

## Intervention group summaries

Group: ADL.....	2
Group: ADL, aids, education, exercise, multifactorial-action and review with medication review and self-management.....	4
Group: Aids .....	7
Group: Available care.....	9
Group: Education .....	13
Group: Education, exercise, multifactorial-action and review with medication review and self-management strategies .....	16
Group: Education, multifactorial-action and review with medication review .....	18
Group: Education, multifactorial-action and review with medication review and self-management strategies.....	21
Group: Education, multifactorial-action and review with self-management strategies.....	24
Group: Exercise .....	26
Group: Exercise and psychology.....	30
Group: Homecare.....	33
Group: Homecare and multifactorial-action.....	35
Group: Home care, ADL, multifactorial-action from care-planning and review with self-management strategies .....	37
Group: Homecare, multifactorial-action and review .....	40
Group: Homecare, multifactorial-action from care-planning and review with medication review .	43
Group: Homecare, multifactorial-action and review with self-management strategies .....	46
Group: Meaningful activities and education .....	48
Group: Multifactorial-action.....	51
Group: Multifactorial-action and review .....	54
Group: Multifactorial-action and review with medication review.....	58
Group: Multifactorial-action and review with medication review and self-management strategies .....	63
Group: Multifactorial-action and review with self-management strategies.....	66
Group: Multifactorial-action with medication review .....	68
Group: Nutrition and exercise .....	70
Group: Risk-screening.....	73
References .....	76

## Group: ADL

There are two interventions in this group: Dorresteyn 2016<sup>1</sup>, Siemonsma 2018<sup>2</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	<p>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.</p>
<b>4. What (procedures)</b>	<p>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.</p>
<b>5. Who provided</b>	<p>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.</p>

<b>6. How</b>	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.
<b>6b. How organised</b>	One report does not mention intervention organisation, the other places organisation on the facilitator and the participants' significant other to undertake activities.
<b>7. Where</b>	Both interventions were implemented in The Netherlands, and in the participants' home.
<b>8. When and how much</b>	<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>
<b>9. Tailoring</b>	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.
<b>10. Modifications</b>	Neither report described modifications to the intervention.
<b>11. How well (planned)</b>	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 2011<sup>3</sup>, Szanton 2019<sup>4</sup>

---

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>

---

---

<b>3. What (materials)</b>	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 TaiChi 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.
<b>4. What (procedures)</b>	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 TaiChi 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.
<b>5. Who provided</b>	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.
<b>6. How</b>	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.
<b>6b. How organised</b>	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.
<b>7. Where</b>	Both interventions were undertaken in the USA, and were delivered at home.
<b>8. When and how much</b>	<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>
<b>9. Tailoring</b>	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.
<b>10. Modifications</b>	No modifications were mentioned in either report.
<b>11. How well (planned)</b>	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.
<b>12. How well (actual)</b>	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 2013<sup>5</sup>, Tomita 2007<sup>6</sup>)

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	<p>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.</p>
<b>4. What (procedures)</b>	<p>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</p>

---

	<p>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 in this assessment.</p>
<b>5. Who provided</b>	<p>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.</p>
<b>6. How</b>	<p>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.</p>
<b>6b. How organised</b>	<p>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.</p>
<b>7. Where</b>	<p>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.</p>
<b>8. When and how much</b>	<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>
<b>9. Tailoring</b>	<p>Both reports describe the interventions being tailored to the needs, preferences, and also the safe capacity of the participant. One intervention</p>

---



	mentioned follow up support being as required, the other mentioned training on the equipment being tailored.
<b>10. Modifications</b>	Neither report mention modification to the intervention.
<b>11. How well (planned)</b>	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.
<b>12. How well (actual)</b>	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 97 interventions in this group Alegria 2019<sup>7</sup>, Arthanat 2019<sup>8</sup>, Balaban 1988<sup>9</sup>, Barenfeld 2018<sup>10</sup>, Bleijenberg 2016<sup>11</sup>, Blom 2016<sup>12</sup>, Botjes 2013<sup>13</sup>, Bouman 2008<sup>14</sup>, Brettschneider 2015<sup>15</sup>, Cameron 2013<sup>16</sup>, Carpenter 1990<sup>17</sup>, Cesari 2014<sup>18</sup>, Clark 1997<sup>19</sup>, Clark 2012<sup>20</sup>, Coleman 1999<sup>21</sup>, Counsell 2007<sup>22</sup>, Cutchin 2009<sup>23</sup>, Dalby 2000<sup>24</sup>, de Craen 2006<sup>25</sup>, Dorresteijn 2016<sup>1</sup>, Fabacher 1994<sup>26</sup>, Fairhall 2015<sup>27</sup>, Fischer 2009<sup>28</sup>, Ford 1971<sup>29</sup>, Gene Huguet 2018<sup>30</sup>, Gill 2002<sup>31</sup>, Giné-Garriga 2020<sup>32</sup>, Gitlin 2006<sup>33</sup>, Grimmer 2013<sup>34</sup>, Gustafson 2021<sup>35</sup>, Gustafsson 2013<sup>36</sup>, Harari 2008<sup>37</sup>, Hay 1998<sup>38</sup>, Hay 1998<sup>38</sup>, Hebert 2001<sup>39</sup>, Henderson 2005<sup>40</sup>, Hendriksen 1984<sup>41</sup>, Hogg 2009<sup>42</sup>, Holland 2005<sup>43</sup>, Howel 2019<sup>44</sup>, Imhof 2012<sup>45</sup>, Jitapunkul 1998<sup>46</sup>, Kerse 2014<sup>47</sup>, Kono 2004<sup>48</sup>, Kukkonen-Harjula 2017<sup>49</sup>, Lambotte 2018<sup>50</sup>, Leung 2004<sup>51</sup>, Leveille 1998<sup>52</sup>, Liddle 1996<sup>53</sup>, Liimatta 2019<sup>54</sup>, Loh 2015<sup>55</sup>, Lood 2015<sup>56</sup>, Mann J 2021<sup>57</sup>, Melis 2008<sup>58</sup>, Meng 2005<sup>59</sup>, Messens 2014<sup>60</sup>, Metzelthin 2013<sup>61</sup>, Moll van Charante 2016<sup>62</sup>, Monteserin Nadal 2008<sup>63</sup>, Morey 2009<sup>64</sup>, Morgan 2019<sup>65</sup>, Newbury 2001<sup>66</sup>, Newcomer 2004<sup>67</sup>, Ng 2015<sup>68</sup>, Pathy 1992<sup>69</sup>, Phelan 2007<sup>70</sup>, Ploeg 2010<sup>71</sup>, Profener 2016<sup>72</sup>, Rockwood 2000<sup>73</sup>, Romera-Liebana 2018<sup>74</sup>, Rubenstein 2007<sup>75</sup>, Serra-Prat 2017<sup>76</sup>, Shapiro 2002<sup>77</sup>, Sherman 2016<sup>78</sup>, Stuck 1995<sup>79</sup>, Stuck 2000<sup>80</sup>, Stuck 2015<sup>81</sup>, Suijker 2016<sup>82</sup>, Szanton 2011<sup>3</sup>, Szanton 2019<sup>4</sup>, Takahashi 2012<sup>83</sup>, Thiel 2019<sup>84</sup>, Thomas 2007<sup>85</sup>, Tomita 2007<sup>6</sup>, Tulloch 1979<sup>86</sup>, van Dongen 2020<sup>87</sup>,

van Heuvelen 2005<sup>88</sup>, van Hout 2010<sup>89</sup>, van Leeuwen 2015<sup>90</sup>, van Lieshout 2018<sup>91</sup>, van Rossum 1993<sup>92</sup>, Vetter 1984<sup>93</sup>, von Bonsdorff 2008<sup>94</sup>, Wallace 1998<sup>95</sup>, Walters 2017<sup>96</sup>, Wong 2019<sup>97</sup>, Yamada 2003<sup>98</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	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 non-active components of interventions such as assessments or social interaction.
<b>3. What (materials)</b>	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.
<b>4. What (procedures)</b>	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**

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.

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.

---

**9. Tailoring**

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.

---

<b>10. Modifications</b>	Only one report mentioned modifications which related to reformation of service provision during the project.
<b>11. How well (planned)</b>	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 active components were not administered to control participants, and one conducted inter-rater-reliability evaluation between active and control group's receipt of the assessment. At least two reports described steps taken to limit control participant access to the active components of the intervention, a further report detailed that any cross-contamination was measured. Two reports detailed steps to ensure participant compliance with the control element.
<b>12. How well (actual)</b>	Very few reports detailed success of delivery. Two reports noted that a substantial proportion of participants allocated to available care accessed active 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 non-active components found compliance with these to be reasonably good for the control group. Inter-rater-reliability was 0.79-0.94 for the study which measured assessments between control and active groups across providers. One study noted that the intervention was delivered as intended.

## Group: Education

There are three interventions in this group Barenfeld 2018<sup>10</sup>, Gustafsson 2013<sup>36</sup>, Lood 2015<sup>56</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	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.

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, 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.

---

<b>3. What (materials)</b>	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.
<b>4. What (procedures)</b>	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.
<b>5. Who provided</b>	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.
<b>6. How</b>	All three interventions were delivered face to face in group sessions of four to six participants and then with one session delivered individually.

---

---

<b>6b. How organised</b>	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.
<b>7. Where</b>	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.
<b>8. When and how much</b>	<p>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.</p> <p>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.</p>
<b>9. Tailoring</b>	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 individuals needs. The two interventions aimed at supporting migrants could tailor language as required.
<b>10. Modifications</b>	None of the reports described modifications to the interventions.
<b>11. How well (planned)</b>	All three reports described steps taken to improve adherence and monitor fidelity. All three developed their intervention with input from stake holders including representatives of the participant group. One intervention also described training for providers and apriori 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.

---

<b>12. How well (actual)</b>	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 2009<sup>99</sup>, Leveille 1998<sup>52</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	<p>Both interventions developed care or action 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.</p>
<b>4. What (procedures)</b>	<p>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 or action 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.</p>



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, dieticians 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 as well.

---

**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** 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.

The interventions varied the 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.

---

<b>9. Tailoring</b>	Both interventions required the tailoring of care and exercise routine planning based on needs and preference of the participant. One study had tailored referrals
<b>10. Modifications</b>	This was not mentioned in the reports.
<b>11. How well (planned)</b>	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.
<b>12. How well (actual)</b>	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.

## Group: Education, multifactorial-action and review with medication review

There are three interventions in this group: Newcomer 2004<sup>67</sup>, Ploeg 2010<sup>71</sup>, Stuck 1995<sup>79</sup>

<b>TIDieR item</b>	<b>Description</b>
<b>1. Brief name</b>	
<b>2. Why</b>	<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.</p>

---

	<p>The third intervention simply stated that the intervention would improve quality of life and reduce mortality compared to usual care.</p>
<b>3. What (materials)</b>	<p>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.</p>
<b>4. What (procedures)</b>	<p>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.</p>
<b>5. Who provided</b>	<p>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.</p>
<b>6. How</b>	<p>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.</p>
<b>6b. How organised</b>	<p>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</p>

---

	<p>geriatricians, another mentioned the participants taking an active role. Two mentioned input from the family doctor.</p>
<b>7. Where</b>	<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>
<b>8. When and how much</b>	<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>
<b>9. Tailoring</b>	<p>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.</p>
<b>10. Modifications</b>	<p>Only one report described modification, this was to care protocols during the research project.</p>
<b>11. How well (planned)</b>	<p>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.</p>
<b>12. How well (actual)</b>	<p>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</p>

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 1999<sup>21</sup>, Counsell 2007<sup>22</sup>, Meng 2005<sup>59</sup>, Metzelthin 2013<sup>61</sup>, Stuck 2015<sup>81</sup>

---

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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</p>

---

frequently undiagnosed geriatric syndromes. One study was also informed by policy recommendations.

---

**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.
<b>6b. How organised</b>	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.
<b>7. Where</b>	Three interventions were undertaken in the USA, one in The Netherlands and one in Switzerland. Four interventions took place in the participants home, while the other was carried out in clinics and practice rooms at the health care facility undertaking the study.
<b>8. When and how much</b>	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.
<b>9. Tailoring</b>	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.
<b>10. Modifications</b>	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.
<b>11. How well (planned)</b>	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 interventions, one study found that though 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 2019<sup>100</sup>, Moll van Charante 2016<sup>62</sup>)

---

**TIDieR item**

**Description**

**1. Brief name**

**2. Why**

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.



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

**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.
<b>8. When and how much</b>	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.
<b>9. Tailoring</b>	The care plan for both cases were tailored based on the participant's needs assessment and goals.
<b>10. Modifications</b>	Not mentioned in both cases.
<b>11. How well (planned)</b>	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.
<b>12. How well (actual)</b>	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.

---

## Group: Exercise

There are seven interventions in this group Giné-Garriga 2020<sup>32</sup>, Morey 2006<sup>101</sup>, Morey 2006<sup>101</sup>, Morey 2006<sup>101</sup>, Morey 2009<sup>64</sup>, Morgan 2019<sup>65</sup>, von Bonsdorff 2008<sup>94</sup>

---

TIDieR item	Description
1. Brief name	
2. Why	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.

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.

---

### 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 describe 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 2019<sup>7</sup>, Jing 2018<sup>102</sup>, van Heuvelen 2005<sup>88</sup>

Brief name	
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>

What: materials	Some provided equipment and instructions for the exercises and materials to support the psychological tasks.
What: procedures	<p>Providing exercise sessions.</p> <p>Providing 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>
Who	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.
How	<p>Both components 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>
How organised	Few details of organisation provided.
Where	<p>China, Netherlands and USA.</p> <p>The intervention took place in community facilities and at the participant's home.</p>
When and how much	Started in different circumstances:

	<p>(a) participants did not have cognitive impairment and were not very active;</p> <p>(b) participants were housebound;</p> <p>(c) participants had low mood and mild-moderate disability.</p> <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>
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>
Modifications	Not mentioned
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>
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 2020<sup>103</sup>, Bernabei 1998<sup>104</sup>, Dupuy 2017<sup>105</sup>, Fernandez-Barres 2017<sup>106</sup>, Fristedt 2019<sup>107</sup>, King 2012<sup>108</sup>, Lewin 2013<sup>109</sup>, Mann WC 1999<sup>110</sup>, Rooijackers 2021<sup>111</sup>, Teut 2013<sup>112</sup>, van der Pols-Vijlbrief 2017<sup>113</sup>, Wolter 2013<sup>114</sup>)

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	<p>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.</p>
<b>4. What (procedures)</b>	<p>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.</p>
<b>5. Who provided</b>	<p>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.</p>

---

<b>6. How</b>	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.
<b>6b. How organised</b>	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.
<b>7. Where</b>	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.
<b>8. When and how much</b>	<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>
<b>9. Tailoring</b>	Four interventions mention that provision would be tailored according to the need of participants. The remaining eight do not describe tailoring.
<b>10. Modifications</b>	No reports mention modification to their intervention.

---

<b>11. How well (planned)</b>	No reports mention steps taken to improve implementation or adherence to the intervention.
<b>12. How well (actual)</b>	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 2012<sup>115</sup>, Parsons M 2012<sup>116</sup>, Parsons M 2017<sup>117</sup>, Tuntland 2015<sup>118</sup>, Whitehead 2016<sup>119</sup>)

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	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.

---

<b>4. What (procedures)</b>	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 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.
<b>5. Who provided</b>	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.
<b>6. How</b>	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.
<b>6b. How organised</b>	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.
<b>7. Where</b>	Three interventions were implemented in New Zealand, one in Norway and one in the United Kingdom.  Four interventions mention delivery of the intervention at home.

---

<b>8. When and how much</b>	<p>Eligibility to all five interventions was after referral to home care services. One of these required this to be on hospital discharge.</p> <p>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.</p>
<b>9. Tailoring</b>	<p>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.</p>
<b>10. Modifications</b>	<p>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.</p>
<b>11. How well (planned)</b>	<p>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.</p>
<b>12. How well (actual)</b>	<p>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 staffing.</p>

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

There are three interventions in this group: King 2012<sup>108</sup>, Parsons M 2017<sup>117</sup>, Rooijackers 2021<sup>111</sup>

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)	<p>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.</p>
4. What (procedures)	<p>All three interventions required a multi-domain 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.</p>
5. Who provided	<p>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.</p>
6. How	<p>All three interventions were provided face to face, three mention this being on an individual basis. One intervention mentions telephone contact as well.</p>
6b. How organised	<p>All three interventions appear to have nurse co-ordinators as a core organisational feature. Support worker input is key across all three</p>

	<p>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.</p>
7. Where	<p>All three interventions were delivered at home. Two interventions mention involvement of one key healthcare provider.</p> <p>Two studies were undertaken in New Zealand, one in The Netherlands.</p>
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	<p>All three interventions were 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.</p>
10. Modifications	<p>This was not mentioned by any of the reports.</p>
11. How well (planned)	<p>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 thorough prompts to providers. One report details a process evaluation through the collection of documents about records and qualitative methods.</p>

---

12. How well (actual)	<p>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 time-frame, 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.</p>
-----------------------	--

---

## Group: Homecare, multifactorial-action and review

There are six interventions in this group (Hall 1992<sup>120</sup>, Markle-Reid 2006<sup>121</sup>, Parsons M 2012<sup>116</sup>, Ryvicker 2011<sup>122</sup>, Ryvicker 2011<sup>122</sup>, Shapiro 2002<sup>77</sup>)

---

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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 that are barriers to providing</p>

---



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.

---

**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.

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.

---

---

<b>12. How well (actual)</b>	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 1998<sup>104</sup>, Fristedt 2019<sup>107</sup>, Wolter 2013<sup>114</sup>

<b>TIDieR item</b>	<b>Description</b>
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	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.
<b>4. What (procedures)</b>	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.
<b>5. Who provided</b>	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.
<b>6. How</b>	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).
<b>6b. How organised</b>	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.
<b>7. Where</b>	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.
<b>8. When and how much</b>	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.

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.

---

**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 1992<sup>120</sup>, Parsons J 2012<sup>115</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<p>Goals: The goals of the two interventions were broadly aligned. One intervention stated that 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>
<b>3. What (materials)</b>	<p>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.</p>
<b>4. What (procedures)</b>	<p>Both interventions use multidomain assessments the planning and arrangement/organisation of care and a regular review component.</p>

	One intervention stated that review was monthly. Both interventions also used supported goalsetting 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.
<b>5. Who provided</b>	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.
<b>6. How</b>	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.
<b>6b. How organised</b>	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.
<b>7. Where</b>	One intervention was conducted in Canada, the other in New Zealand
<b>8. When and how much</b>	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.
<b>9. Tailoring</b>	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.
<b>10. Modifications</b>	Modifications were not mentioned in either report.
<b>11. How well (planned)</b>	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.
<b>12. How well (actual)</b>	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 1997<sup>19</sup>, Clark 2012<sup>20</sup>)

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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</p>



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.

---

**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.

---

---

<b>8. When and how much</b>	<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>
<b>9. Tailoring</b>	<p>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.</p>
<b>10. Modifications</b>	<p>Neither report detailed modifications made to the intervention.</p>
<b>11. How well (planned)</b>	<p>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.</p>
<b>12. How well (actual)</b>	<p>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.</p>

---

## Group: Multifactorial-action

There are nine interventions in this group Borrows 2013<sup>5</sup>, Botjes 2013<sup>13</sup>, de Craen 2006<sup>25</sup>, Grimmer 2013<sup>34</sup>, Hay 1998<sup>38</sup>, Siemonsma 2018<sup>2</sup>, Stewart 2005<sup>123</sup>, Stewart 2005<sup>123</sup>, Williams 1992<sup>124</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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 need for working proactively, which was mentioned twice, adherence to policy recommendations or that certain patient groups posed specific risk.</p>
<b>3. What (materials)</b>	<p>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 used of a protocol to guide</p>

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 participants home, one mentioned attending clinic and one a location befitting the participants therapy requirements.

---

**8. When and how much** 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.

---

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.

---

**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 take 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 2004<sup>125</sup>, Cutchin 2009<sup>23</sup>, Hattori 2019<sup>100</sup>, Henderson 2005<sup>40</sup>, Hendriksen 1984<sup>41</sup>, Imhof 2012<sup>45</sup>, Kono 2004<sup>48</sup>, Kono 2012<sup>126</sup>, Kono 2012<sup>126</sup>, Kono 2016<sup>127</sup>, Lambotte 2018<sup>50</sup>, van Rossum 1993<sup>92</sup>, Vass 2005<sup>128</sup>, Vetter 1984<sup>93</sup>, Williams 1992<sup>124</sup>

---

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	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.

---

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 a 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.

---

**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** Thirteen interventions were described as being provided in the participant's home.

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.

---



---

<b>8. When and how much</b>	<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 preceeding 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>
<b>9. Tailoring</b>	<p>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.</p>
<b>10. Modifications</b>	<p>None of the reports described any modifications made to the intervention.</p>
<b>11. How well (planned)</b>	<p>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</p>

---

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 along side the trial.

<b>12. How well (actual)</b>	<p>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.</p>
------------------------------	---

## Group: Multifactorial-action and review with medication review

There are 24 interventions in this group Bouman 2008<sup>14</sup>, Brettschneider 2015<sup>15</sup>, Cesari 2014<sup>18</sup>, Challis 2004<sup>125</sup>, Dalby 2000<sup>24</sup>, Fabacher 1994<sup>26</sup>, Fairhall 2015<sup>27</sup>, Ford 1971<sup>29</sup>, Fox 1997<sup>129</sup>, Harari 2008<sup>37</sup>, Hebert 2001<sup>39</sup>, Hogg 2009<sup>42</sup>, Kono 2016<sup>127</sup>, Leung 2004<sup>51</sup>, Melis 2008<sup>58</sup>, Rubenstein 2007<sup>75</sup>, Stuck 2000<sup>80</sup>, Suijker 2016<sup>82</sup>, Thomas 2007<sup>85</sup>, Thomas 2007<sup>85</sup>, Tulloch 1979<sup>86</sup>, van Hout 2010<sup>89</sup>, Vass 2005<sup>128</sup>, Yamada 2003<sup>98</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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</p>

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.

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.

---

**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 dieticians, 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**

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.

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.

---

**8. When and how much**

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.

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.

---

**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 1997<sup>129</sup>, Phelan 2007<sup>70</sup>, van Leeuwen 2015<sup>90</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	<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, nutritional diaries, equipment to collect physiological data, various health advice materials and referrals. This and one other describe materials used to record meeting</p>

---

---

	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.
<b>4. What (procedures)</b>	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.
<b>5. Who provided</b>	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.
<b>6. How</b>	All three interventions were provided face to face and individually with additional telephone contact.
<b>6b. How organised</b>	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.
<b>7. Where</b>	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.
<b>8. When and how much</b>	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.

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.

---

**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  $\frac{3}{4}$  of participants were at least moderately adherent to the intervention recommendations, economic limits were identified as a barrier to adherence. Another intervention found almost  $\frac{3}{4}$  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 2017<sup>96</sup>, Wong 2019<sup>97</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	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.
<b>4. What (procedures)</b>	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.
<b>5. Who provided</b>	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.
<b>6. How</b>	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.
<b>6b. How organised</b>	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.
<b>7. Where</b>	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.
<b>8. When and how much</b>	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.
<b>9. Tailoring</b>	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.
<b>10. Modifications</b>	Not mentioned
<b>11. How well (planned)</b>	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.
<b>12. How well (actual)</b>	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 1988<sup>9</sup>, Mann J 2021<sup>57</sup>, Newbury 2001<sup>66</sup>, Rockwood 2000<sup>73</sup>, Sherman 2016<sup>78</sup>

TIDieR item	Description
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	<p>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.</p>
<b>4. What (procedures)</b>	<p>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.</p>

	<p>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.</p>
<b>5. Who provided</b>	<p>Primarily interventions were provided by nurse, 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, Dieticians, 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>
<b>6. How</b>	<p>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 participants home and presumably therefore was face to face.</p>
<b>6b. How organised</b>	<p>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 participants GP.</p>
<b>7. Where</b>	<p>A range of international locations were involved, including Australia, Sweden and Canada.</p> <p>Interaction with participants was usually at home or in a primary care facility.</p>

<b>8. When and how much</b>	<p>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.</p> <p>All studies had a minimum of one visit, the remaining contact was based on needs identified.</p>
<b>9. Tailoring</b>	<p>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.</p>
<b>10. Modifications</b>	<p>Only one intervention mentioned modifications the nature of these was not specified.</p>
<b>11. How well (planned)</b>	<p>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.</p>
<b>12. How well (actual)</b>	<p>Studies varied in reporting how well the intervention worked. Two made no reference to 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.</p>

## Group: Nutrition and exercise

There are three interventions in this group Loh 2015<sup>55</sup>, Serra-Prat 2017<sup>76</sup>, van Dongen 2020<sup>87</sup>

TIDieR item	Description
-------------	-------------

<b>1. Brief name</b>	
<b>2. Why</b>	<p>Goal: The three interventions involve a combination of nutritional advice and physical exercise with the long term aim of improving frailty status, physical functioning and/or reduce loss of independence. For one intervention good oral care was implicated.</p> <p>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.</p>
<b>3. What (materials)</b>	<p>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.</p>
<b>4. What (procedures)</b>	<p>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.</p>
<b>5. Who provided</b>	<p>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 dieticians or nutritionists, physical activity training was provided by physiotherapists or trained fitness instructors. Other professionals, including health promotion employees were involved to facilitate involvement.</p>
<b>6. How</b>	<p>Although not always clear in the reporting, physical training and nutritional exercise appears to have been provided face to face. Some of these sessions</p>

	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.
<b>6b. How organised</b>	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.
<b>7. Where</b>	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.
<b>8. When and how much</b>	<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 provided 2 sessions.</p>
<b>9. Tailoring</b>	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.
<b>10. Modifications</b>	Not mentioned in any of the reports
<b>11. How well (planned)</b>	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.
<b>12. How well (actual)</b>	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 Bleijenberg 2016<sup>11</sup>, Bleijenberg 2016<sup>11</sup>, Carpenter 1990<sup>17</sup>, Jitapunkul 1998<sup>46</sup>, Kerse 2014<sup>47</sup>, Pathy 1992<sup>69</sup>

<b>TIDieR item</b>	<b>Description</b>
<b>1. Brief name</b>	
<b>2. Why</b>	<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>
<b>3. What (materials)</b>	<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>
<b>4. What (procedures)</b>	<p>Identification through the screening of patient records or using questionnaires and assessments either delivered by a range of individuals, from volunteers to</p>

trained health care professionals, for at least one intervention this was undertaken through self-assessment by the older person.

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.

---

**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.

---

<b>8. When and how much</b>	<p>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.</p> <p>Repetition of the screening process was mentioned as being annual in one study or every three years in another.</p> <p>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.</p>
<b>9. Tailoring</b>	<p>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.</p>
<b>10. Modifications</b>	<p>Only one report describes modifications which were required due to reforms to geriatric services</p>
<b>11. How well (planned)</b>	<p>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.</p>
<b>12. How well (actual)</b>	<p>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.</p>

## References

1. Dorresteijn TA, Zijlstra GA, Ambergen AW, Delbaere K, Vlaeyen JW, Kempen GI. Effectiveness of a home-based cognitive behavioral program to manage concerns about falls in community-dwelling, frail older people: results of a randomized controlled trial. *BMC Geriatr* 2016;**16**:2. <https://doi.org/10.1186/s12877-015-0177-y>
2. Siemonsma PC, Blom JW, Hofstetter H, van Hespden ATH, Gussekloo J, Drewes YM, et al. The effectiveness of functional task exercise and physical therapy as prevention of functional decline in community dwelling older people with complex health problems. *BMC Geriatr* 2018;**18**:164. <https://doi.org/10.1186/s12877-018-0859-3>
3. Szanton SL, Thorpe RJ, Boyd C, Tanner EK, Leff B, Agree E, et al. Community aging in place, advancing better living for elders: a bio-behavioral-environmental intervention to improve function and health-related quality of life in disabled older adults. *J Am Geriatr Soc* 2011;**59**:2314-20. <https://doi.org/10.1111/j.1532-5415.2011.03698.x>
4. Szanton SL, Xue QL, Leff B, Guralnik J, Wolff JL, Tanner EK, et al. Effect of a biobehavioral environmental approach on disability among low-income older adults: A randomized clinical trial. *JAMA Intern Med* 2019;**179**:204-11. <https://doi.org/10.1001/jamainternmed.2018.6026>
5. Borrows A, Holland R. Independent living centre occupational therapy (OT) versus routine community OT. *Int J Ther Rehabil* 2013;**20**:187-94. <https://doi.org/10.12968/ijtr.2013.20.4.187>
6. Tomita MR, Mann WC, Stanton K, Tomita AD, Sundar V. Use of currently available smart home technology by frail elders: process and outcomes. *Top Geriatr Rehabil* 2007;**23**. <https://doi.org/10.1097/00013614-200701000-00005>
7. Alegria M, Frontera W, Cruz-Gonzalez M, Markle SL, Trinh-Shevrin C, Wang Y, et al. Effectiveness of a Disability Preventive Intervention for Minority and Immigrant Elders: The Positive Minds-Strong Bodies Randomized Clinical Trial. *Am J Geriatr Psychiatry* 2019;**27**:1299-313. <https://doi.org/10.1016/j.jagp.2019.08.008>
8. Arthanat S. Promoting Information Communication Technology Adoption and Acceptance for Aging-in-Place: A Randomized Controlled Trial. *J Appl Gerontol* 2019; 10.1177/0733464819891045. <https://doi.org/10.1177/0733464819891045>
9. Balaban DJ, Goldfarb NI, Perkel RL, Carlson BL. Follow-up study of an urban family medicine home visit program. *J Fam Pract* 1988;**26**:307-12.
10. Barenfeld E, Dahlin-Ivanoff S, Wallin L, Gustafsson S. Promoting aging migrants' capabilities: A randomized controlled trial concerning activities of daily living and self-rated health. *AIMS Public Health* 2018;**5**:173-88. <https://doi.org/10.3934/publichealth.2018.2.173>
11. Bleijenberg N, Drubbel I, Schuurmans MJ, Dam HT, Zuithoff NP, Numans ME, et al. Effectiveness of a proactive primary care program on preserving daily functioning of older people: a cluster randomized controlled trial. *J Am Geriatr Soc* 2016;**64**:1779-88. <https://doi.org/10.1111/jgs.14325>
12. Blom J, den Elzen W, van Houwelingen AH, Heijmans M, Stijnen T, Van den Hout W, et al. Effectiveness and cost-effectiveness of a proactive, goal-oriented, integrated care model in general practice for older people. A cluster randomised controlled trial: Integrated

Systematic Care for older People--the ISCOPE study. *Age Ageing* 2016;**45**:30-41.  
<https://doi.org/10.1093/ageing/afv174>

13. Botjes E. *Methodebeschrijving EigenKrachtWijzer: Databank Effectieve sociale interventies* Report: Movisie; 2013. URL: <https://www.movisie.nl/sites/movisie.nl/files/2018-03/Methodebeschrijving-eigenkrachtwijzer.pdf> (Accessed 17 May 2020).
14. Bouman A, van Rossum E, Ambergen T, Kempen G, Knipschild P. Effects of a home visiting program for older people with poor health status: a randomized, clinical trial in The Netherlands. *J Am Geriatr Soc* 2008;**56**:397-404. <https://doi.org/10.1111/j.1532-5415.2007.01565.x>
15. Brettschneider C, Luck T, Fleischer S, Roling G, Beutner K, Lupp M, et al. Cost-utility analysis of a preventive home visit program for older adults in Germany. *BMC Health Serv Res* 2015;**15**:141. <https://doi.org/10.1186/s12913-015-0817-0>
16. Cameron ID, Fairhall N, Langron C, Lockwood K, Monaghan N, Aggar C, et al. A multifactorial interdisciplinary intervention reduces frailty in older people: randomized trial. *BMC Med* 2013;**11**:65. <https://doi.org/10.1186/1741-7015-11-65>
17. Carpenter GI, Demopoulos GR. Screening the elderly in the community: controlled trial of dependency surveillance using a questionnaire administered by volunteers. *BMJ* 1990;**300**:1253-6. <https://doi.org/10.1136/bmj.300.6734.1253>
18. Cesari M, Demougeot L, Boccalon H, Guyonnet S, Vellas B, Andrieu S. The Multidomain Intervention to prevent disability in EIDers (MINDED) project: rationale and study design of a pilot study. *Contemp Clin Trials* 2014;**38**:145-54. <https://doi.org/10.1016/j.cct.2014.04.006>
19. Clark F, Azen SP, Zemke R, Jackson J, Carlson M, Mandel D, et al. Occupational therapy for independent-living older adults. A randomized controlled trial. *JAMA* 1997;**278**:1321-6. <https://doi.org/10.1001/jama.1997.03550160041036>
20. Clark F, Jackson J, Carlson M, Chou C-P, Cherry BJ, Jordan-Marsh M, et al. Effectiveness of a lifestyle intervention in promoting the well-being of independently living older people: results of the Well Elderly 2 Randomised Controlled Trial. [Erratum in: *J Epidemiol Community Health* 2012;**66**:1079-82]. *J Epidemiol Community Health* 2012;**66**:782-90. <https://doi.org/10.1136/jech.2009.099754>
21. Coleman EA, Grothaus LC, Sandhu N, Wagner EH. Chronic Care Clinics: A randomized controlled trial of a model of primary care for frail older adults. *J Am Geriatr Soc* 1999;**47**:775-83. <https://doi.org/10.1111/j.1532-5415.1999.tb03832.x>
22. Counsell SR, Callahan CM, Clark DO, Tu W, Buttar AB, Stump TE, et al. Geriatric care management for low-income seniors: a randomized controlled trial. *JAMA* 2007;**298**:2623-33. <https://doi.org/10.1001/jama.298.22.2623>
23. Cutchin MP, Coppola S, Talley V, Svihula J, Catellier D, Shank KH. Feasibility and effects of preventive home visits for at-risk older people: design of a randomized controlled trial. *BMC Geriatr* 2009;**9**:54. <https://doi.org/10.1186/1471-2318-9-54>
24. Dalby DM, Sellors JW, Fraser FD, Fraser C, van Ineveld C, Howard M. Effect of preventive home visits by a nurse on the outcomes of frail elderly people in the community: a randomized controlled trial. *CMAJ* 2000;**162**:497-500.

25. de Craen AJ, Gussekloo J, Blauw GJ, Willems CG, Westendorp RG. Randomised controlled trial of unsolicited occupational therapy in community-dwelling elderly people: the LOTIS trial. *PLoS Clin Trials* 2006;**1**:e2. <https://doi.org/10.1371/journal.pctr.0010002>
26. Fabacher D, Josephson K, Pietruszka F, Linderborn K, Morley JE, Rubenstein LZ. An in-home preventive assessment program for independent older adults: a randomized controlled trial. *J Am Geriatr Soc* 1994;**42**:630-8. <https://doi.org/10.1111/j.1532-5415.1994.tb06862.x>
27. Fairhall N, Kurlle SE, Sherrington C, Lord SR, Lockwood K, John B, et al. Effectiveness of a multifactorial intervention on preventing development of frailty in pre-frail older people: study protocol for a randomised controlled trial. *BMJ Open* 2015;**5**:e007091. <https://doi.org/10.1136/bmjopen-2014-007091>
28. Fischer G, Sandholzer H, Perschke-Hartmann C. *Final report of the scientific support of "Getting Healthy Elderly (GÄW)". A prevention project of the AOK Lower Saxony.* [German] (Abschlussbericht der wissenschaftlichen Begleitung von "Gesund Älter Werden (GÄW)"). unpublished: AOK Niedersachsen; 2009.
29. Ford AB, Katz S, Downs TD, Adams M. Results of long-term home nursing: the influence of disability. *J Chronic Dis* 1971;**24**:591-6. [https://doi.org/10.1016/0021-9681\(71\)90047-6](https://doi.org/10.1016/0021-9681(71)90047-6)
30. Gene Huguet L, Navarro Gonzalez M, Kostov B, Ortega Carmona M, Colungo Francia C, Carpallo Nieto M, et al. Pre Frail 80: Multifactorial intervention to prevent progression of pre-frailty to frailty in the elderly. *J Nutr Health Aging* 2018;**22**:1266-74. <https://doi.org/10.1007/s12603-018-1089-2>
31. Gill TM, Baker DI, Gottschalk M, Peduzzi PN, Allore H, Byers A. A program to prevent functional decline in physically frail, elderly persons who live at home. *N Engl J Med* 2002;**347**:1068-74. <https://doi.org/10.1056/NEJMoa020423>
32. Giné-Garriga M, Sansano-Nadal O, Tully MA, Caserotti P, Coll-Planas L, Rothenbacher D, et al. Accelerometer-measured sedentary and physical activity time and their correlates in European older adults: The SITLESS study. *J Gerontol A Biol Sci Med Sci* 2020;**75**:1754-62. <https://doi.org/10.1093/gerona/glaa016>
33. Gitlin LN, Winter L, Dennis MP, Corcoran M, Schinfeld S, Hauck WW. A randomized trial of a multicomponent home intervention to reduce functional difficulties in older adults. *J Am Geriatr Soc* 2006;**54**:809-16. <https://doi.org/10.1111/j.1532-5415.2006.00703.x>
34. Grimmer K, Luker J, Beaton K, Kumar S, Crockett A, Price K. TRIaling individualized interventions to prevent functional decline in at-risk older adults (TRIIFL): study protocol for a randomized controlled trial nested in a longitudinal observational study. *Trials* 2013;**14**:266. <https://doi.org/10.1186/1745-6215-14-266>
35. Gustafson DH, Kornfield R, Mares M-L, Johnston DC, Cody OJ, Yang EF, et al. Effect of an eHealth intervention on older adults' quality of life and health-related outcomes: a randomized clinical trial. *J Gen Intern Med* 2021;**37**:521-30. <https://doi.org/10.1007/s11606-021-06888-1>
36. Gustafsson S, Eklund K, Wilhelmson K, Edberg A-K, Johansson B, Kronlöf GH, et al. Long-Term Outcome for ADL Following the Health-Promoting RCT—Elderly Persons in the Risk Zone. *Gerontologist* 2013;**53**:654-63. <https://doi.org/10.1093/geront/gns121>

37. Harari D, Iliffe S, Kharicha K, Egger M, Gillmann G, von Renteln-Kruse W, *et al.* Promotion of health in older people: a randomised controlled trial of health risk appraisal in British general practice. *Age Ageing* 2008;**37**:565-71. <https://doi.org/10.1093/ageing/afn150>
38. Hay WI, van Ineveld C, Browne G, Roberts J, Bell B, Mills M, *et al.* Prospective care of elderly patients in family practice. Is screening effective? *Can Fam Physician* 1998;**44**:2677-87.
39. Hebert R, Robichaud L, Roy PM, Bravo G, Voyer L. Efficacy of a nurse-led multidimensional preventive programme for older people at risk of functional decline. A randomized controlled trial. *Age Ageing* 2001;**30**:147-53. <https://doi.org/10.1093/ageing/30.2.147>
40. Henderson MJ. *In-home preventive health assessment and telephone case management for over 75s living alone in independent living units: A cluster randomized controlled trial* [PhD thesis]. Queensland: Queensland University of Technology; 2005.
41. Hendriksen C, Lund E, Stromgard E. Consequences of assessment and intervention among elderly people: a three year randomised controlled trial. *Br Med J (Clin Res Ed)* 1984;**289**:1522-4. <https://doi.org/10.1136/bmj.289.6457.1522>
42. Hogg W, Lemelin J, Dahrouge S, Liddy C, Armstrong CD, Legault F, *et al.* Randomized controlled trial of anticipatory and preventive multidisciplinary team care: for complex patients in a community-based primary care setting. *Can Fam Physician* 2009;**55**:e76-85.
43. Holland SK, Greenberg J, Tidwell L, Malone J, Mullan J, Newcomer R. Community-based health coaching, exercise, and health service utilization. *J Aging Health* 2005;**17**:697-716. <https://doi.org/10.1177/0898264305277959>
44. Howel D, Moffatt S, Haighton C, Bryant A, Becker F, Steer M, *et al.* Does domiciliary welfare rights advice improve health-related quality of life in independent-living, socio-economically disadvantaged people aged  $\geq 60$  years? Randomised controlled trial, economic and process evaluations in the North East of England. *PLoS One* 2019;**14**:e0209560. <https://doi.org/10.1371/journal.pone.0209560>
45. Imhof L, Naef R, Wallhagen MI, Schwarz J, Mahrer-Imhof R. Effects of an advanced practice nurse in-home health consultation program for community-dwelling persons aged 80 and older. *J Am Geriatr Soc* 2012;**60**:2223-31. <https://doi.org/10.1111/jgs.12026>
46. Jitapunkul S. A randomised controlled trial of regular surveillance in Thai elderly using a simple questionnaire administered by non-professional personnel. *J Med Assoc Thai* 1998;**81**:352-6.
47. Kerse N, McLean C, Moyes SA, Peri K, Ng T, Wilkinson-Meyers L, *et al.* The cluster-randomized BRIGHT trial: Proactive case finding for community-dwelling older adults. *Ann Fam Med* 2014;**12**:514-24. <https://doi.org/10.1370/afm.1696>
48. Kono A, Kai I, Sakato C, Harker JO, Rubenstein LZ. Effect of preventive home visits for ambulatory housebound elders in Japan: a pilot study. *Aging Clin Exp Res* 2004;**16**:293-9. <https://doi.org/10.1007/BF03324554>
49. Kukkonen-Harjula K, Karmeniemi P, Suikkanen S, Kaaria S, Sipila S, Pitkala K, *et al.* Long-term home-based physiotherapy for older people with signs of frailty-RCT (NCT02305433) [P-229]. *Eur Geriatr Med* 2017;**8**:S105. [https://doi.org/10.1016/S1878-7649\(17\)30179-1](https://doi.org/10.1016/S1878-7649(17)30179-1)

50. Lambotte D, De Donder L, De Roeck EE, Hoeyberghs LJ, van der Vorst A, Duppen D, et al. Randomized controlled trial to evaluate a prevention program for frail community-dwelling older adults: a D-SCOPE protocol. *BMC Geriatr* 2018;**18**:194. <https://doi.org/10.1186/s12877-018-0875-3>
51. Leung AC-t, Liu C-p, Chow NW-s, Chi I. Cost-Benefit Analysis of a Case Management Project for the Community-Dwelling Frail Elderly in Hong Kong. *J Appl Gerontol* 2004;**23**:70-85. <https://doi.org/10.1177/0733464804263088>
52. Leveille SG, Wagner EH, Davis C, Grothaus L, Wallace J, LoGerfo M, et al. Preventing disability and managing chronic illness in frail older adults: a randomized trial of a community-based partnership with primary care. *J Am Geriatr Soc* 1998;**46**:1191-8. <https://doi.org/10.1111/j.1532-5415.1998.tb04533.x>
53. Liddle J, March L, Carfrae B, Finnegan T, Druce J, Schwarz J, et al. Can occupational therapy intervention play a part in maintaining independence and quality of life in older people? A randomised controlled trial. *Aust N Z J Public Health* 1996;**20**:574-8. <https://doi.org/10.1111/j.1467-842x.1996.tb01068.x>
54. Liimatta H, Lampela P, Laitinen-Parkkonen P, Pitkala KH. Effects of preventive home visits on health-related quality-of-life and mortality in home-dwelling older adults. *Scand J Prim Health Care* 2019;**37**:90-7. <https://doi.org/10.1080/02813432.2019.1569372>
55. Loh DA, Hairi NN, Choo WY, Mohd Hairi F, Peramalah D, Kandiben S, et al. MultiComponent Exercise and theRApeutic lifeStyle (CERgAS) intervention to improve physical performance and maintain independent living among urban poor older people—a cluster randomised controlled trial. *BMC Geriatr* 2015;**15**:8. <https://doi.org/10.1186/s12877-015-0002-7>
56. Lood Q, Gustafsson S, Dahlin Ivanoff S. Bridging barriers to health promotion: a feasibility pilot study of the 'Promoting Aging Migrants' Capabilities study'. *J Eval Clin Pract* 2015;**21**:604-13. <https://doi.org/10.1111/jep.12345>
57. Mann J, Thompson F, McDermott R, Esterman A, Strivens E. Impact of an integrated community-based model of care for older people with complex conditions on hospital emergency presentations and admissions: a step-wedged cluster randomized trial. *BMC Health Serv Res* 2021;**21**:701. <https://doi.org/10.1186/s12913-021-06668-x>
58. Melis RJ, van Eijken MI, Teerenstra S, van Achterberg T, Parker SG, Borm GF, et al. A randomized study of a multidisciplinary program to intervene on geriatric syndromes in vulnerable older people who live at home (Dutch EASYcare Study). *J Gerontol A Biol Sci Med Sci* 2008;**63**:283-90. <https://doi.org/10.1093/gerona/63.3.283>
59. Meng H, Friedman B, Wamsley BR, Mukamel D, Eggert GM. Effect of a consumer-directed voucher and a disease-management-health-promotion nurse intervention on home care use. *Gerontologist* 2005;**45**:167-76. <https://doi.org/10.1093/geront/45.2.167>
60. Messens L, Quinn S, Saez I, Cuidad Mas MJ, Squillace P, Laura A-G. *Health monitoring and sOcial integration environMent for Supporting Wide ExTension of independent life at HOME (Home Sweet Home): Final Trial Evaluation Report* no. D7.5. Antwerp: Zorgbedrijf Antwerpen; 2014.
61. Metzelthin SF, Van Rossum E, De Witte LP, Ambergen AW, Hobma SO, Sipers W, et al. Effectiveness of interdisciplinary primary care approach to reduce disability in community dwelling frail older people: Cluster randomised controlled trial. *BMJ* 2013;**347**:f5264. <https://doi.org/10.1136/bmj.f5264>



62. Moll van Charante EP, Richard E, Eurelings LS, van Dalen JW, Ligthart SA, van Bussel EF, et al. Effectiveness of a 6-year multidomain vascular care intervention to prevent dementia (preDIVA): a cluster-randomised controlled trial. *Lancet* 2016;**388**:797-805. [https://doi.org/10.1016/S0140-6736\(16\)30950-3](https://doi.org/10.1016/S0140-6736(16)30950-3)
63. Monteserin Nadal R, Altimir Losada S, Brotons Cuixart C, Padros Selma J, Santauegenia Gonzalez S, Moral Pelaez I, et al. Randomized clinical trial on the efficacy of global geriatric assessment in primary care. [Spanish]. *Rev Esp Geriatr Gerontol* 2008;**43**:5-12. [https://doi.org/10.1016/s0211-139x\(08\)71144-2](https://doi.org/10.1016/s0211-139x(08)71144-2)
64. Morey MC, Peterson MJ, Pieper CF, Sloane R, Crowley GM, Cowper PA, et al. The Veterans Learning to Improve Fitness and Function in Elders Study: a randomized trial of primary care-based physical activity counseling for older men. *J Am Geriatr Soc* 2009;**57**:1166-74. <https://doi.org/10.1111/j.1532-5415.2009.02301.x>
65. Morgan GS, Haase AM, Campbell RM, Ben-Shlomo Y. A pilot randomised controlled trial of physical activity facilitation for older adults: feasibility study findings. *Pilot Feasibility Stud* 2019;**5**:40. <https://doi.org/10.1186/s40814-019-0414-9>
66. Newbury JW, Marley JE, Beilby JJ. A randomised controlled trial of the outcome of health assessment of people aged 75 years and over. *Med J Aust* 2001;**175**:104-7. <https://doi.org/10.5694/j.1326-5377.2001.tb143541.x>
67. Newcomer R, Maravilla V, Faculjak P, Graves MT. Outcomes of preventive case management among high-risk elderly in three medical groups: a randomized clinical trial. *Eval Health Prof* 2004;**27**:323-48. <https://doi.org/10.1177/0163278704270011>
68. Ng TP, Feng L, Nyunt MS, Feng L, Niti M, Tan BY, et al. Nutritional, physical, cognitive, and combination interventions and frailty reversal among older adults: A randomized controlled trial. *Am J Med* 2015;**128**:1225-36.e1. <https://doi.org/10.1016/j.amjmed.2015.06.017>
69. Pathy MS, Bayer A, Harding K, Dibble A. Randomised trial of case finding and surveillance of elderly people at home. *Lancet* 1992;**340**:890-3. [https://doi.org/10.1016/0140-6736\(92\)93294-W](https://doi.org/10.1016/0140-6736(92)93294-W)
70. Phelan EA, Balderson B, Levine M, Erro JH, Jordan L, Grothaus L, et al. Delivering effective primary care to older adults: a randomized, controlled trial of the senior resource team at group health cooperative. *J Am Geriatr Soc* 2007;**55**:1748-56. <https://doi.org/10.1111/j.1532-5415.2007.01416.x>
71. Ploeg J, Brazil K, Hutchison B, Kaczorowski J, Dalby DM, Goldsmith CH, et al. Effect of preventive primary care outreach on health related quality of life among older adults at risk of functional decline: randomised controlled trial. *BMJ* 2010;**340**:c1480. <https://doi.org/10.1136/bmj.c1480>
72. Profener F, Anders J, Dapp U, Minder CE, Golgert S, von Renteln-Kruse W. Acceptance of preventive home visits among frail elderly persons : Participants an non-participants in a Follow-up after 2 and 4 years within the LUCAS longitudinal study. [German]. *Z Gerontol Geriatr* 2016;**49**:596-605. <https://doi.org/10.1007/s00391-016-1127-9>
73. Rockwood K, Stadnyk K, Carver D, MacPherson KM, Beanlands HE, Powell C, et al. A clinimetric evaluation of specialized geriatric care for rural dwelling, frail older people. *J Am Geriatr Soc* 2000;**48**:1080-5. <https://doi.org/10.1111/j.1532-5415.2000.tb04783.x>

74. Romera-Liebana L, Orfila F, Segura JM, Real J, Fabra ML, Möller M, et al. Effects of a primary care-based multifactorial intervention on physical and cognitive function in frail, elderly individuals: A randomized controlled trial. *J Gerontol A Biol Sci Med Sci* 2018;**73**:1688-74. <https://doi.org/10.1093/gerona/glx259>
75. Rubenstein LZ, Alessi CA, Josephson KR, Trinidad Hoyl M, Harker JO, Pietruszka FM. A randomized trial of a screening, case finding, and referral system for older veterans in primary care. *J Am Geriatr Soc* 2007;**55**:166-74. <https://doi.org/10.1111/j.1532-5415.2007.01044.x>
76. Serra-Prat M, Sist X, Domenich R, Jurado L, Saiz A, Rocés A, et al. Effectiveness of an intervention to prevent frailty in pre-frail community-dwelling older people consulting in primary care: a randomised controlled trial. *Age Ageing* 2017;**46**:401-7. <https://doi.org/10.1093/ageing/afw242>
77. Shapiro A, Taylor M. Effects of a community-based early intervention program on the subjective well-being, institutionalization, and mortality of low-income elders. *Gerontologist* 2002;**42**:334-41. <https://doi.org/10.1093/geront/42.3.334>
78. Sherman H, Soderhielm-Blid S, Forsberg C, Karp A, Tornkvist L. Effects of preventive home visits by district nurses on self-reported health of 75-year-olds. *Prim Health Care Res Dev* 2016;**17**:56-71. <https://doi.org/10.1017/S1463423614000565>
79. Stuck AE, Aronow HU, Steiner A, Alessi CA, Bula CJ, Gold MN, et al. A trial of annual in-home comprehensive geriatric assessments for elderly people living in the community. *N Engl J Med* 1995;**333**:1184-9. <https://doi.org/10.1056/NEJM199511023331805>
80. Stuck AE, Minder CE, Peter-Wuest I, Gillmann G, Egli C, Kesselring A, et al. A randomized trial of in-home visits for disability prevention in community-dwelling older people at low and high risk for nursing home admission. *Arch Intern Med* 2000;**160**:977-86. <https://doi.org/10.1001/archinte.160.7.977>
81. Stuck AE, Moser A, Morf U, Wirz U, Wyser J, Gillmann G, et al. Effect of health risk assessment and counselling on health behaviour and survival in older people: a pragmatic randomised trial. *PLoS Med* 2015;**12**:e1001889. <https://doi.org/10.1371/journal.pmed.1001889>
82. Suijker JJ, van Rijn M, Buurman BM, Ter Riet G, Moll van Charante EP, de Rooij SE. Effects of nurse-led multifactorial care to prevent disability in community-living older people: Cluster randomized trial. *PLoS One* 2016;**11**:e0158714. <https://doi.org/10.1371/journal.pone.0158714>
83. Takahashi PY, Pecina JL, Upatising B, Chaudhry R, Shah ND, Van Houten H, et al. A randomized controlled trial of telemonitoring in older adults with multiple health issues to prevent hospitalizations and emergency department visits. *Arch Intern Med* 2012;**172**:773-9. <https://doi.org/10.1001/archinternmed.2012.256>
84. Thiel C, Braun T, Grüneberg C. Physical training as core component of multimodal treatment of older frail people-study protocol of a randomized controlled pilot study. *J Gerontol Geriatr* 2019;**52**:45-60. <https://doi.org/10.1007/s00391-018-1443-3>
85. Thomas R, Worrall G, Elgar F, Knight J. Can they keep going on their own? A four-year randomized trial of functional assessments of community residents. *Can J Aging* 2007;**26**:379-90. <https://doi.org/10.3138/cja.26.4.379>

86. Tulloch AJ, Moore V. A randomized controlled trial of geriatric screening and surveillance in general practice. *J R Coll Gen Pract* 1979;**29**:733-40.
87. van Dongen EJ, Haveman-Nies A, Doets EL, Dorhout BG, de Groot LC. Effectiveness of a diet and resistance exercise intervention on muscle health in older adults: ProMuscle in Practice. *J Am Med Dir Assoc* 2020;**21**:1065-72.  
<https://doi.org/10.1016/j.jamda.2019.11.026>
88. van Heuvelen MJ, Hochstenbach JB, Brouwer WH, de Greef MH, Zijlstra GA, van Jaarsveld E, et al. Differences between participants and non-participants in an RCT on physical activity and psychological interventions for older persons. *Aging Clin Exp Res* 2005;**17**:236-45. <https://doi.org/10.1007/BF03324603>
89. van Hout HP, Jansen AP, van Marwijk HW, Pronk M, Frijters DF, Nijpels G. Prevention of adverse health trajectories in a vulnerable elderly population through nurse home visits: a randomized controlled trial [ISRCTN05358495]. *J Gerontol A Biol Sci Med Sci* 2010;**65**:734-42. <https://doi.org/10.1093/gerona/glq037>
90. van Leeuwen KM, Bosmans JE, Jansen AP, Hoogendijk EO, Muntinga ME, van Hout HP, et al. Cost-effectiveness of a chronic care model for frail older adults in primary care: Economic evaluation alongside a stepped-wedge cluster-randomized trial. *J Am Geriatr Soc* 2015;**63**:2494-504. <https://doi.org/10.1111/jgs.13834>
91. van Lieshout MRJ, Bleijenberg N, Schuurmans MJ, de Wit NJ. The effectiveness of a PProactive multicomponent intervention program on disability in independently living older people: A randomized controlled trial. *J Nutr Health Aging* 2018;**22**:1051-9.  
<https://doi.org/10.1007/s12603-018-1101-x>
92. van Rossum E, Frederiks CM, Philipsen H, Portengen K, Wiskerke J, Knipschild P. Effects of preventive home visits to elderly people. *BMJ* 1993;**307**:27-32.  
<https://doi.org/10.1136/bmj.307.6895.27>
93. Vetter NJ, Jones DA, Victor CR. Effect of health visitors working with elderly patients in general practice: a randomised controlled trial. *Br Med J (Clin Res Ed)* 1984;**288**:369-72.  
<https://doi.org/10.1136/bmj.288.6414.369>
94. von Bonsdorff MB, Leinonen R, Kujala UM, Heikkinen E, Törmäkangas T, Hirvensalo M, et al. Effect of physical activity counseling on disability in older people: A 2-year randomized controlled trial. *J Am Geriatr Soc* 2008;**56**:2188-94. <https://doi.org/10.1111/j.1532-5415.2008.02000.x>
95. Wallace JI, Buchner DM, Grothaus L, Leveille S, Tyll L, LaCroix AZ, et al. Implementation and effectiveness of a community-based health promotion program for older adults. *J Gerontol A Biol Sci Med Sci* 1998;**53**:M301-6. <https://doi.org/10.1093/gerona/53a.4.m301>
96. Walters K, Frost R, Kharicha K, Avgerinou C, Gardner B, Ricciardi F, et al. Home-based health promotion for older people with mild frailty: the HomeHealth intervention development and feasibility RCT. *Health Technol Assess* 2017;**21**:1-128.  
<https://doi.org/10.3310/hta21730>
97. Wong AKC, Wong FKY, Chang K. Effectiveness of a community-based self-care promoting program for community-dwelling older adults: A randomized controlled trial. *Age Ageing* 2019;**48**:852-8. <https://doi.org/10.1093/ageing/afz095>

98. Yamada Y, Ikegami N. Preventive home visits for community- dwelling frail elderly people based on minimum data set-home care: randomized controlled trial. *Geriatr Gerontol Int* 2003;**3**:236–42. <https://doi.org/10.1111/j.1444-1586.2003.00103.x>
99. Faul AC, Yankeelov PA, Rowan NL, Gillette P, Nicholas LD, Borders KW, *et al.* Impact on geriatric assessment and self-management support on community-dwelling older adults with chronic illnesses. *J Gerontol Soc Work* 2009;**52**:230-49. <https://doi.org/10.1080/01634370802609288>
100. Hattori S, Yoshida T, Okumura Y, Kondo K. Effects of reablement on the independence of community-dwelling older adults with mild disability: A randomized controlled trial. *Int J Environ Res Public Health* 2019;**16**. <https://doi.org/10.3390/ijerph16203954>
101. Morey MC, Ekelund C, Pearson M, Crowley G, Peterson M, Sloane R, *et al.* Project LIFE: a partnership to increase physical activity in elders with multiple chronic illnesses. *J Aging Phys Act* 2006;**14**:324-43. <https://doi.org/10.1123/japa.14.3.324>
102. Jing L, Jin Y, Zhang X, Wang F, Song Y, Xing F. The effect of Baduanjin qigong combined with CBT on physical fitness and psychological health of elderly housebound. *Medicine* 2018;**97**:e13654. <https://doi.org/10.1097/MD.00000000000013654>
103. Auvinen K, Voutilainen A, Jyrkkä J, Lönnroos E, Mäntyselkä P. Interprofessional medication assessment among home care patients: any impact on functioning? Results from a randomised controlled trial. *BMC Geriatr* 2020;**20**:390-. <https://doi.org/10.1186/s12877-020-01796-1>
104. Bernabei R, Landi F, Gambassi G, Sgadari A, Zuccala G, Mor V, *et al.* Randomised trial of impact of model of integrated care and case management for older people living in the community. *BMJ* 1998;**316**:1348-51. <https://doi.org/10.1136/bmj.316.7141.1348>
105. Dupuy L, Froger C, Consel C, Sauzeon H. Everyday functioning benefits from an assisted living platform amongst frail older adults and their caregivers. *Front Aging Neurosci* 2017;**9**:302. <https://doi.org/10.3389/fnagi.2017.00302>
106. Fernandez-Barres S, Garcia-Barco M, Basora J, Martinez T, Pedret R, Arija V, *et al.* The efficacy of a nutrition education intervention to prevent risk of malnutrition for dependent elderly patients receiving Home Care: A randomized controlled trial. *Int J Nurs Stud* 2017;**70**:131-41. <https://doi.org/10.1016/j.ijnurstu.2017.02.020>
107. Fristedt S, Nystedt P, Skogar O. Mobile geriatric teams - a cost-effective way of improving patient safety and reducing traditional healthcare utilization among the frail elderly? A randomized controlled trial. *Clin Interv Aging* 2019;**14**:1911-24. <https://doi.org/10.2147/CIA.S208388>
108. King All, Parsons M, Robinson E, Jorgensen D. Assessing the impact of a restorative home care service in New Zealand: A cluster randomised controlled trial. *Health Soc Care Community* 2012;**20**:365-74. <https://doi.org/10.1111/j.1365-2524.2011.01039.x>
109. Lewin G, De San Miguel K, Knuiman M, Alan J, Boldy D, Hendrie D, *et al.* A randomised controlled trial of the Home Independence Program, an Australian restorative home-care programme for older adults. *Health Soc Care Community* 2013;**21**:69-78. <https://doi.org/10.1111/j.1365-2524.2012.01088.x>
110. Mann WC, Ottenbacher KJ, Fraas L, Tomita M, Granger CV. Effectiveness of assistive technology and environmental interventions in maintaining independence and reducing

- home care costs for the frail elderly. A randomized controlled trial. *Arch Fam Med* 1999;**8**:210-7. <https://doi.org/10.1001/archfami.8.3.210>
111. Rooijackers TH, Kempen GIJM, Zijlstra GAR, van Rossum E, Koster A, Lima Passos V, et al. Effectiveness of a reablement training program for homecare staff on older adults' sedentary behavior: A cluster randomized controlled trial. *J Am Geriatr Soc* 2021;**69**:2566-78. <https://doi.org/10.1111/jgs.17286>
  112. Teut M, Schnabel K, Baur R, Kerckhoff A, Reese F, Pilgram N, et al. Effects and feasibility of an Integrative Medicine program for geriatric patients-a cluster-randomized pilot study. *Clin Interv Aging* 2013;**8**:953-61. <https://doi.org/10.2147/CIA.S45242>
  113. van der Pols-Vijlbrief R, Wijnhoven HAH, Bosmans JE, Twisk JWR, Visser M. Targeting the underlying causes of undernutrition. Cost-effectiveness of a multifactorial personalized intervention in community-dwelling older adults: A randomized controlled trial. *Clin Nutr* 2017;**36**:1498-508. <https://doi.org/10.1016/j.clnu.2016.09.030>
  114. Wolter A, Stolle C, Roth G, Rothgang H. Does the resident care assessment instrument improve long-term home care? - results of a nation-wide study in Germany. [German]. *Gesundheitswesen* 2013;**75**:29-32. <https://doi.org/10.1055/s-0032-1309013>
  115. Parsons J, Rouse P, Robinson EM, Sheridan N, Connolly MJ. Goal setting as a feature of homecare services for older people: does it make a difference? *Age Ageing* 2012;**41**:24-9. <https://doi.org/10.1093/ageing/afr118>
  116. Parsons M, Senior H, Kerse N, Chen MH, Jacobs S, Vanderhoorn S, et al. Should care managers for older adults be located in primary care? A randomized controlled trial. *J Am Geriatr Soc* 2012;**60**:86-92. <https://doi.org/10.1111/j.1532-5415.2011.03763.x>
  117. Parsons M, Senior H, Kerse N, Chen MH, Jacobs S, Anderson C. Randomised trial of restorative home care for frail older people in New Zealand. *Nurs Older People* 2017;**29**:27-33. <https://doi.org/10.7748/nop.2017.e897>
  118. Tuntland H, Aaslund MK, Espehaug B, Førland O, Kjekken I. Reablement in community-dwelling older adults: a randomised controlled trial. *BMC Geriatr* 2015;**15**:1-11. <https://doi.org/10.1186/s12877-015-0142-9>
  119. Whitehead PJ, Walker MF, Parry RH, Latif Z, McGeorge ID, Drummond AE. Occupational Therapy in HomeCare Re-ablement Services (OTHERS): results of a feasibility randomised controlled trial. *BMJ Open* 2016;**6**:e011868. <https://doi.org/10.1136/bmjopen-2016-011868>
  120. Hall N, De Beck P, Johnson D, Mackinnon K, Gutman G, Glick N. Randomized trial of a health promotion program for frail elders. *Can J Aging* 1992;**11**:72-91.
  121. Markle-Reid M, Weir R, Browne G, Roberts J, Gafni A, Henderson S. Health promotion for frail older home care clients. *J Adv Nurs* 2006;**54**:381-95. <https://doi.org/10.1111/j.1365-2648.2006.03817.x>
  122. Ryvicker M, Feldman PH, Rosati RJ, Sobolewski S, Maduro GA, Jr., Schwartz T. Improving functional outcomes in home care patients: impact and challenges of disseminating a quality improvement initiative. *J Healthc Qual* 2011;**33**:28-36. <https://doi.org/10.1111/j.1945-1474.2011.00156.x>

123. Stewart S, Harvey I, Poland F, Lloyd-Smith W, Mugford M, Flood C. Are occupational therapists more effective than social workers when assessing frail older people? Results of CAMELOT, a randomised controlled trial. *Age Ageing* 2005;**34**:41-6. <https://doi.org/10.1093/ageing/afh230>
124. Williams EI, Greenwell J, Groom LM. The care of people over 75 years old after discharge from hospital: an evaluation of timetabled visiting by Health Visitor Assistants. *J Public Health Med* 1992;**14**:138-44. <https://doi.org/10.1093/oxfordjournals.pubmed.a042711>
125. Challis D, Clarkson P, Williamson J, Hughes J, Venables D, Burns A, et al. The value of specialist clinical assessment of older people prior to entry to care homes. *Age Ageing* 2004;**33**:25-34. <https://doi.org/10.1093/ageing/afh007>
126. Kono A, Kanaya Y, Fujita T, Tsumura C, Kondo T, Kushiyama K, et al. Effects of a preventive home visit program in ambulatory frail older people: a randomized controlled trial. *J Gerontol A Biol Sci Med Sci* 2012;**67**:302-9. <https://doi.org/10.1093/gerona/qlr176>
127. Kono A, Izumi K, Yoshiyuki N, Kanaya Y, Rubenstein LZ. Effects of an updated preventive home visit program based on a systematic structured assessment of care needs for ambulatory frail older adults in Japan: A randomized controlled trial. *J Gerontol A Biol Sci Med Sci* 2016;**71**:1631-7. <https://doi.org/10.1093/gerona/glw068>
128. Vass M, Avlund K, Lauridsen J, Hendriksen C. Feasible model for prevention of functional decline in older people: municipality-randomized, controlled trial. *J Am Geriatr Soc* 2005;**53**:563-8. <https://doi.org/10.1111/j.1532-5415.2005.53201.x>
129. Fox PJ, Breuer W, Wright JA. Effects of a health promotion program on sustaining health behaviors in older adults. *Am J Prev Med* 1997;**13**:257-64.