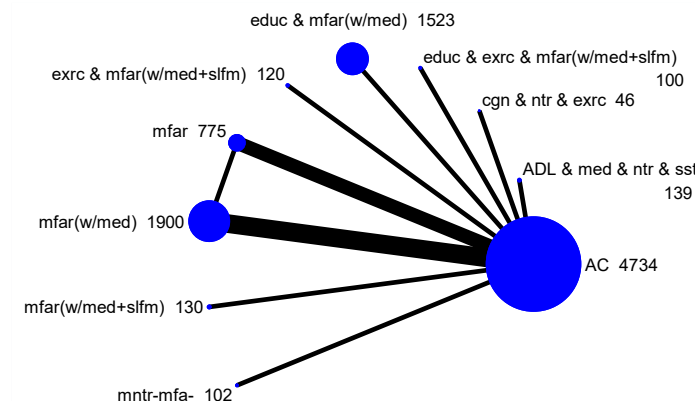
Timeframe: medium term; range of follow up 12 to 18 months

Setting: Community

Total studies: 15

Total participants: 9569

Comparator rank: Mean 4.4, 95% CI 5 to 8



Intervention	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (520 per 1000 with ac)		Low-risk population (118 per 1000 with ac)				
			With intervention	Difference	With intervention	Difference			
Education, exercise, multifactorial-action and review with medication-review and self-management strategies (educ & excr & mfar(w/med+slfm))	OR 0.53 (0.25 to 1.12) Mixed estimate	RR 0.59 (0.30 to 1.09)	365 per 1000 (213 to 549)	155 fewer per 1000 (307 fewer to 29 more)	66 per 1000 (32 to 131)	52 fewer per 1000 (86 fewer to 13 more)	⊕⊕⊕⊖ Low ^b	1.4 (5 to 10)	may result in a reduction in chance of being hospitalised
Education, multifactorial-action and review with medication-review (educ & mfar(w/med))	OR 0.92 (0.78 to 1.09) Mixed estimate	RR 0.94 (0.82 to 1.07)	499 per 1000 (457 to 542)	21 fewer per 1000 (63 fewer to 22 more)	110 per 1000 (94 to 127)	8 fewer per 1000 (24 fewer to 9 more)	⊕⊕⊕⊖ Low ^c	3.3 (5 to 9)	may result in a slight reduction in chance of being hospitalised
Exercise, multifactorial-action and review with medication-review and self-management strategies (excr & mfar(w/med+slfm))	OR 1.34 (0.80 to 2.24) Mixed estimate	RR 1.24 (0.84 to 1.75)	592 per 1000 (465 to 708)	72 more per 1000 (55 fewer to 188 more)	152 per 1000 (97 to 231)	34 more per 1000 (21 fewer to 113 more)	⊕⊕⊕⊖ Low ^d	7.0 (1 to 8)	may result in an increase in chance of being hospitalised
Multifactorial-action and review (mfar)	OR 0.81 (0.62 to 1.06) Mixed estimate	RR 0.85 (0.67 to 1.05)	467 per 1000 (400 to 535)	53 fewer per 1000 (120 fewer to 15 more)	98 per 1000 (76 to 124)	20 fewer per 1000 (42 fewer to 6 more)	⊕⊖⊖⊖ Very low ^{e,c}	2.4 (6 to 10)	the evidence is very uncertain about the effect on chance of being hospitalised
Multifactorial-action and review with medication-review (mfar(w/med))	OR 1.10 (0.95 to 1.28) Mixed estimate	RR 1.08 (0.96 to 1.20)	544 per 1000 (507 to 581)	24 more per 1000 (13 fewer to 61 more)	129 per 1000 (113 to 146)	11 more per 1000 (5 fewer to 28 more)	⊕⊖⊖⊖ Very low ^{e,c}	5.7 (3 to 8)	the evidence is very uncertain about the effect on chance of being hospitalised
Multifactorial-action and review with medication-review and self-management strategies (mfar(w/med+slfm))	OR 1.37 (0.76 to 2.50) Mixed estimate	RR 1.27 (0.80 to 1.86)	598 per 1000 (450 to 731)	78 more per 1000 (70 fewer to 211 more)	155 per 1000 (92 to 251)	37 more per 1000 (26 fewer to 133 more)	⊕⊖⊖⊖ Very low ^{f,g}	6.7 (1 to 9)	the evidence is very uncertain about the effect on chance of being hospitalised

Monitoring (mntr-mfa-)	OR 1.39 (0.80 to 2.42) Mixed estimate	RR 1.28 (0.84 to 1.83)	602 per 1000 (466 to 724)	82 more per 1000 (54 fewer to 204 more)	157 per 1000 (97 to 244)	39 more per 1000 (21 fewer to 126 more)	⊕⊖⊖⊖ Very low ^{h,i}	7.0 (1 to 9)	the evidence is very uncertain about the effect on chance of being hospitalised
ADL, medication-review, nutrition and social-skills (ADL & med & ntr & sst)	OR 1.70 (0.93 to 3.09) Mixed estimate	RR 1.46 (0.95 to 2.09)	648 per 1000 (503 to 770)	128 more per 1000 (17 fewer to 250 more)	185 per 1000 (111 to 293)	67 more per 1000 (7 fewer to 175 more)	⊕⊖⊖⊖ Very low ^{h,k}	8.1 (1 to 7)	the evidence is very uncertain about the effect on chance of being hospitalised
Cognitive training, nutrition and exercise (cgn & ntr & exrc)	OR 3.30 (0.63 to 17.30) Mixed estimate	RR 2.16 (0.69 to 3.67)	781 per 1000 (405 to 949)	261 more per 1000 (115 fewer to 429 more)	306 per 1000 (78 to 698)	188 more per 1000 (40 fewer to 580 more)	⊕⊖⊖⊖ Very low ^{h,l}	9.0 (1 to 9)	the evidence is very uncertain about the effect on chance of being hospitalised

- a: Calculated from OR and an assumed comparator risk of 0.228, the median available care risk among these studies.
- b: very serious concerns about imprecision as confidence interval includes substantial benefit and harm, and as no closed loop and direct comparison is based on 35 events from 200 persons which does not meet optimal information size. Downgrade twice.
- c: very serious concerns about imprecision as confidence interval includes substantial benefit and harm. Downgrade twice.
- d: very serious concerns about imprecision as confidence interval includes substantial harm and harm, and as no closed loop and direct comparison is based on 140 events from 241 persons which does not meet optimal information size. Downgrade twice.
- e: serious concerns about risk of bias mainly due to missing outcome data among the studies. Downgrade once.
- f: very serious concerns about risk of bias due to the recruitment process of participants and missing data. Downgrade twice.
- g: very serious concerns about imprecision as confidence interval includes substantial benefit and harm, and as no closed loop and direct comparison is based on 52 events from 299 persons which does not meet optimal information size. Already downgraded twice for risk of bias, downgrade once.
- h: serious concerns about risk of bias due to missing outcome data. Downgrade once.
- i: very serious concerns about imprecision as confidence interval includes substantial benefit and harm, and as no closed loop and direct comparison is based on 98 events from 205 persons which does not meet optimal information size. Downgrade twice.
- j: very serious concerns about risk of bias due to substantial number of missing outcome data. Downgrade twice.
- k: very serious concerns about imprecision as confidence interval includes substantial benefit and harm, and as no closed loop and direct comparison is based on 55 events from 281 persons which does not meet optimal information size. Already downgraded twice for risk of bias, downgrade once.
- l: very serious concerns about imprecision as confidence interval includes substantial benefit and harm, and as no closed loop and direct comparison is based on 8 events from 95 persons which does not meet optimal information size. Downgrade twice.

Table 68 - Results of hospitalisation medium-term analysis

mnr-mfa-									1.39 (0.80, 2.42)
1.01 (0.45, 2.29)	mfar(w/med+slfm)								1.38 (0.76, 2.50)
1.26 (0.71, 2.23)	1.25 (0.67, 2.31)	mfar(w/med)	1.07 (0.59, 1.97)						1.12 (0.96, 1.30)
1.72 (0.93, 3.19)	1.70 (0.88, 3.29)	1.36 (1.01, 1.83)	mfar						0.76 (0.56, 1.03)
1.04 (0.49, 2.21)	1.03 (0.47, 2.26)	0.82 (0.48, 1.40)	0.60 (0.34, 1.08)	exrc & mfar(w/med+slfm)					1.34 (0.80, 2.24)
1.51 (0.85, 2.69)	1.49 (0.80, 2.78)	1.20 (0.96, 1.50)	0.88 (0.64, 1.21)	1.46 (0.85, 2.50)	educ & mfar(w/med)				0.92 (0.78, 1.09)
2.63 (1.04, 6.67)	2.60 (0.99, 6.78)	2.08 (0.97, 4.48)	1.53 (0.69, 3.39)	2.53 (1.02, 6.28)	1.74 (0.81, 3.75)	educ & exrc & mfar(w/med+slfm)			0.53 (0.25, 1.12)
0.42 (0.07, 2.42)	0.42 (0.07, 2.43)	0.33 (0.06, 1.76)	0.25 (0.05, 1.31)	0.41 (0.07, 2.30)	0.28 (0.05, 1.48)	0.16 (0.03, 0.99)	cg & ntr & exrc		3.30 (0.63, 17.30)
0.82 (0.36, 1.85)	0.81 (0.35, 1.89)	0.65 (0.35, 1.20)	0.48 (0.25, 0.92)	0.79 (0.36, 1.74)	0.54 (0.29, 1.01)	0.31 (0.12, 0.82)	1.94 (0.33, 11.31)	ADL & med & ntr & sst	1.70 (0.93, 3.09)
1.39 (0.80, 2.42)	1.38 (0.76, 2.50)	1.10 (0.95, 1.28)	0.81 (0.62, 1.06)	1.34 (0.80, 2.24)	0.92 (0.78, 1.09)	0.53 (0.25, 1.12)	3.30 (0.63, 17.30)	1.70 (0.93, 3.09)	AC

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR<1 favours the upper left intervention; a OR>1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 69 - Intervention rankings for hospitalisation medium-term analysis

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI rank	UCI rank
educ & excr & mfar(w/med+slfm)	95.5	83.5	1.4	1	6
mfar	84.6	11.2	2.4	1	5
educ & mfar(w/med)	74.2	1.3	3.3	2	6
ac	62.6	0	4.4	3	6
mfar(w/med)	48.1	0	5.7	3	8
mfar(w/med+slfm)	36.3	0.9	6.7	2	10
mntr-mfa-	33.1	0.9	7	3	10
excr & mfar(w/med+slfm)	33.6	0.5	7	2	10
ADL & med & ntr & sst	20.7	0.2	8.1	4	10
cgn & ntr & excr	11.3	1.5	9	2	10

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

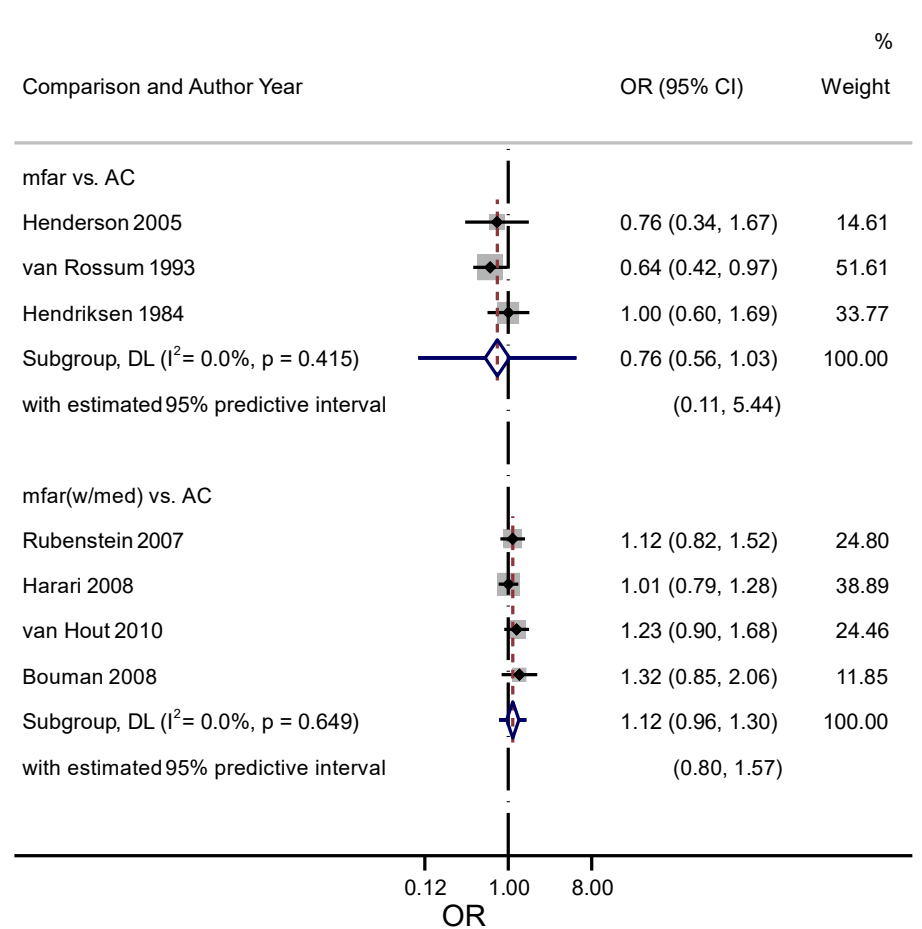


Figure 31 - Pairwise meta-analysis for hospitalisation: medium-term available care network (pooling comparisons with greater than one study reporting results)

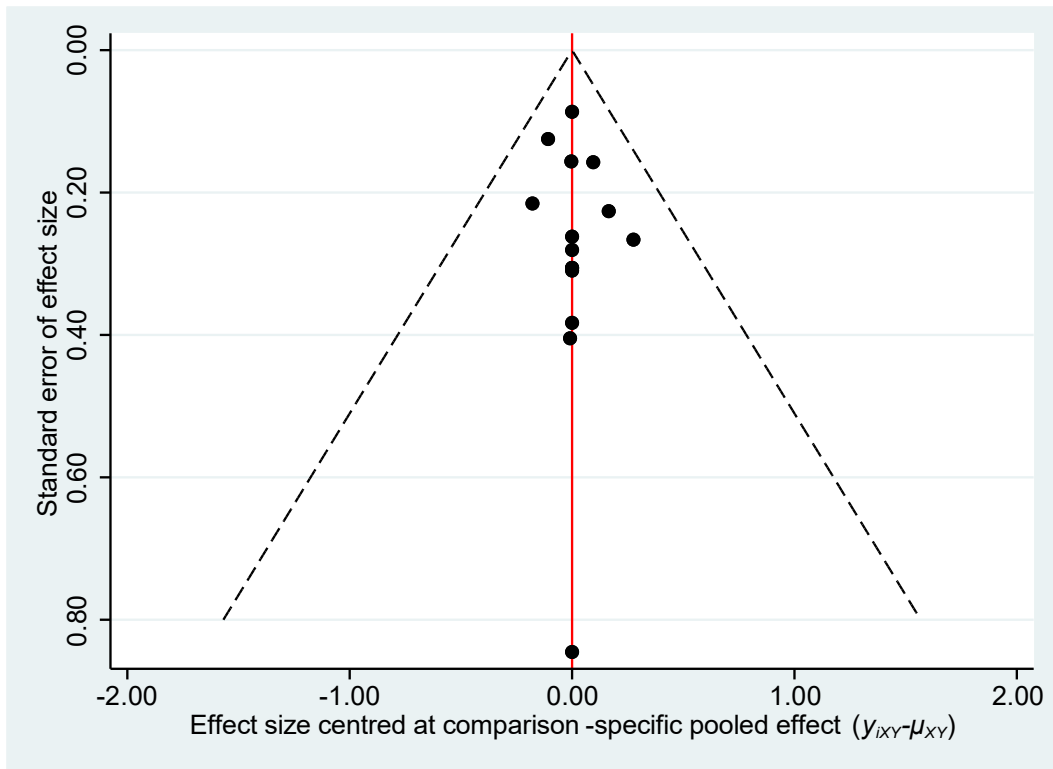


Figure 32 - Comparison-adjusted funnel plot for hospitalisation: medium-term available care network

11.5.2 Hospitalisation homecare network (medium-term timeframe only)

No results as there were too few comparisons to conduct network meta-analysis.

11.6 Care-home placement

11.6.1 Care-home placement available care network, short-term timeframe

Table 70 - Short-term care-home placement available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Imhof 2012 ⁵⁵³	all	436	mfar	ac	-	-	x	+	-	x
Kukkonen-Harjula 2017 ⁵⁶¹	pre-frail and frail	284	ADL & ntr & exrc	ac	+	-	x	+	-	x
Liddle 1996 ⁵⁶⁶	unclassifiable	102	aids & mfar	ac	-	x	x	+	-	xx
Metzelthin 2013 ⁵⁷⁶	frail	335	educ & mfar(w/med+slfm)	ac	-/-	-	x	+	-	x
Suijker 2016 ⁶⁰⁵	frail	1983	mfar(w/med)	ac	+/-	-	x	+	-	x
Szanton 2011 ⁶⁰⁶	pre-frail and frail	38	ADL&aids&educ&exrc&mfar(w/med+slfm)	ac	-	-	+	+	-	-
Wong 2019 ⁶³⁰	all	494	mfar(w/slfm)	ac	x	-	x	+	-	xx

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 71 - Care-home placement in the short term: comparisons with available care summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: care-home placement

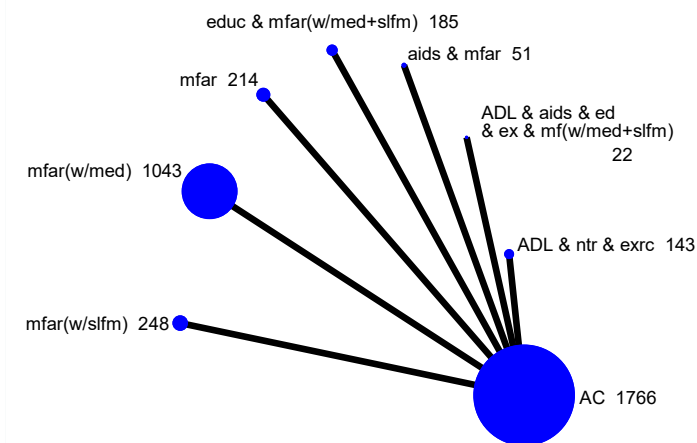
Timeframe: short term; range of follow up 24 weeks to 6 months

Setting: Community

Total studies: 7

Total participants: 3672

Comparator rank: Mean 4.6, 95% CI 3 to 7



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (28 per 1000 with ac)		Low-risk population (2 per 1000 with ac)				
			With intervention	Difference	With intervention	Difference			
Multifactorial-action and review with medication-review (mfar(w/med))	OR 0.77 (0.17 to 3.50) Mixed estimate	RR 0.78 (0.17 to 3.44)	22 per 1000 (5 to 92)	6 fewer per 1000 (23 fewer to 64 more)	2 per 1000 (0 to 7)	0 per 1000 (2 fewer to 5 more)	⊕⊕⊕⊕ Very low ^{b,c}	2.3 (1 to 7)	the evidence is very uncertain about the effect on care-home placement
Aids, multifactorial-action and review (aids & mfar)	OR 4.02 (0.18 to 89.76) Mixed estimate	RR 3.94 (0.18 to 55.36)	104 per 1000 (5 to 721)	76 more per 1000 (23 fewer to 693 more)	8 per 1000 (0 to 152)	6 more per 1000 (2 fewer to 150 more)	⊕⊕⊕⊕ Very low ^{d,e}	3.1 (1 to 8)	the evidence is very uncertain about the effect on care-home placement
Multifactorial-action and review (mfar)	OR 2.46 (0.25 to 23.86) Mixed estimate	RR 2.43 (0.25 to 20.57)	66 per 1000 (7 to 407)	38 more per 1000 (21 fewer to 379 more)	5 per 1000 (1 to 46)	3 more per 1000 (1 fewer to 44 more)	⊕⊕⊕⊕ Very low ^{b,c}	4.0 (1 to 7)	the evidence is very uncertain about the effect on care-home placement
ADL, nutrition and exercise (ADL & ntr & excr)	OR 0.99 (0.34 to 2.87) Mixed estimate	RR 0.99 (0.34 to 2.83)	28 per 1000 (10 to 76)	0 per 1000 (18 fewer to 48 more)	2 per 1000 (1 to 6)	0 per 1000 (1 fewer to 4 more)	⊕⊕⊕⊕ Very low ^{b,c}	4.6 (1 to 8)	the evidence is very uncertain about the effect on care-home placement
Multifactorial-action and review with self-management strategies (mfar(w/slfm))	OR 0.18 (0.01 to 3.75) Mixed estimate	RR 0.18 (0.01 to 3.68)	5 per 1000 (0 to 98)	23 fewer per 1000 (28 fewer to 70 more)	0 per 1000 (0 to 7)	2 fewer per 1000 (2 fewer to 5 more)	⊕⊕⊕⊕ Very low ^{e,f}	4.6 (2 to 7)	the evidence is very uncertain about the effect on care-home placement
Education, multifactorial-action and review with medication-review and self-management strategies (educ & mfar(w/med+slfm))	OR 0.33 (0.01 to 8.21) Mixed estimate	RR 0.33 (0.01 to 7.82)	9 per 1000 (0 to 191)	19 fewer per 1000 (28 fewer to 163 more)	1 per 1000 (0 to 16)	1 fewer per 1000 (2 fewer to 14 more)	⊕⊕⊕⊕ Very low ^{b,c}	6.2 (2 to 8)	the evidence is very uncertain about the effect on care-home placement
ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management strategies (ADL&aids&educ&excr& mfar(w/med+slfm))	OR 0.99 (0.02 to 50.04) Mixed estimate	RR 0.99 (0.02 to 37.25)	28 per 1000 (1 to 590)	0 per 1000 (27 fewer to 562 more)	2 per 1000 (0 to 91)	0 per 1000 (2 fewer to 89 more)	⊕⊕⊕⊕ Very low ^g	6.6 (2 to 9)	the evidence is very uncertain about the effect on care-home placement

- a: Calculated from OR and an assumed comparator risk of 0.007, the median available care risk among these studies.
- b: serious concerns about risk of bias due to missing outcome data. Downgrade once.
- c: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.
- d: very serious concerns about risk of bias due to deviations from the intended interventions and missing data. Downgrade twice.
- e: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Already downgraded twice for risk of bias, downgrade once.
- f: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.
- g: extremely serious concerns about imprecision as confidence interval is extremely wide. Downgrade three levels.

Table 72 - Results of care-home placement: short-term available care network

mfar(w/slfm)							0.99 (0.34,2.87)
5.51 (0.22,137.74)	mfar(w/med)						0.18 (0.01,3.75)
1.28 (0.20,8.10)	0.23 (0.01,6.90)	mfar					0.77 (0.17,3.50)
0.40 (0.03,4.97)	0.07 (0.00,3.25)	0.32 (0.02,4.83)	educ & mfar(w/med+slfm)				2.46 (0.25,23.86)
3.03 (0.10,90.43)	0.55 (0.01,46.17)	2.37 (0.07,83.33)	7.51 (0.15,388.32)	aids & mfar			0.33 (0.01,8.21)
0.25 (0.01,6.56)	0.04 (0.00,3.44)	0.19 (0.01,6.08)	0.61 (0.01,28.63)	0.08 (0.00,7.14)	ADL&aids&ed&ex&mf(w/med+slfm)		4.02 (0.18,89.76)
1.01 (0.02,58.78)	0.18 (0.00,26.13)	0.79 (0.01,52.76)	2.49 (0.03,232.77)	0.33 (0.00,53.33)	4.08 (0.03,609.32)	ADL & ntr & exrc	0.99 (0.02,50.04)
0.99 (0.34,2.87)	0.18 (0.01,3.75)	0.77 (0.17,3.50)	2.46 (0.25,23.86)	0.33 (0.01,8.21)	4.02 (0.18,89.76)	0.99 (0.02,50.04)	ac

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR<1 favours the upper left intervention; a OR>1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 73 - Intervention rankings for care-home placement: short-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
mfar(w/med)	81.7	47.4	2.3	1	7
aids & mfar	70.6	30.9	3.1	1	8
mfar	56.7	4.7	4.0	1	7
mfar(w/slfm)	47.9	0.8	4.6	2	7
ac	48.6	0.1	4.6	3	7
ADL & ntr & exrc	48.5	13.5	4.6	1	8
educ & mfar(w/med+slfm)	25.8	0.9	6.2	2	8
ADL&aids&ed&mfar(w/med+slfm)	20.2	1.7	6.6	2	9

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

11.6.2 Care-home placement available care network, medium-term timeframe

Table 74 - Medium-term care-home placement available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Blom 2016 ⁵¹⁰	all	1000	mfa-(w/med+slfm)	ac	x/+	-	x	+	-	xx
Fabacher 1994 ⁵²⁸	all	221	mfar(w/med)	ac	-	-	x	+	-	x
Hall 1992 ⁵⁴³	frail	155	hmcr & mfar(w/slfm)	hmcr & mfar	-	-	x	+	-	x
Harari 2008 ⁵⁴⁴	all	2377	mfar(w/med)	ac	+	x	x	+	+	xx
Hay 1998 ⁵⁴⁶	unclassifiable	470	mfa-	ac	-	-	x	+	-	x
Hebert 2001 ⁵⁴⁷	pre-frail and frail	464	mfar(w/med)	ac	-	-	x	+	-	x
Henderson 2005 ⁵⁴⁸	robust	130	mfar	ac	+/x	+	x	+	-	xx
Kerse 2014 ⁵⁵⁶	pre-frail and frail	3565	rsk-mfa-	ac	+/+	-	x	+	-	x
Kono 2004 ⁵⁵⁹	pre-frail and frail	107	mfar	ac	-	-	x	+	-	x
Kono 2016 ⁵⁵⁸	pre-frail	305	mfar(w/med)	mfar	+	-	x	+	-	x
Kukkonen-Harjula 2017 ⁵⁶¹	pre-frail and frail	272	ADL & ntr & exrc	ac	+	-	x	+	-	x
Metzelthin 2013 ⁵⁷⁶	frail	313	educ & mfar(w/med+slfm)	ac	-/-	-	x	+	-	x
Monteserin Nadal 2008 ⁵⁷⁸	all	474	educ & rsk-mfa-	ac	-	-	x	+	-	x
Newbury 2001 ⁵⁸²	unclassifiable	94	mfa-(w/med)	ac	-	-	x	+	-	x
Newcomer 2004 ⁵⁸³	unclassifiable	2845	educ & mfar(w/med)	ac	-	-	x	+	-	x
Ploeg 2010 ⁵⁹⁰	pre-frail and frail	645	educ & mfar(w/med)	ac	+	-	x	+	-	x
Romera-Liebana 2018 ⁵⁹³	pre-frail and frail	324	cgn & med & ntr & exrc	ac	+	-	x	+	-	x
Shapiro 2002 ⁵⁹⁸	frail	67	hmcr & mfar	ac	-	-	x	+	-	xx
Suijker 2016 ⁶⁰⁵	frail	1784	mfar(w/med)	ac	+/-	-	x	+	-	x
van Hout 2010 ⁶¹⁸	frail	443	mfar(w/med)	ac	+	-	x	+	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 75 Care-home placement in the medium term: comparisons with available care summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: care-home placement

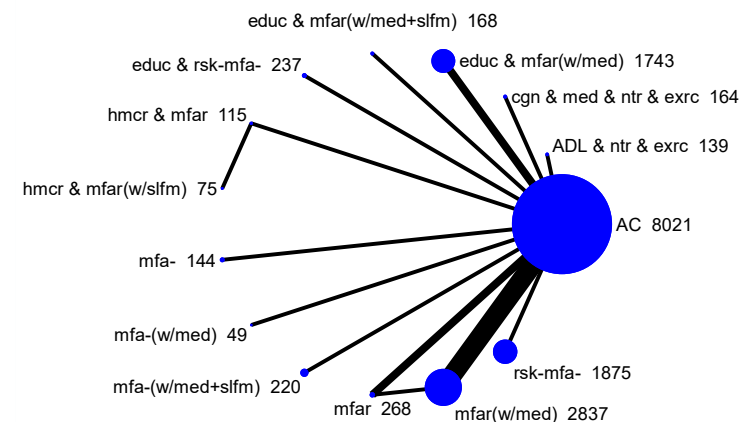
Timeframe: medium term; range of follow up 12 to 18 months

Setting: Community

Total studies: 20

Total participants: 16,055

Comparator rank: Mean 9.2, 95% CI 6 to 12



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (50 per 1000 with ac)		Low-risk population (1 per 1000 with ac) ^b				
			With intervention	Difference	With intervention	Difference			
Homecare, multifactorial-action and review with self-management strategies (hmc & mfar(w/slfm))	OR 0.07 (0.01 to 0.53) Indirect estimate	RR 0.07 (0.01 to 0.53)	4 per 1000 (0 to 27)	46 fewer per 1000 (50 fewer to 23 fewer)	0 per 1000 (0 to 1)	1 fewer per 1000 (1 fewer to 0)	⊕⊕⊕⊕ Very low ^{c,d}	1.6 (1 to 5)	the evidence is very uncertain about the effect on care-home placement
Homecare, multifactorial-action and review (hmc & mfar)	OR 0.18 (0.04 to 0.78) Mixed estimate	RR 0.18 (0.04 to 0.78)	9 per 1000 (2 to 39)	41 fewer per 1000 (48 fewer to 11 fewer)	0 per 1000 (0 to 1)	1 fewer per 1000 (1 fewer to 0)	⊕⊕⊕⊕ Very low ^{e,f}	2.9 (1 to 7)	the evidence is very uncertain about the effect on care-home placement
Multifactorial-action (mfa-)	OR 0.32 (0.02 to 6.48) Mixed estimate	RR 0.32 (0.02 to 5.81)	17 per 1000 (1 to 254)	33 fewer per 1000 (49 fewer to 204 more)	0 per 1000 (0 to 6)	1 fewer per 1000 (1 fewer to 5 more)	⊕⊕⊕⊕ Very low ^{g,h}	5.3 (1 to 14)	the evidence is very uncertain about the effect on care-home placement
Multifactorial-action and review (mfar)	OR 0.53 (0.20 to 1.39) Mixed estimate	RR 0.53 (0.20 to 1.38)	27 per 1000 (10 to 68)	23 fewer per 1000 (40 fewer to 18 more)	1 per 1000 (0 to 1)	0 per 1000 (1 fewer to 0)	⊕⊕⊕⊕ Very low ^{g,h}	5.7 (2 to 12)	the evidence is very uncertain about the effect on care-home placement
Education and risk-screening (educ & rsk-mfa-)	OR 0.59 (0.13 to 2.72) Mixed estimate	RR 0.60 (0.13 to 2.63)	30 per 1000 (7 to 125)	20 fewer per 1000 (43 fewer to 75 more)	1 per 1000 (0 to 3)	0 per 1000 (1 fewer to 2 more)	⊕⊕⊕⊕ Very low ^{g,h}	6.6 (2 to 14)	the evidence is very uncertain about the effect on care-home placement
Cognitive training, medication-review, nutrition and exercise (cgn & med & ntr & excr)	OR 0.65 (0.10 to 4.17) Mixed estimate	RR 0.65 (0.10 to 3.91)	33 per 1000 (5 to 180)	17 fewer per 1000 (45 fewer to 130 more)	1 per 1000 (0 to 4)	0 per 1000 (1 fewer to 3 more)	⊕⊕⊕⊕ Very low ^{g,h}	7.2 (1 to 14)	the evidence is very uncertain about the effect on care-home placement
Multifactorial-action and review with medication-review (mfar(w/med))	OR 0.81 (0.42 to 1.57) Mixed estimate	RR 0.81 (0.42 to 1.55)	41 per 1000 (22 to 76)	9 fewer per 1000 (28 fewer to 26 more)	1 per 1000 (0 to 2)	0 per 1000 (1 fewer to 1 more)	⊕⊕⊕⊕ Very low ^{g,h}	7.7 (4 to 12)	the evidence is very uncertain about the effect on care-home placement

Multifactorial-action with medication-review (mfa-(w/med))	OR 0.91 (0.12 to 7.18) Mixed estimate	RR 0.92 (0.12 to 6.35)	46 per 1000 (6 to 274)	4 fewer per 1000 (44 fewer to 224 more)	1 per 1000 (0 to 7)	0 per 1000 (1 fewer to 6 more)	⊕⊕⊕⊕ Very low ^{g,h}	8.3 (2 to 14)	the evidence is very uncertain about the effect on care-home placement
ADL, nutrition and exercise (ADL & ntr & exrc)	OR 0.96 (0.13 to 7.29) Mixed estimate	RR 0.96 (0.13 to 6.44)	48 per 1000 (7 to 277)	2 fewer per 1000 (43 fewer to 227 more)	1 per 1000 (0 to 7)	0 per 1000 (1 fewer to 6 more)	⊕⊕⊕⊕ Very low ^{g,h}	8.6 (2 to 14)	the evidence is very uncertain about the effect on care-home placement
Multifactorial-action with medication-review and self-management strategies (mfa-(w/med+slfm))	OR 1.01 (0.40 to 2.58) Mixed estimate	RR 1.01 (0.40 to 2.49)	51 per 1000 (21 to 119)	1 more per 1000 (29 fewer to 69 more)	1 per 1000 (0 to 3)	0 per 1000 (1 fewer to 2 more)	⊕⊕⊕⊕ Very low ^{l,j}	9.3 (4 to 14)	the evidence is very uncertain about the effect on care-home placement
Risk-screening (rsk-mfa-)	OR 1.15 (0.62 to 2.13) Mixed estimate	RR 1.14 (0.62 to 2.08)	57 per 1000 (31 to 101)	7 more per 1000 (19 fewer to 51 more)	1 per 1000 (1 to 2)	0 per 1000 (0 to 1 more)	⊕⊕⊕⊕ Very low ^{g,h}	10.0 (6 to 14)	the evidence is very uncertain about the effect on care-home placement
Education, multifactorial-action and review with medication-review (educ & mfar(w/med))	OR 1.23 (0.61 to 2.49) Mixed estimate	RR 1.22 (0.61 to 2.41)	61 per 1000 (31 to 116)	11 more per 1000 (19 fewer to 66 more)	1 per 1000 (1 to 2)	0 per 1000 (0 to 1 more)	⊕⊕⊕⊕ Very low ^{g,h}	10.4 (5 to 14)	the evidence is very uncertain about the effect on care-home placement
Education, multifactorial-action and review with medication-review and self-management strategies (educ & mfar(w/med+slfm))	OR 2.19 (0.39 to 12.29) Mixed estimate	RR 2.14 (0.40 to 9.93)	103 per 1000 (20 to 393)	53 more per 1000 (30 fewer to 343 more)	2 per 1000 (0 to 12)	1 more per 1000 (1 fewer to 11 more)	⊕⊕⊕⊕ Very low ^{g,h}	12.1 (4 to 14)	the evidence is very uncertain about the effect on care-home placement

a: Calculated from OR and an assumed comparator risk of 0.021, the median available care risk among these studies.

b: 1 per 1000 was given as low risk but two available care groups had lower risks than this.

c: very serious concerns about risk of bias due to missing outcome data in the indirect evidence via homecare, multifactorial-action and review (hmcr & mfar) vs available care (ac) comparison. Downgrade twice.

d: serious concerns about imprecision as no closed loop and direct evidence is based on 11 events and 155 persons in homecare, multifactorial-action and review (hmcr & mfar) which do not meet optimal information size. Downgrade once.

e: very serious concerns about risk of bias due to missing outcome data. Downgrade twice.

f: serious concerns about imprecision as no closed loop and direct evidence is based on 14 events and 67 persons in homecare, multifactorial-action and review (hmcr & mfar) which do not meet optimal information size. Downgrade once.

g: serious concerns about risk of bias due to missing outcome data. Downgrade once.

h: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.

i: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.

j: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Already downgraded twice for risk of bias, downgrade once.

Table 76 - Results of care-home placement: medium-term available care network

rsk-mfa-													1.15 (0.77, 1.70)
1.41 (0.57, 3.50)	mfar(w/med)	1.97 (0.18, 22.00)											0.79 (0.42, 1.47)
2.17 (0.69, 6.83)	1.53 (0.50, 4.66)	mfar											0.55 (0.21, 1.48)
1.13 (0.37, 3.47)	0.80 (0.26, 2.51)	0.52 (0.14, 2.00)	mfa- (w/med+slfm)										1.01 (0.46, 2.26)
1.25 (0.15, 10.77)	0.89 (0.10, 7.70)	0.58 (0.06, 5.63)	1.11 (0.12, 10.63)	mfa-(w/med)									0.91 (0.12, 6.78)
3.58 (0.17, 77.33)	2.53 (0.12, 55.13)	1.65 (0.07, 38.98)	3.17 (0.14, 73.90)	2.86 (0.07, 109.58)	mfa-								0.32 (0.02, 6.23)
17.08 (1.98, 147.40)	12.08 (1.38, 105.43)	7.88 (0.81, 76.98)	15.10 (1.57, 145.41)	13.63 (0.74, 251.66)	4.77 (0.12, 182.97)	hmcr & mfar(w/slfm)	0.38 (0.10, 1.47)						
6.40 (1.30, 31.61)	4.53 (0.90, 22.70)	2.96 (0.51, 17.18)	5.66 (0.99, 32.31)	5.11 (0.41, 64.21)	1.79 (0.06, 50.84)	0.38 (0.09, 1.60)	hmcr & mfar						0.18 (0.04, 0.72)
1.93 (0.37, 9.96)	1.36 (0.26, 7.15)	0.89 (0.15, 5.39)	1.70 (0.29, 10.14)	1.54 (0.12, 19.89)	0.54 (0.02, 15.64)	0.11 (0.01, 1.46)	0.30 (0.04, 2.49)	educ & rsk- mfa-					0.59 (0.14, 2.52)
0.52 (0.08, 3.26)	0.37 (0.06, 2.34)	0.24 (0.03, 1.74)	0.46 (0.07, 3.28)	0.42 (0.03, 6.12)	0.15 (0.00, 4.67)	0.03 (0.00, 0.45)	0.08 (0.01, 0.79)	0.27 (0.03, 2.70)	educ & mfar(w/med+sl fm)				2.19 (0.42, 11.48)
0.93 (0.36, 2.39)	0.66 (0.25, 1.75)	0.43 (0.13, 1.42)	0.83 (0.26, 2.66)	0.75 (0.08, 6.57)	0.26 (0.01, 5.72)	0.05 (0.01, 0.48)	0.15 (0.03, 0.74)	0.48 (0.09, 2.59)	1.79 (0.28, 11.50)	educ & mfar(w/med)			1.14 (0.34, 3.82)
1.77 (0.25, 12.67)	1.25 (0.17, 9.07)	0.82 (0.10, 6.69)	1.57 (0.19, 12.62)	1.42 (0.09, 22.80)	0.50 (0.01, 17.05)	0.10 (0.01, 1.68)	0.28 (0.03, 2.98)	0.92 (0.08, 10.21)	3.39 (0.27, 43.01)	1.90 (0.26, 13.96)	cgn & med & ntr & exrc		0.65 (0.11, 3.92)
1.20 (0.14, 10.03)	0.85 (0.10, 7.18)	0.55 (0.06, 5.25)	1.06 (0.11, 9.91)	0.96 (0.05, 17.27)	0.33 (0.01, 12.61)	0.07 (0.00, 1.27)	0.19 (0.02, 2.30)	0.62 (0.05, 7.87)	2.29 (0.16, 32.93)	1.28 (0.15, 11.03)	0.68 (0.04, 10.66)	ADL & ntr & exrc	0.96 (0.13, 6.89)
1.15 (0.62, 2.13)	0.81 (0.42, 1.57)	0.53 (0.20, 1.39)	1.01 (0.40, 2.58)	0.91 (0.12, 7.18)	0.32 (0.02, 6.48)	0.07 (0.01, 0.53)	0.18 (0.04, 0.78)	0.59 (0.13, 2.72)	2.19 (0.39, 12.29)	1.23 (0.61, 2.49)	0.65 (0.10, 4.17)	0.96 (0.13, 7.29)	ac

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR<1 favours the upper left intervention; a OR>1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 77 - Intervention rankings for care-home placement: medium-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & mfar(w/slfm)	95.1	65.1	1.6	1	5
hmcr & mfar	85.2	4.6	2.9	1	7
mfa-	67	19.9	5.3	1	14
mfar	63.9	0.5	5.7	2	12
educ & rsk-mfa-	56.6	1.7	6.6	2	14
cgn & med & ntr & exrc	52.6	3.2	7.2	1	14
mfar(w/med)	48.1	0	7.7	4	12
mfa-(w/med)	43.6	2.8	8.3	2	14
adl & ntr & exrc	41.3	2.1	8.6	2	14
ac	37	0	9.2	6	12
mfa-(w/med+slfm)	36.5	0	9.3	4	14
rsk-mfa-	30.6	0	10	6	14
educ & mfar(w/med)	27.6	0	10.4	5	14
educ & mfar(w/med+slfm)	15	0.1	12.1	4	14

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

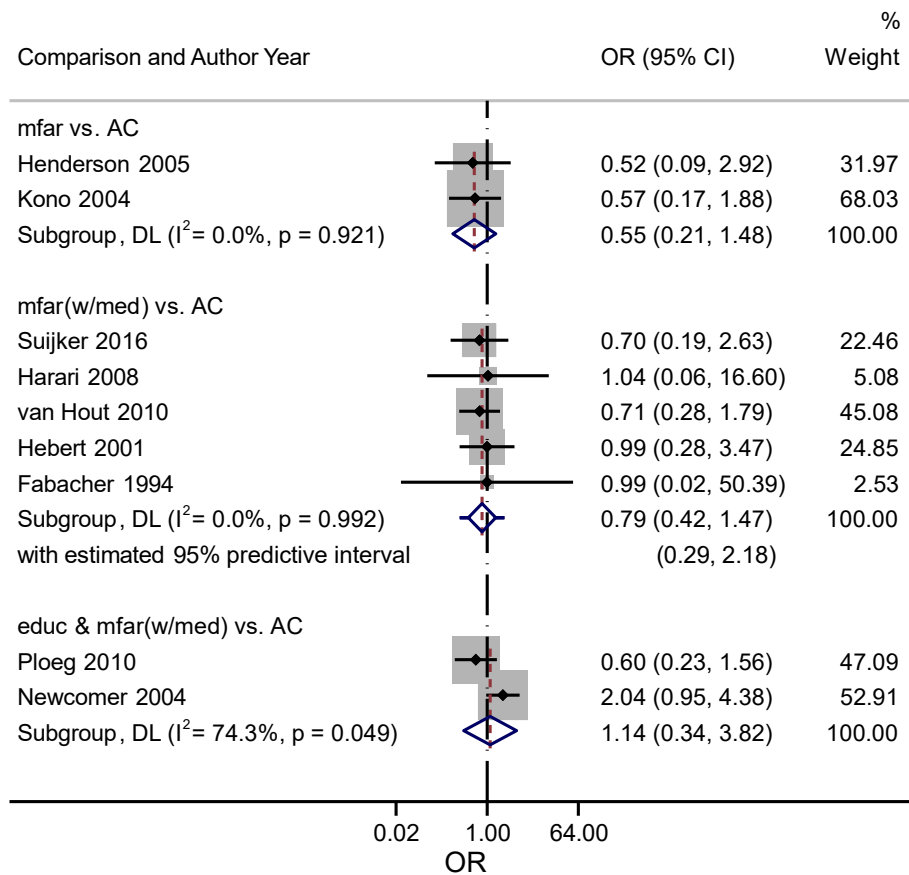


Figure 33 - Pairwise meta-analysis for care-home placement: medium-term available care network (pooling comparisons with greater than one study reporting results)

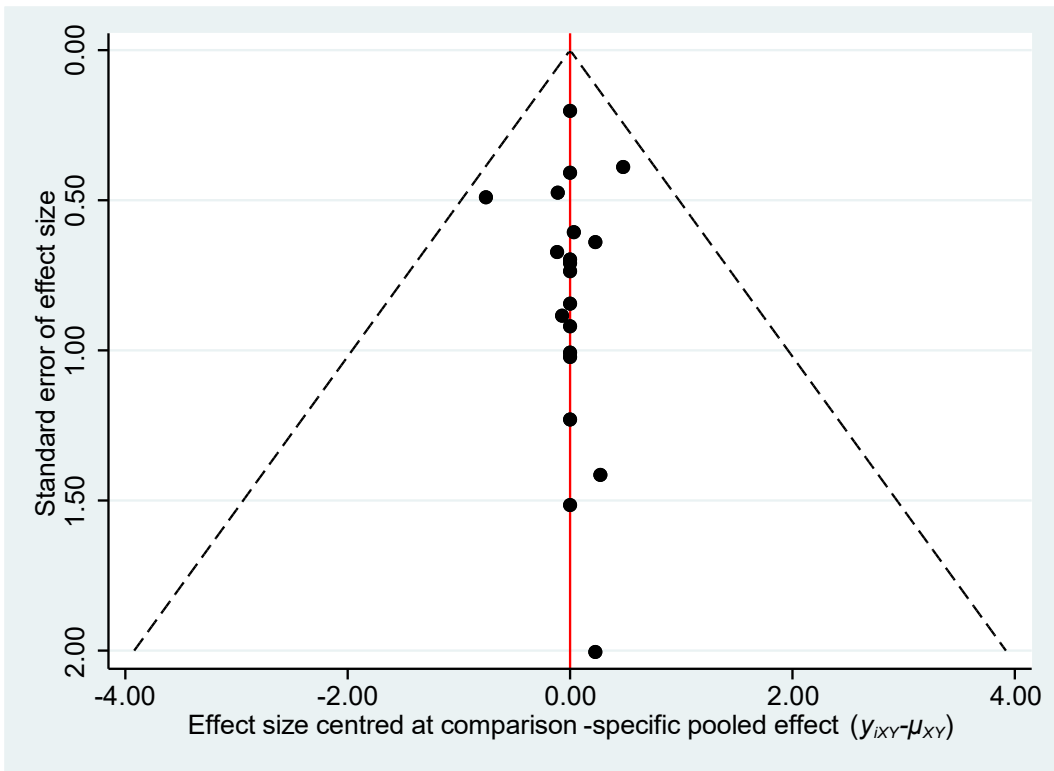


Figure 34 - Comparison-adjusted funnel plot for care-home placement: medium-term available care network

11.6.3 Care-home placement available care network, long-term timeframe

Table 78 - Long-term care-home placement available-care network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Carpenter 1990 ⁵¹⁶	all	395	rsk-mfa-	ac	-	-	x	+	-	x
Fischer 2009 ⁵³²	all	3700	eng & mfa-(w/slfm)	ac	+	-	x	+	-	x
Ford 1971 ⁵³³	pre-frail and frail	213	mfar(w/med)	ac	+	-	x	+	-	x
Hay 1998 ⁵⁴⁶	unclassifiable	359	mfa-	ac	-	-	x	+	-	x
Kerse 2014 ⁵⁵⁶	pre-frail and frail	3305	rsk-mfa-	ac	+/+	-	x	+	-	x
Kono 2016 ⁵⁵⁸	pre-frail	280	mfar(w/med)	mfar	+	-	x	+	-	x
Kukkonen-Harjula 2017 ⁵⁶¹	pre-frail and frail	262	ADL & ntr & exrc	ac	+	-	x	+	+	x
Metzelthin 2013 ⁵⁷⁶	frail	290	educ & mfar(w/med+slfm)	ac	-/-	-	x	+	-	x
Stuck 1995 ⁶⁰²	all	364	educ & mfar(w/med)	ac	+	-	x	+	-	x
Stuck 2015 ⁶⁰⁴	robust and pre-frail	2045	educ & mfar(w/med+slfm)	ac	+	x	x	+	+	xx
Suijker 2016 ⁶⁰⁵	frail	1776	mfar(w/med)	ac	+/-	-	x	+	-	x
Thomas 2007 ⁶¹¹	pre-frail and frail	341	mfar(w/med)	ac	-	-	-	+	-	-
Tomita 2007 ⁶¹²	frail	85	aids	ac	x	-	x	+	-	xx
Tulloch 1979 ⁶¹³	all	223	mfar(w/med)	ac	-	-	x	+	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 79 - Care-home placement in the long term: comparisons with available care summary of findings table.

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: care-home placement

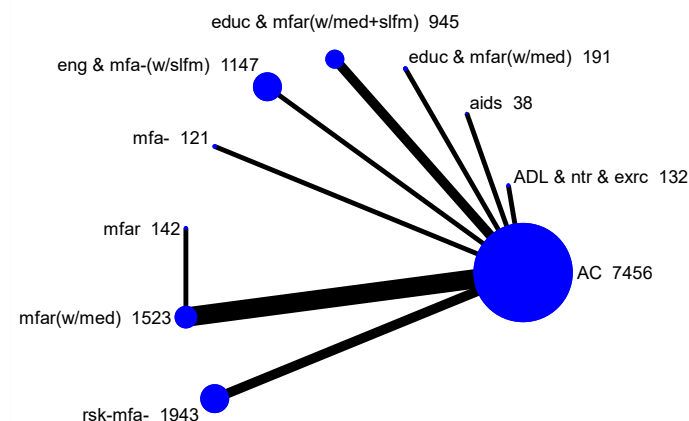
Timeframe: long term; range of follow up 24 to 48 months

Setting: Community

Total studies: 14

Total participants: 13638

Comparator rank: Mean 5.4, 95% CI 3 to 8



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (200 per 1000 with ac)		Low-risk population (7 per 1000 with ac)				
			With intervention	Difference	With intervention	Difference			
Risk-screening (rsk-mfa-)	OR 1.41 (1.06 to 1.88) Mixed estimate	RR 1.39 (1.06 to 1.82)	261 per 1000 (209 to 319)	61 more per 1000 (9 more to 119 more)	10 per 1000 (7 to 13)	3 more per 1000 (0 to 6 more)	⊕⊕⊕⊖ Low ^{b,c}	8.4 (6 to 10)	may result in an increase in care-home placement
Multifactorial-action and review (mfar)	OR 0.41 (0.07 to 2.26) Indirect estimate	RR 0.42 (0.08 to 2.16)	93 per 1000 (18 to 361)	107 fewer per 1000 (182 fewer to 161 more)	3 per 1000 (1 to 16)	4 fewer per 1000 (6 fewer to 9 more)	⊕⊖⊖⊖ Very low ^{d,e}	3.1 (1 to 10)	the evidence is very uncertain about the effect on care-home placement
Aids (aids)	OR 0.40 (0.04 to 3.97) Mixed estimate	RR 0.41 (0.04 to 3.58)	90 per 1000 (10 to 498)	110 fewer per 1000 (190 fewer to 298 more)	3 per 1000 (0 to 27)	4 fewer per 1000 (7 fewer to 20 more)	⊕⊖⊖⊖ Very low ^{f,g}	3.3 (1 to 10)	the evidence is very uncertain about the effect on care-home placement
ADL, nutrition and exercise (ADL & ntr & excr)	OR 0.79 (0.32 to 1.98) Mixed estimate	RR 0.80 (0.32 to 1.91)	165 per 1000 (73 to 331)	35 fewer per 1000 (127 fewer to 131 more)	6 per 1000 (2 to 14)	1 fewer per 1000 (5 fewer to 7 more)	⊕⊖⊖⊖ Very low ^{b,c}	4.6 (1 to 10)	the evidence is very uncertain about the effect on care-home placement
Education, multifactorial-action and review with medication-review (educ & mfar(w/med))	OR 0.77 (0.25 to 2.33) Mixed estimate	RR 0.78 (0.26 to 2.22)	161 per 1000 (60 to 369)	39 fewer per 1000 (140 fewer to 169 more)	5 per 1000 (2 to 16)	2 fewer per 1000 (5 fewer to 9 more)	⊕⊖⊖⊖ Very low ^{b,c}	4.6 (1 to 10)	the evidence is very uncertain about the effect on care-home placement
Multifactorial-action (mfa-)	OR 0.65 (0.07 to 6.34) Mixed estimate	RR 0.66 (0.07 to 5.30)	140 per 1000 (17 to 613)	60 fewer per 1000 (183 fewer to 413 more)	5 per 1000 (0 to 43)	2 fewer per 1000 (7 fewer to 36 more)	⊕⊖⊖⊖ Very low ^{b,c}	4.7 (1 to 10)	the evidence is very uncertain about the effect on care-home placement
Multifactorial-action and review with medication-review (mfar(w/med))	OR 1.08 (0.72 to 1.62) Mixed estimate	RR 1.08 (0.73 to 1.58)	212 per 1000 (153 to 288)	12 more per 1000 (47 fewer to 88 more)	8 per 1000 (5 to 11)	1 more per 1000 (2 fewer to 4 more)	⊕⊖⊖⊖ Very low ^{b,c}	6.2 (3 to 10)	the evidence is very uncertain about the effect on care-home placement

Meaningful-activities and multifactorial-action with self-management strategies (eng & mfa-(w/slfm))	OR 1.21 (0.79 to 1.86) Mixed estimate	RR 1.20 (0.79 to 1.80)	232 per 1000 (165 to 317)	32 more per 1000 (35 fewer to 117 more)	8 per 1000 (6 to 13)	1 more per 1000 (1 fewer to 6 more)	⊕⊕⊕⊕ Very low ^{b,c}	7.3 (3 to 10)	the evidence is very uncertain about the effect on care-home placement
Education, multifactorial-action and review with medication-review and self-management strategies (educ & mfar(w/med+slfm))	OR 1.26 (0.67 to 2.37) Mixed estimate	RR 1.25 (0.68 to 2.25)	240 per 1000 (144 to 372)	40 more per 1000 (56 fewer to 172 more)	9 per 1000 (5 to 16)	2 more per 1000 (2 fewer to 9 more)	⊕⊕⊕⊕ Very low ^{g,h}	7.4 (3 to 10)	the evidence is very uncertain about the effect on care-home placement

- a: Calculated from OR and an assumed comparator risk of 0.037, the median available care risk among these studies.
- b: serious concerns about risk of bias due to missing outcome data. Downgrade once.
- c: serious concerns about inconsistency (heterogeneity) between studies as their point estimates indicate benefit and harm respectively. Although confidence intervals overlap it is only moderate. $I^2 = 56\%$ Downgrade once.
- d: serious concerns about risk of bias due to missing outcome data in the indirect evidence via multifactorial-action and review with medication-review vs available care comparison. Downgrade once.
- e: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.
- f: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.
- g: very serious concerns about imprecision as confidence interval includes substantial benefit and harm. Already downgraded twice for risk of bias, downgrade once.
- h: very serious concerns about risk of bias due to deviations from the intended interventions and missing data. Downgrade twice.

Table 80 - Results of care-home placement: long-term available care network

									0.75 (0.10, 5.72)
1.31 (0.80,2.14)	mfar(w/med)	2.63 (0.50, 13.80)							1.08 (0.70, 1.65)
3.44 (0.61,19.37)	2.63 (0.50,13.80)	mfar							
2.16 (0.22,21.36)	1.65 (0.16,16.64)	0.63 (0.04,10.78)	mfa-						0.65 (0.07, 6.34)
1.16 (0.70,1.95)	0.89 (0.49,1.61)	0.34 (0.06,1.97)	0.54 (0.05,5.46)	eng & mfa- (w/slfm)					1.21 (0.79, 1.86)
1.12 (0.56,2.23)	0.86 (0.41,1.81)	0.33 (0.05,2.00)	0.52 (0.05,5.48)	0.96 (0.45,2.06)	educ & mfar(w/med+slfm)				1.26 (0.67, 2.37)
1.83 (0.58,5.77)	1.40 (0.43,4.57)	0.53 (0.07,4.08)	0.85 (0.07,10.66)	1.57 (0.48,5.17)	1.64 (0.46,5.88)	educ & mfar(w/med)			0.77 (0.25, 2.33)
3.56 (0.35,36.28)	2.72 (0.26,28.26)	1.03 (0.06,18.19)	1.65 (0.06,41.96)	3.05 (0.29,31.84)	3.18 (0.29,34.70)	1.94 (0.15,25.06)	aids		0.40 (0.04, 3.97)
1.78 (0.68,4.65)	1.36 (0.50,3.71)	0.52 (0.07,3.59)	0.82 (0.07,9.57)	1.53 (0.56,4.21)	1.59 (0.52,4.84)	0.97 (0.23,4.10)	0.50 (0.04,5.98)	ADL & ntr & exrc	0.79 (0.32, 1.98)
1.41 (1.06,1.88)	1.08 (0.72,1.62)	0.41 (0.07,2.26)	0.65 (0.07,6.34)	1.21 (0.79,1.86)	1.26 (0.67,2.37)	0.77 (0.25,2.33)	0.40 (0.04,3.97)	0.79 (0.32,1.98)	ac

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR<1 favours the upper left intervention; a OR>1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 81 - Intervention rankings for care-home placement: long-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
mfar	76.5	31.2	3.1	1	10
aids	74.2	37.6	3.3	1	10
adl & ntr & exrc	60.5	3.7	4.6	1	10
educ & mfar(w/med)	60.2	6	4.6	1	10
mfa-	58.8	21.2	4.7	1	10
ac	50.7	0	5.4	3	8
mfar(w/med)	42.4	0.1	6.2	3	10
eng & mfa-(w/slfm)	29.9	0	7.3	3	10
educ & mfar(w/med+slfm)	29.1	0.2	7.4	3	10
rsk-mfa	17.7	0	8.4	6	10

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

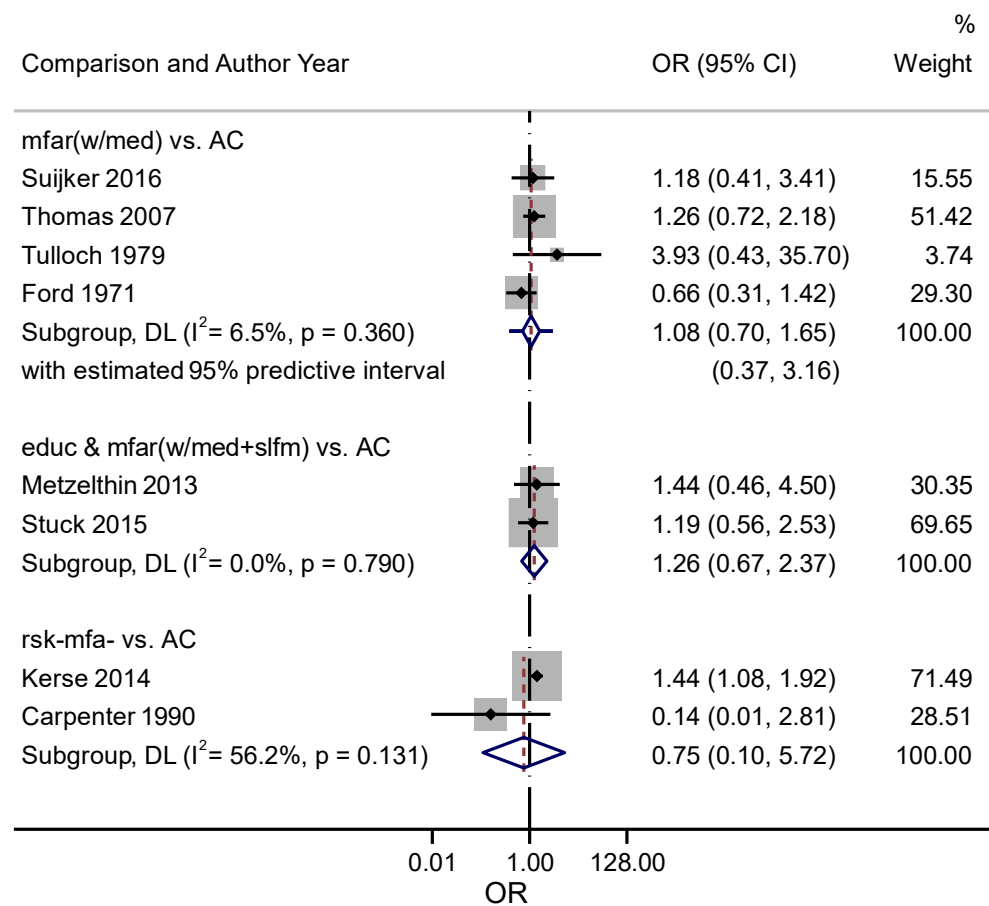


Figure 35 - Pairwise meta-analysis for care-home placement: long-term available care network (pooling comparisons with greater than one study reporting results)

11.6.4 Care-home placement homecare network, short-term timeframe

No results as there were too few comparisons to conduct network meta-analysis.

11.6.5 Care-home placement homecare network, medium-term timeframe

Table 82 - Medium-term care-home placement homecare network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Fernandez-Barres 2017⁵³¹	frail	129	hmcr & ntr	hmcr	+	-	x	+	-	x
Lewin 2013⁵⁶⁵	frail	607	hmcr & educ & mfar	hmcr	x	x	x	+	-	xx
Rooijackers 2021⁵⁹⁴	frail	232	hmcr & ADL & mfar(w/slfn)	hmcr	+/-	-	x	+	-	x
Wolter 2013⁶²⁹	frail	599	hmcr & mfar(w/med)	hmcr	+/-	-	x	+	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 83. Care-home placement in the medium term: comparisons with homecare summary of findings table.

Population: Older people

Interventions: Community-based complex interventions

Comparator: Homecare (hmcr)

Outcome: care-home placement

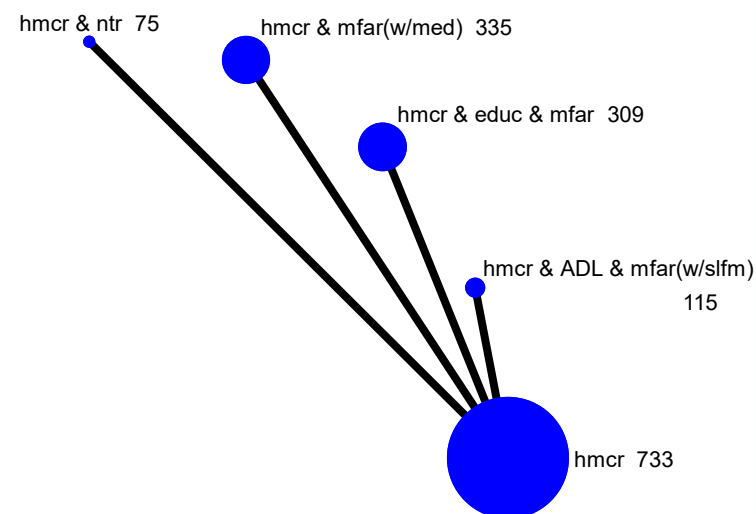
Timeframe: medium term; range of follow up 12 to 13 months

Setting: Community

Total studies: 4

Total participants: 1567

Comparator rank: Mean 2.9, 95% CI 1 to 5



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (182 per 1000 with hmcr)		Low-risk population (85 per 1000 with hmcr)				
			With intervention	Difference	With intervention	Difference			
Homecare, education, multifactorial-action and review (hmcr & educ & mfar)	OR 0.86 (0.55 to 1.35) Mixed estimate	RR 0.88 (0.59 to 1.29)	161 per 1000 (110 to 231)	21 fewer per 1000 (72 fewer to 49 more)	74 per 1000 (49 to 111)	11 fewer per 1000 (36 fewer to 26 more)	⊕⊕⊕⊕ Very low ^{b,c}	2.2 (1 to 5)	the evidence is very uncertain about the effect on care-home placement
Homecare, ADL, multifactorial-action and review with self-management strategies (hmcr & ADL & mfar(w/slfm))	OR 0.91 (0.35 to 2.33) Mixed estimate	RR 0.92 (0.39 to 1.97)	168 per 1000 (73 to 341)	14 fewer per 1000 (109 fewer to 159 more)	78 per 1000 (32 to 178)	7 fewer per 1000 (53 fewer to 93 more)	⊕⊕⊕⊕ Very low ^{d,e}	2.6 (1 to 5)	the evidence is very uncertain about the effect on care-home placement
Homecare, multifactorial-action and review with medication-review (hmcr & mfar(w/med))	OR 1.12 (0.75 to 1.70) Mixed estimate	RR 1.11 (0.77 to 1.55)	200 per 1000 (142 to 274)	18 more per 1000 (40 fewer to 92 more)	95 per 1000 (65 to 136)	10 more per 1000 (20 fewer to 51 more)	⊕⊕⊕⊕ Very low ^{d,e}	3.6 (1 to 5)	the evidence is very uncertain about the effect on care-home placement

Homecare and nutrition (hmcr & ntr)	OR 1.37 (0.48 to 3.98) Mixed estimate	RR 1.31 (0.51 to 2.83)	234 per 1000 (96 to 470)	52 more per 1000 (86 fewer to 288 more)	113 per 1000 (42 to 270)	28 more per 1000 (43 fewer to 185 more)	⊕⊖⊖⊖ Very low ^{d,e}	3.8 (1 to 5)	the evidence is very uncertain about the effect on care-home placement
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- a: Calculated from OR and an assumed comparator risk of 0.136, the median available care risk among these studies.
- b: very serious concerns about risk of bias due to randomisation process, participants were not analysed according to allocation, and missing outcome data. Downgrade twice.
- c: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Already downgraded twice for risk of bias, downgrade once.
- d: serious concerns about risk of bias due to missing outcome data. Downgrade once.
- e: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.

Table 84 - Results of care-home placement: medium-term homecare network

hmcr & ntr				1.37 (0.48,3.98)
1.22 (0.39,3.82)	hmcr & mfar(w/med)			1.13 (0.75,1.70)
1.59 (0.50,5.03)	1.30 (0.71,2.38)	hmcr & educ & mfar		0.86 (0.55,1.35)
1.51 (0.37,6.25)	1.24 (0.44,3.45)	0.95 (0.34,2.69)	hmcr & ADL & mfar(w/slfm)	0.91 (0.35,2.33)
1.37 (0.48,3.98)	1.13 (0.75,1.70)	0.86 (0.55,1.35)	0.91 (0.35,2.33)	hmcr

Lower left triangle presents the findings (OR with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (OR with 95% CI) of pairwise meta-analyses. A OR<1 favours the upper left intervention; a OR>1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (OR and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 85 - Intervention rankings for care-home placement: medium-term homecare network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & educ & mfar	71.2	36.4	2.2	1	5
hmcr & ADL & mfar(w/slfm)	60.1	38.1	2.6	1	5
hmcr	52.5	6.8	2.9	1	5
hmcr & mfar(w/med)	35.8	4.9	3.6	1	5
hmcr & ntr	30.4	13.8	3.8	1	5

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

11.6.6 Care-home placement homecare network, long-term timeframe

No results as there were too few comparisons to conduct network meta-analysis.

11.7 Health status

11.7.1 Health status available care network (medium-term timeframe only)

Table 86 - Medium-term health status available-care network

Study	Frailty	n	Experimental group	Control group	ROB					
					D1	D2	D3	D4	D5	Overall
Blom 2016 ⁵¹⁰	all	844	mfa-(w/med+slfm)	ac	x/+	-	x	-	+	xx
Bouman 2008 ⁵¹³	pre-frail and frail	293	mfar(w/med)	ac	+	-	x	-	-	x
Brettschneider 2015 ⁵¹⁴	frail	278	mfar(w/med)	ac	-	-	x	-	+	x
Cameron 2013 ⁵¹⁵	frail	215	exrc & mfar(w/med+slfm)	ac	+	-	-	-	+	-
Serra-Prat 2017 ⁵⁹⁷	pre-frail	133	ntr & exrc	ac	-	-	x	-	-	x
Szanton 2019 ⁶⁰⁷	pre-frail and frail	260	ADL&aids&educ&exrc& mfar(w/med+slfm)	ac	+	-	x	-	-	x
Takahashi 2012 ⁶⁰⁸	frail	166	mntr-mfa-	ac	-	-	x	-	+	x
Thomas 2007 ⁶¹¹	pre-frail and frail	442	mfar(w/med)	ac	-	-	x	-	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 87 - Self-reported health in the medium term: comparisons with available care summary of findings table.

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: self-reported health (single question)

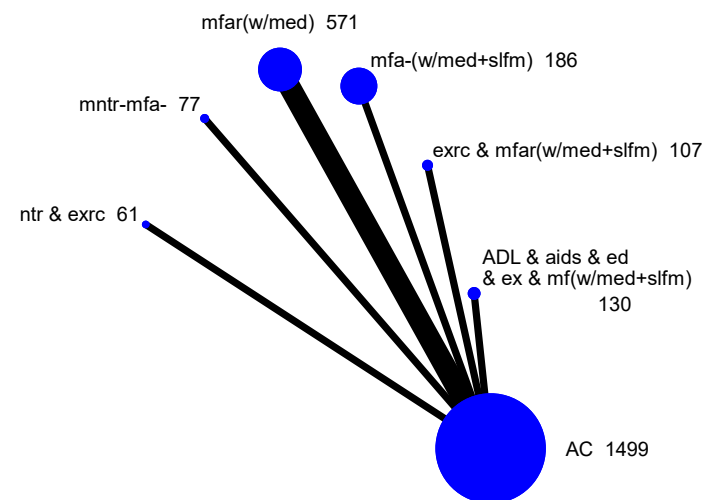
Timeframe: medium term; range of follow up 12 to 18 months

Setting: Community

Total studies: 8

Total participants: 2631

Comparator rank: Mean 4.4, 95% CI 2 to 6



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (EQ-VAS, 0 to 100) ^a			
Exercise, multifactorial-action and review with medication-review and self-management strategies (excr & mfar(w/med+slfm))	SMD 0.01 lower (0.34 lower to 0.32 higher) Mixed estimate	MD 0.20 lower (6.94 lower to 6.53 higher)	⊕⊕⊕⊕ Low ^b	4.3 (1 to 7)	may result in little to no difference in self-reported health
Multifactorial-action and review with medication-review (mfar(w/med))	SMD 0.11 higher (0.06 lower to 0.28 higher) Mixed estimate	MD 2.24 higher (1.22 lower to 5.71 higher)	⊕⊕⊕⊕ Very low ^{b,c}	2.6 (1 to 6)	the evidence is very uncertain about the effect on self-reported health
Multifactorial-action with medication-review and self-management strategies (mfa-(w/med+slfm))	SMD 0.07 higher (0.18 lower to 0.32 higher) Mixed estimate	MD 1.43 higher (3.67 lower to 6.53 higher)	⊕⊕⊕⊕ Very low ^{d,e}	3.2 (1 to 7)	the evidence is very uncertain about the effect on self-reported health
Nutrition and exercise (ntr & excr)	SMD 0.07 higher (0.33 lower to 0.46 higher) Mixed estimate	MD 1.43 higher (6.73 lower to 9.38 higher)	⊕⊕⊕⊕ Very low ^{b,c}	3.4 (1 to 7)	the evidence is very uncertain about the effect on self-reported health
ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management strategies (ADL & aids & ed & ex & mf(w/med+slfm))	SMD 0.06 lower (0.38 lower to 0.25 higher) Mixed estimate	MD 1.22 lower (7.75 lower to 5.10 higher)	⊕⊕⊕⊕ Very low ^{b,c}	4.9 (1 to 7)	the evidence is very uncertain about the effect on self-reported health
Monitoring (mntr-mfa-)	SMD 0.11 lower (0.47 lower to 0.26 higher) Mixed estimate	MD 2.24 lower (9.59 lower to 5.30 higher)	⊕⊕⊕⊕ Very low ^{b,c}	5.3 (1 to 7)	the evidence is very uncertain about the effect on self-reported health

a: calculated from the estimated SMD using a standard deviation of 20.4, the pooled standard deviation across all intervention groups reporting EQ-VAS (0 to 100) included in this NMA.

b: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

c: serious concerns about risk of bias due to missing outcome data. Downgrade once.

d: very serious concerns about risk of bias due to missing outcome data and uncertainty about the randomisation procedure combined with a large imbalance in cluster sizes.

e: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.

Table 88 - Results of Health status: medium-term available care network

ntr & exrc						0.07 (-0.27,0.41)
0.17 (-0.36,0.71)	mntr-mfa-					-0.11 (-0.41,0.20)
-0.04 (-0.47,0.38)	-0.21 (-0.61,0.19)	mfar(w/med)				0.11 (-0.06,0.28)
-0.00 (-0.47,0.46)	-0.18 (-0.62,0.27)	0.04 (-0.27,0.34)	mfa-(w/med+slfm)			0.07 (-0.09,0.23)
0.08 (-0.44,0.59)	-0.10 (-0.59,0.40)	0.12 (-0.25,0.49)	0.08 (-0.34,0.50)	exrc & mfar(w/med+slfm)		-0.01 (-0.28,0.26)
0.13 (-0.37,0.63)	-0.04 (-0.52,0.44)	0.17 (-0.18,0.53)	0.14 (-0.27,0.54)	0.05 (-0.40,0.51)	ADL&aids&ed&ex&mf(w/med+slfm)	-0.06 (-0.31,0.18)
0.07 (-0.33,0.46)	-0.11 (-0.47,0.26)	0.11 (-0.06,0.28)	0.07 (-0.18,0.32)	-0.01 (-0.34,0.32)	-0.06 (-0.38,0.25)	ac

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 89 - Intervention rankings for Health status: medium-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
mfar(w/med)	74.1	24.4	2.6	1	6
mfa-(w/med+slfm)	64	22.3	3.2	1	7
ntr & exrc	59.2	27.4	3.4	1	7
exrc & mfar(w/med+slfm)	44.7	12.3	4.3	1	7
ac	44.1	0.2	4.4	2	6
adl&aids&ed&ex&mf(w/med+slfm)	35	6.6	4.9	1	7
mntr-mfa-	28.9	6.8	5.3	1	7

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

mfar(w/med) vs. AC

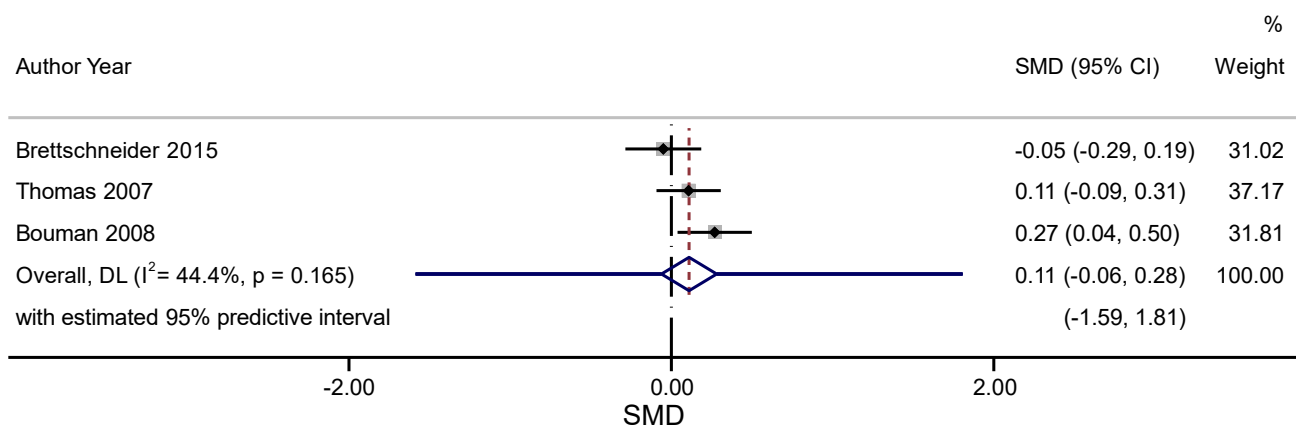


Figure 36 - Pairwise meta-analysis for Health status: medium-term available care network (pooling comparisons with greater than one study reporting results)

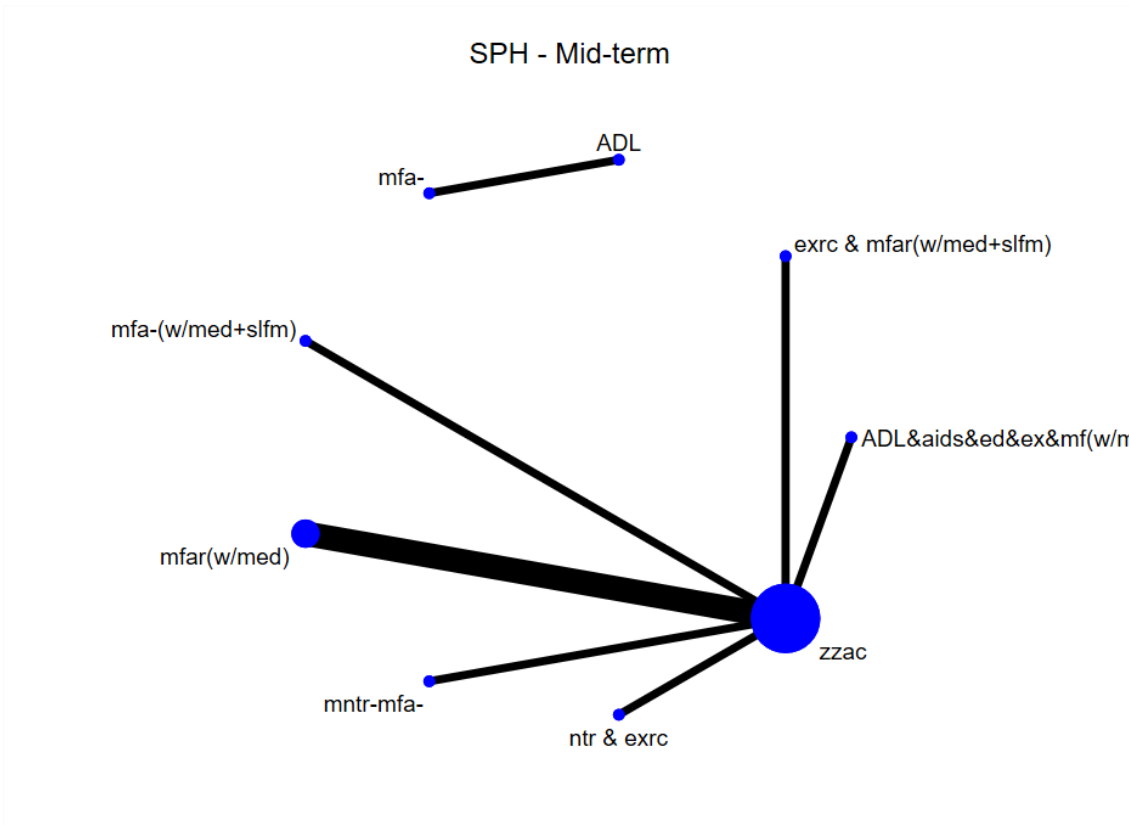


Figure 37 - Example of disconnected network for health status medium-term available care network

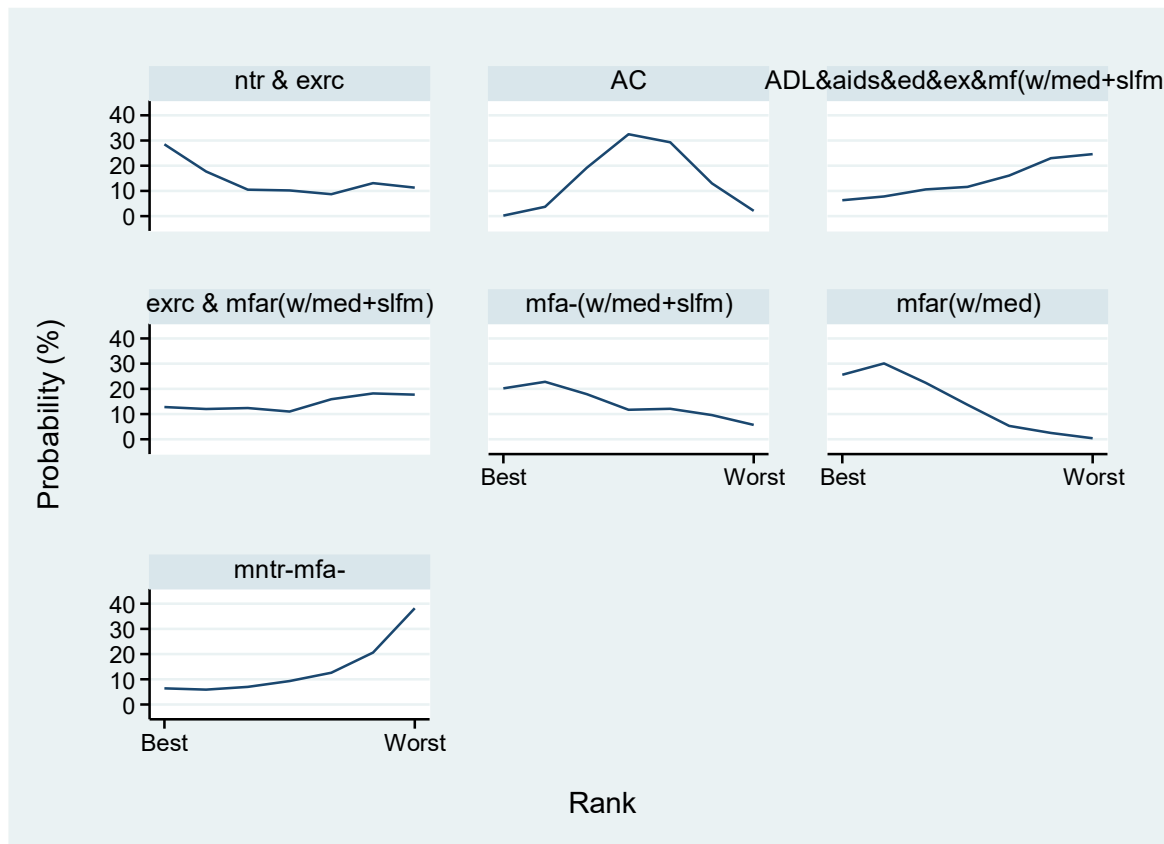


Figure 38 - Rankogram showing comparative effectiveness of interventions for Health Status medium-term available care network. Results based on a simulation of 1000 replications

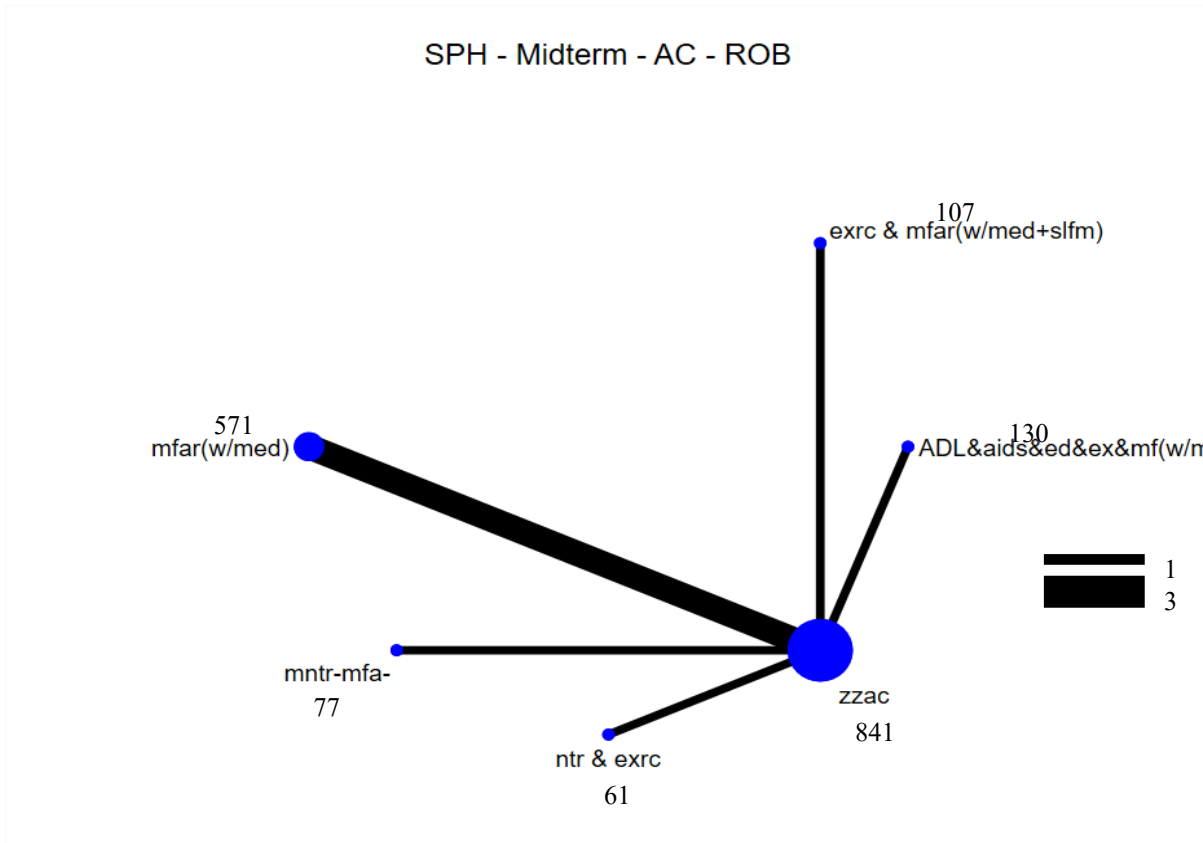


Figure 39 - Network plot for risk of bias analysis for Health Status medium-term available care network

Table 90 - Results of Risk of Bias analysis for Health Status: medium-term available care network

ntn & exrc					0.07 (-0.27, 0.41)
0.17 (-0.36,0.71)	mntr-mfa-				-0.11 (-0.41, 0.20)
-0.04 (-0.47,0.38)	-0.21 (-0.61,0.19)	mfar(w/med)			0.11 (-0.06, 0.28)
0.08 (-0.44,0.59)	-0.10 (-0.59,0.40)	0.12 (-0.25,0.49)	exrc & mfar(w/med+slfm)		-0.01 (-0.28, 0.26)
0.13 (-0.37,0.63)	-0.04 (-0.52,0.44)	0.17 (-0.18,0.53)	0.05 (-0.40,0.51)	ADL&aids&ed&ex&mf(w/med+slfm)	-0.06 (-0.31, 0.18)
0.07 (-0.33,0.46)	-0.11 (-0.47,0.26)	0.11 (-0.06,0.28)	-0.01 (-0.34,0.32)	-0.06 (-0.38,0.25)	AC

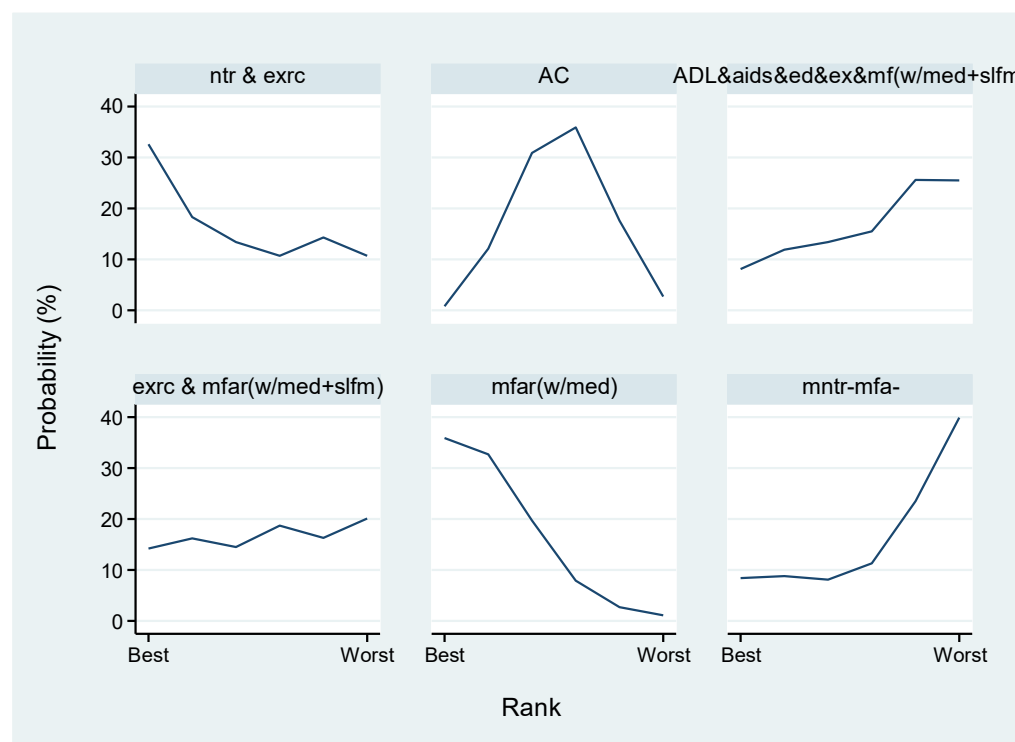


Figure 40 - Rankogram showing comparative effectiveness of interventions for risk of bias sensitivity analysis for Health Status medium-term available care network. Results based on a simulation of 1000 replications

11.7.2 Health status homecare network (medium-term timeframe only)

No results as there were too few comparisons to conduct network meta-analysis.

11.8 Depression

11.8.1 Depression available care network (medium-term timeframe only)

Table 91 - Medium-term depression available-care network

Study	Frailty	n	Experimental group	Control group	ROB					
					D1	D2	D3	D4	D5	Overall
Bleijenberg 2016 ⁵⁰⁹	pre-frail and frail	2489	rsk-mfa-	ac	x/+	-	x	+	-	xx
Blom 2016 ⁵¹⁰	all	1379	mfa-(w/med+slfm)	ac	x/+	-	x	-	-	xx
Bouman 2008 ⁵¹³	pre-frail and frail	293	mfar(w/med)	ac	+	-	x	-	-	x
Cameron 2013 ⁵¹⁵	frail	214	exrc & mfar(w/med+slfm)	ac	+	-	-	-	+	-
Clark 1997 ⁵¹⁹	robust and pre-frail	283	eng & educ	ac	x	-	x	-	x	xx
Cutchin 2009 ⁵²³	unclassifiable	110	mfar	ac	-	-	x	-	-	x
Gustafson 2021 ⁵⁴¹	all	390	aids & educ & comm	ac	+	-	x	-	-	x
Henderson 2005 ⁵⁴⁸	robust	124	mfar	ac	+/x	+	x	+	-	xx
Kono 2016 ⁵⁵⁸	pre-frail	360	mfar(w/med)	mfar	+	-	x	-	-	x
Metzelthin 2013 ⁵⁷⁶	frail	317	educ & mfar(w/med+slfm)	ac	-/-	-	x	-	-	x
Newbury 2001 ⁵⁸²	unclassifiable	89	mfa-(w/med)	ac	-	-	x	-	-	x
Rubenstein 2007 ⁵⁹⁵	frail	694	mfar(w/med)	ac	-	-	-	-	-	-
Szanton 2019 ⁶⁰⁷	pre-frail and frail	260	ADL&aids&educ&exrc& mfar(w/med+slfm)	ac	+	-	x	-	-	x
Takahashi 2012 ⁶⁰⁸	frail	166	mntr-mfa-	ac	-	-	x	-	+	x
van Heuvelen 2005 ⁶¹⁷	pre-frail and frail	77	exrc & psyc	ac	-	x	x	-	-	xx

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 92 - Depression in the medium term: comparisons with available care summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Available care (ac)

Outcome: Depression

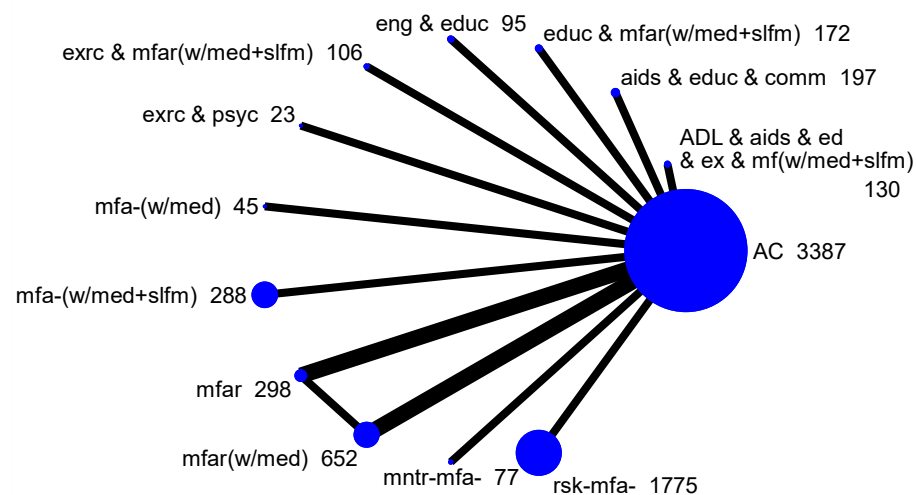
Timeframe: medium term; range of follow up 44 weeks to 18 months

Setting: Community

Total studies: 15

Total participants: 7245

Comparator rank: Mean 7.6, 95% CI 5 to 11



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Geriatric Depression Scale (GDS 15)) ^a			
Exercise, multifactorial-action and review with medication-review and self-management strategies (excr & mfar(w/med+slfm))	SMD 0.11 lower (0.45 lower to 0.23 higher) Mixed estimate	MD 0.35 lower (1.41 lower to 0.72 higher)	⊕⊕⊕⊖ Low ^b	4.9 (1 to 12)	may result in a very slight reduction in symptoms of depression
Meaningful-activities and education (eng & educ)	SMD 0.13 lower (0.46 lower to 0.19 higher) Mixed estimate	MD 0.42 lower (1.44 lower to 0.59 higher)	⊕⊖⊖⊖ Very low ^{c,d}	4.7 (1 to 12)	the evidence is very uncertain about the effect on symptoms of depression
Risk-screening (rsk-mfa-)	SMD 0.09 lower (0.31 lower to 0.14 higher) Mixed estimate	MD 0.28 lower (0.98 lower to 0.43 higher)	⊕⊖⊖⊖ Very low ^{d,e}	5.3 (1 to 11)	the evidence is very uncertain about the effect on symptoms of depression
Multifactorial-action and review with medication-review (mfar(w/med))	SMD 0.07 lower (0.25 lower to 0.12 higher) Mixed estimate	MD 0.21 lower (0.80 lower to 0.37 higher)	⊕⊖⊖⊖ Very low ^{b,f}	5.6 (1 to 11)	the evidence is very uncertain about the effect on symptoms of depression
Aids, education and telecoms (aids & educ & comm)	SMD 0.05 lower (0.33 lower to 0.24 higher) Mixed estimate	MD 0.15 lower (1.05 lower to 0.76 higher)	⊕⊖⊖⊖ Very low ^{b,f}	6.2 (1 to 13)	the evidence is very uncertain about the effect on symptoms of depression
Exercise and psychology (excr & psyc)	SMD 0.06 lower (0.59 lower to 0.47 higher) Mixed estimate	MD 0.20 lower (1.87 lower to 1.47 higher)	⊕⊖⊖⊖ Very low ^{d,g}	6.2 (1 to 13)	the evidence is very uncertain about the effect on symptoms of depression

ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management strategies (ADL & aids & ed & ex & mf(w/med+slfm))	SMD 0.01 lower (0.33 lower to 0.31 higher) Mixed estimate	MD 0.03 lower (1.03 lower to 0.97 higher)	⊕⊕⊕⊕ Very low ^{b,f}	7.2 (1 to 13)	the evidence is very uncertain about the effect on symptoms of depression
Monitoring (mntr-mfa-)	SMD 0.00 (0.37 lower to 0.37 higher) Mixed estimate	MD 0.00 (1.16 lower to 1.16 higher)	⊕⊕⊕⊕ Very low ^{b,f}	7.3 (1 to 13)	the evidence is very uncertain about the effect on symptoms of depression
Multifactorial-action with medication-review and self-management strategies (mfa-(w/med+slfm))	SMD 0.00 (0.24 lower to 0.24 higher) Mixed estimate	MD 0.00 (0.77 lower to 0.77 higher)	⊕⊕⊕⊕ Very low ^{d,h}	7.5 (2 to 13)	the evidence is very uncertain about the effect on symptoms of depression
Multifactorial-action and review (mfar)	SMD 0.04 higher (0.20 lower to 0.28 higher) Mixed estimate	MD 0.13 higher (0.63 lower to 0.88 higher)	⊕⊕⊕⊕ Very low ^{b,f}	8.6 (2 to 13)	the evidence is very uncertain about the effect on symptoms of depression
Multifactorial-action with medication-review (mfa-(w/med))	SMD 0.11 higher (0.35 lower to 0.58 higher) Mixed estimate	MD 0.36 higher (1.10 lower to 1.82 higher)	⊕⊕⊕⊕ Very low ^{b,f}	9.3 (1 to 13)	the evidence is very uncertain about the effect on symptoms of depression
Education, multifactorial-action and review with medication-review and self-management strategies (educ & mfar(w/med+slfm))	SMD 0.17 higher (0.13 lower to 0.47 higher) Mixed estimate	MD 0.53 higher (0.42 lower to 1.48 higher)	⊕⊕⊕⊕ Very low ^{b,f}	10.6 (3 to 13)	the evidence is very uncertain about the effect on symptoms of depression

a: calculated from the estimated SMD using a standard deviation of 3.15, the pooled standard deviation across intervention groups reporting the GDS-15 in the medium term.

b: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.

c: very serious concerns about risk of bias due to randomisation process, missing outcome data, and reported results were not analysed according to allocation. Downgrade twice.

d: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.

e: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.

f: serious concerns about risk of bias due to missing outcome data. Downgrade once.

g: very serious concerns about risk of bias due to excluding participants in per-protocol analysis and missing outcome data. Downgrade twice.

h: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.

Table 93 - Results of Depression: medium-term available care network

												-0.09 (-0.18, -0.00)
-0.09 (-0.52,0.34)	mntr-mfa-											0.00 (-0.31, 0.31)
-0.02 (-0.31,0.27)	0.07 (-0.34,0.48)	mfar(w/med)	0.00 (-0.21, 0.21)									-0.13 (-0.26, -0.00)
-0.13 (-0.46,0.20)	-0.04 (-0.48,0.40)	-0.11 (-0.33,0.12)	mfar									0.15 (-0.19, 0.49)
-0.09 (-0.42,0.24)	-0.00 (-0.44,0.44)	-0.07 (-0.37,0.24)	0.04 (-0.30,0.38)	mfa- (w/med+slfm)								0.00 (-0.13, 0.13)
-0.20 (-0.72,0.31)	-0.11 (-0.71,0.48)	-0.18 (-0.68,0.32)	-0.07 (-0.60,0.45)	-0.11 (-0.64,0.41)	mfa-(w/med)							0.11 (-0.30, 0.53)
-0.03 (-0.60,0.55)	0.06 (-0.58,0.71)	-0.00 (-0.57,0.56)	0.10 (-0.48,0.68)	0.06 (-0.52,0.65)	0.18 (-0.53,0.88)	exrc & psyc						-0.06 (-0.55, 0.43)
0.02 (-0.38,0.43)	0.11 (-0.39,0.61)	0.04 (-0.34,0.43)	0.15 (-0.26,0.57)	0.11 (-0.31,0.53)	0.23 (-0.35,0.80)	0.05 (-0.58,0.68)	exrc & mfar(w/med+sl fm)					-0.11 (-0.38, 0.16)
0.05 (-0.35,0.44)	0.13 (-0.35,0.62)	0.07 (-0.30,0.44)	0.17 (-0.23,0.58)	0.13 (-0.27,0.54)	0.25 (-0.32,0.81)	0.07 (-0.55,0.69)	0.02 (-0.44,0.49)	eng & educ				-0.13 (-0.38, 0.11)
-0.26 (-0.63,0.12)	-0.17 (-0.64,0.31)	-0.24 (-0.59,0.12)	-0.13 (-0.51,0.26)	-0.17 (-0.56,0.22)	-0.05 (-0.61,0.50)	-0.23 (-0.84,0.38)	-0.28 (-0.73,0.18)	-0.30 (-0.74,0.14)	educ & mfar(w/med+sl fm)			0.17 (-0.05, 0.39)
-0.04 (-0.40,0.32)	0.05 (-0.42,0.51)	-0.02 (-0.36,0.32)	0.09 (-0.29,0.46)	0.05 (-0.33,0.42)	0.16 (-0.38,0.71)	-0.02 (-0.62,0.59)	-0.06 (-0.51,0.38)	-0.09 (-0.52,0.34)	0.21 (-0.20,0.63)	aids & educ & comm		-0.05 (-0.24, 0.15)
-0.08 (-0.47,0.31)	0.01 (-0.48,0.50)	-0.06 (-0.43,0.31)	0.05 (-0.35,0.45)	0.01 (-0.39,0.41)	0.12 (-0.44,0.69)	-0.05 (-0.67,0.56)	-0.10 (-0.57,0.36)	-0.12 (-0.58,0.33)	0.18 (-0.26,0.62)	-0.04 (-0.47,0.39)	ADL&aids&ed &ex&mf(w/me d+slfm)	-0.01 (-0.25, 0.23)
-0.09 (-0.31,0.14)	-0.00 (-0.37,0.37)	-0.07 (-0.25,0.12)	0.04 (-0.20,0.28)	-0.00 (-0.24,0.24)	0.11 (-0.35,0.58)	-0.06 (-0.59,0.47)	-0.11 (-0.45,0.23)	-0.13 (-0.46,0.19)	0.17 (-0.13,0.47)	-0.05 (-0.33,0.24)	-0.01 (-0.33,0.31)	ac

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD<1 favours the upper left intervention; a SMD>1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 94 - Intervention rankings for Depression: medium-term available care network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
eng & educ	69.2	20.2	4.7	1	12
exrc & mfar(w/med+slfm)	67.7	18.7	4.9	1	12
rsk-mfa-	64.2	7.7	5.3	1	11
mfar(w/med)	62.1	2.9	5.6	1	11
aids & educ & comm	56.4	6.9	6.2	1	13
exrc & psyc	56.4	21.1	6.2	1	13
ADL&aids&ed&ex&mf(w/med+slfm)	48.4	5.7	7.2	1	13
mntr-mfa-	47.7	8.6	7.3	1	13
mfa-(w/med+slfm)	45.5	2.3	7.5	2	13
ac	45.1	0	7.6	5	11
mfar	36.5	1.3	8.6	2	13
mfa-(w/med)	31.1	4.2	9.3	1	13
educ & mfar(w/med+slfm)	19.7	0.4	10.6	3	13

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

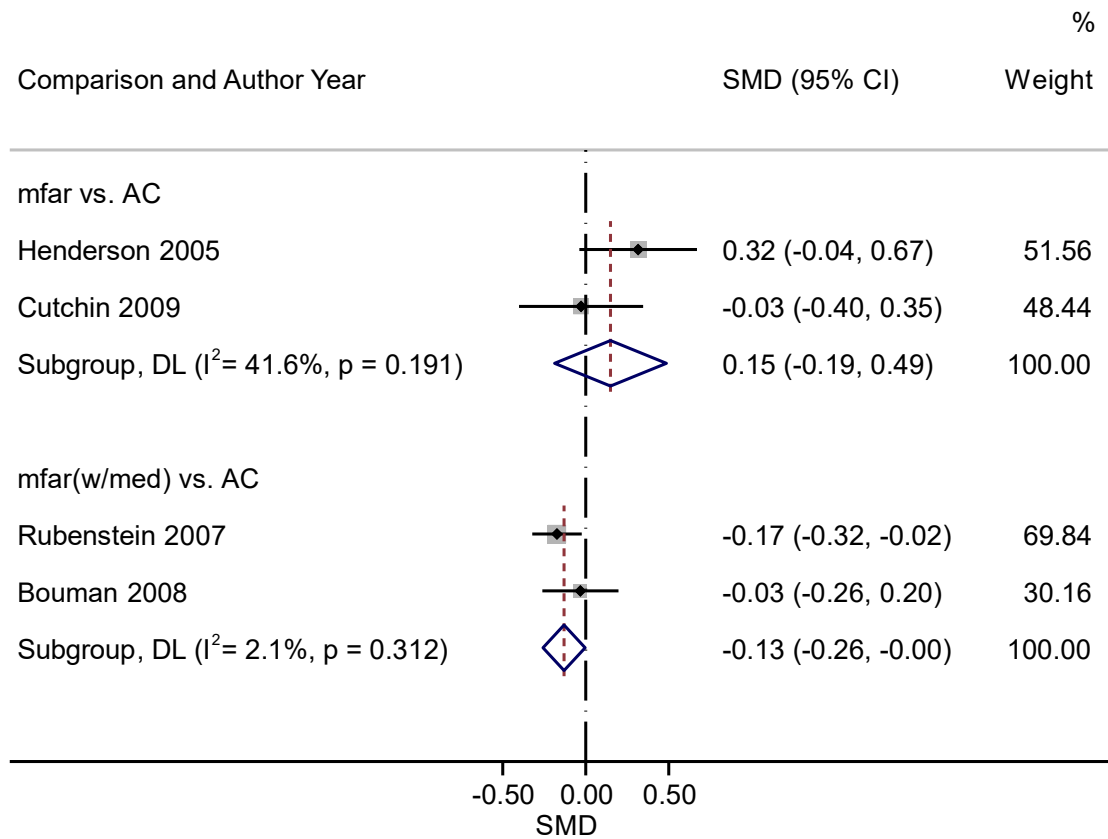


Figure 41 - Pairwise meta-analysis for depression: medium-term available care network (pooling comparisons with greater than one study reporting results)

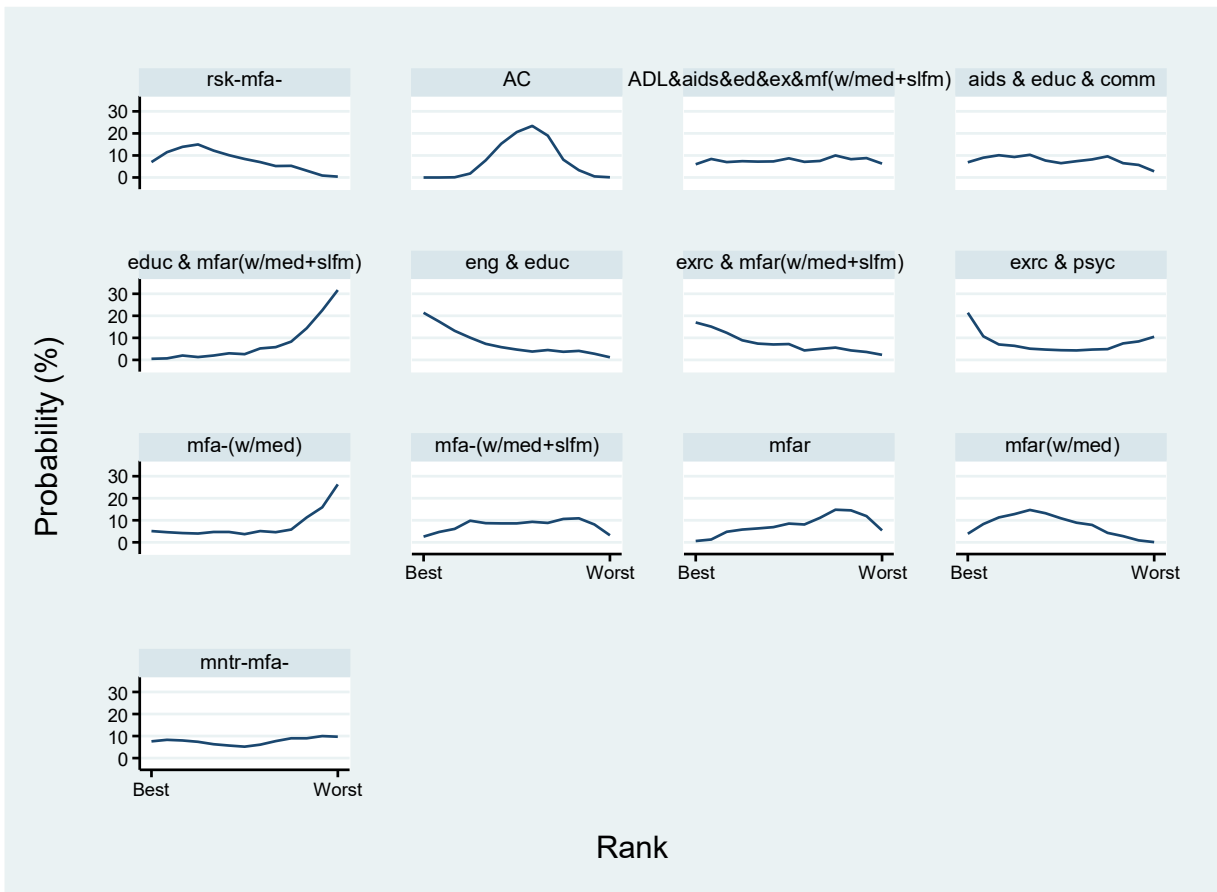


Figure 42 - Rankogram showing comparative effectiveness of interventions for depression medium-term available care network. Results based on a simulation of 1000 replications.

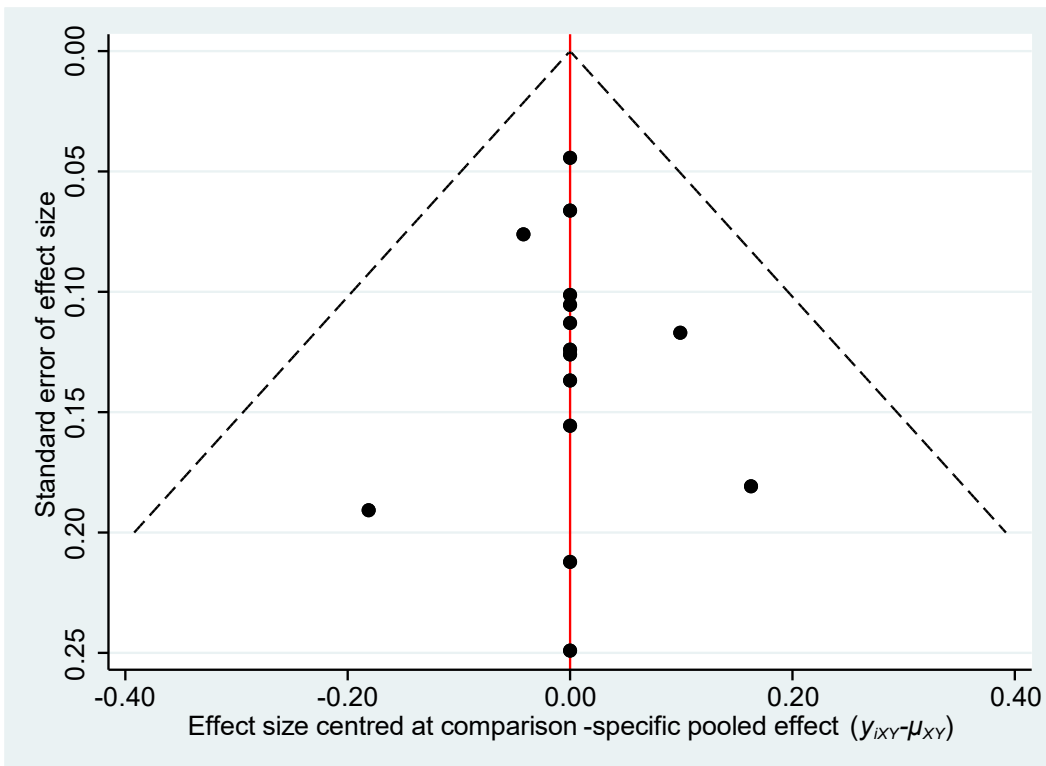


Figure 43 - Comparison-adjusted funnel plot for depression: medium-term available care network

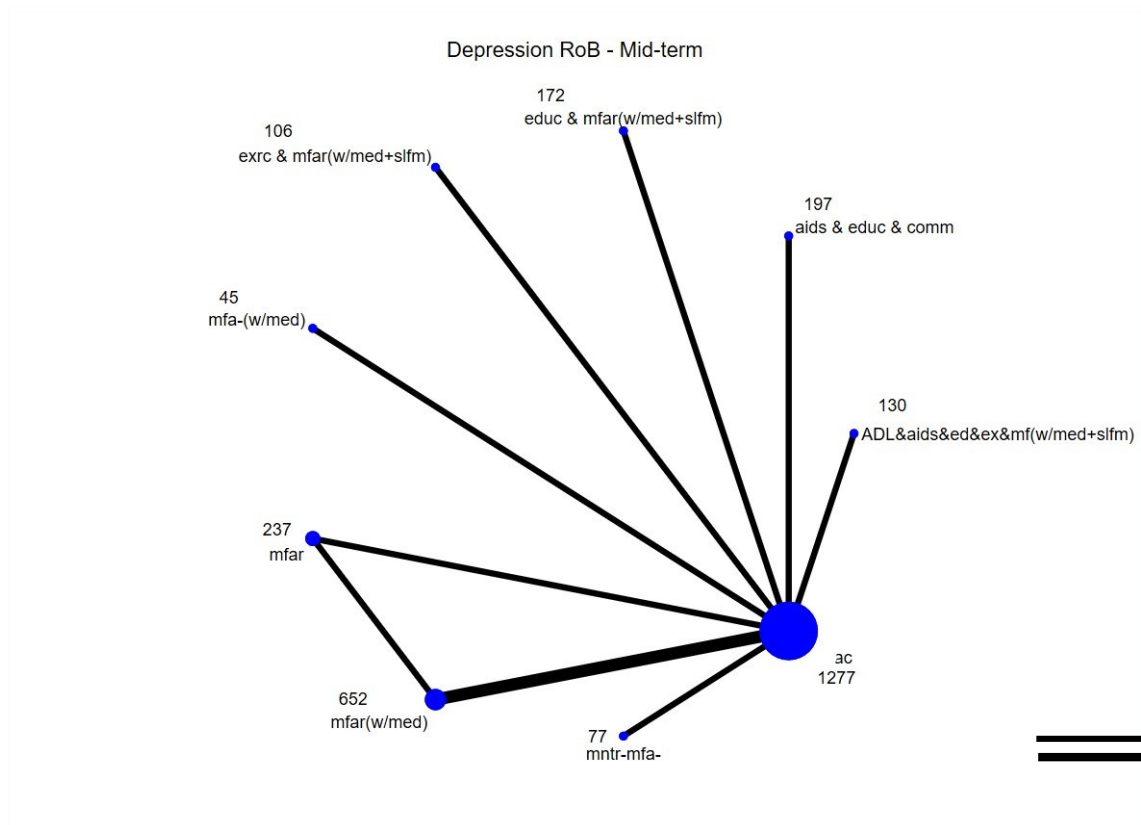


Figure 44 - Network plot for risk of bias analysis for depression medium-term available care network

Table 95 - Intervention rankings for risk of bias analysis for depression: medium-term available care network

Treatment	SUCRA	PrBest	Mean Rank	95% CI for true rank
mfar(w/med)	77.8	16.0	2.8	1 - 6
exrc & mfar(w/med+slfm)	69.9	30.4	3.4	1 - 8
mfar	69.0	17.9	3.5	1 - 8
aids & educ & comm	56.7	8.9	4.5	1 - 8
ADL&aids&ed&ex&mf(w/med+slfm)	47.9	9.0	5.2	1 - 9
mntr-mfa-	46.1	10.4	5.3	1 - 9
ac	42.0	0.0	5.6	3 - 8
mfa-(w/med)	27.5	7.1	6.8	1 - 9
educ & mfar(w/med+slfm)	13.1	0.3	8.0	4 - 9

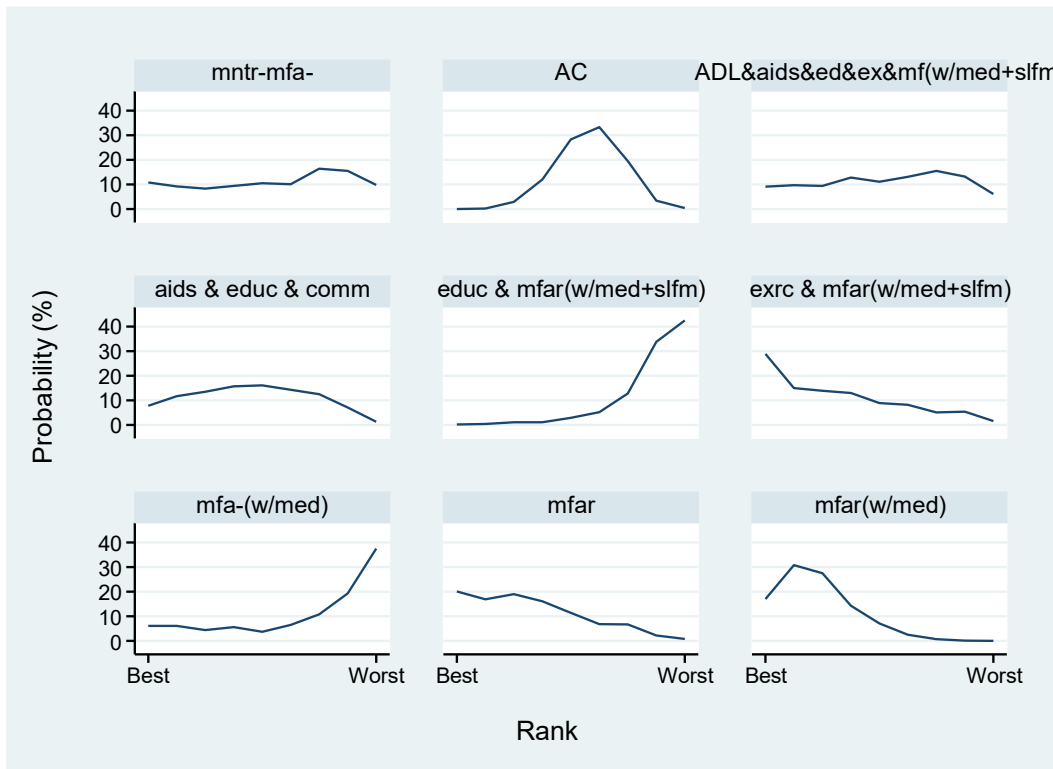


Figure 45 - Rankogram showing comparative effectiveness of interventions for risk of bias sensitivity analysis for depression medium-term available care network. Results based on a simulation of 1000 replications.

Table 96 - Results of risk of bias depression: medium-term available care network

mntr-mfa-								0.00 (-0.31, 0.31)
0.12 (-0.20,0.45)	mfar(w/med)	0.00 (-0.21, 0.21)						-0.13 (-0.26, -0.00)
0.10 (-0.27,0.47)	-0.02 (-0.21,0.16)	mfar						-0.03 (-0.40, 0.35)
-0.11 (-0.63,0.40)	-0.24 (-0.67,0.20)	-0.22 (-0.68,0.25)	mfa-(w/med)					0.11 (-0.30, 0.53)
0.11 (-0.30,0.52)	-0.01 (-0.31,0.28)	0.01 (-0.33,0.35)	0.23 (-0.27,0.72)	exrc & mfar(w/med+slfm)				-0.11 (-0.38, 0.16)
-0.17 (-0.55,0.21)	-0.29 (-0.54,-0.04)	-0.27 (-0.57,0.03)	-0.05 (-0.52,0.42)	-0.28 (-0.63,0.07)	educ & mfar(w/med+slfm)			0.17 (-0.05, 0.39)
0.05 (-0.32,0.41)	-0.08 (-0.31,0.16)	-0.05 (-0.34,0.23)	0.16 (-0.30,0.62)	-0.06 (-0.40,0.27)	0.21 (-0.08,0.51)	aids & educ & comm		-0.05 (-0.24, 0.15)
0.01 (-0.38,0.40)	-0.11 (-0.38,0.16)	-0.09 (-0.41,0.23)	0.12 (-0.36,0.61)	-0.10 (-0.46,0.26)	0.18 (-0.15,0.51)	-0.04 (-0.35,0.28)	ADL&aids&ed&ex&mf(w/med+slfm)	-0.01 (-0.25, 0.23)
-0.00 (-0.31,0.31)	-0.12 (-0.24,-0.00)	-0.10 (-0.30,0.10)	0.11 (-0.30,0.53)	-0.11 (-0.38,0.16)	0.17 (-0.05,0.39)	-0.05 (-0.24,0.15)	-0.01 (-0.25,0.23)	AC

11.8.2 Depression homecare network (medium-term timeframe only)

Table 97 - Medium-term depression homecare network

Study	Frailty	n	Experimental group	Control group	ROB					Overall
					D1	D2	D3	D4	D5	
Bernabei 1998 ⁵⁰⁸	frail	199	hmcr & mfar(w/med)	hmcr	-	-	x	-	-	x
Fernandez-Barres 2017 ⁵³¹	frail	111	hmcr & ntr	hmcr	+	-	x	-	-	x
Parsons M 2012 ⁵⁸⁷	frail	251	hmcr & mfar	hmcr & mfa-	+/-	-	x	-	-	x
Parsons M 2017 ⁵⁸⁶	frail	113	hmcr & ADL & mfar(w/slfm)	hmcr & mfa-	-	-	x	-	-	xx
Rooijackers 2021 ⁵⁹⁴	frail	264	hmcr & ADL & mfar(w/slfm)	hmcr	+/-	-	x	+	x	xx
Teut 2013 ⁶⁰⁹	frail	58	hmcr & hmnt & exrc	hmcr	+/+	-	x	-	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only).

Table 98 - Depression in the medium term: comparisons with homecare summary of findings table

Population: Older people

Interventions: Community-based complex interventions

Comparator: Homecare (hmcr)

Outcome: Depression

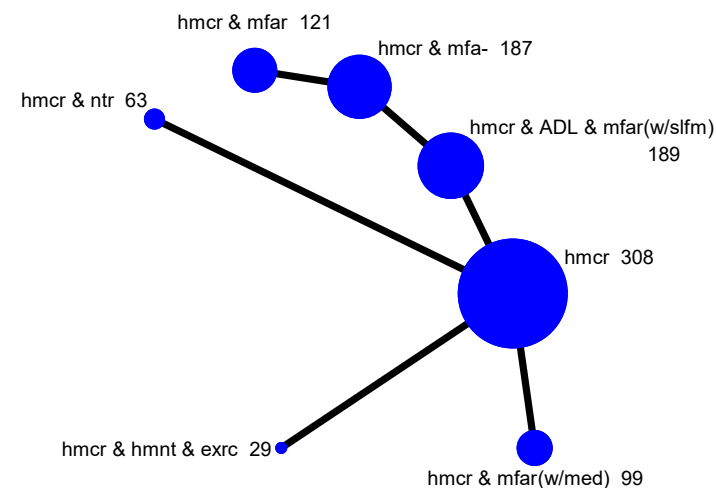
Timeframe: medium term; follow up at 12 months

Setting: Community

Total studies: 6

Total participants: 996

Comparator rank: Mean 5.2, 95% CI 3 to 7



Intervention group	Anticipated absolute effect (95% CI)		Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	SMD	MD (Geriatric Depression Scale (GDS 15)) ^a			
Homecare, multifactorial-action and review with medication-review (hmcr & mfar(w/med))	SMD 0.38 lower (0.66 lower to 0.10 lower) Mixed estimate	MD 1.20 lower (2.08 lower to 0.31 lower)	⊕⊕⊕⊕ Low ^{b,c}	1.7 (1 to 4)	may result in a slight reduction in symptoms of depression
Homecare and nutrition (hmcr & ntr)	SMD 0.24 lower (0.62 lower to 0.14 higher) Mixed estimate	MD 0.76 lower (1.95 lower to 0.43 higher)	⊕⊕⊕⊕ Very low ^{b,d}	2.8 (1 to 7)	the evidence is very uncertain about the effect on symptoms of depression
Homecare, ADL, multifactorial-action and review with self-management strategies (hmcr & ADL & mfar(w/slfm))	SMD 0.09 lower (0.33 lower to 0.16 higher) Mixed estimate	MD 0.27 lower (1.03 lower to 0.49 higher)	⊕⊕⊕⊕ Very low ^{e,f}	4.0 (2 to 7)	the evidence is very uncertain about the effect on symptoms of depression
Homecare and multifactorial-action (hmcr & mfa-)	SMD 0.09 lower (0.53 lower to 0.35 higher) Indirect estimate	MD 0.28 lower (1.67 lower to 1.11 higher)	⊕⊕⊕⊕ Very low ^{d,g}	4.0 (1 to 6)	the evidence is very uncertain about the effect on symptoms of depression
Homecare, alternative-medicine and exercise (hmcr & hmnt & excr)	SMD 0.06 lower (0.58 lower to 0.45 higher) Mixed estimate	MD 0.20 lower (1.82 lower to 1.42 higher)	⊕⊕⊕⊕ Very low ^{b,d}	4.4 (1 to 7)	the evidence is very uncertain about the effect on symptoms of depression
Homecare, multifactorial-action and review (hmcr & mfar)	SMD 0.10 higher (0.40 lower to 0.61 higher) Indirect estimate	MD 0.32 higher (1.27 lower to 1.92 higher)	⊕⊕⊕⊕ Very low ^{d,h}	5.9 (2 to 7)	the evidence is very uncertain about the effect on symptoms of depression

a: calculated from the estimated SMD using a standard deviation of 3.15, the pooled standard deviation across all intervention groups reporting the GDS-15 in the medium term.

b: serious concerns about risk of bias due to missing outcome data. Downgrade once.

- c: serious concerns about imprecision as no closed loop and direct evidence is based on 99 persons in homecare, multifactorial-action and review with medication-review (hmcr & mfar(w/med)) which does not meet optimal information size. Downgrade once.
- d: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Downgrade twice.
- e: very serious concerns about risk of bias due to missing outcome data and the reported results were not analysed in accordance with the protocol. Downgrade twice.
- f: very serious concerns about imprecision as confidence interval includes substantial benefit and harm (SMD +/- 0.05). Already downgraded twice for risk of bias, downgrade once.
- g: very serious concerns about risk of bias due to missing outcome data and the reported results were not analysed in accordance with the protocol in the indirect evidence via homecare, ADL, multifactorial-action and review with self-management strategies (hmcr & ADL & mfar(w/slfm)) vs homecare (hmcr) comparison. Downgrade twice.
- h: very serious concerns about risk of bias due to missing outcome data and the reported results were not analysed in accordance with the protocol in the indirect evidence via homecare, ADL, multifactorial-action and review with self-management strategies (hmcr & ADL & mfar(w/slfm)) vs homecare (hmcr) comparison and via homecare, ADL, multifactorial-action and review with self-management strategies (hmcr & ADL & mfar(w/slfm)) vs homecare and multifactorial-action (hmcr & mfa-) comparison. Downgrade twice.

Table 99 - Results of Depression: medium-term homecare network

hmcr & ntr						-0.24 (-0.62,0.14)
0.14 (-0.33,0.61)	hmcr & mfar(w/med)					-0.38 (-0.66,-0.10)
-0.34 (-0.97,0.29)	-0.48 (-1.06,0.10)	hmcr & mfar	0.19 (-0.06,0.44)			
-0.15 (-0.73,0.43)	-0.29 (-0.81,0.23)	0.19 (-0.06,0.44)	hmcr & mfa-		-0.00 (-0.37,0.36)	
-0.18 (-0.82,0.46)	-0.32 (-0.90,0.27)	0.17 (-0.56,0.89)	-0.03 (-0.70,0.65)	hmcr & hmnt & exrc		-0.06 (-0.58,0.45)
-0.16 (-0.60,0.29)	-0.29 (-0.66,0.08)	0.19 (-0.26,0.63)	-0.00 (-0.37,0.36)	0.02 (-0.55,0.59)	hmcr & ADL & mfar(w/slfm)	-0.09 (-0.33,0.16)
-0.24 (-0.62,0.14)	-0.38 (-0.66,-0.10)	0.10 (-0.40,0.61)	-0.09 (-0.53,0.35)	-0.06 (-0.58,0.45)	-0.09 (-0.33,0.16)	hmcr

Lower left triangle presents the findings (SMD with 95% CI) of the network meta-analysis. Upper right triangle presents the findings (SMD with 95% CI) of pairwise meta-analyses. A SMD>1 favours the upper left intervention; a SMD<1 favours the lower right intervention. Within the table, comparisons between treatments should be read from left to right (i.e. treatment 1 versus treatment 2). The estimate effect measure (SMD and their 95% CI) is in the cell in common between the row- and column-defining treatment.

Table 100 - Intervention rankings for Depression: medium-term homecare network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & mfar(w/med)	89.1	58.8	1.7	1	4
hmcr & ntr	69.7	22.3	2.8	1	7
hmcr & mfa-	50.0	7.2	4	1	6
hmcr & ADL & mfar(w/slfm)	49.4	1.3	4	2	7
hmcr & hmnt & exrc	43.9	9.9	4.4	1	7
hmcr	30.2	0	5.2	3	7
hmcr & mfar	17.8	0.5	5.9	2	7

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

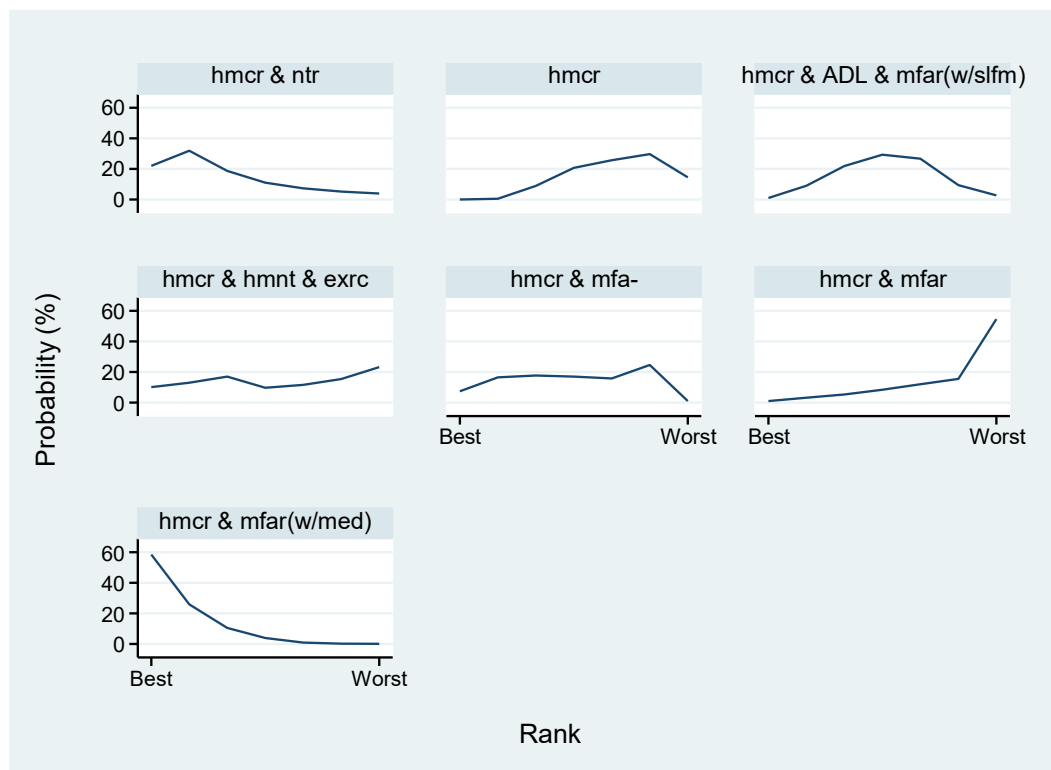


Figure 46 - Rankogram showing comparative effectiveness of interventions for depression medium-term homecare network. Results based on a simulation of 1000 replications.

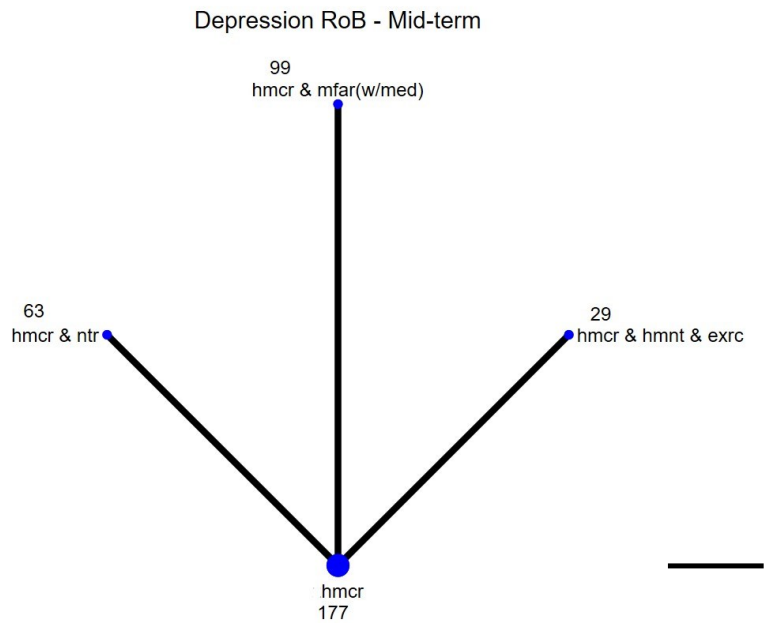


Figure 47 - Network plot for risk of bias analysis for depression medium-term homecare network

Table 101 - Intervention rankings for risk of bias analysis for depression: medium-term homecare network

Treatment	SUCRA	PrBest	Mean Rank	95% CI for true rank
hmcrc & mfar(w/med)	86.1	64.2	1.4	1 - 3
hmcrc & ntr	62.1	24.2	2.1	1 - 4
hmcrc & hmnt & exrc	34.6	11.6	3	1 - 4
hmcrc	17.2	0	3.5	2 - 4

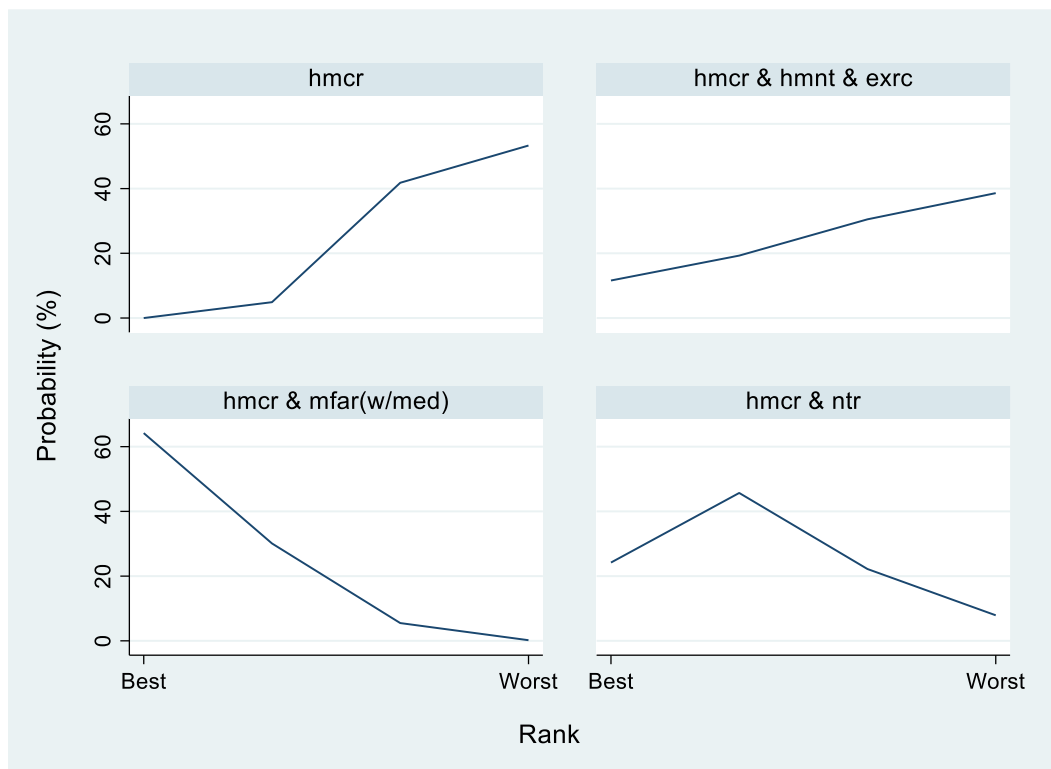


Figure 48 - Rankogram showing comparative effectiveness of interventions for risk of bias sensitivity analysis for depression medium-term homecare network. Results based on a simulation of 1000 replications.

Table 102 - Results of risk of bias depression: medium-term homecare network

hmcr	0.24 (-0.14,0.62)	0.38 (0.10,0.66)	0.06 (-0.45,0.58)
0.24 (-0.14,0.62)	hmcr & ntr		
0.38 (0.10,0.66)	0.14 (-0.33,0.61)	hmcr & mfar(w/med)	
0.06 (-0.45,0.58)	-0.18 (-0.82,0.46)	-0.32 (-0.90,0.27)	hmcr & hmnt & exerc

11.9 Mortality (medium-term timeframe only)

Table 103 - Medium-term mortality

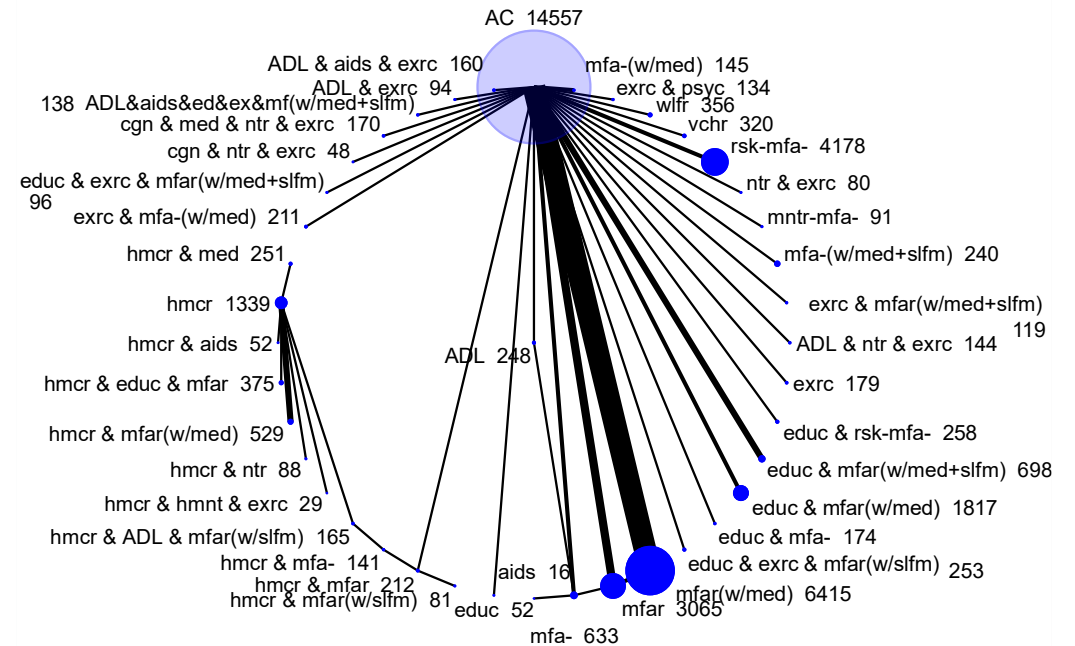
Study	Frailty	n	Experimental group	Control group	ROB					
					D1	D2	D3	D4	D5	Overall
Alegria 2019 ⁵⁰³	pre-frail	267	exerc & psyc	ac	x	x	x	+	-	xx
Auvinen 2020 ⁵⁰⁵	frail	494	hmcr & med	hmcr	+	-	x	+	+	x
Barenfeld 2018 ⁵⁰⁷	all	125	educ	ac	-	x	x	+	-	xx
Bernabei 1998 ⁵⁰⁸	frail	199	hmcr & mfar(w/med)	hmcr	-	-	+	+	+	-
Bleijenberg 2016 ⁵⁰⁹	pre-frail and frail	3092	rsk-mfa-	ac	x/+	-	+	+	-	x
Blom 2016 ⁵¹⁰	all	1095	mfa-(w/med+slfm)	ac	x/+	-	x	+	-	xx
Borrows 2013 ⁵¹¹	unclassifiable	33	aids	mfa-	+	-	x	+	-	x
Bouman 2008 ⁵¹³	pre-frail and frail	311	mfar(w/med)	ac	+	-	x	+	+	x
Brettschneider 2015 ⁵¹⁴	frail	278	mfar(w/med)	ac	-	-	x	+	+	x
Cameron 2013 ⁵¹⁵	frail	238	exerc & mfar(w/med+slfm)	ac	+	-	-	+	+	-
Coleman 1999 ⁵²¹	frail	164	educ & mfar(w/med+slfm)	ac	-/-	-	x	+	-	x
Counsell 2007 ⁵²²	unclassifiable	853	educ & mfar(w/med+slfm)	ac	+/-	-	x	+	+	x
Dalby 2000 ⁵²⁴	frail	139	mfar(w/med)	ac	-	-	+	+	+	-
de Craen 2006 ⁵²⁵	all	335	mfa-	ac	+	-	x	+	-	x
Dorresteijn 2016 ⁵²⁶	unclassifiable	389	ADL	ac	+	-	+	+	-	-
Fabacher 1994 ⁵²⁸	all	229	mfar(w/med)	ac	-	-	x	+	+	x
Fernandez-Barres 2017 ⁵³¹	frail	147	hmcr & ntr	hmcr	+	-	x	+	-	x
Fristedt 2019 ⁵³⁵	frail	62	hmcr & mfar(w/med)	hmcr	x	-	+	+	+	x
Gill 2002 ⁵³⁷	pre-frail and frail	188	ADL & exerc	ac	-	-	+	+	+	-
Gitlin 2006 ⁵³⁹	pre-frail and frail	319	ADL & aids & exerc	ac	+	-	+	+	+	-
Gustafsson 2013 ⁵⁴²	all	288	educ & mfa-	ac	-	-	x	+	-	x
Hall 1992 ⁵⁴³	frail	167	hmcr & mfar(w/slfn)	hmcr & mfar	-	-	+	+	+	-
Harari 2008 ⁵⁴⁴	all	2423	mfar(w/med)	ac	+	x	x	+	+	xx
Hay 1998 ⁵⁴⁶	unclassifiable	484	mfa-	ac	-	-	x	+	-	x
Hebert 2001 ⁵⁴⁷	pre-frail and frail	494	mfar(w/med)	ac	-	-	-	+	-	-
Henderson 2005 ⁵⁴⁸	robust	130	mfar	ac	+/x	+	x	+	-	xx
Hendriksen 1984 ⁵⁴⁹	all	572	mfar	ac	-	-	+	+	+	-
Hogg 2009 ⁵⁵⁰	unclassifiable	240	mfar(w/med)	ac	-	-	-	+	-	-
Holland 2005 ⁵⁵¹	unclassifiable	493	educ & exerc & mfar(w/slfn)	ac	+	-	x	+	-	x
Howel 2019 ⁵⁵²	all	725	wlfr	ac	+	+	x	+	+	x
Kerse 2014 ⁵⁵⁶	pre-frail and frail	3687	rsk-mfa-	ac	+/+	-	x	+	-	x
Kono 2004 ⁵⁵⁹	pre-frail and frail	117	mfar	ac	-	-	-	+	-	-
Kono 2016 ⁵⁵⁸	pre-frail	351	mfar(w/med)	mfar	+	-	x	+	+	x
Kukkonen-Harjula 2017 ⁵⁶¹	pre-frail and frail	287	ADL & ntr & exerc	ac	+	-	x	+	-	x
Leveille 1998 ⁵⁶⁴	unclassifiable	191	educ & exerc & mfar(w/med+slfm)	ac	+	-	x	+	-	x
Lewin 2013 ⁵⁶⁵	frail	750	hmcr & educ & mfar	hmcr	x	x	+	+	+	xx
Liimatta 2019 ⁵⁶⁷	robust and pre-frail	422	exerc & mfa-(w/med)	ac	-	-	+	+	+	-
Mann WC 1999 ⁵⁷¹	frail	100	hmcr & aids	hmcr	-	-	-	+	-	-
Meng 2005 ⁵⁷⁴	frail	599	vchr	ac	-	x	x	+	x	xx
Metzelthin 2013 ⁵⁷⁶	frail	321	educ & mfar(w/med+slfm)	ac	-/-	-	x	+	-	x
Monteserin Nadal 2008 ⁵⁷⁸	all	516	educ & rsk-mfa-	ac	-	-	x	+	+	x
Morey 2009 ⁵⁸⁰	unclassifiable	362	exerc	ac	-	-	x	+	-	x
Newbury 2001 ⁵⁸²	unclassifiable	100	mfa-(w/med)	ac	-	-	+	+	+	-
Newcomer 2004 ⁵⁸³	unclassifiable	2934	educ & mfar(w/med)	ac	-	-	x	+	-	x
Ng 2015 ⁵⁸⁴	pre-frail and frail	95	cgn & ntr & exerc	ac	+	-	x	+	+	x
Parsons M 2012 ⁵⁸⁷	frail	196	hmcr & mfar	hmcr & mfa-	+/-	-	x	+	-	x
Parsons M 2017 ⁵⁸⁶	frail	75	hmcr & ADL & mfar(w/slfn)	hmcr & mfa-	-	-	x	+	+	x
Ploeg 2010 ⁵⁹⁰	pre-frail and frail	713	educ & mfar(w/med)	ac	+	-	-	+	-	-
Rockwood 2000 ⁵⁹²	frail	182	mfa-(w/med)	ac	-	-	+	+	+	-
Romera-Liebana 2018 ⁵⁹³	pre-frail and frail	342	cgn & med & ntr & exerc	ac	+	-	x	+	-	x
Rooijackers 2021 ⁵⁹⁴	frail	252	hmcr & ADL & mfar(w/slfn)	hmcr	+/-	-	-	+	-	-
Rubenstein 2007 ⁵⁹⁵	frail	792	mfar(w/med)	ac	-	-	+	+	+	-

Serra-Prat 2017 ⁵⁹⁷	pre-frail	172	ntr & exrc	ac	-	-	+	+	-	-
Shapiro 2002 ⁵⁹⁸	frail	58	hmcr & mfar	ac	-	x	x	+	-	xx
Siemonsma 2018 ⁶⁰⁰	frail	118	ADL	mfa-	-	-	x	+	-	x
Suijker 2016 ⁶⁰⁵	frail	2283	mfar(w/med)	ac	+/-	-	+	+	+	-
Szanton 2019 ⁶⁰⁷	pre-frail and frail	273	ADL&aids&educ&exrc&mfar(w/med+slfm)	ac	+	-	x	+	-	x
Takahashi 2012 ⁶⁰⁸	frail	186	mntr-mfa-	ac	-	-	x	+	-	x
Teut 2013 ⁶⁰⁹	frail	55	hmcr & hmnt & exrc	hmcr	+/+	-	-	+	-	-
van Hout 2010 ⁶¹⁸	frail	651	mfar(w/med)	ac	+	-	+	+	+	-
van Rossum 1993 ⁶²¹	all	580	mfar	ac	-	-	+	+	+	-
Vass 2005 ⁶²²	all	4060	mfar(w/med)	mfar	+/+	-	+	+	+	-
Williams 1992 ⁶²⁸	all	470	mfar	mfa-	-	-	+	+	+	-
Wolter 2013 ⁶²⁹	frail	732	hmcr & mfar(w/med)	hmcr	+/-	-	x	+	-	x
Yamada 2003 ⁶³¹	pre-frail and frail	356	mfar(w/med)	ac	+	-	x	+	-	x

n: number of participants. ROB: risk of bias. D#: Domain #. D1: risk of bias arising from the randomisation process (individual); or, for cluster trials, risk of bias arising from the randomisation process / risk of bias arising from the identification or recruitment of participants into clusters. D2: risk of bias due to deviations from the intended interventions (effect of assignment to the intervention). D3: risk of bias due to missing outcome data. D4: risk of bias in measurement of the outcome. D5: risk of bias in selection of the reported result. +: low risk of bias; -: some concerns; x: high risk of bias / serious concerns; xx: very serious concerns (overall risk of bias only). all: robust, pre-frail and frail.

Table 104 - Mortality in the medium term: comparisons with available care summary of findings table

Population: Older people
 Interventions: Community-based complex interventions
 Comparator: Available care (ac)
 Outcome: Mortality
 Timeframe: medium term; range of follow up 12 to 18 months
 Setting: Community
 Total studies: 65
 Total participants: 38,351
 Comparator rank: Mean 26.0, 95% CI 18 to 31



Intervention group	Relative effect (95% CI)		Anticipated absolute effect (95% CI)				Certainty of the evidence (GRADE)	Ranking (95% CI)	Interpretation
	Network estimate	Calculated risk ratio ^a	High-risk population (202 per 1000 with ac)		Low-risk population (7 per 1000 with ac)				
			With intervention	Difference	With intervention	Difference			
ADL, aids and exercise (ADL & aids & exrc)	OR 0.16 (0.03 to 0.71) Mixed estimate	RR 0.17 (0.03 to 0.72)	39 per 1000 (8 to 152)	163 fewer per 1000 (194 fewer to 50 fewer)	1 per 1000 (0 to 5)	6 fewer per 1000 (7 fewer to 2 fewer)	⊕⊕⊕⊖ Low ^b	8.6 (1 to 19)	may result in a reduction in mortality
Multifactorial-action and review (mfar)	OR 0.88 (0.66 to 1.18) Mixed estimate	RR 0.88 (0.67 to 1.17)	182 per 1000 (143 to 230)	20 fewer per 1000 (59 fewer to 28 more)	7 per 1000 (5 to 9)	1 fewer per 1000 (3 fewer to 1 more)	⊕⊕⊕⊖ Low ^c	22.9 (12 to 31)	may result in a slight reduction in mortality
ADL (ADL)	OR 1.03 (0.44 to 2.43) Mixed estimate	RR 1.03 (0.45 to 2.29)	206 per 1000 (100 to 380)	5 more per 1000 (102 fewer to 179 more)	8 per 1000 (3 to 18)	0 per 1000 (4 fewer to 10 more)	⊕⊕⊕⊖ Low ^c	25.9 (12 to 37)	may result in a very slight increase in mortality
Exercise, multifactorial-action and review with medication-review and self-management strategies (exrc & mfar(w/med+slfm))	OR 1.22 (0.50 to 3.01) Mixed estimate	RR 1.21 (0.51 to 2.77)	235 per 1000 (112 to 432)	34 more per 1000 (89 fewer to 230 more)	9 per 1000 (4 to 22)	2 more per 1000 (4 fewer to 15 more)	⊕⊕⊕⊖ Low ^c	28.6 (11 to 38)	may result in a slight increase in mortality
Multifactorial-action with medication-review (mfa-(w/med))	OR 1.23 (0.50 to 3.04) Mixed estimate	RR 1.22 (0.51 to 2.80)	237 per 1000 (112 to 434)	35 more per 1000 (89 fewer to 233 more)	9 per 1000 (4 to 22)	2 more per 1000 (4 fewer to 15 more)	⊕⊕⊕⊖ Low ^c	28.8 (14 to 38)	may result in a slight increase in mortality

Exercise and multifactorial-action with medication-review (excrc & mfa-(w/med))	OR 1.51 (0.25 to 9.20) Mixed estimate	RR 1.48 (0.26 to 6.83)	276 per 1000 (59 to 699)	74 more per 1000 (142 fewer to 497 more)	11 per 1000 (2 to 64)	4 more per 1000 (6 fewer to 57 more)	⊕⊕⊕⊖ Low ^c	29.7 (8 to 41)	may result in an increase in mortality
ADL and exercise (ADL & excrc)	OR 1.53 (0.41 to 5.70) Mixed estimate	RR 1.50 (0.42 to 4.75)	279 per 1000 (94 to 590)	77 more per 1000 (108 fewer to 388 more)	11 per 1000 (3 to 41)	4 more per 1000 (4 fewer to 33 more)	⊕⊕⊕⊖ Low ^c	30.9 (11 to 40)	may result in an increase in mortality
Homecare and aids (hmcr & aids)	OR 0.07 (0.00 to 1.57) Indirect estimate	RR 0.07 (0.00 to 1.53)	17 per 1000 (0 to 284)	184 fewer per 1000 (202 fewer to 82 more)	1 per 1000 (0 to 12)	7 fewer per 1000 (7 fewer to 4 more)	⊕⊖⊖⊖ Very Low ^{d,e}	5.1 (1 to 27)	the evidence is very uncertain about the effect on mortality
Homecare, multifactorial-action and review with medication-review (hmcr & mfar(w/med))	OR 0.10 (0.01 to 1.64) Indirect estimate	RR 0.10 (0.01 to 1.60)	25 per 1000 (3 to 293)	177 fewer per 1000 (199 fewer to 91 more)	1 per 1000 (0 to 12)	7 fewer per 1000 (7 fewer to 5 more)	⊕⊖⊖⊖ Very low ^{d,e}	6.0 (1 to 27)	the evidence is very uncertain about the effect on mortality
Homecare, education, multifactorial-action and review (hmcr & educ & mfar)	OR 0.12 (0.01 to 1.93) Indirect estimate	RR 0.12 (0.01 to 1.86)	29 per 1000 (3 to 328)	172 fewer per 1000 (199 fewer to 126 more)	1 per 1000 (0 to 14)	7 fewer per 1000 (7 fewer to 7 more)	⊕⊖⊖⊖ Very low ^{d,e}	7.7 (1 to 30)	the evidence is very uncertain about the effect on mortality
Homecare (hmcr)	OR 0.13 (0.01 to 1.97) Indirect estimate	RR 0.13 (0.01 to 1.89)	32 per 1000 (3 to 332)	170 fewer per 1000 (199 fewer to 131 more)	1 per 1000 (0 to 14)	6 fewer per 1000 (7 fewer to 7 more)	⊕⊖⊖⊖ Very low ^{d,e}	8.1 (2 to 29)	the evidence is very uncertain about the effect on mortality
Exercise (excrc)	OR 0.17 (0.02 to 1.40) Mixed estimate	RR 0.18 (0.02 to 1.38)	41 per 1000 (5 to 261)	160 fewer per 1000 (197 fewer to 60 more)	1 per 1000 (0 to 10)	6 fewer per 1000 (7 fewer to 3 more)	⊕⊖⊖⊖ Very low ^{d,e}	9.6 (1 to 34)	the evidence is very uncertain about the effect on mortality
Homecare, multifactorial-action and review (hmcr & mfar)	OR 0.16 (0.02 to 1.58) Mixed estimate	RR 0.17 (0.02 to 1.54)	39 per 1000 (5 to 285)	163 fewer per 1000 (197 fewer to 84 more)	1 per 1000 (0 to 12)	6 fewer per 1000 (7 fewer to 4 more)	⊕⊖⊖⊖ Very low ^{g,h}	9.6 (2 to 28)	the evidence is very uncertain about the effect on mortality
Homecare and medication-review (hmcr & med)	OR 0.16 (0.01 to 2.68) Indirect estimate	RR 0.17 (0.01 to 2.50)	39 per 1000 (3 to 404)	163 fewer per 1000 (199 fewer to 202 more)	1 per 1000 (0 to 20)	6 fewer per 1000 (7 fewer to 12 more)	⊕⊖⊖⊖ Very low ^{d,e}	10.8 (2 to 34)	the evidence is very uncertain about the effect on mortality
Homecare, multifactorial-action and review with self-management strategies (hmcr & mfar(w/slfm))	OR 0.18 (0.01 to 2.26) Indirect estimate	RR 0.19 (0.01 to 2.15)	43 per 1000 (3 to 363)	158 fewer per 1000 (199 fewer to 162 more)	1 per 1000 (0 to 17)	6 fewer per 1000 (7 fewer to 9 more)	⊕⊖⊖⊖ Very low ^{d,e}	10.8 (1 to 34)	the evidence is very uncertain about the effect on mortality
Nutrition and exercise (ntr & excrc)	OR 0.22 (0.01 to 4.78) Mixed estimate	RR 0.23 (0.01 to 4.12)	53 per 1000 (3 to 547)	149 fewer per 1000 (199 fewer to 345 more)	2 per 1000 (0 to 34)	6 fewer per 1000 (7 fewer to 27 more)	⊕⊖⊖⊖ Very low ⁱ	13.0 (1 to 39)	the evidence is very uncertain about the effect on mortality
Homecare, ADL, multifactorial-action and review with self-management strategies (hmcr & ADL & mfar(w/slfm))	OR 0.22 (0.02 to 3.01) Indirect estimate	RR 0.23 (0.02 to 2.77)	53 per 1000 (5 to 432)	149 fewer per 1000 (197 fewer to 230 more)	2 per 1000 (0 to 22)	6 fewer per 1000 (7 fewer to 15 more)	⊕⊖⊖⊖ Very low ^{d,e}	13.1 (5 to 35)	the evidence is very uncertain about the effect on mortality
Cognitive training, nutrition and exercise (cgn & ntr & excrc)	OR 0.32 (0.01 to 8.09) Mixed estimate	RR 0.33 (0.01 to 6.22)	75 per 1000 (3 to 671)	127 fewer per 1000 (199 fewer to 470 more)	2 per 1000 (0 to 57)	5 fewer per 1000 (7 fewer to 50 more)	⊕⊖⊖⊖ Very low ^{c,f}	15.6 (1 to 40)	the evidence is very uncertain about the effect on mortality
Homecare and multifactorial-action (hmcr & mfa-)	OR 0.31 (0.03 to 3.46) Indirect estimate	RR 0.32 (0.03 to 3.13)	73 per 1000 (8 to 466)	129 fewer per 1000 (194 fewer to 265 more)	2 per 1000 (0 to 25)	5 fewer per 1000 (7 fewer to 18 more)	⊕⊖⊖⊖ Very low ^{g,h}	15.9 (7 to 37)	the evidence is very uncertain about the effect on mortality
ADL, nutrition and exercise (ADL & ntr & excrc)	OR 0.48 (0.16 to 1.46) Mixed estimate	RR 0.49 (0.17 to 1.43)	108 per 1000 (39 to 269)	93 fewer per 1000 (163 fewer to 68 more)	4 per 1000 (1 to 11)	4 fewer per 1000 (6 fewer to 3 more)	⊕⊖⊖⊖ Very low ^{c,f}	16.1 (4 to 33)	the evidence is very uncertain about the effect on mortality
Cognitive training, medication-review, nutrition and exercise (cgn & med & ntr & excrc)	OR 0.49 (0.18 to 1.35) Mixed estimate	RR 0.50 (0.19 to 1.33)	110 per 1000 (43 to 254)	91 fewer per 1000 (158 fewer to 53 more)	4 per 1000 (1 to 10)	4 fewer per 1000 (6 fewer to 3 more)	⊕⊖⊖⊖ Very low ^{c,f}	16.3 (4 to 32)	the evidence is very uncertain about the effect on mortality
Homecare, alternative-medicine and exercise (hmcr & hmnt & excrc)	OR 0.31 (0.01 to 7.00) Indirect estimate	RR 0.32 (0.01 to 5.58)	73 per 1000 (3 to 639)	129 fewer per 1000 (199 fewer to 437 more)	2 per 1000 (0 to 50)	5 fewer per 1000 (7 fewer to 42 more)	⊕⊖⊖⊖ Very low ^{d,e}	16.8 (2 to 40)	the evidence is very uncertain about the effect on mortality

Education, exercise, multifactorial-action and review with medication-review and self-management strategies (educ & excr & mfar(w/med+slfm))	OR 0.49 (0.04 to 5.53) Mixed estimate	RR 0.50 (0.04 to 4.64)	110 per 1000 (10 to 583)	91 fewer per 1000 (192 fewer to 381 more)	4 per 1000 (0 to 40)	4 fewer per 1000 (7 fewer to 32 more)	⊕⊕⊕⊕ Very low ^{e,f}	17.9 (1 to 40)	the evidence is very uncertain about the effect on mortality
Homecare and nutrition (hmcr & ntr)	OR 0.35 (0.02 to 6.49) Indirect estimate	RR 0.36 (0.02 to 5.27)	81 per 1000 (5 to 621)	120 fewer per 1000 (197 fewer to 419 more)	3 per 1000 (0 to 46)	5 fewer per 1000 (7 fewer to 39 more)	⊕⊕⊕⊕ Very low ^{d,e}	17.9 (6 to 39)	the evidence is very uncertain about the effect on mortality
Multifactorial-action and review with medication-review (mfar(w/med))	OR 0.86 (0.71 to 1.05) Mixed estimate	RR 0.87 (0.72 to 1.05)	178 per 1000 (152 to 210)	23 fewer per 1000 (50 fewer to 8 more)	6 per 1000 (5 to 8)	1 fewer per 1000 (2 fewer to 0)	⊕⊕⊕⊕ Very low ^{e,j}	22.1 (13 to 29)	the evidence is very uncertain about the effect on mortality
Welfare-advice (wlfr)	OR 0.80 (0.29 to 2.22) Mixed estimate	RR 0.81 (0.30 to 2.11)	168 per 1000 (68 to 359)	34 fewer per 1000 (133 fewer to 158 more)	6 per 1000 (2 to 16)	1 fewer per 1000 (5 fewer to 9 more)	⊕⊕⊕⊕ Very low ^{e,f}	22.7 (7 to 37)	the evidence is very uncertain about the effect on mortality
Multifactorial-action (mfa-)	OR 0.89 (0.56 to 1.43) Mixed estimate	RR 0.89 (0.57 to 1.40)	183 per 1000 (124 to 265)	18 fewer per 1000 (78 fewer to 64 more)	7 per 1000 (4 to 11)	1 fewer per 1000 (3 fewer to 3 more)	⊕⊕⊕⊕ Very low ^{e,f}	23.2 (11 to 34)	the evidence is very uncertain about the effect on mortality
Aids (aids)	OR 0.95 (0.05 to 17.30) Indirect estimate	RR 0.95 (0.05 to 10.24)	193 per 1000 (12 to 814)	8 fewer per 1000 (189 fewer to 612 more)	7 per 1000 (0 to 114)	0 per 1000 (7 fewer to 107 more)	⊕⊕⊕⊕ Very low ^{e,k}	24.6 (2 to 41)	the evidence is very uncertain about the effect on mortality
Multifactorial-action with medication-review and self-management strategies (mfa-(w/med+slfm))	OR 1.00 (0.59 to 1.68) Mixed estimate	RR 1.00 (0.60 to 1.63)	202 per 1000 (130 to 298)	0 per 1000 (72 fewer to 96 more)	7 per 1000 (4 to 12)	0 per 1000 (3 fewer to 5 more)	⊕⊕⊕⊕ Very low ^{l,m}	25.5 (14 to 35)	the evidence is very uncertain about the effect on mortality
Education and risk-screening (educ & rsk-mfa)	OR 1.00 (0.52 to 1.93) Mixed estimate	RR 1.00 (0.53 to 1.86)	202 per 1000 (116 to 328)	0 per 1000 (86 fewer to 126 more)	7 per 1000 (4 to 14)	0 per 1000 (4 fewer to 7 more)	⊕⊕⊕⊕ Very low ^{e,f}	25.9 (11 to 36)	the evidence is very uncertain about the effect on mortality
Care voucher (vchr)	OR 1.02 (0.59 to 1.79) Mixed estimate	RR 1.02 (0.60 to 1.73)	205 per 1000 (130 to 311)	3 more per 1000 (72 fewer to 110 more)	8 per 1000 (4 to 13)	0 per 1000 (3 fewer to 6 more)	⊕⊕⊕⊕ Very low ^{m,n}	25.9 (14 to 36)	the evidence is very uncertain about the effect on mortality
Risk-screening (rsk-mfa-)	OR 1.03 (0.76 to 1.37) Mixed estimate	RR 1.03 (0.77 to 1.35)	206 per 1000 (161 to 257)	5 more per 1000 (41 fewer to 55 more)	8 per 1000 (6 to 10)	0 per 1000 (2 fewer to 3 more)	⊕⊕⊕⊕ Very low ^{e,o}	26.4 (16 to 34)	the evidence is very uncertain about the effect on mortality
Education (educ)	OR 1.41 (0.09 to 23.20) Mixed estimate	RR 1.39 (0.09 to 11.96)	262 per 1000 (22 to 854)	61 more per 1000 (179 fewer to 653 more)	10 per 1000 (1 to 148)	3 more per 1000 (7 fewer to 140 more)	⊕⊕⊕⊕ Very low ^{h,p}	27.2 (3 to 41)	the evidence is very uncertain about the effect on mortality
Education, exercise, multifactorial-action and review with self-management strategies (educ & excr & mfar(w/slfm))	OR 1.19 (0.31 to 4.54) Mixed estimate	RR 1.18 (0.32 to 3.95)	231 per 1000 (73 to 534)	29 more per 1000 (129 fewer to 332 more)	9 per 1000 (2 to 33)	1 more per 1000 (5 fewer to 25 more)	⊕⊕⊕⊕ Very low ^{e,f}	27.8 (8 to 39)	the evidence is very uncertain about the effect on mortality
Education, multifactorial-action and review with medication-review (educ & mfar(w/med))	OR 1.10 (0.73 to 1.67) Mixed estimate	RR 1.10 (0.74 to 1.62)	217 per 1000 (156 to 297)	16 more per 1000 (46 fewer to 95 more)	8 per 1000 (5 to 12)	1 more per 1000 (2 fewer to 5 more)	⊕⊕⊕⊕ Very low ^{e,f}	27.8 (17 to 36)	the evidence is very uncertain about the effect on mortality
Education and multifactorial-action (educ & mfa-)	OR 1.32 (0.23 to 7.39) Mixed estimate	RR 1.30 (0.24 to 5.82)	250 per 1000 (55 to 651)	48 more per 1000 (147 fewer to 449 more)	10 per 1000 (2 to 52)	2 more per 1000 (6 fewer to 45 more)	⊕⊕⊕⊕ Very low ^{e,f}	28.4 (7 to 40)	the evidence is very uncertain about the effect on mortality
Education, multifactorial-action and review with medication-review and self-management strategies (educ & mfar(w/med+slfm))	OR 1.15 (0.66 to 2.01) Mixed estimate	RR 1.14 (0.67 to 1.93)	225 per 1000 (143 to 337)	23 more per 1000 (59 fewer to 135 more)	9 per 1000 (5 to 15)	1 more per 1000 (3 fewer to 7 more)	⊕⊕⊕⊕ Very low ^{e,f}	28.4 (16 to 36)	the evidence is very uncertain about the effect on mortality
Exercise and psychology (excr & psyc)	OR 4.06 (0.44 to 37.10) Mixed estimate	RR 3.59 (0.45 to 14.68)	506 per 1000 (100 to 904)	305 more per 1000 (102 fewer to 702 more)	29 per 1000 (3 to 217)	22 more per 1000 (4 fewer to 209 more)	⊕⊕⊕⊕ Very low ^{m,q}	35.9 (15 to 41)	the evidence is very uncertain about the effect on mortality
Monitoring (mntr-mfa-)	OR 4.49 (1.41 to 14.30) Mixed estimate	RR 3.91 (1.39 to 9.15)	531 per 1000 (262 to 783)	330 more per 1000 (61 more to 582 more)	32 per 1000 (10 to 96)	25 more per 1000 (3 more to 89 more)	⊕⊕⊕⊕ Very low ^{e,f}	38.5 (32 to 41)	the evidence is very uncertain about the effect on mortality

ADL, aids, education, exercise, multifactorial-action and review with medication-review and self-management strategies (ADL & aids & ed & ex & mf(w/med+slfm))	OR 8.25 (1.01 to 67.40) Mixed estimate	RR 6.31 (1.01 to 17.69)	676 per 1000 (203 to 944)	474 more per 1000 (2 more to 743 more)	58 per 1000 (7 to 335)	51 more per 1000 (0 to 327 more)	⊕⊕⊕⊕ Very low ^{e,f}	38.9 (23 to 41)	the evidence is very uncertain about the effect on mortality
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- a: Calculated from OR and an assumed comparator risk of 0.042, the median available care risk among these studies.
- b: very serious concerns about imprecision as confidence interval is wide and direct evidence is based on 14 events from 319 persons. Downgrade twice.
- c: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Downgrade twice.
- d: serious concerns about risk of bias due to excluding participants in per-protocol analysis and missing outcome data in indirect evidence. Downgrade once.
- e: extremely serious concerns about imprecision as confidence interval is extremely wide. Downgrade twice (would be three downgrades except for additional downgrades for risk of bias).
- f: serious concerns about risk of bias due to missing outcome data. Downgrade once.
- g: very serious concerns about risk of bias due to excluding participants in per-protocol analysis and missing outcome data. Downgrade twice.
- h: extremely serious concerns about imprecision as confidence interval is extremely wide. Downgrade once (would be three downgrades except for additional downgrades for risk of bias).
- i: extremely serious concerns about imprecision as confidence interval is extremely wide and direct evidence is based on 2 events from 172 persons. Downgrade three levels.
- j: serious concerns about inconsistency (heterogeneity) between studies as confidence intervals do not overlap. Downgrade once.
- k: serious concerns about risk of bias due to missing outcome data in indirect evidence. Downgrade once.
- l: very serious concerns about risk of bias due to randomisation process and missing outcome data. Downgrade twice.
- m: very serious concerns about imprecision as confidence interval includes substantial benefit and substantial harm. Already downgraded twice for risk of bias, downgrade once.
- n: very serious concerns about risk of bias due to excluding participants from analyses, missing data, and selective reporting results. Downgrade twice.
- o: serious concerns about risk of bias due to randomisation process and missing outcome data in each of the two studies respectively. Downgrade once.
- p: very serious concerns about risk of bias due to contamination between the intervention arms and missing outcome data. Downgrade twice.
- q: very serious concerns about risk of bias due to randomisation process, excluding participants in per-protocol analysis, and missing outcome data. Downgrade twice.

Table 106 - Intervention rankings for mortality: medium-term network

Treatment	SUCRA	Pr(Best)	Mean Rank	LCI Rank	UCI Rank
hmcr & aids	89.7	29.2	5.1	1	27
hmcr & mfar(w/med)	87.5	7.5	6	1	27
hmcr & educ & mfar	83.2	2.2	7.7	1	30
hmcr	82.1	0.4	8.1	2	29
ADL & aids & exrc	81.1	8.4	8.6	1	19
exrc	78.5	12.2	9.6	1	34
hmcr & mfar	78.5	1.2	9.6	2	28
hmcr & med	75.6	0.5	10.8	2	34
hmcr & mfar(w/slfm)	75.4	4.3	10.8	1	34
ntr & exrc	69.9	14.1	13	1	39
hmcr & ADL & mfar(w/slfm)	69.8	0.1	13.1	5	35
cgn & ntr & exrc	63.5	12.1	15.6	1	40
hmcr & mfa-	62.8	0	15.9	7	37
ADL & ntr & exrc	62.1	0.2	16.1	4	33
cgn & med & ntr & exrc	61.7	0	16.3	4	32
hmcr & hmnt & exrc	60.5	0.9	16.8	2	40
educ & exrc & mfar(w/med+slfm)	57.7	3.1	17.9	1	40
hmcr & ntr	57.6	0.2	17.9	6	39
mfar(w/med)	47.4	0	22.1	13	29
wlfr	45.7	0	22.7	7	37
mfar	45.3	0	22.9	12	31
mfa-	44.4	0	23.2	11	34
aids	41	2.2	24.6	2	41
mfa-(w/med+slfm)	38.6	0	25.5	14	35
ADL	37.8	0	25.9	12	37
educ & rsk-mfa-	37.8	0	25.9	11	36
vchr	37.7	0	25.9	14	36
ac	37.5	0	26	18	31
rsk-mfa-	36.5	0	26.4	16	34
educ	34.6	1.1	27.2	3	41
educ & exrc & mfar(w/slfm)	33	0.1	27.8	8	39
educ & mfar(w/med)	32.9	0	27.8	17	36
educ & mfar(w/med+slfm)	31.6	0	28.4	16	36
educ & mfa-	31.4	0	28.4	7	40
exrc & mfar(w/med+slfm)	31.1	0	28.6	11	38
mfa-(w/med)	30.5	0	28.8	14	38
exrc & mfa-(w/med)	28.2	0	29.7	8	41
ADL & exrc	25.2	0	30.9	11	40
exrc & psyc	12.7	0	35.9	15	41
mntr-mfa-	6.2	0	38.5	32	41
ADL&aids&ed&ex&mf(w/med+slfm)	5.4	0	38.9	23	41

SUCRA values (0–100) and mean ranks are presented, based on 1000 simulations. Higher SUCRAs and lower mean ranks indicate better performing interventions. Pr(Best) gives the probability of each specific intervention being ranked best intervention, based on 1000 simulations.

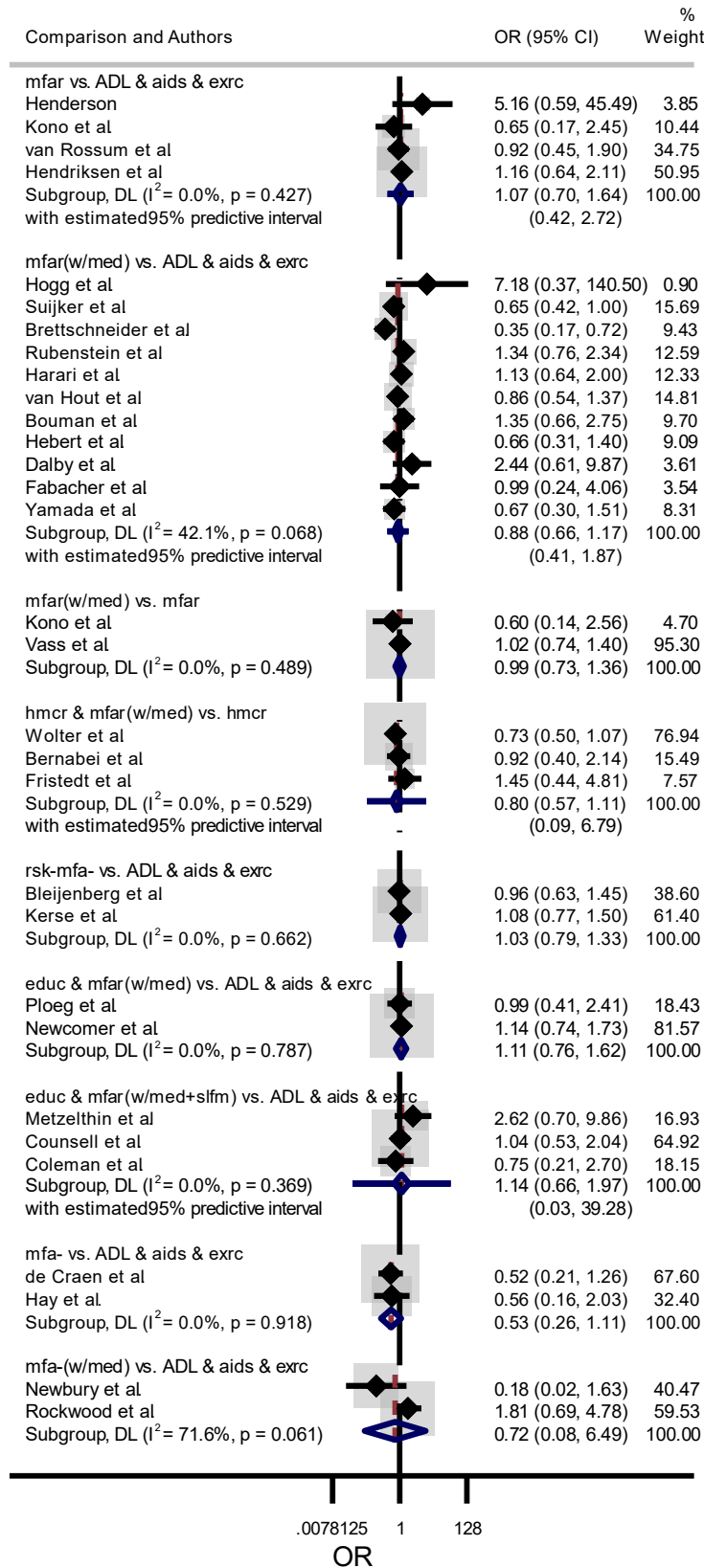


Figure 49 - Pairwise meta-analysis for mortality: medium-term network (pooling comparisons with greater than one study reporting results)

Appendix 12. Health economic evaluations and results

Table 107 - Economic evaluation analysis and principal findings reported for the short-term time horizon

Study	Intervention 1 (Int1) (Experimental intervention)	Intervention 2 (Int2) (comparator)	Perspective	Time horizon (months)	Evaluation ^a type				Cost items category ^a				Intervention cost items	Currency / Price year / Principal findings / Conclusion of study	Study conclusion ^b
					Cost analysis	Cost-effectiveness analysis	Cost-utility analysis	Cost-benefit analysis	Health sector costs	Other sector costs	Patient and family costs	Productivity impacts			
Clark 1997 ⁵¹⁹	eng & educ n = 51/51	ac n = 112/112	Soc (inc. HSCS)	9	•		•		•				Int1: Staff time spent on preparation, contacts, and travelling; Int2: Staff time spent on preparation and contacts	Currency / Price year: USD\$, 1995; annual discount rate of 3% for costs Total costs (annualised mean per person): <i>(during treatment) Int1:</i> \$4741 (SD \$11,654), <i>Int2:</i> \$4723 (SD \$11,321) Conclusion: “Preventive OT demonstrated cost-effectiveness in conjunction with a trend toward decreased medical expenditures.” Notes: Post-treatment total costs and ICER were estimated at 15 months.	✓
Clark 2012 ⁵²⁰	eng & educ n = 232/232	ac n = 228/228	HSCS	6	•		•		•				Salaries of intervention therapists	Currency / Price year: USD\$, 2007-8 Experimental intervention costs (mean per person): \$783 (approx. £472.5) ICER (per QALY): \$41,218 (approx. £24,868), a number within the range that is often considered cost-effective by the UK NICE. Conclusion: “A lifestyle-oriented occupational therapy intervention has beneficial effects for ethnically diverse older people recruited from a wide array of community settings. Because the intervention is cost-effective and is applicable on a wide-scale basis, it has the potential to help reduce health decline and promote well-being in older people.”	✓
Melis 2008 ⁵⁷³	mfar(w/med) n = 85/88	ac n = 66/67	HSCS	6	•	•		•	•				Staff time spent on	Currency / Price year: EUR€, 2005 Total cost (mean per person): <i>Int1:</i> €9713(SD €10,205), <i>Int2:</i> €8952(SD €9757);	✓

												Consult-ation, phone calls, traveling, and administration	<p>mean difference: €761 (95% CI €-3336 to €4687)</p> <p>Experimental intervention costs (mean per person): €998 (95% CI €888 to 1108)</p> <p>ICER (per successful treatment^d): €3418 (95% CI €-21,458 to 45,362)</p> <p>CE plane: 34.6% ICERs in southeast quadrant^e</p> <p>WTP: ICER is roughly €3500 per successful treatment. The new treatment is cost-effective at a WTP of €34,000.</p> <p>Conclusion: “The results of this economic evaluation suggest that DGIP is an effective addition to primary care for frail older people at a reasonable cost.”</p>			
Tuntland 2015 ⁶¹⁴	hmcr & ADL & aids & mfa- (w/slfm) n = 25/31	hmcr & mfa- n = 21/30	HSCS	9	•	• ^f	•	•	•	•	•	Home visits from healthcare professionals only	Home care only	Staff time spent on home visits	<p>Currency / Price year: NOK, (assumed) 2012-4</p> <p>Total costs (mean per person, 3-9 months post-intervention phase only):</p> <p>Int1: 6470.82 (SD 10,559.00) NOK, Int2: 13914.31 (SD 28,926.05) NOK;</p> <p>mean difference: -7443.23 NOK</p> <p>Intervention costs (mean per person): Int1: 6322.78 (SD 4101.98) NOK, Int2: 7456.77 (SD 12,952.97) NOK;</p> <p>mean difference: -1134.00 NOK</p> <p>Conclusions: “We conclude that reablement stands out as a promising intervention, not only because it seems to decrease expenditure, but also because older adults feel they improve their performance and satisfaction in daily life activities. The combination of lower costs and higher effects is the kind of policy measure that will be of interest to policy-makers. Reablement is a more cost-effective intervention compared with usual care. Reablement has a potentially large effect on the demand for compensating home-based care services. Policy-makers should therefore consider implementing reablement on a larger scale.”</p>	✓
Stewart 2005 ⁶⁰¹	mfa- n = 160/160	mfa- n = 161/161	HSCS	8	•	•	•	•	•	•	•	Also social services, equipment and adaptations	Out-of-pocket expenses only, e.g., non-prescription medications, travel, additional household costs.	Not specified but analysed as part of total costs	<p>Currency / Price year: GBP£ (£1 = US \$1.59 = EUR €1.47), 2001; reported no discounting</p> <p>Total costs (mean per person):</p> <p>Int1: £4379 (SD £4173), Int2: £3837 (SD £4736); mean difference: £543 (95% CI -434 to 1519)</p> <p>CEA curve: At best, occupational therapy assessment would improve outcomes at a cost of £14,000 per QALY. The probability of such an outcome was <50% (similar results presented for distribution of values of</p>	✗

															ICER based on Community Dependence Index (CDI) from bootstrap estimation). Conclusions: “From a policy perspective, the lack of difference in clinical and cost-effectiveness means that either a social work or an occupational therapy service is successful in making care assessments that enable an older person to remain in their own home.”	
van der Pols-Vijlbrief 2017 ⁶¹⁵	hmcr & ntr & mfar n = 79/79 ^f	hmcr n = 76/76 ^a	Soc (inc. HSCS)	6	•		•	•	•	•	•	Informal care only	Implementing action plan, staff time needed for support and visits	Currency / Price year: EUR€, 2014; reported no discounting Total costs (mean per person): Int1: €2770 (SE €347), Int2: €3044 (SE €325); mean difference: €-274, 95% CI €-1111 to €782. Experimental intervention costs (mean, per person): €41 (SE €0.47) ICER (per QALY): €-32173 CE plane: 55% cost-effect pairs in southeast quadrant, 21% northeast, 18% in southwest, 6% in northwest quadrants ^e . CEA curve: Probability of cost-effectiveness 0.80 at a WTP of €20,000/QALY gained. Conclusion: “The intervention cannot be considered cost-effective in comparison with usual care for [...] QALYs gained. [It] showed stronger effects in participants who completed the intervention and actually executed the recommendations given. Therefore, future studies should take into account motivation and capability as potential key factors for a successful intervention.”	X	
Wong 2019 ⁶³⁰	mfar(w/slfm) n = 230/271	ac n = 229/269	HSCS	6	•		•	•	•	•	•	Private GP visits only	(Int1) Staff time on staff training, staff time on intervention delivery (home visits, calls, administration), equipment; (Int2) Staff time on staff training, staff time on intervention delivery (calls)	Currency / Price year: HKD\$, 2018 Total costs (mean per person): Int1: \$3979, Int2: \$3623; mean difference: \$356; 95% CI \$272 to \$440. Intervention costs (mean per person): Int1: \$1263, Int2: \$68 ICER (per QALY): \$109,453 (95% CI \$83,719 to \$135,189) CE plane: 12.0% ICERs in the southeast quadrant ^e . CEA curve: The preventive self-care health management program had a 53.2% likelihood of being cost-effective when considering the NICE threshold (\$200,000/QALY), and a 53.4% likelihood of being	~	

Table 108 - Economic evaluation analysis and principal findings reported for the medium-term time horizon

Study	Intervention 1 (Int1) (Experimental intervention)	Intervention 2 (Int2) (comparator)	Perspective	Time horizon (months)	Evaluation type ^a				Cost items category ^a				Intervention cost items	Currency / Price year / Principal findings / Conclusion of study	Study conclusion ^b
					Cost analysis	Cost-effectiveness analysis	Cost-utility analysis	Cost-benefit analysis	Health sector costs	Other sector costs	Patient and family costs	Productivity impacts			
Dorresteijn 2016 ⁵²⁶	ADL n = 130/194	ac n = 159/195	Soc (inc. HSCS)	12	•	• ^c	•		•				Materials used, salaries of the facilitators, costs of training sessions for the facilitators, etc.	<p>Currency / Price year: EUR€, 2011</p> <p>Total costs (mean per person): Int1: €7890 (SD €6450), Int2: €8094 (SD €7466)</p> <p>ICER (per QALY): base case: €-9586 (dominant), healthcare perspective: €-14,018 (dominant), per-protocol: €-159,846 (dominant), without outliers: €-35,330 (dominant)</p> <p>CE plane: (QALY base case) 57% in southeast, 38% northeast, 1% southwest, 3% northwest quadrants^d.</p> <p>(Sensitivity analyses) Overall, the probability of the cost-effectiveness of AMB-Home increased if participants received five or more sessions compared to usual care (per-protocol), decreased when costs were taken only from a healthcare perspective, and without outliers was rather similar to the base case analyses.</p> <p>Conclusion: “The programme is likely to be cost-effective, and therefore a useful addition to current geriatric care, particularly for those persons who are not able or willing to attend group programmes.”</p>	✓
Clark 1997 ⁵¹⁹	eng & educ n = 51/51	ac n = 112/112	Soc (inc. HSCS)	15	•		•		•	Paid caregiver only	Unpaid caregiver only		<p>Int1: Staff time spent on preparation, contacts, and travelling;</p> <p>Int2: Staff time spent on preparation and contacts</p>	<p>Currency / Price year: USD\$, 1995; annual discount rate of 3% for costs</p> <p>Total costs (annualised mean per person): (15 months, post-treatment) Int1: \$4145 (SD \$10,801), Int2: \$5218 (SD \$9588)</p> <p>Intervention costs (mean per person): Int1: \$548, Int2: \$68</p> <p>ICER (per QALY): \$10,666 (95% CI \$6,747 to \$25,430)</p> <p>Conclusion: “Preventive OT demonstrated cost-effectiveness in conjunction with a trend toward decreased medical expenditures.”</p> <p>Notes: Costs during intervention phase estimated at 9 months</p>	✓

Cameron 2013 ⁵¹⁵	exrc & mfar(w/med+slfm) n = 119/120	ac n = 119/121	HSCS	12	•	• ^e	•	• ^e	•	•	Also transport		Staff time spent on assessments and intervention delivery, materials and equipment in intervention delivery, aids and adaptations	<p>Currency / Price year: AUD\$, 2011</p> <p>Total costs (mean per person): <i>Int1</i> \$25,030 (SD \$29,827), <i>Int2</i> \$22,885 (SD \$32354); <i>mean difference</i>^d: \$2145 (95% CI \$-5698 to \$10,221)</p> <p>Experimental intervention costs (mean per person): \$1528.52</p> <p>ICER: (per QALY) taking uncertainty into account, the bootstrapped replicates indicated that 10.8% probability of being cost saving across the entire participant population, 17.8% probability of saving in the very frail subgroup, and 8.2% probability in the frail subgroup</p> <p>Conclusion: “For frail older people residing in the community, a 12-month multifactorial intervention provided good value for money, particularly for the very frail, where it has a high probability of being cost saving as well as effective.”^e</p>	✓ ^e
Brettschneider 2015 ⁵¹⁴	mfar(w/med) n = 133/150	ac n = 145/155	Soc (inc. HSCS)	18	•	•	•	•	•	•	Also medical devices, dentures	•	Informal care, transport, in-home modifications only	<p>Currency / Price year: EUR€, 2008; reported no discounting</p> <p>Total costs (mean per person): <i>Int1</i>: €20,195 (SD €21,689), <i>Int2</i>: €21,028 (SD €24,384); <i>adjusted mean difference</i>^d: €4400.52 (SE €3019.61)</p> <p>Experimental intervention costs (mean per person): €73 (SD €22)</p> <p>CEA curve: 15% probability of an ICER <€50,000/QALY for preventive home visits. At a WTP of €0/QALY the probability of cost-effectiveness of preventive home visits was 7%, while at a WTP of €250,000/QALY the probability was 39%.</p> <p>Conclusions: “The evaluated preventive home visits programme is unlikely to be cost-effective.”</p>	×
Hogg 2009 ⁵⁵⁰	mfar(w/med) n = 74/120	ac n = 78/121	HSCS ^g	15	•	• ^h	•	•	•	•	Also personal service support		Staff time spent on intervention delivery and administration, medical supplies, overheads	<p>Currency / Price year: CAD\$, (assumed) 2004-6</p> <p>Total costs (mean, per person): <i>Int1</i>: \$12,923, <i>Int2</i>: \$9222; <i>mean difference</i>^d: \$3701 (95% CI \$385 to \$7024)</p> <p>Experimental intervention costs (mean, per person): \$3802</p> <p>Conclusion: “By any of the metrics used, the APTCare intervention was not cost-effective, at least not in a population for which baseline quality of care was high.”</p>	×
Suijker 2016 ⁶⁰⁵	mfar(w/med) n = 1209/1209 ⁱ	ac n = 1074/1074 ⁱ	HSCS	12	•	•	•	•	•	•		•	Staff time spent on training, postal screening, visits, and planning treatment plans	<p>Currency / Price year: EUR€, 2010 prices adjusted for 2016</p> <p>Total costs (mean per person): <i>Int1</i>: €6518 (SE €472), <i>Int2</i>: €5214 (SE €338); <i>mean difference</i>^d: €1457 (95% CI €572 to €2537)</p> <p>Experimental intervention costs (mean per person): €168</p>	×

													(each day in community gained): \$20.13 Sensitivity analysis: Results can be quite sensitive to changes in the average resource use and changes in living and survival status outcomes. Conclusion: Over 12 months, “the cost of the initiative was more than the cost for usual care, [but it increased time remaining at home comparatively], by [reducing] time spent in residential care [or] deceased.” “Our base case results suggest that COSE costs an additional \$20 per person over a 12-month period for each extra day spent in the community relative to usual care.”	
Leveille 1998 ⁵⁶⁴	educ & exrc & mfar(w/med+slfm) n = 100/101	ac n = 100/100	HSCS	12	•			• Hospital in-patient charges only	• Experimental intervention costs only			Salaries of intervention team	Currency / Price year (assumed): USD\$, mid-1990s Hospital charges (mean per person): <i>mean difference</i> : savings of approx. \$1200 in Int1 Experimental intervention costs (mean per person annually): approx. £300 Conclusion: “The estimated cost savings, based on the absolute reduction in the number of inpatient days by intervention participants, were substantial. [...] These findings in regard to inpatient costs alone are very encouraging and suggest a sizeable cost benefit to healthcare insurers from this approach to disability prevention.”	✓
Bleijenberg et al. 2016 ⁵⁰⁹	UPRIM screening rsk-mfa- n = 790/790 UPRIM+U-CARE rsk-mfa- n = 1446/1446	ac n = 856/856	HSCS	12	•		• Items not specified					Not specified but analysed as part of total costs	Currency / Price year: EUR€, (around) 2010-2 Total costs (mean per person): <i>Int1:</i> (U-PRIM) €6651, (U-PRIM+U-CARE) €6825, <i>Int2:</i> €7601. Conclusions: “U-PRIM and U-PRIM+U-CARE resulted in better preservation of daily functioning in older patients and has a high probability of being cost-effective compared with usual care.”	✓
Mann WC 1999 ⁵⁷¹	hmcr & aids n = 52/52	hmcr n = 49/52	HSCS	18	•		•		• Also case manager visits			AT and EI only	Currency / Price year: (assumed) USD\$, mid-1990s Total costs (mean per person): <i>Int1:</i> \$14,172 (SD \$13,761), <i>Int2:</i> \$31,610 (SD \$42,239) Intervention costs on AT-EIs (mean per person): <i>Int1:</i> \$2620, <i>Int2:</i> \$443 Conclusion: “The frail elderly persons in this trial experienced functional decline over time. Results indicate rate of decline can be slowed, and	✓

													institutional and certain in-home personnel costs reduced through a systematic approach to providing AT and EIs.”		
Bernabei 1998 ⁵⁰⁸	hmcr & mfar(w/med) n = 99/100	hmcr n = 100/100	HSCS	12	•				•	•			Salaries of intervention team	<p>Currency / Price year: GBP£ and USD\$, (assumed) 1995</p> <p>Total costs: savings of £1125 (\$1800) per year of follow up in Int1, 23% less than Int2, mainly from reductions in nursing home and hospital expenses</p> <p>Conclusion: “Integrated social and medical care with case management programmes may provide a cost-effective approach to reduce admission to institutions and functional decline in older people living in the community.”</p>	✓
Ploeg 2010 ⁵⁹⁰	educ & mfar(w/med) n = 350/361	ac n = 343/358	HSCS	12	•				•	•			Not specified but analysed as part of total costs	<p>Currency / Price year: CAD\$, (assumed 2004-6)</p> <p>Total costs (mean per person): Int1: \$7779 (SD \$7980), Int2: \$8096 (SD \$9582); mean difference: \$-165 (£107; €118; USD\$162) (95% CI \$-16545 to \$16214)</p> <p>Conclusion: “A preventive primary care outreach intervention for older Canadian adults at risk of functional decline had no effect on QALYs, costs of health and social services, functional status, self-rated health, or mortality. “The results of this study do not support adoption of this preventive primary care intervention for this target population of high-risk older adults.”</p>	×
Hay 1998 ⁵⁴⁶	mfa- n = 75/209	Usual care (CG1: no baseline; CG2: assessed at baseline) CG1: ac CG2: ac CG1 n = 103/207 CG2 n = 86/203	Soc (inc. HSCS)	12	•				•	•	•	•	Not specified, not included in total costs analysis.	<p>Currency / Price year (assumed): CAD\$, 1991-5</p> <p>Total costs (mean per person annually): (during treatment) Int1: \$4001, CG1: \$1555, CG2: \$2587</p> <p>Conclusion: “While the study provided an opportunity for these interventions, there was no demonstrable benefit in terms of cost or health status. There were no significant differences in health system use costs, although the experimental group showed higher use the year they were being treated and a marked decrease in the second year. Differences in hospitalization rates account for this variation.”</p>	×

Counsell 2007 ⁵²²	educ & mfar(w/med+ slfm) n = 474/474	ac n = 477/477	HSCS	12	•				•			Salaries and benefits for personnel, mileage reimburse-ment, pager and cellphone costs, home visit bags, and office supplies	Currency / Price year: USD\$, (assumed 2002-4) Total costs (mean per person): (12 months) Int1: \$7917 (SD \$10,457), Int2: \$6163 (SD \$10,044) Experimental intervention costs (mean per person annually): all: \$1260, high risk: \$1432, low risk: \$1207 Conclusion: “In patients at high risk of hospitalization, the GRACE intervention is cost neutral from the healthcare delivery system perspective. A cost-effectiveness analysis is needed to guide decisions about implementation in low-risk patients.”	~
Newcomer 2004 ⁵⁸³	educ & mfar(w/med) n = 1523/1537	ac n = 1532/1542	HSCS ^k	12	•				• Hospital in-patient charges only			Not specified	Currency / Price year (assumed): USD\$, 2001-3 Hospital charges (mean per person monthly): Int1: \$2002 (SD \$9895), Int2: \$2102 (SD \$15,227); mean change^e (increase from baseline): Int1: \$1110 (SD \$10,300), Int2: \$1071 (SD \$15,597). Conclusion: “Regardless of the approach taken to quantify or standardize service use or expenditures, the unadjusted findings were consistent: There was no statistically significant treatment effect evident among the study outcomes.”	~

approx., approximately; AT and EI, assistive technology and home environmental interventions; CAD\$, Canadian dollar; CE, cost-effectiveness; CEA curve, cost-effectiveness acceptability curve; CI, confidence interval; EUR€, Euro; GBP£, British pound; HSCS, health and social care system; ICER, incremental cost-effectiveness ratio; n= number of participants analysed out of the number randomised; NZD\$, New Zealand dollar; pyrs, per person-years; QALY, quality-adjusted life year; SD, standard deviation; SE, standard error; Soc (inc. HSCS), societal perspective including health and social care system; USD\$, US dollar; WTP, willingness to pay

Intervention and control group abbreviations are a combination of the following:- ac: available care; ADL: activities of daily living training; aids: provision of aids and adaptations; cgn: cognitive training; comm: technology for communication and engagement; educ: health education; eng: engagement in meaningful activities; excr: physical exercise; hmcr: formal homecare; hmnt: alternative medicine; med: medication review; mfa: multifactorial action; mfar: multifactorial action and follow-on routine review; mntr-mfa: monitoring, which may trigger multifactorial action; ntr: nutritional support; psyc: psychological therapy; rsk-mfa: risk screening, which may trigger multifactorial action; sst: social skills training; vchr: care voucher provision; wlfr: welfare rights advice; w/med: with medication review; w/slfr: with self-management.

- a • indicates the category was included in the study evaluation
- b ✓ indicates that experimental intervention was clearly concluded as a more cost-effective, lower-cost alternative, or recommended by the study authors; X indicates that experimental intervention was explicitly not recommended by the study authors; ~ indicates that no definite conclusion was drawn by the study authors.
- c Cost-effectiveness was evaluated with Falls Efficacy Scale-International (FES-I) which is not an outcome of interest.
- d CE plane regions: southeast quadrant represents less costs and more effects (superior), northeast quadrant represents higher costs and more effects, southwest quadrant represents less costs and less effects, northwest quadrant represents higher costs and less effect (inferior)
- e Cost-effectiveness was evaluated with extra number of patients experiencing transition out of frailty which is not an outcome of interest.
- f Mean difference = Intervention 1 (Int1) group value minus Intervention 2 (Int2) group value
- g Specific payer’s perspective mentioned: From the perspective the provincial Ministry of Health
- h Cost-effectiveness was evaluated with quality of care which is not an outcome of interest.

- i Imputation used to replace missing values
- j Specific payer's perspective mentioned: From the perspective of a homecare agency
- k Specific payer's perspective mentioned: From the perspective of Medicare, USA

Table 109 - Economic evaluation analysis and principal findings reported for the long-term time horizon

Study	Intervention 1 (Int1) (Experimental intervention)	Intervention 2 (Int2) (comparator)	Perspective	Time horizon (months)	Evaluation type ^a				Cost items category ^a				Intervention cost item	Currency / Price year / Principal findings / Conclusion of study	Study conclusion ^b
					Cost analysis	Cost-effectiveness analysis	Cost-utility analysis	Cost-benefit analysis	Health sector costs	Other sector costs	Patient and family costs	Productivity impacts			
Liimatta 2019 ⁵⁶⁷	exrc & mfa- (w/med) n = 211/211 ^c	ac n = 211/211 ^c	HSCS	24	•		•		•				Unit costs of home visits	Currency / Price year: EUR€, 2013-2014 (service costs valued at 2011 and corrected for inflation) Total costs (mean, pyrs): Int1: €7310 (SE €849), Int2: €8277 (SE €1089); mean difference^d: €-967 (95% CI €-3766 to €1633); mean ratio: 0.84 (95% CI 0.55 to 1.13) Experimental intervention costs (mean, per person): €382 CE plane: 60% ICERs per QALY lie in the dominant (southeast) quadrant ^e Conclusion: “The intervention appeared to have positive effects on health-related quality of life without accruing additional costs.”	✓
Metzelthin 2013 ⁵⁷⁶	educ & mfar(w/med+slfm) n = 103/193	ac n = 91/153	Soc (inc. HSCS)	24	•	•	•		•	•	•		Intervention materials, training activities, postal screening, and staff time spent on home visit assessments, treatment plans, delivering interventions	Currency / Price year: EUR€, 2010 Total costs (mean per person): Int1: €26503 (SD €27273), Int2: €20,550 (SD €18891); mean difference^d: €5953 (95% CI €-633 to €12538) Experimental intervention costs (mean per person): €728 ICERs (per GARS score): €1920, (per QALY UK tariff): €150616, without intervention costs: €132195, QALY Dutch tariff: €285428 CE plane: (QALY UK tariff) 2% in southeast, 19% northeast, 2% southwest, 77% northwest quadrants ^e . (GARS): 1% in southeast, 2% northeast, 3% southwest, 95% northwest quadrants ^e . Sensitivity analyses: did not reveal other results Conclusion: “The intervention under study led to an increase in healthcare utilisation and related costs without providing any beneficial effects. This study adds to the scarce amount of evidence	X

													regarding cost-effectiveness of proactive primary care in community-dwelling frail older people.”	
Bouman 2008 ⁵¹³	mfar(w/med) n =139/160 (analysed for CE; 160 analysed for costs)	ac n =154/170 (analysed for CE; 170 analysed for costs)	HSCS	24	•	•			• Also aids, in-home modifications				Staff salaries, staff travel costs, staff training activities Currency / Price year: EUR€, base year 2003, or otherwise discounted at 4% Total cost (mean per person): Int1: €15679, Int2: €15229; mean difference^d: €450 (95% CI €-3780 to €4680) Experimental intervention costs (mean per person): €753 ICER (per self-rated health score): bootstrap analysis showed a 10% chance that the intervention was cost-effective Conclusion: “The home visiting program did not appear to have any effect on the health care use of older people with poor health and had a low chance of being cost-effective. [... T]hese visits are probably not beneficial for such persons [in this] or comparable settings ...”	X
Howel 2019 ⁵⁵²	wlfr n = 381/381	ac n = 374/374	HSCS	24	•		•		• Welfare rights advice services only				Time spent on home visit, telephone calls, letter/email writing, administration, and travel costs Currency / Price year: GBP€, 2013-4 discounted at 1.5% for second year Experimental intervention costs (mean per person): £43.76; 38% were travel costs ICER (per QALY): £1914 CEA curve: 63% probability that the intervention would be cost-effective, should society be willing to pay £20000/QALY gained. These results were robust to changes in the discount rate and higher costs associated with the delivery of the intervention. Conclusion: “We found no effects on health outcomes; fewer participants than anticipated received additional benefit entitlements, and participants were more affluent than expected. Our findings do not support delivery of domiciliary welfare rights advice to achieve the health outcomes assessed in this population. However, better intervention targeting may reveal worthwhile health impacts.”	X
Kukkonen-Harjula 2017 ⁵⁶¹	ADL & ntr & exrc n = 150/150	ac n = 149/149	HSCS	24	•		•		•				Physio-therapist visits (specific cost items not provided) Currency / Price year: EUR€, 2018 (service costs valued at 2011 and corrected for inflation) Total costs (mean, pyrs): (0-24 months including post-intervention) Int1: €23961 (SE €2198), Int2: € 29428 (SE €2282); mean ratio: 1.23 (95% CI 0.95 to 1.50) Conclusion: “The exercise investment was costly, but the costs were gained back in decreased	~

												utilization of health care and social services in the exercise frail subgroup over 24 months.”	
Vass 2005 ⁶²²	mfar(w/med) n = 2092/2104 ^c	mfar n = 1942/1956 ^c	HSCS	36	•	•	•	• Included all resources used recorded in routine healthcare databases, which include dental care, aids and applications	• Included all resources used recorded in routine social services databases	• Patient co-payments for care and prescription only		Staff training programme, GP services, staff time on home visits, transport, administration, breaks, meetings.	~ Currency / Price year: EUR€ (€1=7.46 Danish crowns), 2001-2002 prices converted to 2005 values; reported as undiscounted, and in present values using a 3% and 6% discount rate a year. Total costs (mean per person): (75-year-old) Int1: €12899 (SE €605.36), Int2: €13778 (SE €587.94); mean difference ^d : €-879 (95% CI €-2534 to €776); discounted 3%: €-855 (95% CI €-2455 to €744) (80-year-old) Int1: €17773 (SE €1332.17), Int2: €17059 (SE €1180.97); mean difference ^d : €714 (95% CI €-2779 to 4207); discounted 3%: €694 (95% CI €-2684 to 4071) ICERs (per active life-year): (75-year-old) mean total costs were the same in the groups as well as the mean number of active life-years. Thus it was not relevant to calculate ICERs. (80-year-old, costs and active life-years discounted 3%) €3522 per active life year gained; Sensitivity analyses: €2906 to €6294 per active life-year gained among the 80-year-olds WTP: Probability that Int1 intervention being more cost effective than Int2: (75-year-old) did not increase 86% for ceiling ratios up to €60000 per active life-year gained. (80-year-old) increased to 93% if a decision maker is willing to pay at least €20000 per active life-year gained, and to 98% if they are willing to pay at least €27000 per active life-year gained. Conclusion: “Neither the differences in the total costs nor [...] the effectiveness measure were statistically significant. The estimates [...] fell into a range where no definite conclusions can be drawn regarding cost-effectiveness. [It] depends on the decision makers’ [...] willingness to pay for an active life-year in elderly persons.”
Lewin 2013 ³⁶⁵	hmcr & educ & mfar n = 375/375	hmcr n = 375/375	HSCS	24	•		•	•				Not specified but analysed as part of total costs	✓ Currency / Price year: AUD\$, (assumed) 2007-8 Total costs (mean per person): Int1: \$19888, Int2: \$22757 Conclusion: “Given the projected increase in numbers of older people in Australia over the next 40 years, the incorporation of intensive restorative services into the Gateway proposed for the reformed Australian aged care system (Commonwealth of Australia 2012) could result in very substantial savings at a whole of population level. Careful targeting of older people to maximise the cost-effectiveness of restorative interventions warrants further investigation.”

Hay 1998 ⁵⁴⁶	mfa- n = 75/209	Usual care (CG1: no baseline; CG2: assessed at baseline) CG1: ac CG2: ac CG1 n = 103/207 CG2 n = 86/203	Soc (inc. HSCS)	24	•				•	•	•	Out-of-pocket expenses only	•	Loss of income or work days only	Not specified, not included in total costs analysis.	Currency / Price year (assumed): CAD\$, 1991-5 Total costs (mean per person annually): (<i>post-treatment</i>) <i>Int1</i> : \$1600, <i>CG1</i> : \$1041, <i>CG2</i> : \$2458 Conclusion : “While the study provided an opportunity for these interventions, there was no demonstrable benefit in terms of cost or health status. There were no significant differences in health system use costs, although the experimental group showed higher use the year they were being treated and a marked decrease in the second year. Differences in hospitalization rates account for this variation.”	X
van Rossum 1993 ⁶²¹	mfar n = 292/292	ac n = 288/288	HSCS	36	•				•	•					Staff time spent on home visits, travelling, preparing the visits, administration	Currency / Price year : NLGf (<i>f1</i> = approx. GBP£0.29 and USD\$0.51), (assumed) 1988-92 Total costs (mean per person): <i>Int1</i> : f20080, <i>Int2</i> : f19321; mean difference ^e : +4% Experimental intervention costs (total): f393981 Conclusion : “From a financial point of view, the visits were not beneficial: apart from the reduced hospital costs, the 'gains' in favour of the intervention group were only marginal (home nursing care and nursing home). The increased costs in the intervention group with respect to most community services and homes for the elderly balanced the reduction of hospital costs. Preventive home visits are not beneficial for the general population of elderly people living at home but might be effective when restricted to subjects with poor health.”	X
Counsell 2007 ⁵²²	educ & mfar(w/med+slfm) n = 436/474	ac n = 440/477	HSCS	24 & 36	•				•						Salaries and benefits for personnel, mileage reimbursement, pager and cellphone costs, home visit bags, and office supplies	Currency / Price year : USD\$, (assumed 2002-4) Total costs (mean per person): (24 months, cumulated) <i>Int1</i> : \$14348 (SD \$15008), high risk: \$17713 (SD \$16776), low risk: \$13307 (SD \$14286), <i>Int2</i> : \$11834 (SD \$15567), high risk: \$18776 (SD \$19472), low risk: \$9654 (SD \$13429) (24-36 months, post-intervention) <i>Int1</i> : \$5045 (SD \$9684), high risk: \$5088 (SD \$7481), low risk: \$5032 (SD \$10258), <i>Int2</i> : \$4732 (SD \$10012), high risk: \$6575 (SD \$9030), low risk: \$4217 (SD \$10222) Conclusion : “In patients at high risk of hospitalization, the GRACE intervention is cost	~

												neutral from the healthcare delivery system perspective. A cost-effectiveness analysis is needed to guide decisions about implementation in low-risk patients."	
Coleman 1999 ⁵²¹	educ & mfar(w/med+slfm) n = 96/96	ac n = 73/73	HSCS	24	•			•				Not specified but analysed as part of total costs	~ Currency / Price year (assumed): USD\$, mid-1990s Total costs (mean per person annually): <i>Int1</i> : \$9535, <i>Int2</i> : \$10116 Conclusion : "Costs of medical care including frequency of hospitalization, hospital days, emergency and ambulatory visits, and total costs of care were not significantly different between intervention and control groups."
Stuck 2000 ⁶⁰³	mfar(w/med) n = 775/791 from both groups	ac	HSCS	36	•			•	•			In-Home visits	~ Currency / Price year : SFr (SFr 1 = approx. USD\$0.60), 1995 Total costs (per person annually): <i>mean difference</i> : SFr 1500 (USD\$900) more in Int1 than Int2 Subgroup analysis : Despite the similar health status of subjects, fewer health problems in Int1 participants were identified by 1 (nurse c) of 3 nurses. Among low-risk subjects visited by the 2 nurses (ZIP codes A & B), the PHVs resulted in net cost savings in the third year (SFr 2336 (USD\$1403) per person per year), but not among those visited by nurse C. Experimental intervention costs (mean per person): SFr 460 (USD\$276) Conclusion : "In the subgroup with favourable outcomes (i.e., among low-risk subjects in ZIP codes A and B), [... t]he program resulted in additional costs [near the start] of the intervention, but in the third year, the additional [...] costs [...] were more than offset by savings in nursing home costs..."
Kono 2012 ⁵⁶⁰	mfar	mfar	HSCS	24	•			•	•			Preventive home visits (specific cost items not provided)	~ Currency / Price year : JPY (1 USD\$ = ¥104.5 in 2008, = ¥94.6 in 2009) Total costs : (mean per person):

	n = 161/161	n = 162/162							Also visiting nursing care, aids and home modifications					<p>Int1: ¥2016606 (SE ¥161432; approx. USD\$20166, SE \$1,614), Int2: ¥2287450 (SE ¥200535; approx. USD\$22875, SE \$2005)</p> <p>Experimental intervention costs (mean per person per year): ¥5000 (approx. USD\$50)</p> <p>Conclusion: “The total LTC costs over 2 years in the intervention group were higher than in the control group (non-significant), and the intervention group utilised significantly more community and institutional LTC services than the control group over the period 7 months to 15 months after the intervention started.</p> <p>“The present second analysis of randomized controlled trial showed that a preventive home visit program can reduce health care costs, primarily from reduced hospitalizations, in addition to providing other major benefits.</p> <p>“The results suggest that a preventive home visit program might be ineffective on functional and psychosocial status among ambulatory frail elders overall, although it might significantly improve ADLs, IADLs and depression for those with ADL dependency.”</p>	
Kono 2016 ⁵⁵⁸	mfar(w/med) n = 149/179	mfar n = 157/181	HSCS	36	•				• Also visiting nursing care			Not specified but analysed as part of total costs	<p>Currency / Price year: credit (1 credit = JP¥ 10.0 - 10.70 at 2014)</p> <p>Total costs (mean per person):</p> <p>Int1: 3507 (SD 5400) credits, Int2: 3562 (SD 5066) credits</p> <p>Conclusion: “No statistically significant differences in total LTC service costs per person over 36 months between groups were obtained.</p> <p>“We conclude that our PHV program with rigorous recommendations, based on the systematic structured assessment of care-needs, could be beneficially applied in clinical practice for the prevention of functional decline among ambulatory frail elderly people living at home.”</p>	~	

approx., approximately; CAD\$, Canadian dollar; CE, cost-effectiveness; CEA curve, cost-effectiveness acceptability curve; CI, confidence interval; CUA, cost-utility analysis; EUR€, Euro; GBP£, British pound; GP, general practitioner; HSCS, health and social care system; ICER, incremental cost-effectiveness ratio; n, number of participants analysed out of the number randomised; JP¥, Japanese yen; LTC, long-term Care; PHV, preventive home visit; pyrs, per person-years; QALY, quality-adjusted life year; SD, standard deviation; SE, standard error; SFr, Swiss francs; Soc, societal/ society; Soc (inc. HSCS), societal perspective including health and social care system; USD\$, US dollar; WTP, willingness to pay

Intervention and control group abbreviations are a combination of the following:- ac: available care; ADL: activities of daily living training; aids: provision of aids and adaptations; cgn: cognitive training; comm: technology for communication and engagement; educ: health education; eng: engagement in meaningful activities; exrc: physical exercise; hmcr: formal homecare; hmnt: alternative medicine; med: medication review; mfa: multifactorial action; mfar: multifactorial action and follow-on routine review; mntr-mfa: monitoring, which may trigger multifactorial action; ntr: nutritional support; psyc: psychological therapy; rsk-mfa: risk screening, which may trigger multifactorial action; sst: social skills training; vchr: care voucher provision; wlfr: welfare rights advice; w/med: with medication review; w/slfm: with self-management.

a • indicates the category was included in the study evaluation

b ✓ indicates that experimental intervention was clearly concluded as a more cost-effective, lower-cost alternative, or recommended by the study authors; X indicates that experimental intervention was explicitly not recommended by the study authors; ~ indicates that no definite conclusion was drawn by the study authors.

- c Imputation used to replace missing values
- d Mean difference = Intervention 1 (Int1) group value minus Intervention 2 (Int2) group value
- e CE plane regions: southeast quadrant represents less costs and more effects (superior), northeast quadrant represents higher costs and more effects, southwest quadrant represents less costs and less effects, northwest quadrant represents higher costs and less effect (inferior)

Appendix 13. Narrative and additional outcomes

Comparisons of homecare services usage were reported by sixteen studies (Table 110). Among results for which there were no serious concerns about risk of bias, compared with available care there was lower usage of homecare with three complex interventions and higher usage of homecare with one complex intervention. One other study with no serious concerns had ambivalent results. Results for two further studies were ambivalent (serious concerns). We had serious concerns about the risk of bias in results from eight studies and very serious concerns about the risk of bias in two studies.

For our additional outcomes there was little evidence of any effect on self-reported health status (appendix 11.7), only low certainty beneficial findings regarding depression (appendix 11.8), very little evidence regarding loneliness (Table 111), and more complex interventions were associated with less falling than more falling (12 studies vs 4 studies; Table 112). For mortality there was a large network of 65 studies (n = 38,351) and 41 intervention groups. There was low-certainty evidence of reductions for two, and increases for five, intervention groups (appendix 11.9).

Table 110 - Homecare usage results

Study	Intervention 1	Intervention 2	Outcome measure	Timepoint	Group 1 result	Group 2 result	Comparison	RoB assessment
Bouman 2008 ⁵¹³	mfar(w/med)	ac	Homecare - personal care only (hours)	24 months	n=160; mean (SD): 42.06 (124.25); range: 0 to 907	n=170; mean (SD): 34.09 (109.12); range: 0 to 1130		No serious concerns
Bouman 2008 ⁵¹³	mfar(w/med)	ac	Homecare - domestic care only (hours)	24 months	n=160; mean (SD): 86.65 (143.99); range: 0 to 627	n=170; mean (SD): 81.79 (138.47)		No serious concerns
King 2012 ⁵⁵⁷	hmcr & ADL & mfar(w/slfm)	hmcr	Homecare (visits per month)	7 months	n=87; mean: 5.8	n=85; mean: 6.3	P = 0.4	No serious concerns
King 2012 ⁵⁵⁷	hmcr & ADL & mfar(w/slfm)	hmcr	Homecare (hours per visit)	7 months	n=87; mean: 1.5	n=85; mean: 1.4	P = 0.2	No serious concerns
Kukkonen-Harjula 2017 ⁵⁶¹	ADL & ntr & exrc	ac	Homecare (visits/ per person-years)	12 months	n=150; mean ± SE: 117.2 ± 19.3	n=149; mean ± SE: 160.5 ± 24.8	IRR: 0.73 (95% CI 0.47 to 1.14)	No serious concerns
Kukkonen-Harjula 2017 ⁵⁶¹	ADL & ntr & exrc	ac	Homecare (visits/ per person-years)	24 months	n=150; mean ± SE: 141.2 ± 22.6	n=149; mean ± SE: 185.2 ± 27.1	IRR: 0.76 (95% CI 0.5 to 1.17)	No serious concerns
Liimatta 2019 ⁵⁶⁷	exrc & mfa-(w/med)	ac	Homecare (visits/ per person-years)	24 months	n=211; mean ± SE: 6.73 ± 1.93	n=211; mean ± SE: 11.81 ± 4.26		No serious concerns
von Bonsdorff 2008 ⁶²⁴	exrc	ac	Homecare (pts)	2 years	n=290; 15 persons (5.2%)	n=274; 26 persons (9.5%)	HR: 0.51 (95% CI 0.27 to 0.97)	No serious concerns
Bernabei 1998 ⁵⁰⁸	hmcr & mfar(w/med)	hmcr	Homecare (hours/ person/ year)	12 months	n=99; mean (SD): 120 (20) n assumed=numbers of persons randomised	n=100; mean (SD): 154 (29) n assumed=numbers of persons randomised		Serious concerns
Howel 2019 ⁵⁵²	wlfr	ac	Homecare (Only pts receiving care/ hours per week)	24 months	n=42; mean (SD): 53.7 (66.3)	n=52; mean (SD): 42 (56)	MD values: 26.3 (95% CI 0.8 to 56.1)	Serious concerns
Howel 2019 ⁵⁵²	wlfr	ac	Homecare (pts)	24 months	n=283; 42 persons (14.8%)	n=279; 52 persons (18.6%)		Serious concerns
Kerse 2014 ⁵⁵⁶	rsk-mfa-	ac	Homecare - domestic care only (pts)	3 years	n=1553; 627 persons (40.4%)	n=1428; 502 persons (35.2%)		Serious concerns
Kerse 2014 ⁵⁵⁶	rsk-mfa-	ac	Homecare - personal care only (pts)	3 years	n=1553; 104 persons (6.7%)	n=1428; 80 persons (5.6%)		Serious concerns
Metzelthin 2013 ⁵⁷⁶	educ & mfar(w/med+slfm)	ac	Homecare (hours)	24 months	n=134; mean (SD): 228.2 (288.5)	n=119; mean (SD): 220.2 (319.9)	MD values: 8 (95% CI - 67.3 to 83.36); P = 0.83	Serious concerns
Monteserin Nadal 2008 ⁵⁷⁸	educ & rsk-mfa-	ac	Homecare (pts)	18 months	n=234; 17 persons (7.3%)	n=232; 19 persons (8.2%)		Serious concerns

Study	Intervention 1	Intervention 2	Outcome measure	Timepoint	Group 1 result	Group 2 result	Comparison	RoB assessment
Newbury 2001 ⁵⁸²	mfa-(w/med)	ac	Homecare (pts)	12 months	n=45; 6 persons (13.3%)	n=44; 5 persons (11.4%)		Serious concerns
Pathy 1992 ⁵⁸⁸	rsk-mfa-	ac	Homecare (pts)	3 years	n=223; 46 persons (20.6%)	n=196; 34 persons (17.3%)		Serious concerns
Thomas 2007 ⁶¹¹	mfar(w/med) (RAI-HC Assessment)	ac	Homecare (pts)	12 months	n=147; 4 persons(2.7%)	n=143; 4 persons (2.8%)		Serious concerns
Thomas 2007 ⁶¹¹	mfar(w/med) (RAI-HC Assessment Plus Referral)	ac	Homecare (pts)	12 months	n=152; 7 persons (4.6%)	n=143; 4 persons (2.8%)		Serious concerns
Thomas 2007 ⁶¹¹	mfar(w/med) (RAI-HC Assessment arm)	ac	Homecare (pts)	2 years	n=127; 6 persons (4.7%)	n=122; 1 person (0.8%)		Serious concerns
Thomas 2007 ⁶¹¹	mfar(w/med) (RAI-HC Assessment Plus Referral arm)	ac	Homecare (pts)	2 years	n=126; 8 persons (6.3%)	n=122; 1 person(0.8%)		Serious concerns
Whitehead 2016 ⁶²⁷	hmcr & ADL & aids & mfa-	hmcr & mfa-	Homecare (pts/ last 3 mth)	8 months	n=10; 6 persons (60.0%)	n=12; 6 persons (50.0%)		Serious concerns
Blom 2016 ⁵¹⁰	mfa-(w/med+slfm)	ac	Homecare (pts)	12 months	n=185; 84 persons (45.4%)	n=657; 292 persons (44.4%)		Very serious concerns
Blom 2016 ⁵¹⁰	mfa-(w/med+slfm)	ac	Homecare (hours)	12 months	n=288; mean: 137	n=1091; mean: 140	MD values: -2 (95% CI - 128 to 123); P = 0.97	Very serious concerns
Lewin 2013 ⁵⁶⁵	hmcr & educ & mfar	hmcr	Homecare - personal care only (pts)	12 months	n=262; 67 persons (25.6%)	n=254; 151 persons (59.4%)	P <0.001	Very serious concerns

Results are organised by RoB assessment, Study name and timepoint.

Table 111 - Loneliness results

Study	Intervention 1	Intervention 2	Outcome measure	Timepoint	Group 1 result	Group 2 result	Comparison	RoB assessment
Jing 2018 ⁵⁵⁴	exrc & psyc	psyc	Loneliness (3-point Likert scale; 3=often lonely; 2=sometimes lonely; 1=not lonely) (smaller is better)	6 Months	n=39; Mean (SD): 1.41 (0.68)	n=40; Mean (SD): 1.85 (0.7)	P<0.05	No serious concerns
Bouman 2008 ⁵¹³	mfar(w/med)	ac	Loneliness (de Jong-Gierveld Scale) (0-11) (smaller is better)	18 Months	n=139; Mean (SD): 3.5 (2.98);	n=154; Mean (SD): 4.0 (3.39);	MD values: 0.44; 95% CI: -0.37 to 1.24; P=0.29	Serious concerns

Study	Intervention 1	Intervention 2	Outcome measure	Timepoint	Group 1 result	Group 2 result	Comparison	RoB assessment
de Craen 2006 ⁵²⁵	mfa-	ac	Loneliness (de Jong-Gierveld Scale) (0-11) (smaller is better)	6 Months	n=175; Δ mean (SE): -0.1±0.2	n=176; Δ mean (SE): -0.1±0.2	MD change: -0.1; 95% CI: -0.5 to 0.4; P=0.78	Serious concerns
de Craen 2006 ⁵²⁵	mfa-	ac	Loneliness (de Jong-Gierveld Scale) (0-11) (smaller is better)	24 Months	n=143; Δ mean (SE): 0.1±0.2	n=154; Δ mean (SE): 0.1±0.2	MD change: 0.0 (95% CI: -0.7 to 0.6); p: 0.92	Serious concerns
van Rossum 1993 1993 ⁶²¹	mfar	ac	Loneliness (de Jong-Gierveld Scale) (0-11) (smaller is better)	36 Months	n=232; Mean: 2.1	n=221; Mean: 1.9	MD values: 0.2 (95% CI: -0.2 to 0.6)	Serious concerns
Blom 2016 2016 ⁵¹⁰	mfa- (w/med+slfm)	ac	Loneliness (de Jong-Gierveld Scale) (0-11) (smaller is better)	12 Months	n=288;	n=1091; pBaseline: 0.410; Δ mean: -0.1 (95% CI -0.3 to 0.1)	MD change: -0.1; 95% CI: -0.5 to 0.3; P=0.661	Very serious concerns
Sherman 2016 2016 ⁵⁹⁹	mfa-(w/med)	ac	Loneliness (in Health Index) (1 item, 4-point scale) (larger is better)	1 Year	n=173; pBaseline: 0.03; Mean: 3.3	n=255; pBaseline: 0.03; Mean: 3.4	P=0.57 (Wilcoxon rank-sum test)	Very serious concerns

Results are organised by RoB assessment, Study name and timepoint.

Table 112 - Falls results

Study	Intervention 1	Intervention 2	Outcome measure	Timepoint	Group 1 result	Group 2 result	Comparison	RoB assessment
Rooijackers 2021 ⁵⁹⁴	hmcr & ADL & mfar(w/slfm)	hmcr	Falls (pts fell once or more / last 6 mths)	6 months	n=117; 42 fallers (35.9%)	n=117; 37 fallers (31.6%)	MD values: 0 (95% CI -0.7 to 0.6); P = .930	No serious concerns
Walters 2017 ⁶²⁶	mfar(w/slfm)	ac	Falls (pts fell once or more)	6 months	n=25; 6 fallers (24.0%)	n=23; 7 fallers (30.4%)		No serious concerns
Brettschneider 2015 ⁵¹⁴	mfar(w/med)	ac	Falls (incidents / last 12 mths)	18 months	n=121; mean (SD): 2.2 (2.5); Δ mean ± SE: 0.63 ± 0.1 [95% CI 0.47 to 0.86]	n=119; mean (SD): 3.7 (4.2); Δ mean ± SE: 1.96 ± 0.29 [95% CI 1.46 to 2.63]	IRR: 0.32±0.07 (95% CI 0.22 to 0.49); P <0.001 Poisson regression	Serious concerns
Carpenter 1990 ⁵¹⁶	rsk-mfa-	ac	Falls (incidents / last 1 mth)	3 years	n=206; 12 falls (5.8%)	n=213; 36 falls (16.9%)	P <0.05	Serious concerns
Coleman 1999 ⁵²¹	educ & mfar(w/med+slfm)	ac	Falls (pts fell once or more / last 12 mths)	12 months	n=79	n=63	P = 0.27	Serious concerns
Coleman 1999 ⁵²¹	educ & mfar(w/med+slfm)	ac	Falls (pts fell once or more / last 12 mths)	24 months	n=78, 43.5%	n=49, 35.6%	P = 0.63	Serious concerns
Dorresteijn 2016 ⁵²⁶	ADL	ac	Falls (pts fell once or more / last 12 mths)	12 months	n=166; 94 fallers (56.6%)	n=180; 106 fallers (58.9%)	OR: 0.79 (95% CI 0.5 to 1.23); P = 0.292	Serious concerns
Dorresteijn 2016 ⁵²⁶	ADL	ac	Falls (incidents / last 12 mths)	12 months	n=166; 362 falls (218.1%)	n=180; 429 falls (238.3%)	IRR: 0.86 (95% CI 0.65 to 1.13); P = 0.273	Serious concerns

Study	Intervention 1	Intervention 2	Outcome measure	Timepoint	Group 1 result	Group 2 result	Comparison	RoB assessment
Fabacher 1994 ⁵²⁸	mfar(w/med)	ac	Falls (pts fell once or more)	1 years	n=100, 14%	n=95, 23%		Serious concerns
Jitapunkul 1998 ⁵⁵⁵	rsk-mfa-	ac	Falls (pts fell once or more / last 3 mths)	3 years	n=57, 5.3%	n=59, 10.2%		Serious concerns
King 2012 ⁵⁵⁷	hmcr & ADL & mfar(w/slfm)	hmcr	Falls (pts fell once or more / last 3 mths)	7 months	n=93; 17 fallers (18.3%)	n=90; 23 fallers (25.7%)		Serious concerns
Kono 2016 ⁵⁵⁸	mfar(w/med)	mfar	Falls (pts fell once or more / last 12 mths)	12 months	n=154; 38 fallers (24.7%)	n=151; 42 fallers (27.8%)		Serious concerns
Kono 2016 ⁵⁵⁸	mfar(w/med)	mfar	Falls (pts fell once or more / last 12 mths)	24 months	n=138; 41 fallers (29.7%)	n=142; 48 fallers (33.8%)		Serious concerns
Monteserin Nadal 2008 ⁵⁷⁸	educ & rsk-mfa-	ac	Falls (pts fell once or more)	18 months	n=217; 50 fallers (23.0%)	n=213; 44 fallers (20.7%)		Serious concerns
Newbury 2001 ⁵⁸²	mfa-(w/med)	ac	Falls (pts fell once or more / last 12 mths)	12 months	n=45; 12 fallers (26.7%)	n=44; 17 fallers (38.6%)	OR: 0.58 (95% CI 0.21 to 1.55); P = 0.32	Serious concerns
Ng 2015 ⁵⁸⁴	cgn & ntr & exrc	ac	Falls (pts fell once or more)	6 months	n=47; 1 faller (2.1%)	n=47; 5 fallers (10.6%)	P = 0.38	Serious concerns
Ng 2015 ⁵⁸⁴	cgn & ntr & exrc	ac	Falls (pts fell once or more)	12 months	n=46; 2 fallers (4.3%)	n=46; 5 fallers (10.9%)	P = 0.67	Serious concerns
Profener 2016 ⁵⁹¹	educ & mfar	ac	Falls (pts fell once or more / last 12 mths)	2 years	n=134; 59 fallers (44.0%)	n=259; 123 fallers (47.5%)		Serious concerns
Rooijackers 2021 ⁵⁹⁴	hmcr & ADL & mfar(w/slfm)	hmcr	Falls (pts fell once or more / last 6 mths)	12 months	n=102; 36 fallers (35.3%)	n=99; 27 fallers (27.3%)	MD values: 0 (95% CI - 0.7 to 0.4); P = 0.951	Serious concerns
Rubenstein 2007 ⁵⁹⁵	mfar(w/med)	ac	Falls (pts fell once or more / last 3 mths)	24 months	n=298; 81 fallers (27.2%)	n=309; 71 fallers (23.0%)	P >0.05	Serious concerns
Serra-Prat 2017 ⁵⁹⁷	ntr & exrc	ac	Falls (pts fell once or more / last 3 mths)	12 months	n=61; 11 fallers (18.0%)	n=72; 14 fallers (19.4%)	OR: 0.87 (95% CI 0.36 to 2.11); P = 0.76	Serious concerns
Suijker 2016 ⁶⁰⁵	mfar(w/med)	ac	Falls (incidents / last 6 mths) Estimated incidence rates adjusted for baseline age, sex, socio-economic status, level of education, and score of outcome. Two other ratios available without adjustment and with baseline adjustment only.	6 months	n=1017; mean: 0.25 (95% CI 0.21 to 0.29)	n=918; mean: 0.22 (95% CI 0.18 to 0.26)		Serious concerns
Suijker 2016 ⁶⁰⁵	mfar(w/med)	ac	Falls (incidents / last 6 mths)	12 months	n=936; mean: 0.26 (95% CI 0.21 to 0.3)	n=817; mean: 0.22 (95% CI 0.19 to 0.26)		Serious concerns
Suijker 2016 ⁶⁰⁵	mfar(w/med)	ac	Falls (incidents / last 6 mths)	24 months	n=924; mean: 0.29 (95% CI 0.24 to 0.34)	n=812; mean: 0.25 (95% CI 0.21 to 0.3)	IRR: 1.15 (95% CI 0.98 to 1.34); P = 0.08	Serious concerns

Study	Intervention 1	Intervention 2	Outcome measure	Timepoint	Group 1 result	Group 2 result	Comparison	RoB assessment
Whitehead 2016 ⁶²⁷	hmcr & ADL & aids & mfa-	hmcr & mfa-	Falls (pts fell once or more / last 3 mths)	8 months	n=10; 2 fallers (20.0%)	n=12; 6 fallers (50.0%)		Serious concerns
Whitehead 2016 ⁶²⁷	hmcr & ADL & aids & mfa-	hmcr & mfa-	Falls (incidents / only pts that fell / last 3 mths)	8 months	n=10; mean (SD): 1 (0)	n=12; mean (SD): 1.5 (1.22)		Serious concerns
Henderson 2005 ⁵⁴⁸	mfar	ac	Falls (pts fell once or more)	12 months	n=61; 11 fallers (18.0%)	n=63; 21 fallers (33.3%)		Very serious concerns
Henderson 2005 ⁵⁴⁸	mfar	ac	Falls (incidents)	12 months	n=61; mean (SD): 0.25 (0.65); range: 0 to 4	n=63; mean (SD): 0.51 (1.05); range: 0 to 7	P = 0.098, F=2.778, df=1,108	Very serious concerns
Parsons M 2012 ⁵⁸⁷	hmcr & mfar	hmcr & mfa-	Falls (incidents)	24 months	n=169; 152 falls (89.9%)	n=182; 175 falls (96.2%)		Very serious concerns
Parsons M 2012 ⁵⁸⁷	hmcr & mfar	hmcr & mfa-	Falls (pts fell once or more)	24 months	n=169; 69 fallers (40.8%)	n=182; 77 fallers (42.3%)		Very serious concerns
Parsons M 2017 ⁵⁸⁶	hmcr & ADL & mfar(w/slfm)	hmcr & mfa-	Falls (pts fell once or more)	24 months	n=56; 24 fallers (42.9%)	n=57; 23 fallers (40.4%)	P = 0.8503	Very serious concerns
Parsons M 2017 ⁵⁸⁶	hmcr & ADL & mfar(w/slfm)	hmcr & mfa-	Falls (incidents)	24 months	n=56; 63 falls (112.5%)	n=57; 43 falls (75.4%)		Very serious concerns

Results are organised by RoB assessment, Study name and timepoint.

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