

Appendix to report:

Assessment and interventions in care and services for older adults

## Tables of studies with low or moderate risk of bias

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|--|--|
| Abbott et al                           | Moderate   | To determine the                    | Inclusion criteria:   | Number of studies:   | The need to improve the                                    |
| 2013                                   | Woderate   | effectiveness of mealtime           | Studies of the following  | 36   | nutrition of the elderly                                   |
| UK                                     | SBU domain(s):   | interventions for the               | design were included:   | 30   | living in long term care                                   |
| -                                      | • •  |                                     | 0   | Study design.  | 0 0  |
| [1]                                    | Upprätthållande och  | elderly living in                   | (cluster) randomized  | Study design:  | has long been recognized.                                  |
|  | stimulerande   | residential care, and               | controlled trials (RCTs),   | RCTs (n=10), crossover   | Individual studies within                                  |
|  | arbetssätt och   | where possible,                     | non-RCTs, studies with  | studies (n=6), pre-post  | this review have shown                                     |
|  | metoder – särskilt   | determine which types of            | before and after designs,   | or time series studies   | there are simple   |
|  | boende. (Maintaining   | mealtime intervention               | including time-series   | (n=13), non-RCTs (n=3),  | components of everyday                                     |
|  | and stimulating work   | were more effective.                | studies, and case-control   | and case-control design  | practice within the care                                   |
|  | methods -  |                                     | studies.  | (n=3).   | home setting that can be                                   |
|  | institutional settings)  |                                     |   |  | altered to improve   |
|  | 6,   |                                     | Residents in residential  | Population:  | nutritional care. Large                                    |
|  | Quantitative   |                                     | nursing homes or care   | Residents in residential   | scale multi-center   |
|  |  |                                     | homes. Residents needed   | nursing homes or care  | pragmatic trials are                                       |
|  |  |                                     | to be aged 65 years and   | homes.   | however still required to                                  |
|  |  |                                     | <b>o</b> ,  | nomes.   |  |
|  |  |                                     | older.  |  | establish the full efficacy                                |
|  |  |                                     |   | Number of  | of such interventions and                                  |
|  |  |                                     | Mealtime interventions  | participants:  | cost implications.   |
|  |  |                                     | were considered as those  | 7 to 1726 participants   |  |

Table 1 Main characteristics of included systematic reviews with High or Moderate study quality

| Author    | Study quality | Objectives of the | Inclusion criteria for the   | Characteristics of the   | The conclusions of the        |
|-----------|---------------|-------------------|------------------------------|--------------------------|-------------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review            | studies included in the  | systematic review's           |
| Country   | Quantitative/ |                   | Literature search (date)     | systematic review        | author(s)                     |
| Reference | qualitative   |                   |                              |                          |                               |
|           |               |                   | which aimed to improve       |                          | Meta-analysis found           |
|           |               |                   | the mealtime routine,        | Country of origin:       | inconsistent evidence of      |
|           |               |                   | experience or environment.   | USA 16, Sweden 5,        | effects on body weight of     |
|           |               |                   | Interventions were           | Holland 5, Canada 4, UK  | changes to food service       |
|           |               |                   | included if they directly or | 2, and 1 each from       | (0.5kg; 95% Cl: -1.1 to       |
|           |               |                   | indirectly provided:         | Finland, France and      | 2.2; p=0.51), food            |
|           |               |                   | assistance and               | Taiwan.                  | improvement                   |
|           |               |                   | encouragement with           |                          | interventions (0.4 kg; 95%    |
|           |               |                   | eating, a more stimulating   | Setting:                 | Cl: -0.8 to 1.7; p = 0.50) or |
|           |               |                   | environment to eat,          | Residential care, i. e., | alterations to dining         |
|           |               |                   | increased access to food,    | nursing homes or care    | environment (1.5 kg; 95%      |
|           |               |                   | more choice of food or       | homes.                   | Cl: -0.7 to 2.8; p = 0. 23).  |
|           |               |                   | more appealing (visual,      |                          | Findings from                 |
|           |               |                   | sensory) food. Nutrition     | Interventions:           | observational studies         |
|           |               |                   | education or train-ing       | The interventions were   | within these intervention     |
|           |               |                   | interventions that were      | varied in length,        | types were mixed, but         |
|           |               |                   | specific to mealtime care    | ranging from a couple    | generally positive.           |
|           |               |                   | for residential elderly were | of days through to one   | Observational studies         |
|           |               |                   | also included.               | year and could be        | also found positive           |
|           |               |                   | Studies had to report on at  | broadly categorised      | effects on food/ caloric      |
|           |               |                   | least one nutritional        | into five types: food    | intake across all             |
|           |               |                   | outcome. Nutritional         | improvement (n =4),      | intervention types,           |
|           |               |                   | out-comes were either        | food service (n =8),     | though meta-analyses of       |
|           |               |                   | those directly related to    | staff training (n = 6),  | randomized studies            |
|           |               |                   | food intake (energy intake,  | feeding assistance (n =  | showed little evidence of     |
|           |               |                   | macronutrient intake,        | 4), a combination of     | any effects on                |
|           |               |                   | percentage food intake) or   | food service and staff   | food/caloric intake in        |
|           |               |                   | those used in clinical       | training (n = 2),        | food improvement              |
|           |               |                   | practice to assess           | combination of feeding   | studies (-5kcal; 95% Cl: -    |
|           |               |                   | nutritional status:          | assistance and food      | 36 to 26; p=0.74). There      |
|           |               |                   | nutritional status           | service (n = 2), and     | was some evidence of an       |
|           |               |                   | assessment tool (e.g. Mini   | dining environment (n =  | effect on daily energy        |
|           |               |                   | Nutritional Assessment       | 11)                      | intakes within dining         |
|           |               |                   | [MNA) tool) weight, weight   |                          | environment studies (181      |
|           |               |                   | status (e.g. BMI), body      | Outcomes:                | kcal/day, 95% Cl: -5 to       |
|           |               |                   | compo-sition (e.g. mid-      | Food service             | 367, p =0 .06).               |
|           |               |                   | upper arm circumference,     | Food improvement         |                               |

|                                       | Study quality<br>SBU Domain(s)  | Objectives of the<br>systematic review   | Inclusion criteria for the  | Characteristics of the studies included in the  | The conclusions of the<br>systematic review's  |
|---------------------------------------|---|--|---|---|--|
|                                       | Quantitative/   | systematic review  | systematic review<br>Literature search (date)   | systematic review   | author(s)  |
|                                       | •   |  | Literature search (date)  | systematic review   | aution(s)  |
| Ayalon et al<br>2016<br>Israel<br>[2] | qualitative<br>Moderate<br>SBU Domain(s):<br>Stimulerande och<br>upprätthållande<br>arbetssätt, både<br>ordinärt och särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods – both<br>community and<br>institutional settings)<br>Quantitative | To provide a systematic<br>review and meta-analysis<br>of the entire field of elder<br>maltreatment<br>interventions | Jean body mass),<br>biochemical indices (e.g.<br>serum haemoglobin,<br>albumin), and func-tional<br>status ( e.g. hand-grip).<br>Data on dietary satisfaction<br>and quality of life, where<br>measured, were also<br>outcomes of interest.<br>Literature search:<br>2012<br>Inclusion criteria:<br>Intervention studies written<br>in English<br>Literature search:<br>December 2014 | Dining environment<br>Staff training<br>Feeding assistance<br>Follow-up time:<br>2 days to 2 years<br>Number of studies:<br>24<br>Study design:<br>RCT, pre-post, quasi<br>experimental<br>Population:<br>Older persons with<br>dementia, staff,<br>informal caregivers<br>Number of participants<br>55 up to a couple of<br>thousand older persons<br>Country of origin:<br>USA, Canada, Japan,<br>Taiwan, Hongkong,<br>Iran, UK, Germany,<br>Netherlands, Norway,<br>Sweden | The most effective place<br>to intervene at the<br>present time is by directly<br>targeting physical restrain<br>by long-term care paid<br>carers.<br>Specific areas that are still<br>lacking evidence at the<br>present time are<br>interventions that target<br>(i) elder neglect, (ii) public<br>awareness, (iii) older<br>adults who experience<br>maltreatment, (iv)<br>professionals responsible<br>for preventing<br>maltreatment,(v) family<br>caregivers who abuse and<br>(vi) carers who abuse. |

| Author<br>Year<br>Country        | Study quality<br>SBU Domain(s)<br>Quantitative/                              | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|----------------------------------|--|---|--|--|---|
| Reference                        | qualitative  |   | Literature search (date)   | systematic review  | aution(s)   |
| Reference                        | quantative   |   |  | Setting<br>Nursing home, hospital,<br>geriatric clinic,<br>community   |   |
|                                  |  |   |  | <b>Interventions:</b><br>a) designed to improve<br>the ability of<br>professionals<br>to detect or stop elder<br>maltreatment ( <i>n</i> = 2),<br>b) interventions that<br>target older adults who<br>experience elder<br>maltreatment ( <i>n</i> = 3)<br>and<br>c) interventions that<br>target caregivers who<br>maltreat older adults |   |
|                                  |  |   |  | Outcomes:<br>Abuse, maltreatment,<br>psychological outcome,<br>elder speak, physical<br>restraint  |   |
|                                  |  |   |  | Follow-up time:<br>No information  |   |
| Baker et al<br>2016<br>Australia | High<br>SBU Domain(s):   | To assess the<br>effectiveness of primary,<br>secondary and tertiary  | Inclusion criteria:<br>Studies: Randomised<br>controlled studies (RCTs)  | Number of studies:<br>7  | There is inadequate<br>trustworthy evidence to<br>assess the effects of elder   |
| [3]                              | Insatser avseende<br>våld (Interventions<br>addressing abuse and<br>neglect) | intervention programs<br>utilized to reduce or<br>prevent, or both, elderly<br>abuse in organisational,<br>institutional and/or<br>community settings (i.e. | comparing the use of<br>strategies for the<br>prevention and reduction<br>of recurrent elder abuse<br>with a minimum follow-up<br>of 12 weeks in community | Study design:<br>RCT and non-<br>randomized studies  | abuse interventions on<br>occurrence or recurrence<br>of abuse, although there<br>is some evidence to<br>suggest it may change the<br>combined measure of |

| Author               | Study quality | Objectives of the   | Inclusion criteria for the   | Characteristics of the  | The conclusions of the   |
|----------------------|---------------|---|--|---|--|
| Year                 | SBU Domain(s) | systematic review   | systematic review  | studies included in the   | systematic review's  |
| Country              | Quantitative/ |   | Literature search (date)   | systematic review   | author(s)  |
| Reference            | qualitative   |   |  |   |  |
| Country<br>Reference |               | their own or someone<br>else's home). We sought<br>to identify and report on<br>adverse consequences or<br>effects of the<br>intervention/s in the<br>review.<br>Second, to investigate<br>whether the<br>intervention's effects are<br>modified by types of<br>abuse, types of<br>participants, setting of<br>intervention, or cognitive<br>status of the elderly. | Literature search (date)<br>dwelling and institutionally<br>cared for elderly persons.<br>Intervention:<br>Education programs to<br>reduce factors influencing<br>elder abuse<br>Specific policies on elder<br>abuse<br>Legislation on elder abuse<br>Programs to increase<br>detection rate for<br>prevention of elder abuse<br>Programs targeted to<br>victims of elder abuse.<br>Rehabilitation programs for<br>perpetrators of elder abuse | systematic reviewPopulation:<br>Residents, staff, family<br>membersNumber of<br>participants:<br>1924 elderly<br>participants and 740<br>people (such as carers<br>or nursing home staff)<br>with whom they<br>interact.Country of origin:<br>USA, Taiwan, UKSetting:<br>Home, community, | author(s)<br>anxiety and depression o<br>caregivers.<br>There is a need for high<br>quality trials, including<br>from low- or middle-<br>income countries, with<br>adequate statistical<br>power and appropriate<br>study characteristics to<br>determine whether<br>specific intervention<br>programs, and which<br>components of these<br>programs, are effective ir<br>preventing or reducing<br>abuse episodes among<br>the elderly. It is uncertain |
|                      |               |   | Outcomes:<br>A primary outcome is any<br>measure of rates of elder<br>abuse in either<br>communities or<br>institutions.<br>Secondary outcomes:<br>Participant-related<br>outcomes such as:<br>• increase in awareness<br>regarding elder abuse;<br>• improvement in attitude<br>towards elder abuse;<br>• improvement in skills<br>towards handling elder<br>abuse  | institutions<br>Interventions:<br>Educational<br>Interventions targeted<br>at health professionals<br>and/or carers<br>Programs to reduce<br>factors influencing<br>elder abuse<br>Programs to increase<br>detection<br>Programs targeted to<br>victims<br>Outcomes:                      | whether the use of<br>educational intervention<br>improves knowledge and<br>attitude of caregivers,<br>and whether such<br>programs also reduce<br>occurrence of abuse, thu<br>future research is<br>warranted.<br>In addition, all future<br>research should include a<br>component of cost-<br>effectiveness analysis,<br>implementation<br>assessment and equity  |
|                      |               |   | <ul> <li>increase in detection</li> <li>increase in elderly</li> <li>independent living.</li> </ul>  | changes in knowledge<br>and attitudes, with very<br>few measuring the   | considerations of the<br>specific interventions<br>under review.   |

| Author<br>Year<br>Country                        | Study quality<br>SBU Domain(s)<br>Quantitative/   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|---|--|--|--|
| Reference<br>Bleakley et al<br>2015<br>UK<br>[4] | qualitative         qualitative         Qualitative         Moderate         SBU Domain(s):         Upprätthållande och         stimulerande         arbetssätt – ordinärt         boende. (Maintaining         and stimulating work         methods - community         settings)         Quantitative | To systematically review<br>the evidence base and<br>examine the physical and<br>cognitive effects of<br>physically based<br>interactive computer<br>games (ICG) in an older<br>adult population. We also<br>consider how it affects<br>user's compliance,<br>enjoyment, and safety<br>during exercise. | Victim or perpetrator-<br>related outcomes which<br>include:<br>• improvement in crisis<br>management and<br>relocation of the victims<br>• improvement in conflict<br>resolution and<br>management of the<br>perpetrators.<br>We reported any adverse<br>outcomes from<br>interventions<br>Literature search:<br>March 2016<br>Inclusion criteria:<br>Studies must have used an<br>ICG intervention on older<br>adults (aged >65 years). ICG<br>was defined as any kind of<br>computer game or virtual<br>reality technique where the<br>participant could interact<br>with virtual objects in a<br>computer-based<br>environment. The<br>participants' interaction<br>must have involved at least<br>one of the following<br>physical components:<br>aerobic, strength, balance,<br>or flexibility. Studies using<br>ICG for specific<br>rehabilitation after injury<br>were excluded. | occurrence or reoccurrence of abuse.         Follow-up time:         1 week to 24 months         1 week to 24 months         Number of studies         12         Study design:         Observational (n=5)         Controlled trial (n=2)         RCT (n=5)         Population:         65 years or older. In         three studies         participants were 80+         years. Gender not         completely stated         Number of         participants:         Sample sizes: 6–40. | There is preliminary<br>evidence that ICG is a<br>safe and effective<br>exercise intervention<br>for an older population<br>and may be associated<br>with a range of physical<br>and cognitive benefits.<br>Future ICG interventions<br>should be tailored toward<br>older people, and should<br>aim to optimize<br>motivation, enjoyment,<br>and safety within this<br>population. Study<br>methodology should<br>incorporate randomized,<br>parallel group designs<br>with lower risk of |

| Author    | Study quality | Objectives of the | Inclusion criteria for the   | Characteristics of the   | The conclusions of the                       |
|-----------|---------------|-------------------|--|--|--|
| Year      | SBU Domain(s) | systematic review | systematic review  | studies included in the  | systematic review's                          |
| Country   | Quantitative/ |                   | Literature search (date)   | systematic review  | author(s)                                    |
| Reference | qualitative   |                   |  |  |  |
|           |               |                   | We were primarily<br>interested in outcomes<br>relating to physical or<br>cognitive functioning.<br>Secondary outcomes were<br>compliance, enjoyment,<br>and adverse events. Case<br>reports or small case series<br>(n < 3) were excluded but<br>there were no other<br>restrictions placed on study<br>design.<br>Literature search:<br>June 30, 2011. | Country of origin:<br>Not stated, but one<br>study was Swedish<br>Setting:<br>Community living<br>mainly, but also<br>residential settings<br>Interventions:<br>ICG: any kind of<br>computer game or<br>virtual reality technique<br>where the participant<br>could interact with<br>virtual objects in a<br>computer-based<br>environment; the<br>participants' interaction<br>must involve at least<br>one of the physical<br>components: aerobic,<br>strength, balance, or<br>flexibility.<br>Outcomes:<br>Physical or cognitive<br>functioning, secondary<br>outcomes included<br>adverse effects,<br>compliance, and<br>enjoyment.<br>Follow-up time:<br>4-36 weeks | selection, detection, and<br>attrition bias. |

| Author           | Study quality      | Objectives of the           | Inclusion criteria for the | Characteristics of the  | The conclusions of the       |
|------------------|--------------------|-----------------------------|----------------------------|-------------------------|------------------------------|
| Year             | SBU Domain(s)      | systematic review           | systematic review          | studies included in the | systematic review's          |
| Country          | Quantitative/      |                             | Literature search (date)   | systematic review       | author(s)                    |
| Reference        | qualitative        |                             |                            |                         |                              |
| Bøttcher         | Moderate           | To investigate and          | Inclusion criteria:        | Number of studies:      | Research of case             |
| Berthelsen et al |                    | describe the content,       | Case management,           | 7 studies (5 RCT).      | management                   |
| 2015             | SBU Domain(s):     | dissemination and effects   | Functional status, GRADE,  |                         | interventions for informal   |
| Denmark &        | Anhörigstöd och    | of case management          | Informal caregivers,       | Study design:           | caregivers is very limited.  |
| Sweden           | familjeorienterat  | interventions for informal  | Intervention Older adults, | Quasiexperimental       | This review identifies       |
| [5]              | arbete (Support to | caregivers of older adults, | Satisfaction, Systematic   | design.                 | knowledge about case         |
|                  | informal carers)   | focusing on outcomes        | review.                    |                         | management as an             |
|                  |                    | related to patients'        |                            | Population:             | intervention for what is     |
|                  | Quantitative       | activities of daily living, | Literature search:         | Over 65 years old       | already known about this     |
|                  |                    | nutrition assessment,       | September 2013.            | Caregivers to persons   | topic. Active involvement    |
|                  |                    | pain measurement,           |                            | with dementia           | of informal caregivers in    |
|                  |                    | depression, length of stay  |                            | (n=5 489).              | the care and treatment of    |
|                  |                    | and to caregivers'          |                            | I: n = 2 839, mean age: | their older family           |
|                  |                    | satisfaction and            |                            | 63.3–64 years.          | members can provide an       |
|                  |                    | difficulties.               |                            | C: n = 2 655, mean age: | enhanced effect of           |
|                  |                    |                             |                            | 62.5–64 years.          | treatment and well-being     |
|                  |                    |                             |                            |                         | for the patient. Only a      |
|                  |                    |                             |                            | 45 dyads of patients    | few studies include          |
|                  |                    |                             |                            | undergoing coronary     | support and education        |
|                  |                    |                             |                            | artery graft surgery    | for relatives through a      |
|                  |                    |                             |                            | (mean age: 60.2 years)  | family-oriented approach,    |
|                  |                    |                             |                            | and their family        | even though relatives are    |
|                  |                    |                             |                            | members (mean           | needed in older patients'    |
|                  |                    |                             |                            | age:54.2 years).        | care trajectories. Case      |
|                  |                    |                             |                            | I: n=22 dyads           | management                   |
|                  |                    |                             |                            | C: n=23 dyads.          | interventions have been      |
|                  |                    |                             |                            |                         | applied with success to      |
|                  |                    |                             |                            | 100 persons with        | patients in complex          |
|                  |                    |                             |                            | dementia living at      | settings with significant    |
|                  |                    |                             |                            | home with primary       | effects on patients'         |
|                  |                    |                             |                            | support from informal   | quality of life, depression, |
|                  |                    |                             |                            | caregiver and their     | mobility and length of       |
|                  |                    |                             |                            | primary informal        | stay. What this paper        |
|                  |                    |                             |                            | caregiver               | adds knowledge for           |
|                  |                    |                             |                            | I: n = 53, mean age:    | clinical practice of the     |
|                  |                    |                             |                            | 64.8 years              | importance of involving      |
|                  |                    |                             |                            |                         | informal caregivers          |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|--|
|  |  |  |   | C: n = 47, mean age:<br>63.3 years.<br>Dyads of patients with<br>dementia, n=362<br>I: mean age 76.7–78<br>years<br>C: mean age 76.3 years<br>and their informal<br>caregivers:<br>I: mean age: 66.1–76<br>years<br>C: mean age: 63.1 years<br>I: n = 195 dyads; C: n =<br>167 dyads.<br>Dyads of persons with<br>early symptoms of<br>dementia n=99, mean<br>age 82.1 years and their<br>primary informal<br>caregiver (mean age<br>63.6).<br>I: n = 54 dyads.<br>Number of<br>participants:<br>6 956<br>Country of origin:<br>USA (n=4), Finland<br>(n=2), Netherlands<br>(n=1). | through case<br>management to improve<br>patients' time to<br>institutionalisation and<br>municipal care costs.<br>Importance of prioritising<br>further research<br>regarding specific case<br>management<br>interventions to informal<br>caregivers to patients<br>without dementia. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|---|--|
|  |  |                                     |   | Setting:<br>Community care-based<br>settings in the<br>participants' homes  |  |
|  |  |                                     |   | Interventions:<br>-Case management.<br>-Psycho-educational<br>intervention of<br>progressive Lowered<br>Stress Threshold (PLST).<br>-12 week family<br>focused intervention<br>programme by a<br>research assistant for<br>both patient and family<br>member.<br>-Nurse case<br>management support<br>programme during a<br>maximum of 24 months<br>by a dementia family<br>care coordinator to<br>both patient and<br>informal caregiver.<br>-12 months case<br>management by district<br>nurses to both patients<br>and their informal<br>caregivers. |  |
|  |  |                                     |   | Outcomes:<br>Outcomes related to<br>patients' activities of<br>daily living, nutrition<br>assessment, pain<br>measurement,  |  |

| Author         | Study quality         | Objectives of the           | Inclusion criteria for the                       | Characteristics of the                            | The conclusions of the                          |
|----------------|-----------------------|-----------------------------|--|---|---|
| Year           | SBU Domain(s)         | systematic review           | systematic review                                | studies included in the                           | systematic review's                             |
| Country        | Quantitative/         |                             | Literature search (date)                         | systematic review                                 | author(s)                                       |
| Reference      | qualitative           |                             |  |   |   |
|                |                       |                             |  | depression, length of                             |   |
|                |                       |                             |  | stay, and to caregivers'                          |   |
|                |                       |                             |  | satisfaction and                                  |   |
|                |                       |                             |  | difficulties.                                     |   |
|                |                       |                             |  |   |   |
|                |                       |                             |  | Follow-up time:                                   |   |
|                |                       |                             |  | 3- 36 months.                                     |   |
|                |                       |                             |  | 3-4 days post-surgery                             |   |
|                |                       |                             |  | and 2-12 weeks post                               |   |
|                |                       |                             |  | discharge.  |   |
| Bradshaw et al | Moderate              | To produce a systematic     | Inclusion criteria:                              | Number of studies:                                | This is the first systematic                    |
| 2012           |                       | review of qualitative       | <ul> <li>English language studies</li> </ul>     | 31 (29 about older                                | thematic review                                 |
| UK             | SBU Domain(s):        | studies that have           | of mixed methodology but                         | adults).  | consolidating the views of                      |
| [6]            | Särskilda             | examined residents'         | including qualitative                            |   | people in care homes. For                       |
|                | boendeformer som      | views of QoL. Specifically, | research methods as                              | Study design:                                     | good QoL in care homes,                         |
|                | insats (Institutional | it aims to identify and     | described below.                                 | Qualitative synthesis                             | there needs to be an                            |
|                | care as an            | summarise the factors       | •The views of residents in a                     | from thematic analysis                            | understanding of the                            |
|                | intervention)         | that positively influence   | care home. Care home                             | and meta-ethnographic                             | residents' attitudes                            |
|                |                       | care home life, and         | refers to nursing and                            | rnethods.   | towards living there, and                       |
|                | Qualitative           | provide an evidence base    | residential homes.                               |   | how factors within the                          |
|                |                       | of practical                | Accommodation described                          | Population:                                       | care borne impact upon                          |
|                |                       | recommendations to          | as community villages,                           | Residents in care                                 | their attitude. This                            |
|                |                       | improve QoL                 | supported living or respite                      | homes   | echoes quantitative                             |
|                |                       |                             | stays were excluded.                             |   | research where                                  |
|                |                       |                             | Studies had to examine                           | Number of   | psychological functioning                       |
|                |                       |                             | factors that contribute to                       | participants:                                     | and social support were                         |
|                |                       |                             | care home life.                                  | 1.223 participants aged                           | most strongly correlated                        |
|                |                       |                             |  | from 20 to 100.                                   | to resident satisfaction.<br>Care homes need to |
|                |                       |                             | Literature search:<br>Variations from April 2009 | Country of origins                                | make allowances to the                          |
|                |                       |                             | to January 2011.                                 | <b>Country of origin:</b><br>Canada, USA, Taiwan, | care borne environment                          |
|                |                       |                             | to January 2011.                                 |   |   |
|                |                       |                             |  | Hongkong,<br>Netherlands, Iceland,                | to more closely align with residents' personal  |
|                |                       |                             |  | UK.   | preferences and                                 |
|                |                       |                             |  | UK.   | •   |
|                |                       |                             |  | Sotting   | meanings, e.g. match                            |
|                |                       |                             |  | Setting:<br>Care home                             | compatibility of                                |
|                |                       |                             |  | Care nome   | roommates to promote                            |

| Author<br>Year<br>Country<br>Reference    | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|---|--|---|---|---|--|
|   |  |   |   | Interventions:<br>Not applicable<br>Outcomes:<br>Four key themes were<br>identified: (i)<br>acceptance and<br>adaptation,<br>(ii) connectedness with<br>others,<br>(iii) a homelike<br>environment,<br>(iv) caring practices.<br>Follow-up time:<br>Not clear         | meaningful engagement.<br>Care staff providing both<br>practical and emotional<br>support can enhance<br>residents' QoL.<br>Organizational policies<br>need to support this by<br>maintaining continuity of<br>care and less rigid time<br>schedules and routines.<br>Capabilities of residents<br>must be promoted and<br>valued, to redefine the<br>care borne as one that<br>promotes choice, not one<br>that simply takes it away.   |
| Brownie et al<br>2013<br>Australia<br>[7] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande insatser<br>och arbetssätt –<br>särskilt boende.<br>(Maintaining and<br>stimulating work<br>methods -<br>institutional settings)<br>Quantitative | To evaluate the impact of<br>person-centered care<br>approaches on residents<br>and staff in residential<br>aged-care facilities. | Inclusion criteria:<br>Study design: experimental<br>design studies, including<br>pre-post-test design studies<br>with or without a control<br>group or randomized trials.<br>Intervention:<br>Person-centered<br>approaches to residential<br>aged care, including<br>interventions focused on<br>enhancing residents'<br>autonomy, choice, sense of<br>personal control,<br>independence and<br>interactions with residents<br>and staff. Key phrases in<br>studies that reflect the<br>objectives of these | Number of studies:<br>7<br>Study design:<br>Quasi-experimental<br>research design (n=6),<br>cluster-randomised,<br>cluster randomized<br>controlled trial (n=1)<br>Population:<br>Residents and staff<br>Number of<br>participants:<br>13-289 older adults +<br>staff | The movement away<br>from an institutional<br>mode of care to one that<br>accepts person-centered<br>care as the guiding<br>standard of practice is<br>part of a culture change<br>that is impacting the<br>provision of aged-care<br>services around the<br>world. Forming accurate<br>conclusions about the<br>impact of person-<br>centered interventions on<br>residents and staffs<br>hampered by the<br>heterogeneity of the<br>interventions and<br>significant<br>methodological |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|-------------------------------------|---|---|---|
|  |  |                                     | <ul> <li>interventions included<br/>person centered care,<br/>patient-centered care,<br/>quality of life, quality of<br/>health care, individuality in<br/>old age, satisfaction with<br/>care, and organizational<br/>culture.</li> <li>Subjects and setting, ie,<br/>residents in a long-term<br/>aged-care facility (nursing<br/>home) and/or nursing staff.</li> <li>Literature search:<br/>October 2012</li> </ul> | Country of origin:<br>USA, Australia,<br>Netherlands<br>Setting:<br>Long term care<br>Interventions:<br>- environmental<br>enhancement (eg,<br>plants and animals)<br>- opportunities for<br>social stimulation and<br>fulfilling relationships<br>- continuity of resident<br>care by assigning<br>residents to the same<br>care staff changes in<br>management and<br>leadership approaches<br>(often devolved), with<br>the introduction of<br>democratized<br>approaches to decision-<br>making that involve<br>residents and staff<br>- changes to staffing<br>models focused on staff<br>empowerment<br>- individualized (rather<br>than institutionalized)<br>humanistic philosophy<br>of care.<br>Outcomes:<br>Functional status, | differences between<br>studies. Person-centered<br>interventions are<br>associated with positive<br>influences on staff<br>outcomes (satisfaction<br>and capacity to provide<br>individualized care);<br>improvement in the<br>psychological status of<br>residents (lower rates of<br>boredom and feelings of<br>helplessness); and<br>reduced levels of<br>agitation in residents with<br>dementia. It appears that<br>some person-centered<br>interventions might be<br>associated with an<br>increased risk of falls in<br>aged-care residents. |
|  |  |                                     |   | resident views of   |   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|--|
|  |  |  |   | satisfaction, QoL,<br>organizational change<br>etc.<br><b>Follow-up time:</b>  |  |
| Bunn et al<br>2015<br>UK<br>[8]        | Moderate SBU Domain: Upprätthållande och stimulerande arbetssätt och metoder – särskilt boende. (Maintaining and stimulating work methods - institutional settings) Quantitative | To assess the<br>effectiveness of<br>interventions and<br>environmental factors to<br>increase fluid intake or<br>hydration status in older<br>people living in long-term<br>care. | Inclusion criteria<br>Intervention and<br>observational studies<br>involving older people (≥65<br>years) living in residential,<br>long-term nursing care, or<br>specialist dementia units<br>(together called long-term<br>care facilities), who could<br>drink orally. Studies<br>examined an association<br>between the intervention,<br>or modifiable exposure,<br>and hydration status<br>and/or fluid intake (primary<br>outcomes). Secondary<br>outcomes). Secondary<br>outcomes with a likely link<br>to dehydration, falls, urinary<br>and upper respiratory tract<br>infections, or death) were<br>noted where a primary<br>outcome was described.<br>Literature search<br>September 30, 2013 | Unclear<br>Number of studies:<br>23<br>Study design:<br>RCT, CCT, pre-post,<br>cross sectional<br>Population:<br>Mean age 75-92,3 years<br>Number of<br>participants:<br>3-2128<br>Country of origin:<br>United States 10,<br>Canada 3, UK 2, Ireland,<br>Germany, Japan and<br>Taiwan 1 each.<br>Setting:<br>Long term care, nursing<br>home<br>Interventions:<br>Multicomponent<br>strategies on fluid<br>intake or dehydration.<br>Components included<br>greater choice and<br>availability of<br>beverages, increased | Although this review has<br>been unable to<br>demonstrate the<br>effectiveness of many<br>strategies because of the<br>high risk of bias, our<br>findings indicate that<br>further investigations into<br>dehydration prevention<br>should be undertaken at<br>the resident, institutional,<br>and national policy levels.<br>Further investigations of<br>promising interventions<br>at the resident and<br>institutional levels, using<br>high-quality adequately<br>powered RCTs with valid<br>outcome measures, are<br>required. We were<br>particularly concerned<br>about the lack of<br>interventions to identify<br>and target personal<br>barriers to drinking, thus<br>promoting person-<br>centered care. Although<br>blinding at the level of<br>intervention delivery is<br>challenging, improved<br>study designs, perhaps |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative                          | Objectives of the systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|--|---|---|---|
|  |   |  |   | staff awareness, and<br>increased staff<br>assistance with drinking<br>and toileting.<br>Modifications to the<br>dining environment,<br>advice to residents,<br>presentation of<br>beverages, and mode of<br>delivery (straw vs<br>beaker; pre thickened<br>drinks vs those<br>thickened at the<br>bedside).<br><b>Outcomes:</b><br>Dehydration status and<br>fluid intake. Secondary<br>outcomes with a likely<br>link to dehydration<br>(such as constipation,<br>falls, urinary and upper<br>respiratory tract<br>infections, or death). | involving 3 arms ("usual<br>care," intervention, and<br>modified intervention)<br>and more rigorous<br>blinding of personnel at<br>the different stages<br>(random sequence<br>generation, allocation,<br>outcome assessment, and<br>statistical analysis) may<br>resolve some of the<br>biases identified in this<br>review. Further, robust<br>cohort studies<br>investigating the effects<br>of national policies, home<br>ownership, staffing levels,<br>and training are required.<br>Adequate research<br>support has been<br>recognized as a key<br>challenge in developing<br>high-quality research in<br>nursing homes,37 but this<br>is what is required to |
|  |   |  |   | Follow-up time<br>Unclear   | improve fluid intake and<br>hydration status in older<br>care home residents.   |
| Carrion et al<br>2013<br>Spain<br>[9]  | Moderate<br>SBU Domain(s):<br>Effekten av vissa<br>hjälpmedel inom<br>kommunikation och | To review existing<br>scientific evidence on<br>interventions included in<br>the category of cognition-<br>oriented approaches<br>when treating people | Inclusion criteria:<br>Articles that reported on<br>intervention studies<br>regarding cognition-<br>oriented care approaches<br>for dementia in older | Number of studies:<br>17<br>Study design:<br>RCTs   | We conclude that<br>stimulation of cognitive<br>functions, especially by<br>means of reality<br>orientation,<br>improve overall cognitive   |
|  | kognitiv förmåga.<br>(Effects from  | suffering from dementia.<br>This category includes<br>both reality orientation   | people diagnosed as having<br>Alzheimer's disease or<br>probable Alzheimer's  | Population:<br>Older people diagnosed<br>as having Alzheimer's  | function (measured by<br>the MMSE or ADAS-Cog)<br>in patients suffering from  |

| communication and<br>cognitive devices)and skills training<br>interventions.disease. Only randomized<br>controlled traits (RCTs) or<br>controlled traits (RCTs) or<br>participants:<br>11-201disease<br>therewise apars included<br>patters with Alzheimer's<br>or probable Alzheimer's<br>disease, stimulation of<br>cognitive interventions may<br>apply to dementia in<br>traits are warranted in<br>traits are warranted in<br>improve evidence<br>recruited from day<br>centers and residential<br>homesdisease<br>therwentions:<br>Presentation and<br>repetition of<br>or protable Alzheimer's<br>interventions:<br>Presentation and<br>repetition of<br>or protainte the purpose of<br>providing the patients<br>with a better<br>understanding of their<br>beginning with the<br>patient's basic personal<br>and current information<br>the respit repeatedly<br>presents basic personal<br>and current information<br>to each patient<br>beginning with the<br>patient's may here | Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)                       | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|---|--|--|-------------------------------------|---|--|--|
| he or she is and the  |  | communication and cognitive devices)                           | -                                   | controlled trials (RCTs) or<br>controlled clinical trials<br>were eligible.<br>Literature search: | Alzheimer's disease Number of participants: 11-201 Country of origin: USA, Great Britain, Italy, Germany Setting: Participants were recruited from day centers and residential homes Interventions: Reality Orientation Interventions: Presentation and repetition of orientation information with the purpose of providing the patients with a better understanding of their surroundings. (During the session, the therapist repeatedly presents basic personal and current information to each patient beginning with the patient's name, where | reviewed papers included<br>patients with Alzheimer's<br>or probable Alzheimer's<br>disease, stimulation of<br>cognitive functions may<br>apply to dementia in<br>general. Higher-quality<br>trials are warranted in<br>order to confirm these<br>findings. Multicenter and<br>large-sample trials may<br>improve evidence<br>regarding the effects of<br>cognitive interventions<br>on patients suffering |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review   | The conclusions of the systematic review's author(s) |
|--|--|-------------------------------------|---|--|--|
|  |  |                                     |   | has relearned these<br>basic facts, others are<br>presented such as age,<br>hometown and former<br>occupation).<br><i>Skills training:</i><br>computer activities,<br>mixture of activities,<br>some of which were<br>computer cognitive<br>training activities,<br>organizing stimulus<br>items into meaningful<br>categories, organizing<br>ideas and details for<br>remembering everyday<br>text-based information,<br>visualizing and<br>associating items to be<br>remembered, lists of<br>words to be<br>remembered, using an<br>agenda and a calendar |  |
|  |  |                                     |   | and training in daily<br>living<br>activities.<br><b>Outcomes:</b><br>Cognition, Memory,<br>Visual memory, Verbal<br>memory<br>Fluency, Problem<br>solving,<br>ADL, language etc.  |  |

| Author<br>Year<br>Country<br>Reference                   | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|---|---|--|--|
|  |  |   |   | Follow-up time:<br>Not stated  |  |
| Chen et al<br>2016<br>Hong Kong &<br>Switzerland<br>[10] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>metoder och<br>arbetssätt – ordinärt<br>boende. (Maintaining<br>and stimulating work<br>methods - community<br>settings)<br>Qualitative and<br>quantitative | To explore the effects of<br>Information<br>Communication<br>Technology (ICT)<br>interventions, on<br>reducing social isolation<br>of the elderly | Inclusion criteria:<br>(1) publications must be in<br>English; (2) studies must<br>empirically investigate the<br>effects of ICTs on one or<br>more attributes of social<br>isolation among the elderly;<br>and (3) study participants<br>must be<br>aged 55 years or older.<br>Literature search:<br>July 2015 | Number of studies:<br>25<br>Study design:<br>RCT (6 studies); another<br>6, were cohort studies<br>(2 with a control group<br>and 4 without, 4 were<br>cross-sectional studies<br>(surveys) and 14 were<br>qualitative studies.<br>Number of<br>participants:<br>8-5203<br>Characteristics of<br>participants:<br>55–99 years (average<br>age ranged from 66<br>years (SD not given) to<br>83 years). In most<br>studies, mostly females.<br>Setting:<br>regular living<br>environments of the<br>participants, including<br>private housing (n=13),<br>assisted and<br>independent living<br>communities (n=2),<br>congregate housing<br>sites (n=1), retirement<br>villages (n=2), nursing | More well-designed<br>studies that contain a<br>minimum risk of research<br>bias are needed to<br>draw conclusions on the<br>effectiveness of ICT<br>interventions for elderly<br>people in reducing their<br>perceived social isolation<br>as a multi-dimensional<br>concept. The results of<br>this review suggest that<br>ICT could be an effective<br>tool to tackle social<br>isolation among the<br>elderly.<br>However, it is not suitable<br>for every senior alike.<br>Future research should<br>identify who among<br>elderly people can most<br>benefit from ICT use in<br>reducing social isolation.<br>Research on other types<br>of ICT (eg, mobile phone–<br>based instant messaging<br>apps) should be<br>conducted to promote<br>understanding and<br>practice of ICT-based<br>social-isolation<br>interventions for elderly<br>people. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
|  |  |  |   | homes (n=4), day care<br>centers (n=1), and no<br>specifics on where they<br>resided (n=2).   |  |
|  |  |  |   | <b>Country of origin:</b><br>USA (n=9), Australia<br>(n=2), Canada (n=1),<br>Finland and Slovenia<br>(n=1), Israel (n=2), The<br>Netherlands (n=3), New<br>Zealand (n=2), Norway<br>(n=1), Sweden (n=1),<br>Taiwan (n=2), United<br>Kingdom (n=1)   |  |
|  |  |  |   | Interventions:<br>ICT interventions (e.g.,<br>mobile phone–based<br>instant messaging<br>apps).   |  |
|  |  |  |   | Outcomes:<br>Social isolation or did so<br>by looking at its effect<br>on 1 or more of the 7<br>single attributes of<br>social isolation:<br>loneliness, social<br>support, social contact,<br>number of confidants,<br>social<br>connectedness/social<br>connectivity, social<br>networks, and social<br>well-being. |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|---|--|---|
|  |  |   |   | Follow-up time   |   |
| Chin et al<br>2007<br>China<br>[11]    | Moderate SBU Domain(s): Upprätthållande och stimulerande insatser – särskilt boende och ordinärt boende. (Maintaining and stimulating work methods – both community and institutional settings) Quantitative | To examine the clinical<br>effect of reminiscence<br>therapy on the life<br>satisfaction, happiness,<br>depression, and self-<br>esteem of older adults<br>aged 50 or above | Inclusion criteria:All controlled trials, before2001, investigating theeffect of reminiscencetherapy on life satisfaction,happiness, self-esteem anddepression in older adultswere included in thisreview. The trials areeligible: (1) if they were ofpre-post-test design; (2) ifthere were at least twogroups, one receivedreminiscence therapywhereas the other receivedno treatment (exceptbaseline treat-ment, e.g.basic nursing care fornursing home subjects);and (3) if each comparisongroup consisted of at leastfive subjects in post-test.Participants are olderadults of age 50 years orabove.The types of reminiscenceintervention were thosealigned with the definitionprovided by Haight &Burnside (1993). Theintervention should alsohave been conducted in the | Unclear<br>Number of studies:<br>15<br>Study design:<br>Randomized or<br>controlled trials<br>Number of<br>participants:<br>424 (range 24-43)<br>Characteristics of<br>participants:<br>Twelve studies >60%<br>female subjects, Mean<br>age 65.6 – 86.0 years.<br>Setting:<br>Residential care and<br>community subject.<br>Country of origin:<br>Not stated.<br>Interventions:<br>4-20 sessions,<br>sometimes with audio,<br>visual or real objects.<br>Outcomes:<br>Life satisfaction,<br>happiness, depression<br>and self-esteem.<br>Follow-up time: | This review shows that<br>reminiscence therapy has<br>beneficial effects on the<br>happiness and depression<br>of older adults, but its<br>effects on life-satisfaction<br>and self-esteem are not<br>significant. However, due<br>to the limited number of<br>included studies, the<br>small sample size of the<br>trials, the possible play of<br>publication bias, language<br>bias and Hawthorne<br>effect, a convincing<br>conclusion on the clinical<br>effects of reminiscence<br>therapy on life<br>satisfaction, happiness,<br>depression and self-<br>esteem of older adults<br>cannot be drawn at this<br>stage.<br>A more comprehensive<br>search to identify eligible<br>studies would surely<br>contribute to future<br>systematic reviews. |

| Author<br>Year<br>Country<br>Reference                 | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|--|--|---|--|
| Reference<br>Choi et al<br>2012<br>South Korea<br>[12] | qualitative         qualitative         qualitative         Qualitative         Qualitative         Moderate         SBU Domain(s)         Upprätthållande och<br>stimulerande<br>arbetssätt         - både ordinärt och<br>särskilt boende.         (Maintaining and<br>stimulating work<br>methods – both<br>community and<br>institutional settings) | To examine the<br>effectiveness of computer<br>and Internet<br>interventions in reducing<br>loneliness and depression<br>among older adults,<br>through a meta-analysis. | format of discussion or<br>interview.<br>Outcomes were those<br>relating to reminiscence<br>therapy in terms of life<br>satisfaction, happiness,<br>self-esteem and<br>depression. The outcomes<br>should have been<br>measured by validated<br>assessment tools.<br>Literature search<br>2001<br>Inclusion criteria:<br>Older adults living in either<br>communities or facilities as<br>the target population.<br>An intervention that<br>involved computer or<br>Internet use, and<br>measuring the psychosocial<br>outcomes (i.e., levels of<br>loneliness and depression)<br>of interest. | Not stated<br>Number of studies:<br>6<br>Study design:<br>4 RCT, 2 quasi-<br>experimental studies<br>Number of<br>participants:<br>373<br>Characteristics of<br>participants: | Computer and Internet<br>interventions were<br>effective in decreasing<br>loneliness, but not<br>depression. Cur-rently,<br>many older adults have<br>the opportunity to use<br>various devices besides a<br>personal computer, such<br>as tablet PCs or smart-<br>devices. In the near<br>future, these devices may<br>play a key role in |
|  | Quantitative  |  | July 2012  | Mean age: 73 – 82,6<br>years<br>Setting:<br>Community or<br>residential care  | providing older adults<br>with social networks so<br>that they stay connected<br>with the wider world and<br>obtain new information<br>that has a beneficial<br>effect on their<br>psycho-social wellbeing.  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review     | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|---|---|
|  |  |  |   | Country of origin:<br>Israel, Netherlands and<br>USA<br>Interventions:<br>All interventions<br>included both<br>computer and Internet<br>training, and 4 studies<br>provided computers as<br>well to the older adults,<br>duration 3-36 months<br>Outcomes:<br>Depression<br>Loneliness<br>Follow-up time:<br>Baseline and 3-36<br>months | Thus, web pages and<br>applications for tablet PCs<br>and smart-devices that<br>older adults find more<br>usable should be<br>developed. In further<br>studies, the effectiveness<br>of these newly developed<br>devices on psychosocial<br>problems should be<br>investigated. |
| Chuanmei You et                        | Moderate   | To summarise the                           | Inclusion criteria:   | Number of studies:  | Available evidence in this  |
| al                                     |  | evidence for the effects                   | No restriction on date;   | 15  | review showed that case   |
| 2012                                   | SBU Domain(s):   | of case management in                      | English language; only  | Chudu da siste  | management in   |
| Australia<br>[13]                      | Integrerade insatser<br>eller aktiviteter,                     | community aged care on<br>client and carer | involving community-<br>dwelling frail older people                         | Study design:<br>RCT (n=10), quasi-   | community aged care<br>interventions can  |
| [13]                                   | samverkan och  | outcomes.                                  | (suffering from age-related   | experimental study  | improve client  |
|  | informations-  | outcomes.                                  | health problems, such as  | design (n=4),   | psychological health or   |
|  | överföring   |  | functional disabilities and   | retrospective cohort  | well-being and unmet  |
|  | (Integrated measures   |  | dementia) and/or carers;  | (n=1)   | service needs. In contrast,   |
|  | or activities)   |  | case management   |   | the effects of the  |
|  |  |  | interventions (excluding  | Population:   | interventions on client   |
|  | Quantitative   |  | disease management  | Persons aged 65 or  | mortality, functional   |
|  |  |  | programs that target older  | more; carers.   | status, medical   |
|  |  |  | adults with specific chronic  |   | conditions, behavioral  |
|  |  |  | diseases, and specific  | Number of   | problems and satisfaction   |
|  |  |  | preventive measures, such   | participants:   | with care services, as well   |
|  |  |  | as in-home visit); care   | 60 to 8095  | as carer outcomes as  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|--|---|
|  |  |  | setting limited to<br>community aged care<br>(excluding the other<br>community based care<br>settings, such as primary<br>care, community mental<br>health, etc.); case<br>management as an<br>independent intervention<br>(rather than as a small<br>component of a multi-<br>faceted intervention or an<br>integrated care delivery<br>system/model); published<br>in refereed journals or<br>publications of equivalent<br>standard; RCTs or<br>comparative observational<br>studies; and evaluating<br>client and/or carer<br>outcomes.<br>Literature search:<br>2011 | Country of origin:<br>USA, Hongkong,<br>England, Finland, Italy<br>and Israel.<br>Setting:<br>Community aged care.<br>Interventions:<br>Needs identification<br>and assessment, care<br>plan development,<br>home visits, phone<br>contacts, face-to-face<br>contacts, face-to-face<br>contacts, periodic<br>reassessment & care<br>system coordination.<br>Outcomes:<br>Client outcomes<br>included mortality/<br>survival days, physical<br>or cognitive<br>functioning, medical<br>conditions, psychiatric<br>symptoms and<br>associated behavioral<br>problems, unmet<br>service needs,<br>psychological health or<br>well-being (related to<br>self-perceived health<br>status, such as<br>depression, stress,<br>anxiety, life satisfaction<br>etc.), and satisfaction | noted by this review are<br>less conclusive.<br>Future studies should<br>investigate what specific<br>components of case<br>management are crucial<br>in achieving improved<br>outcomes for the client<br>and their carer. In<br>addition, undertaking<br>evaluation studies by<br>employing rigorous study<br>designs are warranted.<br>This review provided<br>largely consistent<br>evidence that case<br>management<br>interventions improve<br>older clients'<br>psychological health<br>or well-being and also<br>deliver significant<br>improvements in unmet<br>service needs. Clear<br>effects of the<br>interventions on other<br>client outcomes and carer<br>outcomes are not so<br>evident, with mixed<br>evidence for the other<br>outcome variables<br>reviewed here. We found<br>that studies reported<br>inconsistent results<br>regarding client physical |

| Author<br>Year<br>Country<br>Reference             | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|--|---|--|--|
| Chuanmei You et<br>al<br>2013<br>Australia<br>[14] | Moderate<br>SBU Domain(s):<br>Integrerade insatser,<br>samverkan och<br>informationsöverförin<br>g. (Integrated<br>measures or<br>activities)<br>Quantitative | To evaluate the effects of<br>case management in<br>community<br>aged care (CMCAC)<br>interventions on service<br>use and costs. | Inclusion criteria:<br>We included RCTs and<br>observational comparative<br>studies that examined the<br>effects of CMCAC on<br>service use and/or costs.<br>Only studies in English<br>language and also<br>published in refereed<br>journals or publications of<br>equivalent standard were<br>included.<br>Literature search:<br>July 2011 | with care.<br>Carer outcomes<br>included stress or<br>burden, psychological<br>health or well-being,<br>satisfaction with<br>care, and social<br>consequences (such as<br>social support, and<br>relationships with care<br>clients—getting on well<br>or not).<br><b>Follow-up time</b><br>Between 6-36 months,<br>but not specified for all<br>studies.<br><b>Number of studies</b> :<br>21<br><b>Study design:</b><br>RCT (n=16) and<br>observational studies<br>(n=5)<br><b>Population:</b><br>Participants in the<br>studies reviewed were<br>community dwelling<br>frail elderly (people<br>aged 65 and older who<br>suffer from age-related<br>health problems such<br>as functional disabilities<br>and cognitive problems | or cognitive functioning<br>and carer stress or<br>burden.<br>There was also limited<br>evidence supporting that<br>case management in<br>community aged care<br>interventions improve<br>client length of survival,<br>health conditions,<br>behavioral problems or<br>satisfaction with care, as<br>well as carer satisfaction<br>with care, psychological<br>health or well-being and<br>social consequences.<br>In the future, more<br>research related to the<br>use of case management<br>services, informal care,<br>and various other social<br>and health care relevant<br>to the frail elderly is<br>warranted. Cost studies<br>with a societal<br>perspective are<br>recommended, and<br>where possible full<br>economic evaluation can<br>be explored to uncover<br>robust economic impacts<br>of CMCAC interventions.<br>Based on available<br>studies, we found that<br>there is <b>Moderate</b> |

| Country Q | tudy quality<br>BU Domain(s)<br>uantitative/<br>ualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|-----------|--|--|---|--|--|
|           |  |  |   | Number of<br>participants:<br>60 – 8 095.<br>Setting:<br>Community aged care.<br>Country of origin:<br>Fourteen studies were<br>based in the United<br>States, 2 in Finland, and<br>1, respectively, in<br>Canada, China<br>Hongkong, England,   | evidence supporting the<br>conclusion that CMCAC<br>interventions can<br>significantly improve<br>clients' use of some<br>community care services<br>(greater likelihood, higher<br>intensity, higher<br>frequency, and earlier<br>use). We also found<br>moderate evidence in<br>regard to improving the<br>use of case management<br>services, delaying nursing  |
|           |  |  |   | Interventions:<br>Independent case<br>management<br>interventions<br>specifically applied in<br>the community aged<br>care setting. Studies<br>involving more than<br>one or multifaceted<br>identifiable core case<br>management functions,<br>such as assessment,<br>care planning, care<br>coordination,<br>monitoring, and so on<br>were of particular<br>interest. CMCAC<br>Interventions were<br>rnainly provided by | home placement,<br>reducing nursing home<br>admission, and<br>shortening the length of<br>nursing home stay due to<br>CMCAC interventions. In<br>contrast, we did not find<br>evidence showing that<br>CMCAC interventions can<br>significantly influence<br>clients' use of hospital<br>care and other medical<br>services. We did not find<br>evidence indicating that<br>CMCAC interventions<br>could significantly change<br>costs either. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   | Case man-agers'  |  |
|  |  |  |   | caseload size varied   |  |
|  |  |  |   | from 15 to more than   |  |
|  |  |  |   | 100. The intervention  |  |
|  |  |  |   | aims were generally  |  |
|  |  |  |   | divided into client goals  |  |
|  |  |  |   | (such as improving   |  |
|  |  |  |   | quality of life),  |  |
|  |  |  |   | organizational goals   |  |
|  |  |  |   | (such as controlling cost), and system goals                           |  |
|  |  |  |   | (such as improving   |  |
|  |  |  |   | system integration).   |  |
|  |  |  |   | system integration.  |  |
|  |  |  |   | Outcomes:  |  |
|  |  |  |   | 1. Nursing home care   |  |
|  |  |  |   | use: nursing home  |  |
|  |  |  |   | admission, delay of  |  |
|  |  |  |   | nursing home   |  |
|  |  |  |   | placement, and length  |  |
|  |  |  |   | of nursing home stay;  |  |
|  |  |  |   | 2. Formal community  |  |
|  |  |  |   | care use: the timing,  |  |
|  |  |  |   | likelihood, frequency,   |  |
|  |  |  |   | and intensity of using   |  |
|  |  |  |   | case management  |  |
|  |  |  |   | services (also known as  |  |
|  |  |  |   | indirect community   |  |
|  |  |  |   | care that includes   |  |
|  |  |  |   | assessment, care   |  |
|  |  |  |   | planning, etc.), and   |  |
|  |  |  |   | various direct   |  |
|  |  |  |   | community care   |  |
|  |  |  |   | services, such as home   |  |
|  |  |  |   | nursing and personal   |  |
|  |  |  |   | care.  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|---|--|---|--|
|  |   |   |  | 3. Informal care use:<br>the timing, likelihood,<br>frequency, and<br>intensity of receiving<br>assistance with<br>activities of daily living<br>(ADL) and instrumental<br>activities of daily living<br>(IADL) from carers, such<br>as family members,<br>friends, and neighbors<br>4. Health care use:<br>hospital admission and<br>length of hospital stay,<br>and the timing,<br>likelihood, frequency,<br>and intensity of using<br>other medical services<br>such as ED visits and<br>physician services<br>5. Costs: service costs,<br>start-up costs of<br>CMCAC programs,<br>intervention costs, and<br>other related costs.<br><b>Follow-up time</b><br>Unclear |  |
| Clegg et al<br>2015<br>UK<br>[15]      | Moderate<br>SBU Domain(s):<br>Behovsbedömning<br>och uppföljning.<br>(Needs assessment<br>and follow-up: older<br>persons). | To investigate the<br>diagnostic test accuracy<br>(DTA) of simple<br>instruments for<br>identifying frailty in<br>community-dwelling<br>older people. | Inclusion criteria:<br>Prospective studies<br>assessing the DTA of one or<br>more simple instruments<br>for identifying frailty in<br>community-dwelling older<br>people (index tests) against<br>a reference standard were<br>considered for inclusion. | Number of studies:<br>3<br>Study design:<br>Prospective studies.<br>Number of<br>participants:  | Slow gait speed, PRISMA<br>7 and TUGT all have high<br>sensitivity but limited<br>specificity as simple<br>instruments for<br>identifying frailty. This<br>means that there are<br>many false-positive test<br>results which limit their |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|---|--|
|  | Quantitative   |  | Literature search:<br>January 1990 to October<br>2013                       | <ul> <li>3261 (summarised in<br/>Supplementary data).</li> <li>Characteristics of<br/>participants:<br/>Community-dwelling<br/>older people, defined<br/>for this review as a<br/>mean age in the study<br/>population of 65<br/>years and over. The<br/>reported mean<br/>age in study<br/>participants was 74.7<br/>years (range: 70.0–78.6<br/>years), 47.5% were<br/>male.</li> <li>Setting:<br/>Community-dwelling<br/>older people</li> <li>Country of origin:<br/>UK</li> <li>Interventions:<br/>7 simple instruments<br/>for identifying frailty:<br/>Gait speed<br/>PRISMA 7<br/>Timed-up-and-go test<br/>Self-rated health<br/>General Practitioner<br/>assessment<br/>Polypharmacy<br/>Groningen Frailty<br/>Indicator.</li> </ul> | DTA. Use of these tools in<br>older populations with<br>higher baseline<br>prevalence of frailty is<br>likely to improve test<br>accuracy.<br>Use of a simple<br>instrument with a high<br>sensitivity followed by<br>either a reference<br>standard test or second<br>simple instrument in a<br>two-step approach to<br>diagnosis would<br>potentially improve<br>accuracy but requires<br>further investigation. |

| Author         | Study quality        | Objectives of the        | Inclusion criteria for the                              | Characteristics of the  | The conclusions of the                           |
|----------------|----------------------|--------------------------|---|---|--|
| Year           | SBU Domain(s)        | systematic review        | systematic review                                       | studies included in the   | systematic review's                              |
| Country        | Quantitative/        |                          | Literature search (date)                                | systematic review   | author(s)  |
| Reference      | qualitative          |                          |   |   |  |
|                |                      |                          |   | Outcomes:<br>Identifying frailty (loss<br>of resources in several<br>domains of functioning<br>(physical, psychological,<br>social), increasing the<br>risk of adverse<br>outcomes.<br>Follow-up time:<br>Unclear |  |
|                |                      |                          |   |   |  |
| Cochrane et al | High                 | To assess the effects of | Inclusion criteria:                                     | Number of studies:  | There is considerable                            |
| 2016           |                      | time-limited home-care   | Randomised controlled                                   | 2   | uncertainty regarding the                        |
| Ireland        | SBU Domain(s):       | reablement services (up  | trials (RCTs), cluster                                  | Charles de clara  | effects of reablement as                         |
| [16]           | Upprätthållande och  | to 12 weeks) for         | randomised or quasi-                                    | Study design:   | the evidence was of very                         |
|                | stimulerande         | maintaining and          | randomised trials of time-                              | RCT   | low quality according to                         |
|                | arbetssätt och       | improving the functional | limited reablement services                             | Demulation  | our GRADE ratings.                               |
|                | metoder – ordinärt   | independence of older    | for older adults (aged 65                               | Population:   | Therefore, the effectiveness of                  |
|                | boende. (Maintaining | adults (aged 65 years or | years or more) delivered in                             | Older persons   |  |
|                | and stimulating work | more) when compared to   | their home; and   | Number of   | reablement services                              |
|                | methods - community  | usual home-care or wait- | incorporated a usual home-<br>care or wait-list control |   | cannot be supported or refuted until more robust |
|                | settings)            | list control group.      |   | participants:<br>811  | evidence becomes                                 |
|                | Quantitative         |                          | group.  | 811   | available. There is an                           |
|                | Quantitative         |                          | Reablement interventions                                | Country of origin:  | urgent need for high                             |
|                |                      |                          | compared with groups                                    | Australia and Norway  | quality trials across                            |
|                |                      |                          |   | Australia allu Norway   | different health and                             |
|                |                      |                          | receiving usual home-care services or with a wait list  | Satting   |  |
|                |                      |                          | control group. Studies were                             | Setting:<br>Community   | social care systems due to the increasingly high |
|                |                      |                          | required to meet the                                    | Community   | profile of reablement                            |
|                |                      |                          | following criteria:                                     | Interventions:  | services in policy and                           |
|                |                      |                          | participants must have                                  | The interventions were  | practice in several                              |
|                |                      |                          | had an identified need for                              | similar in the two  | countries.                                       |
|                |                      |                          | formal care and support or                              | studies and in both   | countries.                                       |
|                |                      |                          | be at risk of functional                                | cases there was an  | Reablement may slightly                          |
|                |                      |                          | decline   | emphasis on   | improve functional status                        |
|                | 1                    | 1                        | uccline   |   | improve functional status                        |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|---|--|
|  |  |  | <ul> <li>the intervention must<br/>have been time-limited (up<br/>to 12<br/>weeks) and intensive (e.g.<br/>multiple home visits)</li> <li>the intervention must<br/>have been delivered in the<br/>older<br/>person's own home, and<br/>provided by an<br/>interdisciplinary team</li> <li>the intervention must<br/>have been focused on<br/>maximising<br/>independence; and</li> <li>the intervention must<br/>have been person-centred<br/>and goal directed</li> <li>Literature search:<br/>June 2015</li> </ul> | encouraging<br>participants to achieve<br>individualized goals and<br>to perform daily<br>activities themselves<br>rather than letting<br>others do it for them. In<br>addition, the<br>intervention included<br>exercises to improve<br>mobility, adaptations to<br>tasks and equipment,<br>and strategies to<br>promote social<br>connectedness. Both<br>interventions involved<br>interdisciplinary teams<br>including occupational<br>therapists and<br>physiotherapists, who<br>conducted the initial<br>assessments and<br>developed the<br>rehabilitation plan<br>tailored to the aims and<br>needs of each<br>participant.<br><b>Outcomes:</b><br>- Functional status<br>including measures of<br>the skills and<br>abilities to complete<br>ADL.<br>• Adverse events<br>including mortality, | but may have little or no<br>effect on QoL of older<br>adults, or mortality rates<br>at nine to 12 months.<br>Other outcomes were<br>measured by one study),<br>and an associated costs<br>paper. The very low-<br>quality evidence<br>suggested there is<br>uncertainty regarding the<br>effects of reablement on<br>living arrangements,<br>unplanned hospital<br>admissions or visits to an<br>emergency department<br>at both the 12-month<br>follow-up and for the<br>overall 24-month period,<br>or for mortality at 24<br>months. There was very<br>low-quality evidence<br>from one study to<br>indicate that the<br>reablement intervention<br>may reduce need for<br>either ongoing home-<br>care, or a new episode of<br>personal care at 12-<br>month follow-up, and<br>may slightly reduce the<br>likelihood of being<br>assessed as needing a<br>higher level of care (i.e.<br>residential care or<br>equivalent home care) at |
|  |  |  |   | including mortality,<br>hospital (re)admission.   | equivalent home care) at 24 months. Neither study  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|--|--|--|--|
|  |   |  |  | <ul> <li>Quality of life (QoL).</li> <li>User satisfaction.</li> <li>Service outcomes,<br/>including level of<br/>ongoing home-care<br/>service (e.g. care hours)<br/>or use of external<br/>health services (e.g.<br/>visits to emergency<br/>department).</li> <li>Living arrangements<br/>(i.e. in own home or<br/>other setting).</li> <li>Cost-effectiveness</li> <li>Follow-up time<br/>3-12 months</li> </ul> | measured user<br>satisfaction, which is<br>possibly an important<br>factor in ensuring uptake<br>and adherence related to<br>such interventions  |
| Coker et al<br>2014<br>Canada<br>[17]  | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder - särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative | To examine the effect of<br>intervention programs<br>designed to enhance the<br>ability of nurses and<br>nursing assistants to<br>improve oral hygiene<br>outcomes in frail older<br>adults residing in long-<br>term care or having an<br>extended hospital stay. | Inclusion criteria:<br>Primary quantitative<br>research studies were<br>eligible if:<br>(a) they evaluated an<br>intervention aimed at<br>nurses or nursing<br>assistants (under a variety<br>of job titles) who provide<br>oral hygiene care to<br>primarily older adults with<br>functional or cognitive<br>disabilities in an<br>institutional care setting;<br>(b)<br>the outcome was directly<br>related to patients' oral<br>health status (e.g., a change<br>in one or more oral health<br>measures, or a change in | Number of studies:         8         Study design:         RCT (n=1), controlled         clinical trial (n=7)         Population:         Older people in long         term care         Number of         participants:         113-343         Country of origin:         United Kingdom,         Canada, Switzerland,         Belgium, Netherlands.   | Although a link has been<br>made between oral<br>hygiene and systemic<br>disease, poor oral<br>hygiene occurs frequently<br>among older adults in<br>institutions who are<br>dependent on<br>others for care. A<br>literature search for<br>studies of interventions<br>to improve oral hygiene<br>delivered by nurses or<br>nursing assistants yielded<br>eight <b>Moderate</b> to<br>strongly rated studies<br>reporting in-service<br>educational sessions,<br>either alone or<br>augmented in some way |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|--|---|--|
| Reference                              | qualitative  |  | risk for oral hygiene related<br>sequelae); and<br>(c) they were published in<br>English. Finally, eligible<br>studies were assessed for<br>their inclusion of a<br>comparison group.<br>Literature search:<br>July 2013 | Setting:<br>Long term care<br>Interventions:<br>(a) single in-service<br>education sessions; (b)<br>single in-service<br>education sessions<br>supplemented by a<br>"train the-trainer"<br>approach; and (c)<br>education sessions<br>supplemented with<br>ongoing active<br>involvement of a dental<br>hygienist.<br>Outcomes:<br>Dental and denture<br>hygiene, dental debris,<br>denture debris, denture<br>plaque, dental plaque,<br>root caries, tooth<br>mobility, fillings, oral<br>flora, condition of oral<br>mucosa, gingival health,<br>glossitis, denture<br>stomatitis, angular<br>cheilitis, an inflamed<br>lesion at the corner of<br>the mouth.<br>Professional<br>knowledge. | (i.e., single in-service<br>education sessions, single<br>in-service education<br>sessions supplemented<br>by a "train-the-trainer"<br>approach, and<br>educational sessions<br>supplemented with<br>ongoing active<br>involvement of a dental<br>hygienist). None of the<br>approaches emerged as<br>being more effective than<br>the others but this was<br>due in great part to poor<br>intervention integrity in<br>many of the studies. A<br>well designed and<br>executed educational<br>program cannot have its<br>effect measured if the<br>caregivers for whom it is<br>intended do not attend<br>the session or do not<br>subsequently care for the<br>patients whose oral<br>hygiene status is being<br>measured. Further study<br>of ways to enhance<br>nurses' ability to deliver<br>oral hygiene care to<br>improve the oral health<br>of patients is crucial. The |
|  |  |  |  | Follow-up time:<br>1-18 months  | newly exposed<br>significance of oral<br>hygiene and the role<br>nurses can play in  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|---|---|---|
| -                                      |  | Which integrated         interventions combining         both psychiatric care and         nursing home care in         Double Care Demanding         (DCD) nursing home         residents are described in         the research literature?         Which effects of these         integrated models         combining both         psychiatric care and         nursing home care in DCD         nursing home residents         are reported in the         literature? | Literature search (date) Inclusion criteria: 1) a study population of nursing borne patients suffering from either somatic illness or dementia combined with psychiatric disorders or severe behavioral problems (2) studies using an inpatient intervention combining both psychiatric care and nursing home care (3) studies yielding quantitative data of a comprehensive intervention combining both psychiatric care and nursing borne care. Literature search: January 2008 | Number of studies:         8         Study design:         RCT (n=4), retrospective         cohort (n=1),         prospective case series         (n=1), prospective         cohort (n=1),         retrospective cohort         (n=1),         Population:         Nursing home residents         70.6 ± 6.1 to 82.9 ± 8.9         years of age.         Number of         participants:         15-64         Country of origin:         USA, Canada, Australia,         UK         Setting: | author(s)optimizing the oral healthof older adults promisesto be an important areafor practice and research.Important elements of asuccessful treatmentstrategy for DCD nursinghome patients include athorough assessment ofpsychiatric, medical andenvironmental causes aswell as programs forteaching behavioralmanagement skills tonurses. DCD nursinghome patients werefound to benefit fromshort-term mentalhospital admission.This review underlinesthe need for morerigorously designedstudies to assess theeffects of acomprehensive,integratedmultidisciplinaryapproach towards DCDnursing home residents. |
|  |  |   |   | Nursing home<br>Interventions:<br>teams involved<br>comprised at least four<br>disciplines up to a<br>maximum of six  |   |

| AuthorStudy qualityYearSBU Domain(s)CountryQuantitative/Referencequalitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|---|--|--|
|  |  |   | disciplines. Certified<br>psychiatric nurses were<br>part of the multi-<br>disciplinary team in all<br>of the eight selected<br>studies. In six of the<br>studies a psychiatrist<br>and a psychologist<br>(sometimes specializing<br>in geriatrics) were part<br>of the multidisciplinary<br>team. A physician was<br>part of the multi-<br>disciplinary team in five<br>studies. The physician<br>involved could be a<br>geriatrician, an internist<br>or a general physician.<br>The multi-disciplinary<br>interventions included<br>a comprehensive<br>assessment of the<br>psychiatric disorders or<br>severe behavioral<br>disorders in the DCD<br>nursing home patients.<br>Outcomes:<br>Levels of general<br>psychiatric symptoms<br>(especially depression<br>and agitation or<br>aggression), global<br>functioning (cognitive<br>and functional status). |  |

| Author<br>Year<br>Country<br>Reference     | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|---|---|---|
|  |  |   |   | Follow-up time:   |   |
| Coll-Planas et al<br>2017<br>Spain<br>[19] | Moderate<br>SBU domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – både<br>ordinärt och särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods – both<br>community and<br>institutional settings)<br>Quantitative | To assess the currently<br>unclear health impact of<br>social capital<br>interventions targeting<br>older adults. | Inclusion criteria:<br>Publication period:<br>Between January 1980 and<br>July 2015Population:<br>Participants over<br>60 years old.Study design:<br>Studies had to assess an<br>intervention that promoted<br>social capital or one of its<br>components. In<br>multicomponent trials, the<br>inclusion was restricted to<br>those studies in which<br>social capital was the focus<br>of the intervention.Comparison/control:<br>The comparison group<br>should not promote social<br>capital.Other criteria:<br>No language restrictions<br>were applied.Literature search:<br>July 2015 | 7 days to 6 months<br>Number of studies:<br>36 studies in 73 papers.<br>Study design:<br>RCT (n=36)<br>Number of<br>participants:<br>Ranging between less<br>than 100 to more than<br>300. Only listed in this<br>way.<br>Characteristics of<br>participants:<br>Not stated.<br>Country of origin:<br>South Europe (n=1),<br>Northern Europe (n=4),<br>United Kingdom (n=4),<br>Central Europe (n=5),<br>North America (n=16),<br>South America (n=16),<br>South America (n=1),<br>Asia (n=3), Oceania<br>(n=2)<br>Setting:<br>Community, nursing<br>home, hospital, hospital<br>and community<br>Interventions:<br>Group interventions<br>(n=15) | Our review highlights the<br>lack of evidence and the<br>diversity among trials,<br>while supporting the<br>potential of social capital<br>interventions to reach<br>comprehensive health<br>effects in older adults. |

| Author          | Study quality    | Objectives of the           | Inclusion criteria for the    | Characteristics of the          | The conclusions of the    |
|-----------------|------------------|-----------------------------|-------------------------------|---------------------------------|---------------------------|
| Year            | SBU Domain(s)    | systematic review           | systematic review             | studies included in the         | systematic review's       |
| Country         | Quantitative/    |                             | Literature search (date)      | systematic review               | author(s)                 |
| Reference       | qualitative      |                             |                               |                                 |                           |
|                 |                  |                             |                               | Individual interventions        |                           |
|                 |                  |                             |                               | (n=14)                          |                           |
|                 |                  |                             |                               | Combined interventions          |                           |
|                 |                  |                             |                               | (n=3)                           |                           |
|                 |                  |                             |                               | Setting approach (n=4)          |                           |
|                 |                  |                             |                               | Outcomes:                       |                           |
|                 |                  |                             |                               | Intermediate social             |                           |
|                 |                  |                             |                               | outcomes (increased             |                           |
|                 |                  |                             |                               | social support,                 |                           |
|                 |                  |                             |                               | increased social                |                           |
|                 |                  |                             |                               | participation, increased        |                           |
|                 |                  |                             |                               | social network,                 |                           |
|                 |                  |                             |                               | increased trust and             |                           |
|                 |                  |                             |                               | social cohesion).               |                           |
|                 |                  |                             |                               | Intermediate health             |                           |
|                 |                  |                             |                               | outcomes (physiological         |                           |
|                 |                  |                             |                               | changes, psychological          |                           |
|                 |                  |                             |                               | changes, behavioral             |                           |
|                 |                  |                             |                               | changes, instrumental           |                           |
|                 |                  |                             |                               | changes).<br>Longer term health |                           |
|                 |                  |                             |                               | outcomes (increased             |                           |
|                 |                  |                             |                               | general health,                 |                           |
|                 |                  |                             |                               | decreased morbidity,            |                           |
|                 |                  |                             |                               | decreased functional            |                           |
|                 |                  |                             |                               | decline and disability,         |                           |
|                 |                  |                             |                               | decreased mortality).           |                           |
|                 |                  |                             |                               | Follow-up time:                 |                           |
|                 |                  |                             |                               | 1.5 months to more              |                           |
|                 |                  |                             |                               | than 1 year                     |                           |
| Comondore et al | High             | To compare quality of       | Inclusion criteria:           | Number of studies:              | Most studies suggest a    |
| 2009            |                  | care in for-profit and not- | Patients: residing in nursing | 82 (spanning 1965 to            | trend towards higher      |
| Canada          | SBU Domain(s):   | for-profit nursing homes.   | homes in any jurisdiction;    | 2003)                           | quality care in not-for-  |
| [20]            | Särskilda        |                             | Intervention: for-profit      |                                 | profit facilities than in |
|                 | boendeformer som |                             | status of the institutions    |                                 | for-profit homes, but a   |

| Author    | Study quality         | Objectives of the | Inclusion criteria for the | Characteristics of the    | The conclusions of the     |
|-----------|-----------------------|-------------------|----------------------------|---------------------------|----------------------------|
| Year      | SBU Domain(s)         | systematic review | systematic review          | studies included in the   | systematic review's        |
| Country   | Quantitative/         |                   | Literature search (date)   | systematic review         | author(s)                  |
| Reference | qualitative           |                   |                            |                           |                            |
|           | insats (Institutional |                   | Comparator: not-for-profit | Study design:             | large proportion of        |
|           | care as an            |                   | status.                    | Comparative studies       | studies show no            |
|           | intervention)         |                   |                            |                           | significant trend          |
|           |                       |                   | Literature search:         | Population:               |                            |
|           | Quantitative          |                   | April 2006                 | Persons living in nursing | Although this review has   |
|           |                       |                   |                            | homes, i.e. need 24       | fully assessed the data    |
|           |                       |                   |                            | hours nursing care        | available comparing for-   |
|           |                       |                   |                            |                           | profit and not-for-profit  |
|           |                       |                   |                            | Number of                 | nursing home care,         |
|           |                       |                   |                            | participants:             | additional work is needed  |
|           |                       |                   |                            | Not stated. (Number of    | to compare the costs       |
|           |                       |                   |                            | public, for profit and    | between these types of     |
|           |                       |                   |                            | not for profit units are  | facilities and to evaluate |
|           |                       |                   |                            | presented)                | the consistency of these   |
|           |                       |                   |                            |                           | findings outside of the    |
|           |                       |                   |                            | Country of origin:        | USA and Canada.            |
|           |                       |                   |                            | USA and Canada            | Although we have           |
|           |                       |                   |                            |                           | extensively evaluated the  |
|           |                       |                   |                            | Setting:                  | literature comparing       |
|           |                       |                   |                            | Nursing home/long         | quality of care in for-    |
|           |                       |                   |                            | term care                 | profit, charitable         |
|           |                       |                   |                            |                           | organization owned, and    |
|           |                       |                   |                            | Interventions:            | government owned           |
|           |                       |                   |                            | See setting               | nursing homes, the         |
|           |                       |                   |                            |                           | available studies did not  |
|           |                       |                   |                            | Outcomes:                 | allow comparison of the    |
|           |                       |                   |                            | Measures of quality of    | possible impact of factors |
|           |                       |                   |                            | care in for-profit and    | such as subcategory of     |
|           |                       |                   |                            | not-for-profit nursing    | for-profit ownership (for  |
|           |                       |                   |                            | homes.                    | example, chain v non-      |
|           |                       |                   |                            | The most frequently       | chain, investor v small    |
|           |                       |                   |                            | used quality measures     | business ownership,        |
|           |                       |                   |                            | were as follows:          | municipality v federal     |
|           |                       |                   |                            | Number of staffs per      | government ownership).     |
|           |                       |                   |                            | resident or level of      | Nursing home               |
|           |                       |                   |                            | training of staff         | management companies       |
|           |                       |                   |                            | Physical restraints       | further complicate the     |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|--|--|--|
|  |  |  |  | Pressure ulcers<br>(regulatory<br>(government survey)<br>deficiencies.<br>Follow-up time:<br>Not applicable  | relation between<br>ownership and quality of<br>care. These are all<br>important areas that<br>warrant further research.   |
| Cooper et al<br>2012<br>UK<br>[21]     | ModerateSBU Domain(s):Stimulerande ochupprätthållandearbetssätt, bådeordinärt och särskiltboende. (Maintainingand stimulating workmethods – bothcommunity andinstitutional settings)Quantitative | To review the<br>effectiveness of non-<br>pharmacological<br>interventions to focus on<br>quality of life or<br>well-being of people with<br>dementia. | <ul> <li>Inclusion criteria:<br/>Research in people with<br/>dementia evaluating non-<br/>pharmacological<br/>interventions in<br/>randomized controlled<br/>trials (RCTs), which<br/>included quality of life or<br/>well-being as a quantitative<br/>outcome.</li> <li>We restricted our search to<br/>studies published in English<br/>and excluded single case<br/>reports, dissertations,<br/>meeting abstracts, and<br/>studies that only used<br/>quality of life measure<br/>subscales, if we judged that<br/>these did not measure<br/>overall quality of life.</li> <li>Literature search:<br/>January 2011</li> </ul> | Number of studies:<br>20<br>Population:<br>Persons with dementia.<br>Number of<br>participants:<br>24-289<br>Study design:<br>RCT<br>Country of origin:<br>Australia, USA, Peru,<br>UK, Netherlands,<br>Hongkong.<br>Setting:<br>Living at home or in<br>institutional care.<br>Interventions:<br>Family carer<br>interventions.<br>Activity programs for<br>people with dementia<br>and family carer coping | There is a lack of<br>definitive evidence for<br>any intervention that<br>increases quality of life or<br>well-being of people with<br>dementia. Nonetheless,<br>lack of evidence of<br>efficacy is not evidence of<br>lack of efficacy. Coping<br>strategy-based family<br>carer interventions and<br>tailored activities for the<br>person with dementia<br>and their family carers,<br>and a system of care<br>management, may<br>improve quality of life of<br>people with dementia<br>living at home. In contrast<br>the only high-quality<br>evidence we found that<br>improved quality of life<br>among care home<br>residents with dementia<br>was a single study of<br>group CST. Further<br>research is needed, to<br>develop and test<br>interventions to increase<br>quality of life among |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|---|---|
|  |  |  |   | strategy combined<br>interventions<br>Cognitive stimulation<br>therapy in group<br>Care management  | people with dementia<br>and to test their cost<br>effectiveness.  |
|  |  |  |   | Discussion groups<br>Individual cognitive   |   |
|  |  |  |   | rehabilitation<br>Exercise  |   |
|  |  |  |   | Staff training and<br>individualized resident<br>care plans   |   |
|  |  |  |   | Other interventions   |   |
|  |  |  |   | <b>Outcomes</b> :<br>Quality of life  |   |
|  |  |  |   | Follow-up time:<br>Post intervention up to<br>18 months   |   |
| Cowdell et al<br>2015<br>UK<br>[22]    | Moderate<br>SBU Domain(s):<br>Stimulerande och<br>upprätthållande<br>arbetssätt och<br>metoder – ordinärt<br>boende. | To locate, summarise and<br>critically analyse current<br>knowledge about skin<br>hygiene practices for<br>older people. | Inclusion criteria:<br>Studies included were<br>alternative bathing protocol<br>or bathing product<br>interventions (cleansing,<br>hygiene, older people, skin,<br>systematic review). Primary<br>focus on general skin<br>cleansing. | Number of studies:<br>7<br>Study design:<br>RCT n=2<br>Quasi-experimental n=5<br>6 used purely<br>quantitative research<br>methods, and one<br>mixed methods. | There is a significant lack<br>of high-quality research<br>studies to provide a<br>framework for guiding<br>evidence-based skin<br>cleansing practice.<br>Current guidance is based<br>on clinical expertise<br>rather than on robust<br>trial evidence. A research |

| Author    | Study quality   | Objectives of the | Inclusion criteria for the   | Characteristics of the  | The conclusions of the  |
|-----------|---|-------------------|--|---|---|
| Year      | SBU Domain(s)   | systematic review | systematic review  | studies included in the   | systematic review's   |
| Country   | Quantitative/   |                   | Literature search (date)   | systematic review   | author(s)   |
| •         |   |                   |  | -,  |   |
| Reference | qualitative         Stimulerande och         upprätthållande         arbetssätt och         metoder – särskilt         boende (Maintaining         and stimulating work         methods – both         community and         institutional settings)         Quantitative |                   | Original quantitative or<br>qualitative research of any<br>design.<br>Literature search:<br>To the last 5 years to<br>ensure currency; however,<br>due to the dearth of<br>papers, the date range was<br>expanded to 1990 onwards. | Number of<br>participants:<br>N=334<br>Characteristics of<br>participants:<br>Aged over 65 years.<br>Gender reported in two<br>studies, n=63)<br>Setting:<br>Residential care homes<br>for older people n=5.<br>This setting with the<br>addition of some<br>community-dwelling<br>participants n=1.<br>A combination of<br>residents in long-term<br>care hospital wards and<br>community dwellers<br>n=1.<br>Country of origin:<br>US n=5<br>Canada n=1<br>Sweden n=1<br>Interventions:<br>Skin cleansing<br>interventions using<br>bathing protocols and/<br>or products.<br>-The Skin Condition<br>Data Form n=3. | agenda has been<br>developed which may<br>become the basis for<br>developing evidence-<br>based, best<br>practice guidelines.<br>Future research must<br>move beyond descriptive<br>studies to include more<br>robust methods of<br>investigation. The lack of<br>intervention studies limits<br>the practice-guiding<br>implications that can be<br>gained from the current<br>body of research. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the systematic review's author(s) |
|--|--|-------------------------------------|---|--|--|
|  |  |                                     |   | <ul> <li>-Subjective measures<br/>including assessment of<br/>skin tears evaluation of<br/>erythema, rashes<br/>and open wounds n=3.<br/>This also recorded the<br/>number of preparations<br/>and medications given<br/>for skin conditions.</li> <li>In addition to focusing<br/>on skin condition, there<br/>were other identified<br/>foci in the literature. 1<br/>study investigated<br/>patient and nurse<br/>perceptions of the 'Bag<br/>Bath' using a Residents<br/>Satisfaction<br/>Questionnaire<br/>and a Nursing Staff<br/>Satisfaction<br/>Questionnaire, and 1<br/>study interviewed<br/>participants.</li> </ul> |  |
|  |  |                                     |   | Outcomes:<br>Measures of skin health<br>(for example, dryness,<br>erythema, cracking and<br>open wounds).<br>Qualitative or<br>quantitative feedback<br>on the experience of<br>the intervention from<br>nurses or patients.   |  |

| Author       | Study quality         | Objectives of the           | Inclusion criteria for the   | Characteristics of the  | The conclusions of the     |
|--------------|-----------------------|-----------------------------|------------------------------|-------------------------|----------------------------|
| Year         | SBU Domain(s)         | systematic review           | systematic review            | studies included in the | systematic review's        |
| Country      | Quantitative/         |                             | Literature search (date)     | systematic review       | author(s)                  |
| Reference    | qualitative           |                             |                              |                         |                            |
|              |                       |                             |                              | Follow-up time          |                            |
|              |                       |                             |                              | Not stated              |                            |
| Dawson et al | Moderate              | To synthesize research      | Inclusion criteria:          | Number of studies:      | In many areas, policy and  |
| 2015         |                       | evidence about the          | Studies that examines        | 131                     | practice developments      |
| UK           | SBU Domain(s)         | effectiveness of services   | research evidence about      |                         | are proceeding on a        |
| [23]         | Stimulerande och      | intended to support and     | the effectiveness of         | Study design:           | limited evidence base.     |
|              | upprätthållande       | sustain people with         | services intended to         | Reviews and primary     | Key issues affecting       |
|              | arbetssätt och        | dementia to live at home,   | support and sustain          | studies                 | substantial numbers of     |
|              | metoder –ordinärt     | including supporting        | community-dwelling people    |                         | existing studies include:  |
|              | boende. Maintaining   | carers.                     | with dementia and their      | Number of               | poorly designed and        |
|              | and stimulating work  | (The review was             | carers. key outcomes:        | participants:           | overly narrowly focused    |
|              | methods - community   | commissioned to support     | Prevention of unnecessary    | Not stated              | studies; variability and   |
|              | settings)             | an inspection regime and    | hospital and mission,        |                         | uncertainty in outcome     |
|              |                       | identifies the current      | prevention of delayed        | Characteristics of      | measurement; lack of       |
|              | Qualitative synthesis | state of scientific         | discharge from hospital,     | participants:           | focus on the perspectives  |
|              |                       | knowledge regarding         | delivery of community        | Age unclear for         | of people with dementia    |
|              |                       | appropriate and effective   | nursing, management of       | specifics see included  | and supporters; and        |
|              |                       | services in relation to a   | medication at home,          | studies                 | failure to understanding   |
|              |                       | set of key outcomes         | reducing lengths of hospital |                         | the complexities of living |
|              |                       | derived from Scottish       | stay, effective discharge    | Setting:                | with dementia, and of the  |
|              |                       | policy, inspection practice | from hospital, consistency   | Ordinary housing        | kinds of multifactorial    |
|              |                       | and standards.)             | and quality of home care     |                         | interventions needed to    |
|              |                       |                             | delivery (including staff    | Country of origin:      | provide holistic and       |
|              |                       |                             | training, staff support),    | Majority of studies     | effective support.         |
|              |                       |                             | carer support and self       | from UK, US and from    | Weaknesses in the          |
|              |                       |                             | directed support.            | an International        | evidence base present      |
|              |                       |                             |                              | perspective. Other      | challenges both to         |
|              |                       |                             | Literature search:           | studies from Ireland,   | practitioners looking for  |
|              |                       |                             | November 2012                | Japan, Australia,       | guidance on how best to    |
|              |                       |                             |                              | Taiwan, Canada, India,  | design and deliver         |
|              |                       |                             |                              | Sweden and Germany      | evidence-based services    |
|              |                       |                             |                              |                         | to support people living   |
|              |                       |                             |                              | Interventions:          | with dementia in the       |
|              |                       |                             |                              | Services intended to    | community and their        |
|              |                       |                             |                              | support and sustain     | carers and to those        |
|              |                       |                             |                              | people with dementia    | charged with the           |
|              |                       |                             |                              | to live at home,        | inspection of services.    |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   | including supporting carers.   |  |
|  |  |  |   | Outcomes:<br>Of 131 publications<br>evaluated, 56 were<br>assessed to be of 'high-<br>quality, 62 of 'medium'<br>quality and 13<br>of 'low' quality.<br>Evaluations identified<br>weaknesses in many<br>published accounts of<br>research, including lack<br>of methodological<br>detail and failure to<br>evidence conclusions.<br>Thematic analysis<br>revealed multiple gaps<br>in the evidence base,<br>including in relation to<br>take-up and use of self-<br>directed support by<br>people with dementia,<br>use of rapid response<br>teams and other<br>multidisciplinary<br>approaches, use of<br>technology to support<br>community-dwelling<br>people with dementia,<br>and support for people<br>without access to<br>unpaid or informal<br>support. |  |
|  |  |  |   | Follow-up time:  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   | Unclear  |  |
| De Sâo José et al                      | Moderate   | To identify, appraise,                 | Inclusion criteria:   | Number of studies:   | Both positive and  |
| 2016                                   |  | synthesize and discuss                 | Publication period:   | 30   | negative experiences of                                    |
| Portugal                               | SBU domain(s):   | relevant research-based                | Between 1990 and  |  | receiving social care                                      |
| [24]                                   | Hemtjänst som insats   | evidence of the                        | September 2014.   | Study design:  | relate, mostly, to the                                     |
|  | (Home help as an   | experiences and                        |   | Ethnographic (n=1),  | relational dimension of                                    |
|  | intervention)  | perspectives of older                  | Population:   | Qualitative (n=18),  | care. Receiving social care                                |
|  |  | persons receiving social               | Older people (people aged   | Biographical (n=1),  | per se does not  |
|  | Qualitative  | care in the community.                 | 65 and over).   | Phenomenological   | automatically imply a                                      |
|  |  |  |   | (n=3), Psychosocial  | negative or a positive                                     |
|  |  |  | Study design:   | narrative (n=2),   | experience. Rather, it is                                  |
|  |  |  | <ul> <li>a focus on older people</li> </ul>                                 | Multiple case study  | the concrete form of                                       |
|  |  |  | who were receiving social   | (n=4), Mixed method  | social care provision,                                     |
|  |  |  | care at the moment of data  | (n=1)  | primarily the attitudes                                    |
|  |  |  | collection (or who had  |  | and behaviour of the                                       |
|  |  |  | stopped receiving it less   | Number of  | carers, which determine                                    |
|  |  |  | than 1 year previously);  | participants:  | whether the care is  |
|  |  |  | <ul> <li>an account of the</li> </ul>                                       | Between (n=3) and  | experienced as positive                                    |
|  |  |  | experiences and   | (n=391)  | or negative.   |
|  |  |  | perspectives of these older   |  |  |
|  |  |  | people;   | Characteristics of   | This conclusion has  |
|  |  |  | <ul> <li>a base on qualitative</li> </ul>                                   | participants:  | implications for   |
|  |  |  | research (data collection   | Age between 50 and   | professional and non-                                      |
|  |  |  | and analysis);  | 98. Males between  | professional practice and                                  |
|  |  |  | • a focus on older people   | (n=0) and (n=15),  | for social policy. We must                                 |
|  |  |  | living in one of the  | Females between (n=3)  | not forget that 'good care                                 |
|  |  |  | countries of the European   | and (n=23). Not all  | practices' (professional                                   |
|  |  |  | Union (27 countries).   | studies list gender.   | and non-professional) can                                  |
|  |  |  |   | Informal caregivers  | be effective and   |
|  |  |  | Setting:  | between (n=0) and  | sustainable only if social                                 |
|  |  |  | Living in the community   | (n=37), Care managers  | and public policies ensure                                 |
|  |  |  | (not in institutional   | between (n=0) and  | 'good conditions' – in                                     |
|  |  |  | settings).  | (n=28)   | terms of   |
|  |  |  |   |  | training/education, time                                   |
|  |  |  | Other criteria:   | Country of origin:   | for care, income/cash for                                  |
|  |  |  | English or Portuguese   | United Kingdom (n=21),   | care, security and   |
|  |  |  |   | Sweden (n=8),  | protection – in order for                                  |

| Author                | Study quality                  | Objectives of the                    | Inclusion criteria for the  | Characteristics of the   | The conclusions of the                             |
|-----------------------|--------------------------------|--------------------------------------|---|--|--|
| Year                  | SBU Domain(s)<br>Quantitative/ | systematic review                    | systematic review<br>Literature search (date)                             | studies included in the  | systematic review´s<br>author(s)                   |
| Country               | -                              |                                      | Literature search (date)  | systematic review  | aution(s)  |
| Reference             | qualitative                    |                                      | Literature search:<br>Date not specified, but<br>probably September 2014. | Netherlands (n=1),<br>Denmark (n=1), Spain<br>(n=1), France (n=1),<br>Slovakia (n=1), Ireland<br>(n=2), Finland (n=1).<br>Some studies include<br>more than one country.<br>Setting:<br>People living in the<br>community<br>Interventions:<br>All type of social care to<br>older people in the<br>community.<br>Outcomes:<br>Qualitative data of<br>older person's<br>experiences and<br>perspectives of<br>receiving social care. | carers 'to do their job'<br>with dignity.          |
| Dickens et al<br>2011 | Moderate                       | To determine the<br>effectiveness of | <b>Inclusion criteria</b> :<br>Related in full/part to older              | Follow-up time:<br>Receiving social care at<br>the moment or stopped<br>less than 1 year.<br>Number of studies:<br>32  | Our systematic review<br>has identified a need for |
| UK                    | SBU Domain(s):                 | interventions designed to            | people;   |  | well conducted studies to                          |
| [25]                  | Upprätthållande och            | alleviate social isolation           | <ul> <li>the intervention targeted</li> </ul>                             | Study design:  | improve the evidence                               |
|                       | stimulerande                   | and/or loneliness in older           | people identified as socially   | RCTs (n=16) and quasi-   | base regarding the                                 |
|                       | arbetssätt och                 | people, we reviewed                  | isolated and/or lonely, and   | experimental studies   | effectiveness of social                            |
|                       | metoder – både                 | randomized controlled                | stated a clear and plausible  | (n=16)   | interventions for                                  |
|                       | ordinärt och särskilt          | trials and quasi-                    | aim to alleviate this;  |  | alleviating social                                 |
|                       | boende (Maintaining            | experimental studies that            |   | Population:  |  |

|   | dy quality  | Objectives of the   | Inclusion criteria for the   | Characteristics of the  | The conclusions of the   |
|---|-------------|---|--|---|--|
| Year SBU                                    | J Domain(s) | systematic review   | systematic review  | studies included in the   | systematic review's  |
| Country Qua                                 | antitative/ |   | Literature search (date)   | systematic review   | author(s)  |
| Reference qua                               | alitative   |   |  |   |  |
| Reference qua<br>and<br>met<br>com<br>insti | •           | assessed treatment<br>effects of such<br>interventions, in<br>comparison with inactive<br>controls. Second, to<br>identify the potential<br>health benefits of such<br>interventions. | Literature search (date)  • recorded some form of<br>participant-level outcome<br>measure, and reported<br>sufficient outcome data for<br>treatment effects to be<br>obtained; - used a<br>randomized controlled trial<br>(RCT), or quasi<br>experimental<br>(controlled trial or matched<br>controlled trial) design<br>• included an inactive<br>(usual care, no<br>intervention, attentional)<br>control group<br>• was published in English.<br>Literature search:<br>May 2009 | <ul> <li>systematic review</li> <li>Participants included<br/>caregivers, disease<br/>sufferers, housing<br/>residents, residents in<br/>institutional settings<br/>and community-<br/>dwelling older people</li> <li>Number of<br/>participants:<br/>4061 participants<br/>contributed<br/>to the 32 studies, with<br/>between 23 and 741<br/>participants per study.</li> <li>Country of origin:<br/>USA, Canada, Japan,<br/>Sweden, Finland,<br/>Netherlands.</li> <li>Setting:<br/>Institutional setting,<br/>community dwelling</li> <li>Interventions:<br/>Interventions were<br/>categorised as offering<br/>activities (social or<br/>physical programs),<br/>support (discussion,<br/>counselling, therapy or</li> </ul> | author(s)<br>isolation. However, it<br>appeared that common<br>characteristics of<br>effective interventions<br>may include having a<br>theoretical basis and<br>offering social activity<br>and/ or support within a<br>group format.<br>Interventions in which<br>older people are active<br>participants also<br>appeared more likely to<br>be effective.<br>Participatory<br>interventions and those<br>including social activity<br>and support were also<br>more likely to be<br>beneficial. While the<br>nature of the intervention<br>provider appeared to be a<br>factor on the basis of<br>vote counting, this should<br>be interpreted cautiously<br>due to the large number<br>of providers identified<br>and the small number of<br>studies relating to each<br>one. There are indications<br>that social isolation |

| Author<br>Year<br>Country                 | Study quality<br>SBU Domain(s)<br>Quantitative/  | Objectives of the systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|---|--|---|---|---|---|
| Reference                                 | qualitative  |   |   | Outcomes:<br>three outcome domains<br>including social health<br>(four sub-domains of:<br>'loneliness', 'social<br>isolation', 'structural<br>social support',<br>'functional social<br>support'); mental<br>health (two<br>subdomains of:<br>'depression', mental/<br>psychological<br>wellbeing') and physical<br>health (e.g. perceived<br>health status, blood<br>pressure, daily<br>medication intake).<br>Follow-up time: | mental and physical<br>health. This study<br>advances the evidence<br>base of previous reviews<br>by including studies<br>published since 2002 and<br>by considering a wider<br>range of outcomes<br>reflecting the multi-<br>dimensional definition of<br>social isolation.  |
| Easton et al<br>2017<br>Australia<br>[26] | Moderate<br>SBU Domain(s):<br>Särskilda<br>boendeformer som<br>insats. (Institutional<br>care as an<br>intervention)<br>Quantitative | To provide<br>a systematic and<br>narrative summary of the<br>existing literature of<br>economic evaluations of<br>residential aged care<br>infrastructure. | Inclusion criteria:<br>Eligible studies included full<br>economic evaluations (e.g.<br>cost- effectiveness<br>analyses, cost-utility<br>analyses, cost benefit<br>analyses), partial economic<br>evaluations (e.g. cost<br>analyses, cost minimization<br>analyses, cost<br>consequences analyses),<br>and randomized trials<br>reporting more limited<br>information, such as<br>estimates of resource use | Six weeks to 5 years<br>Number of studies:<br>14 (16 articles)<br>Study design:<br>RCT, cross-sectional,<br>prospective cohort<br>Population:<br>participating facilities<br>per study ranged from<br>1 to 3,492 (mean: 424;<br>median: 150). Of the<br>three studies that<br>recruited resident<br>participants, sample  | This research highlights a<br>gap in economic<br>evidence, and this<br>evidence is needed to<br>inform future aged care<br>sector facility design and<br>development. Despite the<br>high cost of providing<br>care to older people in<br>residential care facilities,<br>there is a lack of robust<br>economic evidence on<br>the value of<br>organisational and<br>environmental design |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|--|---|--|
|  |  |  | or costs of interventions,<br>pertaining to organizational<br>and environmental<br>characteristics aimed at<br>improving the quality of<br>care for older adults in a<br>residential aged care<br>setting.<br>Literature search:<br>14 December 2015 | sizes varied widely (44 -<br>2,405)<br>Number of<br>participants:<br>3492<br>Country of origin:<br>Australia, USA,<br>Switzerland, UK<br>Setting:<br>Residential aging care<br>Interventions:<br>Not applicable.<br>Outcomes:<br>Resource use, cost of<br>interventions, clinical<br>outcomes<br>Follow-up time:<br>Unclear | features. There is a<br>shortage of research<br>linking costs to outcomes.<br>The quality of existing<br>cost analyses and<br>economic evidence is<br>varied, and much of the<br>existing research is<br>outdated which limits the<br>usefulness of the data.<br>Key methodological<br>issues for consideration in<br>the design of economic<br>evaluations of residential<br>care infrastructure<br>include robust study<br>designs, valuing health<br>and/or quality of life<br>effects in a meaningful<br>way and increasing the<br>representativeness of<br>data by ensuring the<br>inclusion of residents<br>with dementia. Future<br>research should focus on<br>identifying appropriate<br>and meaningful outcome<br>measures that can be<br>used at a service planning<br>level, as well as the<br>broader health benefits<br>and cost-saving potential<br>of different<br>organizational and<br>environmental<br>characteristics in |
|  |  |  |  |   | characteristics in<br>residential care.  |

| Author   | Study quality  | Objectives of the  | Inclusion criteria for the   | Characteristics of the   | The conclusions of the   |
|--|--|--|--|--|--|
| Year   | SBU Domain(s)  | systematic review  | systematic review  | studies included in the  | systematic review's  |
| Country  | Quantitative/  |  | Literature search (date)   | systematic review  | author(s)  |
| Reference  | qualitative  |  |  |  |  |
| Elias et al<br>2015<br>Australia &<br>Malaysia<br>[27] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande insatser<br>och arbetssätt –<br>särskilt boende.<br>(Maintaining and<br>stimulating work<br>methods -<br>institutional settings)<br>Quantitative | What is the effect of<br>group reminiscence<br>therapy on reducing<br>feelings of loneliness,<br>anxiety and depression,<br>in older people diagnosed<br>with symptoms of<br>loneliness, anxiety and<br>depression residing in<br>long-term care settings? | <ul> <li>Inclusion criteria:<br/>Experimental, non-<br/>experimental,<br/>observational<br/>and qualitative studies.<br/>Systematic reviews were<br/>excluded.</li> <li>The population of interest<br/>was people aged 60 years<br/>and over. LTC encompassed<br/>nursing homes, assisted<br/>living facilities and<br/>residential aged care<br/>facilities. The intervention<br/>was group reminiscence<br/>therapy. Studies that used<br/>individual reminiscence<br/>therapy were excluded. The<br/>outcomes of interest were<br/>loneliness, anxiety<br/>and depression.</li> <li>Literature search<br/>No information. Studies<br/>published in English and<br/>Malay languages between<br/>2002 and 2014 and full text<br/>articles were considered for<br/>inclusion.</li> </ul> | Number of studies:<br>8<br>Study design:<br>Quasi experimental<br>Number of<br>participants:<br>24-92 participants<br>Characteristics of<br>participants:<br>Two studies involved<br>males only, one study<br>involved females only<br>and five studies<br>involved both males<br>and females.<br>Setting:<br>Nursing home and<br>assisted living facilities<br>Country of origin:<br>United States of<br>America, Taiwan, the<br>United Kingdom and<br>Iran<br>Interventions:<br>Group reminiscence<br>therapy, duration 4-12<br>weeks<br>Outcomes:<br>Loneliness, depression,<br>anxiety | The majority of group<br>reminiscence therapy<br>studies reviewed were<br>quasi-experimental and<br>included small participant<br>samples, therefore there<br>are no conclusive findings<br>to be made.<br>Notwithstanding the lack<br>of empirical evidence, as<br>there are no reported<br>adverse events to<br>reminiscence therapy,<br>and it can be practically<br>implemented in long-<br>term care settings, it<br>should certainly be<br>considered a worthwhile<br>treatment. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|---|---|---|
| -                                      | -  | To examine the quality of<br>evidence for elder abuse<br>and neglect interventions<br>for community-dwelling<br>older adults. | Literature search (date) Inclusion criteria: Peer-reviewed quantitative studies available in English and focused on elder mistreatment interventions (e.g., physical, emotional, financial, or neglect) for the older adult or perpetrator living in noninstitutional settings where outcomes were reported. Literature search: January 2009 and December 2015. | systematic reviewFollow-up time:<br>Up to 6 monthsNumber of studies:<br>9Study design:<br>RCT n=2, pre-post<br>experimental n=2,<br>retrospective secondary<br>data analysis n=1,<br>quasi-experimental<br>n=3, retrospective<br>national e-survey,<br>mixed method<br>prospective evaluation<br>n=1.   | There are limited high-<br>quality studies on<br>interventions for elder<br>abuse and neglect. The<br>lack of effective<br>interventions holds<br>serious implications for<br>practice to identify<br>evidence-based<br>interventions that are<br>effective in reducing<br>elder abuse and neglect.<br>Need to identify an ideal<br>rating tool to assess the |
|  |  |   |   | Number of<br>participants:<br>START or TAU:<br>Caregivers of a family<br>member with dementia<br>n=520, patients n=260.<br>Male 28–42%, age 56–<br>78 yrs<br>DBT:<br>Caregivers of older<br>adults with dementia<br>n=24, male 21%, aged<br>33–87 years.<br>Israeli multisystem<br>model:<br>Elder abuse victims<br>n=558, 15% male,<br>average age 75. | methodological quality of<br>findings and thereby<br>improve our ability to<br>compare findings across<br>review papers. The use of<br>standardized tools, such<br>as the D&B tool and<br>PEDro scale, are<br>promising for creating a<br>common approach for<br>assessing methodological<br>rigor.   |

| Author<br>Year<br>Country | Study quality<br>SBU Domain(s)<br>Quantitative/ | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|---------------------------|---|--|---|--|--|
| Reference                 | qualitative                                     |  |   | Social workers and<br>professionals n=19.Multidisciplinary<br>approach and lone<br>social worker:65 years or older<br>investigated for abuse,<br>n=1 200, 35.9% male,<br>mean age 80.5.Examine effectiveness<br>of E-CARE in assisting<br>suspected victims:<br>n=175, males 56, age<br>79.59.Multidisciplinary team<br>FC:<br>n=948, female 314, age<br>82.3Elder mediation in<br>preventing financial<br>abuse, n=228 chief<br>executive officers,<br>n=214 service<br>providers, n=113 older<br>adults and relatives,<br>age range 65 to 74<br>years.Characteristics of<br>participants:<br>Community-dwelling<br>older adults.<br>Age and sex, see aboveSetting:<br>Noninstitutional |  |

| Author         | Study quality  | Objectives of the       | Inclusion criteria for the | Characteristics of the   | The conclusions of the   |
|----------------|----------------|-------------------------|----------------------------|--|--------------------------|
| Year           | SBU Domain(s)  | systematic review       | systematic review          | studies included in the  | systematic review's      |
| Country        | Quantitative/  |                         | Literature search (date)   | systematic review  | author(s)                |
| Reference      | qualitative    |                         |                            |  |                          |
| Kelerence      |                |                         |                            | Country of origin:<br>UK, USA, Israel,<br>Australia.<br>Interventions:<br>Psychological<br>interventions for<br>dementia family<br>caregivers (n=3).<br>Multidisciplinary team<br>interventions (n=2).<br>Forensic center and<br>conservatorship<br>interventions (n=2).<br>Elder abuse<br>intervention programs                                     |                          |
|                |                |                         |                            | for caregivers (n=2).<br><b>Outcomes:</b><br>The outcomes<br>identified in the nine<br>articles on community-<br>based interventions for<br>addressing elder abuse<br>and neglect. 2 studies<br>addressed financial<br>abuse specifically, while<br>the remaining<br>addressed all types of<br>mistreatment.<br><b>Follow-up time:</b><br>Not stated |                          |
| Flanagan et al | Moderate       | To provide a narrative  | Inclusion criteria:        | Number of studies:   | Managing incontinence    |
| 2014           |                | summary of intervention | 1. Studies with residents/ | 42 intervention studies  | and promoting            |
| UK             | SBU Domain(s): | studies identifying     | participants aged 65 or    | out of which 9 were  | continence in care homes |

| Author    | Study quality           | Objectives of the        | Inclusion criteria for the                            | Characteristics of the                | The conclusions of the     |
|-----------|-------------------------|--------------------------|---|---------------------------------------|----------------------------|
| Year      | SBU Domain(s)           | systematic review        | systematic review                                     | studies included in the               | systematic review's        |
| Country   | Quantitative/           | -                        | Literature search (date)                              | systematic review                     | author(s)                  |
| Reference | qualitative             |                          |   |                                       |                            |
| [29]      | Upprätthållande och     | practices and associated | above or a majority with a                            | related to associated                 | is complex, requiring time |
|           | stimulerande            | factors for the          | mean age of 65 and over                               | factors with                          | and cost-efficient         |
|           | arbetssätt och          | management of            | living in care homes                                  | incontinence                          | management procedures      |
|           | metoder – särskilt      | incontinence and         | (residential homes, nursing                           |                                       | to contain the problem     |
|           | boende (Maintaining     | promotion of continence  | homes) or assisted living                             | Study design:                         | and deliver quality,       |
|           | and stimulating work    | in care borne residents. | facilities.   | Interventional studies                | achievable care. When      |
|           | methods -               |                          | 2. Studies included were                              |                                       | developing and designing   |
|           | institutional settings) |                          | either descriptive/                                   | Population:                           | systems of care in care    |
|           |                         |                          | observational or                                      | Older persons living in               | homes, it is important to  |
|           |                         |                          | interventions. All of the                             | long term care                        | also recognize the impact  |
|           | Quantitative            |                          | studies focus on the                                  |                                       | of associated factors. As  |
|           |                         |                          | management of   | Number of                             | with any healthcare        |
|           |                         |                          | incontinence, promotion                               | participants:                         | intervention program,      |
|           |                         |                          | and maintenance of                                    | 24-164                                | resources are required to  |
|           |                         |                          | continence in care home                               |                                       | implement the protocols.   |
|           |                         |                          | populations.  | Country of origin:                    | Economic evaluation        |
|           |                         |                          | Study designs include                                 | USA and UK                            | studies are limited, with  |
|           |                         |                          | randomized controlled                                 |                                       | further studies warranted  |
|           |                         |                          | trials (RCT), quasi-                                  | Setting:                              | alongside preventative     |
|           |                         |                          | randomized controlled                                 | Residential care homes                | studies to maintain        |
|           |                         |                          | trials, quasi-experimental                            |                                       | long-term continence in    |
|           |                         |                          | studies, casecontrol                                  | Interventions:                        | these populations.         |
|           |                         |                          | studies, cohort studies,                              | Prompted voiding,                     |                            |
|           |                         |                          | surveys, pre-test/ posttest                           | toileting reinforcement,              |                            |
|           |                         |                          | studies, economic                                     | padding methods etc.                  |                            |
|           |                         |                          | evaluation or empirical                               | Outeenver                             |                            |
|           |                         |                          | studies.  | Outcomes:                             |                            |
|           |                         |                          | 3. Continence status,                                 | Factors included                      |                            |
|           |                         |                          | management of   | economic data, skin                   |                            |
|           |                         |                          | incontinence or the                                   | care, exercise studies,               |                            |
|           |                         |                          | promotion or maintenance<br>of continence included as | staff quality and<br>prompted voiding |                            |
|           |                         |                          | an outcome measure.                                   | adherence and the                     |                            |
|           |                         |                          | 4. Type of condition -                                | promotion of                          |                            |
|           |                         |                          | Urinary incontinence (UI) or                          | continence by the                     |                            |
|           |                         |                          | dual incontinence (UI with                            | management of                         |                            |
|           |                         |                          | faecal incontinence (FI))                             | management U                          |                            |
|           |                         |                          |   |                                       |                            |

| Author<br>Year<br>Country<br>Reference     | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|--|--|---|--|
|  |   |  | <ul> <li>with or without definitions<br/>included.</li> <li>5. Language - All published<br/>articles were in English.</li> <li>6. Year of study publication</li> <li>Literature search:</li> </ul>   | dehydration and<br>incontinence.<br><b>Follow-up time:</b><br>Unclear   |  |
| Fleming et al<br>2014<br>Australia<br>[30] | Moderate SBU Domain(s): Effekten av vissa hjälpmedel inom kommunikation och kognitiv förmåga. (Effects from communication and cognitive devices) Quantitative | To assess the empirical<br>support for the use of<br>assistive technology in<br>the care of people with<br>dementia as an<br>intervention to improve<br>independence, safety,<br>communication,<br>wellbeing and carer<br>support. | May 2010.<br>Inclusion criteria:<br>Studies published between<br>1995 and 2011,<br>incorporated a control<br>group, pre-test-post-test,<br>cross sectional or survey<br>design, evaluated an<br>intervention utilizing an<br>assistive technology and<br>focused on the care of<br>people with dementia over<br>50 years of age.<br>Literature search:<br>2011 | Number of studies:41out of which 7 wereconsidered as strongand 10 as Moderatevalidity and weredescribed.Study design:UnclearPopulation:Persons with dementiaor their caregiversNumber ofparticipants:5-136 persons orcaregiversCountry of origin:Not statedSetting:Various to unclear:nursing home, chroniccare facility,psychogeriatric ward | This review aimed to<br>explore the ways in which<br>technology has been<br>applied to helping people<br>with dementia carry out<br>the tasks of daily living<br>and how it may be<br>making a contribution to<br>the wellbeing of these<br>people by reducing their<br>behavioural problems<br>and improving their<br>emotional state.<br>Research to date has<br>been unable to establish<br>a positive difference to<br>the lives of people with<br>dementia by the general<br>use of the assistive<br>technology reviewed<br>here. The literature<br>exploring the use of<br>assistive technologies for<br>increasing independence<br>and compensating for<br>memory problems<br>illustrate the problems of<br>moving from the<br>laboratory to real life. The |

| Author    | Study quality | Objectives of the | Inclusion criteria for the | Characteristics of the   | The conclusions of the     |
|-----------|---------------|-------------------|----------------------------|--------------------------|----------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review          | studies included in the  | systematic review's        |
| Country   | Quantitative/ | -                 | Literature search (date)   | systematic review        | author(s)                  |
| Reference | qualitative   |                   |                            |                          |                            |
|           |               |                   |                            | Interventions:           | review has demonstrated    |
|           |               |                   |                            | Telemedicine (cognitive  | that the research has      |
|           |               |                   |                            | intervention program     | been characterised by      |
|           |               |                   |                            | using telemedicine (VC)  | very small samples, high   |
|           |               |                   |                            | vs a conventional face-  | drop-out rates, very basic |
|           |               |                   |                            | to-face (FTF) method).   | statistical analyses, lack |
|           |               |                   |                            | Brigth light. Robot cat. | of adjustment for          |
|           |               |                   |                            | Technology-aided         | multiple comparisons and   |
|           |               |                   |                            | pictorial cues alone or  | poor performance of the    |
|           |               |                   |                            | in combination with      | technology itself.         |
|           |               |                   |                            | verbal instructions.     | Regarding the use of       |
|           |               |                   |                            | Simulated presence       | assistive technologies for |
|           |               |                   |                            | therapy (SPT) – an       | increasing independence,   |
|           |               |                   |                            | audio tape on a          | this review showed that    |
|           |               |                   |                            | personal stereo.         | once the evaluation        |
|           |               |                   |                            | Snoezelen room.          | moves from the             |
|           |               |                   |                            | Multi-sensory            | laboratory significant     |
|           |               |                   |                            | stimulation (MSS) or     | practical and              |
|           |               |                   |                            | activity groups (playing | methodological problems    |
|           |               |                   |                            | card games, looking at   | emerge and the use of      |
|           |               |                   |                            | photographs, etc.)       | the technology reported    |
|           |               |                   |                            |                          | to date makes little       |
|           |               |                   |                            | Outcomes:                | difference to practical    |
|           |               |                   |                            | The review is presented  | outcomes.                  |
|           |               |                   |                            | around the following     | The evidence for the       |
|           |               |                   |                            | topics: independence,    | effective use of assistive |
|           |               |                   |                            | prompts and              | technology to improve      |
|           |               |                   |                            | reminders; safety and    | the safety and security of |
|           |               |                   |                            | security; leisure and    | people with dementia is    |
|           |               |                   |                            | lifestyle,               | very weak. No              |
|           |               |                   |                            | communication and        | methodologically strong    |
|           |               |                   |                            | telehealth; and          | evaluations of the use of  |
|           |               |                   |                            | therapeutic              | assistive technology to    |
|           |               |                   |                            | interventions.           | improve the safety         |
|           |               |                   |                            |                          | and/or security of people  |
|           |               |                   |                            | Follow-up time:          | with dementia were         |
|           |               |                   |                            | Various to unclear       | found. The common          |

| Author<br>Year                                    | Study quality<br>SBU Domain(s)  | Objectives of the<br>systematic review   | Inclusion criteria for the systematic review  | Characteristics of the studies included in the   | The conclusions of the systematic review's   |
|---|---|--|---|--|--|
| Country<br>Reference                              | Quantitative/<br>qualitative  |  | Literature search (date)  | systematic review  | author(s)  |
| Kelerence   |   |  |   |  | problems associated with<br>lack of acceptance by the<br>user, difficulties with use<br>and technical reliability<br>are evident.<br>Overall there is a great<br>need for better designed<br>studies with larger   |
|   |   |  |   |  | samples.   |
| Forsman et al<br>2011<br>Sweden & Finland<br>[31] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – ordinärt<br>boende<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende (Maintaining<br>and stimulating work<br>methods – both<br>community and<br>institutional settings)<br>Quantitative | To assess the<br>effectiveness of<br>psychosocial<br>interventions in the<br>primary prevention of<br>depressive symptoms and<br>unipolar depressive<br>disorders in people aged<br>65 or above. | Study design:<br>Prospective controlled<br>studies.<br>Participants:<br>All participants aged 65<br>years or older, or an<br>average participant age of<br>70 years or older.<br>Should not meet the<br>diagnostic criteria for a<br>depressive disorder at the<br>time of enrolment.<br>Studies where the<br>participants suffered from a<br>psychiatric disorder (e.g.,<br>dementia) were excluded.<br>Setting:<br>All settings, i.e. institution<br>or community.<br>Interventions:<br>Psychosocial interventions,<br>i.e. emphasizing<br>psychological or social<br>factors, not biological<br>factors. Excluding | Number of studies:<br>In review: 30 studies<br>In meta-analysis: 19<br>studies.<br>Study design:<br>RCT (n=23), non-<br>randomized controlled<br>trials (n=7)<br>Number of<br>participants:<br>N=1697 in meta-<br>analysis<br>Characteristics of<br>participants:<br>Mean age: 77 years (for<br>pooled data)<br>Age range: Not stated<br>Gender distribution:<br>71% women<br>Setting:<br>Regardless of setting,<br>i.e. institution or<br>community | Psychosocial<br>interventions have a<br>small but statistically<br>significant effect in<br>reducing depressive<br>symptoms among older<br>adults. The current<br>evidence base for<br>psychosocial<br>interventions for primary<br>prevention of depression<br>in older people is weak,<br>and further trials<br>warranted especially for<br>the most promising type<br>of interventions<br>evaluated, that is, social<br>activities. More large-<br>scale, high-quality<br>controlled trials on<br>psychosocial<br>interventions are needed<br>to detect important<br>effects of primary<br>prevention of depression<br>in older people. The<br>review suggests that<br>attention should be paid |

| Author<br>Year<br>Country<br>Reference    | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|---|---|--|--|--|--|
|   |   |  | interventions with<br>organization of care.<br>Outcomes:<br>Depressive symptoms or<br>depression.<br>Literature search:<br>October 2009  | Country of origin:<br>Not stated<br>Interventions:<br>Physical exercise (n=7)<br>Skill training (n=7)<br>Group support (n=1),<br>Reminiscence (n=6)<br>Social activities (n=3)<br>Multicomponential<br>(n=6)<br>Outcomes:<br>Depression<br>Secondary outcomes:<br>functional ability,<br>quality of life.<br>Follow-up time:<br>Not stated | not only to the duration<br>of the interventions but<br>also to the frequency of<br>sessions so as to obtain<br>the best effects. In<br>addition, further research<br>on cost effectiveness of<br>psychosocial<br>interventions is called for.   |
| Franck et al<br>2016<br>Australia<br>[32] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder - ordinärt<br>boende.<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder - särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods – both | To systematically review<br>studies reporting<br>interventions for reducing<br>social isolation and<br>depression in older<br>people receiving aged<br>care services (community<br>or residential) | Study design:<br>Intervention studies, with<br>no design exclusions<br>Participants:<br>Studies involving<br>participants who were<br><u>mostly aged 60 years</u> and<br>over<br>Setting:<br>Address social isolation and<br>depression in aged care<br>clients living in rural setting<br>(though urban setting was<br>also included) | Number of studies:<br>n=6<br>Study design:<br>All intervention studies<br>(various)<br>Number of<br>participants:<br>All studies had small<br>sample sizes, ranging<br>from 26 to 113<br>participants.   | Only one intervention,<br>group-based<br>reminiscence therapy,<br>was reported as<br>successful in reducing<br>both social isolation and<br>depression in older<br>people within an urban<br>aged care setting. More<br>research is needed to<br>explore transferability of<br>interventions across<br>different aged care<br>settings and into rural<br>areas |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  | community and<br>institutional settings)<br>Quantitative       |  | Interventions:<br>Any<br>Outcomes:<br>Outcomes of social<br>isolation or loneliness, or<br>the combination of<br>depression with social<br>isolation or loneliness were<br>included<br>Literature search:<br>July 2014. | Characteristics of<br>participants:<br>Study participants were<br>older adults ranging in<br>age from 77 to 86 years<br>Setting:<br>All urban residential<br>care<br>Country of origin:<br>Taiwan n=1, UK n=1,<br>USA n=1, Hong Kong<br>n=1, Australia n=1<br>Interventions:<br>Reminiscence therapy<br>n=1, Gender-based<br>Social Clubs n=1,<br>Playing Wii n=1, Indoor<br>Gardening n=1, Radio<br>Program n=1<br>Outcomes:<br>Three of the five<br>included intervention<br>studies successfully<br>reduced social isolation;<br>one also successfully<br>reduced depression<br>Follow-up time:<br>3 month, 10 and 8<br>weeks, depending on<br>outcome. |  |

| Author                      | Study quality                       | Objectives of the                               | Inclusion criteria for the       | Characteristics of the     | The conclusions of the   |
|-----------------------------|-------------------------------------|---|----------------------------------|----------------------------|--------------------------|
| Year                        | SBU Domain(s)                       | systematic review                               | systematic review                | studies included in the    | systematic review's      |
| Country                     | Quantitative/                       |   | Literature search (date)         | systematic review          | author(s)                |
| Reference<br>Gallione et al | qualitative                         | To review the office of                         | Study design:                    | Number of studies.         | The fundamental function |
| Gallione et al<br>2017      | Moderate                            | To review the efficacy<br>and accuracy of tools | Study design:<br>Prospective and | Number of studies:<br>n=11 | of any assessment        |
|                             |                                     | administered to older                           | retrospective observational      | 11-11                      | instrument is to guide   |
| Italy<br>[33]               | SBU Domain(s):<br>Insatser avseende | people, intended to                             | cohort studies                   | Study design:              | through a standardised   |
| [55]                        | våld. (Interventions                | detect and measure elder                        | conort studies                   | Prospective and            | screening process and to |
|                             | addressing abuse and                | abuse   | Participants:                    | retrospective              | ensure that signs of     |
|                             | neglect)                            | abuse   | Aged 60 and older                | observational cohort       | abuse are not missed.    |
|                             | negiecij                            |   | Aged 00 and older                | studies                    | Several tools have been  |
|                             | Behovsbedömning                     |   | Setting:                         | 5100105                    | tested; some have        |
|                             | och uppföljning                     |   | The article describes an         | Number of                  | demonstrated a           |
|                             | (Needs assessment                   |   | intervention designed to be      | participants:              | Moderate to good         |
|                             | and follow-up: older                |   | provided to individual           | H-S/EAST (115 abused,      | internal consistency and |
|                             | persons)                            |   | subjects (abused persons or      | 28 non abused and 47       | some have been           |
|                             | percent,                            |   | perpetrators), healthcare        | in comparison group),      | validated to allow an    |
|                             | Quantitative                        |   | professionals or the             | VASS (10421 women,         | early identification.    |
|                             |                                     |   | ,<br>community.                  | EASI (663), CASE (139      | None have been           |
|                             |                                     |   |                                  | caregivers), BASE (492     | evaluated against        |
|                             |                                     |   | Interventions:                   | subjects), E-IOA (T0-n     | measurable violence or   |
|                             |                                     |   | Detect/assess the risk of        | 108, T1-n 730, T2-n        | health outcomes.         |
|                             |                                     |   | elder abuse (physical,           | 1317 (T 3 –71 subjects     |                          |
|                             |                                     |   | psychological,                   | in nursing homes), EAI     |                          |
|                             |                                     |   | financial, sexual or neglect)    | (501 older adults and      |                          |
|                             |                                     |   | using a screening tool           | 484 patients, EPAS (88     |                          |
|                             |                                     |   |                                  | males and 107              |                          |
|                             |                                     |   | Outcomes:                        | females), CPEABS (28       |                          |
|                             |                                     |   | Elder abuse risk                 | males and 64 females),     |                          |
|                             |                                     |   | assessment/quantification,       | OAPAM (unclear) and        |                          |
|                             |                                     |   | reduced exposure to              | OAFEM (unclear)            |                          |
|                             |                                     |   | violence                         |                            |                          |
|                             |                                     |   |                                  | Characteristics of         |                          |
|                             |                                     |   | Literature search:               | participants:              |                          |
|                             |                                     |   | April to May 2015                | Aged 60 and older          |                          |
|                             |                                     |   |                                  | Setting:                   |                          |
|                             |                                     |   |                                  | The article describes an   |                          |
|                             |                                     |   |                                  | intervention designed      |                          |
|                             |                                     |   |                                  | to be provided to          |                          |

| Author         | Study quality                       | Objectives of the                              | Inclusion criteria for the                            | Characteristics of the                      | The conclusions of the                            |
|----------------|-------------------------------------|--|---|---|---|
| Year           | SBU Domain(s)                       | systematic review                              | systematic review                                     | studies included in the                     | systematic review's                               |
| Country        | Quantitative/                       |  | Literature search (date)                              | systematic review                           | author(s)   |
| Reference      | qualitative                         |  |   | individual subjects                         |   |
|                |                                     |  |   | individual subjects<br>(abused persons or   |   |
|                |                                     |  |   | perpetrators),                              |   |
|                |                                     |  |   | healthcare                                  |   |
|                |                                     |  |   | professionals or the                        |   |
|                |                                     |  |   | community                                   |   |
|                |                                     |  |   | Country of origin:                          |   |
|                |                                     |  |   | USA, Canada, Israel,                        |   |
|                |                                     |  |   | Taiwan, Australia                           |   |
|                |                                     |  |   | Interventions:                              |   |
|                |                                     |  |   | Data summarised and                         |   |
|                |                                     |  |   | not synthetized                             |   |
|                |                                     |  |   | Outcomes:                                   |   |
|                |                                     |  |   | Eleven screening tools                      |   |
|                |                                     |  |   | have been presented:                        |   |
|                |                                     |  |   | H-S/EAST, VASS, EASI,                       |   |
|                |                                     |  |   | CASE, BASE, E-IOA, EAI,                     |   |
|                |                                     |  |   | EPAS, CPEABS, OAPAM<br>and OAFEM, all aimed |   |
|                |                                     |  |   | at healthcare                               |   |
|                |                                     |  |   | professional or, in some                    |   |
|                |                                     |  |   | cases, expected to be                       |   |
|                |                                     |  |   | specifically used by                        |   |
|                |                                     |  |   | nurse                                       |   |
|                |                                     |  |   | Follow-up time:                             |   |
|                |                                     |  |   | Not stated                                  |   |
| Gardiner et al | Moderate                            | To conduct an integrative                      | Inclusion criteria:                                   | Number of studies:                          | A wide range of                                   |
| 2016           |                                     | review to identify the                         | Literature relating to                                | 39  | interventions have been                           |
| UK             | SBU Domain(s):                      | range and scope of                             | interventions with a                                  | Chudu daalam                                | developed to tackle social                        |
| [34]           | Upprätthållande och<br>stimulerande | interventions that target social isolation and | primary or secondary                                  | Study design:<br>6 randomised               | isolation and loneliness                          |
|                | arbetssätt och                      | loneliness among older                         | outcome of reducing or<br>preventing social isolation | controlled trials (RCT),                    | among older people. The majority of interventions |
|                | metoder – ordinärt                  | people, to gain insight                        | and/or loneliness                                     | 21 other quantitative                       | reported some success in                          |

| Author    | Study quality           | Objectives of the      | Inclusion criteria for the   | Characteristics of the                   | The conclusions of the                          |
|-----------|-------------------------|------------------------|------------------------------|--|---|
| Year      | SBU Domain(s)           | systematic review      | systematic review            | studies included in the                  | systematic review's                             |
| Country   | Quantitative/           |                        | Literature search (date)     | systematic review                        | author(s)                                       |
| Reference | qualitative             |                        |                              |  |   |
|           | och särskilt boende.    | into why interventions | Literature relating to older | designs, 10 were                         | reducing social isolation                       |
|           | (Maintaining and        | are successful and to  | adults                       | qualitative studies, 2                   | and loneliness, but there                       |
|           | stimulating work        | determine the          | Empirical research articles  | were mixed method                        | was significant                                 |
|           | methods – both          | effectiveness of those | reporting primary research,  | studies.                                 | heterogeneity between                           |
|           | community and           | interventions          | published in full, including |  | interventions. Common                           |
|           | institutional settings) |                        | all research methodologies   | Number of                                | features of successful                          |
|           |                         |                        | (but excluding reviews)      | participants:                            | interventions include                           |
|           | Quantitative and        |                        | English language articles    | 8-5203                                   | adaptability, community                         |
|           | qualitative             |                        | Published since 2003         |  | participation and                               |
|           |                         |                        |                              | Characteristics of                       | activities involving                            |
|           |                         |                        | Literature search:           | participants:                            | productive engagement.                          |
|           |                         |                        | January 2016                 | 53 years or older. Frail                 | However, it is important                        |
|           |                         |                        |                              | persons. Age and                         | to note that our                                |
|           |                         |                        |                              | gender distribution not                  | conclusions are based on                        |
|           |                         |                        |                              | always stated                            | combined evidence from                          |
|           |                         |                        |                              |  | studies using a range of                        |
|           |                         |                        |                              | Setting:                                 | methods and are not                             |
|           |                         |                        |                              | Community settings as                    | based on meta-analysis.                         |
|           |                         |                        |                              | friendship clubs, day                    | Therefore, conclusions                          |
|           |                         |                        |                              | centres, residential care                | regarding effectiveness                         |
|           |                         |                        |                              |  | cannot be confirmed                             |
|           |                         |                        |                              | Country of origin:                       | statistically. Further                          |
|           |                         |                        |                              | Australia, USA, Japan,                   | research is now required to enhance theoretical |
|           |                         |                        |                              | Hong Kong, Taiwan,<br>Nya Zeeland, Iran, | understandings of how                           |
|           |                         |                        |                              | Israel, Finland, Slovenia,               | successful interventions                        |
|           |                         |                        |                              | Netherlands, UK                          | mediate social isolation                        |
|           |                         |                        |                              | Nethenanus, OK                           | and loneliness and                              |
|           |                         |                        |                              | Interventions:                           | provide more robust data                        |
|           |                         |                        |                              | Social facilitation                      | on effectiveness.                               |
|           |                         |                        |                              | interventions,                           | Research exploring the                          |
|           |                         |                        |                              | psychological therapies,                 | cost-effectiveness of                           |
|           |                         |                        |                              | health and social care                   | different approaches is                         |
|           |                         |                        |                              | provision, animal                        | also urgently required in                       |
|           |                         |                        |                              | interventions,                           | order to further support                        |
|           |                         |                        |                              | befriending                              | the development of                              |
|           |                         |                        |                              | interventions and                        | interventions which                             |

| Author<br>Year<br>Country<br>Reference   | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|---|--|--|--|
| Gjerlaug et al<br>2016<br>Norway<br>[35] | Moderate<br>SBU Domain(s):<br>Behovsbedömning<br>och uppföljning<br>(Needs assessment<br>and follow-up: older<br>persons)<br>Quantitative | To identify screening<br>tools suitable for<br>uncovering risk of<br>malnutrition in elderly<br>residents in long-term<br>care facilities, and among<br>users of home care<br>services. | Inclusion criteria:<br>Aged 65 an older<br>Community-dwelling with<br>home care services<br>resident in long-term care<br>facility with nursing<br>personnel present, such as<br>nursing home or assisted<br>living facility studies<br>performed to validate one<br>or several screening tools<br>Literature search:<br>February 2014 | leisure/skill<br>development.<br>Outcomes:<br>Social isolation,<br>loneliness<br>Follow-up time:<br>Postintervention to 3<br>years, but follow-up<br>time is not specified for<br>each study.<br>Number of studies:<br>9<br>Study design:<br>Validation and<br>reliability studies<br>Number of<br>participants:<br>3599 (127-2603)<br>Characteristics of<br>participants:<br>65 years of age or older<br>Setting:<br>Assisted living, nursing<br>home, community living<br>Country of origin:<br>Australia, Poland, Italy,<br>Netherlands, France | address the growing issue<br>of social isolation and<br>loneliness in our<br>expanding older<br>populations.<br>This study shows that<br>there is little research<br>available assessing<br>validity, reliability and<br>applicability of screening<br>tools to uncover risk of<br>malnutrition in elderly in<br>long-term care facilities<br>and community-dwelling<br>elderly receiving home<br>care services.<br>Available research shows<br>that MNA-SF is a well-<br>suited screening tool for<br>this target group. SNAQ-<br>BMI and MST can also be<br>good screening tools in<br>long-term care facilities,<br>but seem to overdiagnose<br>malnutrition. More<br>research is needed,<br>particularly with regard<br>to reliability and |
|  |   |   |  | Interventions:<br>Screening tool   | applicability.   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|--|---|
| •                                      | -  | To evaluate the evidence<br>concerning the effects of<br>non-pharmacological<br>interventions on reducing<br>apathy in persons with<br>dementia. | Literature search (date)<br>Inclusion criteria:<br>(1) the design was<br>preferably a RCT, but<br>minimally included a<br>separate control or<br>comparison group or a<br>randomized cross-over<br>design; (2) a non-<br>pharmacological<br>intervention was tested; (3)<br>focus was on apathy or<br>passivity in dementia; (4)<br>the population was limited<br>to older adults; and (5)<br>publication occurred in a<br>peer-reviewed, English-<br>language journal. | systematic review         Outcomes:         Risk of malnutrition         Follow-up time:         Not applicable         Number of studies:         16         Study design:         RCT and quasi         experimental studies         Number of         participants:         18-146         Characteristics of         participants:         Mean age was over 80         years in a majority of         studies.         Setting: | Findings from this<br>quantitative systematic<br>review hold several<br>important implications<br>for policy, practice,<br>research and education.<br>At the level of<br>institutional policy and<br>clinical practice, a<br>continued need exists to<br>support the appropriate<br>assessment of the<br>presence and severity of<br>apathy among persons<br>with dementia to identify<br>persons in need of<br>intervention. |
|  |  |  | Literature search:<br>December 2014   | Residential care or<br>nursing home facilities,<br>specialized dementia<br>care units or adult day<br>care. Acute care<br>intervention delivery<br>settings such as<br>inpatient geriatric<br>psychiatric units or<br>military sanatoriums<br>were also used.  | While this review<br>provides some evidence<br>to support the use of<br>several non-<br>pharmacologic<br>interventions to reduce<br>apathy, multiple high-<br>quality studies point to a<br>role for music therapy for<br>apathy reduction in<br>institutionalized persons<br>with dementia. Findings<br>suggest a need for   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|---|---|
|  |  |  |   | Country of origin:<br>Australia, USA, Italy,<br>Germany, France,<br>Spain, Netherlands,<br>China, Taiwan, Japan.<br>Interventions:<br>Music therapies<br>including music alone,<br>music therapy in<br>addition to standard<br>care or music therapy in<br>combination with<br>treatment and<br>Education of Autistic<br>and related<br>Communication<br>Handicapped Children<br>(TEACCH)-based<br>cognitive-behavioural<br>and environmental<br>interactions, a<br>combination music, art,<br>psychomotor activity<br>and mime intervention,<br>cognitive stimulation<br>therapy, art therapy,<br>multi-sensory<br>stimulation techniques,<br>snoezelen-based care,<br>reminiscence group<br>therapy.<br>Outcomes:<br>Apathy | appropriately trained<br>staff to then support the<br>implementation and<br>evaluation of music<br>therapy in this<br>population. |

| Grant et al       Moderate       To assess the effectiveness of effectiveness of studies:       Types of studies:       Number of studies:         UK       SBU Domain(s):       preventive home visits for trials, clustered RCTs.       (reported in 89)  | on in 12<br>es had a   |
|---|--|
| 2014effectiveness of<br>preventive home visits forRandomised controlled<br>trials, clustered RCTs.In review: 64 st<br>(reported in 89)  |  |
| [37]Insatser eller<br>aktiviteter för att<br>stödja kvarboende.<br>(Interventions to<br>support ageing in<br>place)community-dwelling<br>older adults (65+ years)<br>without dementia and<br>investigate factors that<br>may Moderate effects<br>through pre-specified<br>subgroup analyses.Population:<br>65 years or older living at<br>home (alone or with<br>partner), i.e. majority of<br>sample 65 years or older.<br>Excluded studies in which<br>more than 50% of the<br>participants had dementia.Study design:<br>RCT (n=64); qu<br>random methoUpprätthållande och<br>stödjande arbetssätt -<br>ordinärt boende.<br>(Maintaining and<br>stimulating work<br>methods - community<br>settings)Intervention:<br>visits at home by health or<br>social care professional.<br>Eligible interventions:<br>'routine' health visiting<br>practice; visits that included<br>more dan resulted in<br>specific recommendations<br>to reduce, treat, or prevent<br>problems; visits that<br>focused on fall prevention;<br>visits that included exercise<br>components; follow-up<br>home visits that were<br>directly related to recent<br>hospital discharge.Country of orig<br>united States (<br>Great Britain (1<br>Canada (11), A<br>(4), New Zealai | udies<br>articles)identify reliable effects of<br>home visits overall or in<br>any subset of the studies<br>in this review. It is<br>possible that some home<br>visiting programmes have<br>beneficial effects for<br>community-dwelling<br>older adults, but poor<br>reporting of how<br>interventions and<br>comparisons were<br>implemented prevents<br>more robust conclusions.ofWhile it is difficult to<br>draw firm conclusions<br>given these limitations,<br>stated<br>tion:<br>women.finaryestimates of treatment<br>effects are statistically<br>would be unlikely to<br>change the conclusions of<br>this review. If researchers<br>continue to evaluate<br>4),<br>these types of<br>interventions, they |

| Author<br>Year<br>Country<br>Reference      | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative                                     | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|---|--|---|---|--|--|
|   |  |   | involved home visits were<br>also excluded.<br><b>Outcomes:</b><br>Primary:<br>Mortality<br>Secondary<br>Institutionalisation,<br>hospitalization, falls,<br>injuries, physical<br>functioning, cognitive<br>functioning, quality of life,<br>psychiatric illness | Finland (1), Netherlands<br>(5), Japan (3), Taiwan<br>(2), Sweden (2), and<br>Switzerland (1).<br>Interventions:<br>Preventive home visits<br>including falls<br>prevention (n=17),<br>multi-dimensional<br>geriatric assessment<br>(n=25), both (n=16),<br>alternative focus<br>regarding health<br>impairment prevention | describe the programme<br>theory of change and<br>implementation, and<br>report all outcomes<br>measured.  |
|   |  |   | Literature search:<br>December 2012   | <ul> <li>(n=6); sometimes also<br/>exercise component<br/>(n=26).</li> <li>Outcomes:<br/>Institutionalization<br/>Hospitalisation<br/>Other outcomes,<br/>including functioning<br/>and psychiatric illness.</li> <li>Follow-up time:<br/>3-60 months</li> </ul>   |  |
| Gravolin et al<br>2007<br>Australia<br>[38] | Moderate<br>SBU Domain(s):<br>Stöd, råd och<br>information (Support,<br>advice and<br>information) | To assess the effects of<br>various decision-support<br>interventions delivered<br>by health or social care<br>providers on the<br>outcomes of older people<br>facing the possibility of<br>entering long-term<br>residential care. | Inclusion criteria:<br>Population:<br>All older people (60 or<br>older) facing the possibility<br>of residential aged care,<br>and their families or carers.<br>Study design:   | Number of studies:<br>0<br>Study design:<br>Not relevant<br>Number of<br>participants:<br>Not relevant   | No studies met the<br>review's inclusion criteria.<br>Although the searches<br>identified a number of<br>studies, they were<br>predominantly opinion<br>pieces or qualitative in<br>nature. While these<br>studies are a potential |

| Author                                     | Study quality   | Objectives of the  | Inclusion criteria for the   | Characteristics of the  | The conclusions of the   |
|--|---|--|--|---|--|
| Year                                       | SBU Domain(s)   | systematic review  | systematic review  | studies included in the   | systematic review's  |
| Country                                    | Quantitative/   |  | Literature search (date)   | systematic review   | author(s)  |
| Reference                                  | qualitative   |  |  |   |  |
|  | Quantitative  |  | Randomised control trials,<br>quasi-randomised control<br>trials/quasi-experimental<br>trials<br>• Controlled before and<br>after studies<br>• Controlled prospective<br>studies<br>• Interrupted time series<br>studies<br>Settings:<br>Living at home<br>Literature search:<br>March 2005  | Characteristics of<br>participants:<br>Not relevant<br>Country of origin:<br>Not stated<br>Interventions:<br>Not applicable<br>Outcomes:<br>Not applicable<br>Follow-up time:<br>Not applicable   | source of evidence about<br>current practice or<br>people's views, they were<br>not suitable for drawing<br>conclusions about the<br>effects of interventions to<br>support decision-making.   |
| Gregory et al<br>2017<br>Australia<br>[39] | Moderate<br>SBU Domain(s):<br>Hemtjänst som insats<br>(Home help as an<br>intervention)<br>Qualitatitve | To synthesize the<br>qualitative literature<br>about perceived<br>experiences of health<br>care for older people who<br>need support to live at<br>home, from the<br>perceptions of older<br>people, carers and health<br>providers. | Inclusion criteria:<br>Publication period: 1995 to<br>2015<br>Population:<br>Older people<br>(aged 60 years or older)<br>who needed support to live<br>at home; carers; and health<br>providers.<br>Study design:<br>Qualitative studies and<br>mixed methods studies<br>with qualitative<br>data collection and analysis<br>were included.<br>Settings:<br>The context was<br>community-based settings, | Number of studies:<br>46<br>Study design:<br>Generic qualitative (n =<br>27), phenomenological<br>(n = 9), ethnographic (n<br>= 3), grounded theory<br>(n = 2), participatory<br>action (n = 2), and<br>interpretive descriptive<br>(n = 1).<br>Number of<br>participants:<br>4319 participants<br>Characteristics of<br>participants:<br>Not specified for all<br>studies. Age ranging | Findings from this review<br>provide new insights into<br>how health care impacts<br>on the older person's<br>sense of autonomy, both<br>in health care decision-<br>making and everyday life.<br>The autonomy of the<br>older person living in<br>their community is<br>empowered by the<br>person's own capacity,<br>and by respectful conduct<br>and communication by<br>health providers.<br>Engagement between<br>older people, carers and<br>health providers is a<br>negotiated and shifting<br>interaction, affected by<br>multiple factors. Given |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|--|--|--|
|  |  |  | not residential facilities.<br>Hospital-based studies<br>were excluded if they<br>reported about acute care<br>only, with no relevance to<br>care supporting older<br>people to live at home.<br>Other criteria:<br>English<br>Literature search:<br>November 2015 | between (n=61) and<br>(n=98) for those where<br>listed.<br><b>Country of origin:</b><br>Israel (n=1), England<br>(n=13), USA (n=4),<br>Norway (n=1), Sweden<br>(n=4) Canada (n=5),<br>Australia (n=9), Korea<br>(n=1), Scotland (n=2),<br>Finland (n=2), Estonia<br>(n=1), France (n=1),<br>Germany (n=1), The<br>Netherlands (n=2),<br>Spain (n=1), New<br>Zealand (n=1), Denmark<br>(n=2), United Kingdom<br>(n=2), China (n=1).<br>Note: some studies<br>include more than one<br>country which is why<br>the numbers do not<br>add up to the total<br>number.<br><b>Setting:</b><br>Home care<br><b>Interventions:</b><br>Health care for older<br>people who need<br>support to live<br>at home | the negotiated nature of<br>engagement between<br>older people and health<br>providers, there are<br>implications for policy,<br>practice, education and<br>research. To empower<br>the older person's<br>autonomy<br>during interactions with<br>health providers, skills of<br>negotiation and<br>collaboration are<br>important enablers.<br>Therefore, training in<br>skills of negotiation and<br>advocacy may be useful<br>for some older people<br>and carers. Attention is<br>required on further<br>developing the skills of<br>health providers in<br>respectful conduct,<br>advanced communication<br>and negotiation skills, and<br>resolution of complex<br>ethical dilemmas. |

| Author    | Study quality           | Objectives of the           | Inclusion criteria for the    | Characteristics of the     | The conclusions of the     |
|-----------|-------------------------|-----------------------------|-------------------------------|----------------------------|----------------------------|
| Year      | SBU Domain(s)           | systematic review           | systematic review             | studies included in the    | systematic review's        |
| Country   | Quantitative/           |                             | Literature search (date)      | systematic review          | author(s)                  |
| Reference | qualitative             |                             |                               |                            |                            |
|           |                         |                             |                               | Outcomes:                  |                            |
|           |                         |                             |                               | The phenomena of           |                            |
|           |                         |                             |                               | interest were perceived    |                            |
|           |                         |                             |                               | experiences of health      |                            |
|           |                         |                             |                               | care for older people      |                            |
|           |                         |                             |                               | who need support to        |                            |
|           |                         |                             |                               | live at home (from the     |                            |
|           |                         |                             |                               | older persons, carers      |                            |
|           |                         |                             |                               | and health providers'      |                            |
|           |                         |                             |                               | perspective).              |                            |
|           |                         |                             |                               | h h                        |                            |
|           |                         |                             |                               | Follow-up time:            |                            |
|           |                         |                             |                               | Not stated.                |                            |
| Haesler   | Moderate                | To establish the best       | Inclusion criteria:           | Number of studies:         | Wrist actigraphy was       |
| 2004      |                         | available evidence in       | Papers addressing sleep       | 41                         | found to be the most       |
| Australia | SBU Domain(s):          | relation to the promotion   | diagnosis, assessment         |                            | accurate objective sleep   |
| [40]      | Upprätthållande och     | of sleep in older adults in | and/or management in          | Study design:              | assessment tool for use in |
| []        | stimulerande            | the high-level aged care    | adults aged 65 or over who    | RCT (n=8), non-RCT         | the population of          |
|           | arbetssätt – särskilt   | setting. Specifically, it   | were residing in high-level   | (n=3), cohort studies      | interest, and issues       |
|           | boende. (Maintaining    | addressed:                  | aged care. Randomized         | (n=15), times series trial | surrounding its use are    |
|           | and stimulating work    | 1. What are the most        | controlled trials (RCTs) and. | (n=5), case report         | presented. Although no     |
|           | methods -               | effective measures to       | due to the limited number     | (n=3), descriptive study   | subjective sleep           |
|           | institutional settings) | assess and diagnose sleep   | of RCTs available, non-       | (n=5), opinion paper       | assessment tools were      |
|           | institutional settingsy | disturbances in older       | RCTs, cohort and case         | (n=2)                      | identified in this review, |
|           | Quantitative            | adults residing in high-    | control studies and           | (11-2)                     | the evidence suggested     |
|           | Quantitative            | level care?                 | qualitative research.         | Population:                | that subjective reports of |
|           |                         | 2. What are the most        | Research was included if it   | Adults aged 65 or over     | sleep quality are an       |
|           |                         | effective interventions for | addressed the assessment,     | who were residing in       | important consideration    |
|           |                         | promotion of sleep in       | diagnosis or management       | high-level aged            | in sleep assessment.       |
|           |                         | older adults residing in    | of sleep using outcome        | care.                      |                            |
|           |                         | high-level aged care        | measure of improved           | curc.                      | Evidence suggested that    |
|           |                         | settings?                   | nighttime sleep or daytime    | Number of                  | behavioral observations    |
|           |                         | serrings:                   | function, improvements in     | participants:              | may be an effective        |
|           |                         |                             | resident satisfaction with    | 2-800                      | assessment strategy        |
|           |                         |                             |                               | 2-000                      | when conducted on a        |
|           |                         |                             | sleep or reduction in         | Country of origin.         |                            |
|           |                         |                             | medication use associated     | Country of origin:         | frequent basis. The        |
|           |                         |                             | with sleep.                   | Not stated                 | review found no evidence   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|-------------------------------------|---|---|---|
|  |  |                                     | Literature search:<br>2003  | Setting:<br>Nursing homes,<br>geriatric facility, LTC.<br>Interventions:<br>alternative therapies<br>including massage,<br>aromatherapy and<br>medicinal herbs;<br>behavioral or cognitive<br>interventions;<br>biochemical,<br>environmental,<br>pharmacological<br>interventions, and<br>related nocturnal<br>interventions such as<br>continence care.<br>Instruments and<br>strategies to diagnose<br>and assess the sleep of<br>older high-level care<br>residents, including<br>objective and<br>subjective assessment<br>tools<br><b>Outcomes:</b><br>indicators of improved<br>sleep quality and<br>quantity, including<br>improvement in<br>daytime functioning<br>and improved night-<br>time sleep; reduction in<br>use of hypnotics and | on the effectiveness of<br>any assessment tools for<br>the diagnosis of specific<br>sleep problems in older<br>adults. The use of<br>multidisciplinary<br>strategies including<br>reduction of<br>environmental noise,<br>reduction of nighttime<br>nursing care that disrupts<br>sleep and daytime activity<br>is likely to be the most<br>effective strategy for the<br>promotion of sleep in<br>older <b>High</b> -level care<br>residents. The use of<br>sedating medications did<br>not appear to have a<br>substantial effect in<br>promoting sleep, and<br>health practitioners in<br>high-level aged care<br>should consider their use<br>cautiously. |

| Author<br>Year<br>Country<br>Reference     | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|---|---|--|--|
|  |   |   |   | sedatives; and<br>increased satisfaction<br>with sleep.  |  |
|  |   |   |   | Follow-up time:<br>When applicable and<br>reported, between 5<br>days and 18 months  |  |
| Haesler et al<br>2004<br>Australia<br>[41] | Moderate<br>SBU Domain(s):<br>Anhörigstöd och<br>familjeorienterat<br>arbete<br>(Support for informal<br>carers)<br>Quantitative and<br>qualitative | To present the best<br>available evidence on the<br>strategies, practices and<br>organisational<br>characteristics that<br>promote constructive<br>staff-family relationships<br>in the care of older adults<br>in the health care setting.<br>Specifically this review<br>sought to investigate how<br>staff and family members<br>perceive their<br>relationships with each<br>other; staff<br>characteristics that<br>promote constructive<br>relationships with the<br>family; and interventions<br>that support staff-family<br>relationships. | Inclusion criteria:<br>Publication period: 1990-2005.<br>Population:<br>Participants were residents<br>and patients within acute,<br>subacute, rehabilitation<br>and residential settings,<br>aged over 65 years, their<br>family and health care staff.<br>No restrictions were made<br>in terms of the patient's<br>condition (e.g. their<br>cognitive state,<br>seriousness/level of illness).<br>Study design:<br>This review considered<br>quantitative (e.g. RCT, time<br>series, crossover design,<br>case series, crosssectional,<br>cohort, prospective, case<br>control, retrospective<br>studies) and qualitative<br>studies (e.g. case<br>ACEBAC Constructive staff-<br>family relationships in the | Number of studies:<br>35 studies.<br>Study design:<br>RCT (n=1)<br>Triangulated<br>experiments (n=3)<br>Qualitative research<br>studies (n=28)<br>Textual papers (n=3)<br>Number of<br>participants:<br>Not calculated but<br>listed for most included<br>study. Residents<br>ranging between (n=10)<br>and (n=16), family<br>members ranging<br>between (n=7) and<br>(n=349), staff ranging<br>between (n=7) and<br>(n=895)<br>Characteristics of<br>participants:<br>Residents and patients<br>within acute, subacute, | Family members'<br>perceptions of their<br>relationships with staff<br>showed that a strong<br>focus was placed on<br>opportunities for the<br>family to be involved in<br>the patient's care. Staff<br>members also expressed<br>a theoretical support for<br>the collaborative process,<br>however this belief often<br>did not translate to the<br>staff members' clinical<br>practice. In the studies<br>included in the review<br>staff were frequently<br>found to rely on<br>traditional medical<br>models of care in their<br>clinical practice and<br>maintaining control over<br>the environment, rather<br>than fully collaborating<br>with families. Four factors<br>were found to be<br>essential to interventions<br>designed to support a |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|--|
|  |  |  | <ul> <li>institutional setting reports,<br/>phenomenological studies,<br/>grounded theory,<br/>ethnographic studies,<br/>naturalistic studies) which<br/>reported on staff and<br/>family perceptions of staff-<br/>family relationships in the<br/>care of older people who<br/>are patients of acute,<br/>subacute, rehabilitation<br/>and long term care settings.<br/>Text which were derived<br/>from sources other than<br/>research (e.g. opinion<br/>papers, discussion papers,<br/>reviews,<br/>consensus guidelines) were<br/>also be considered.</li> <li>Settings:<br/>Acute, subacute,<br/>rehabilitation and<br/>residential settings.</li> <li>Other criteria:<br/>English</li> <li>Literature search:<br/>2005</li> </ul> | residential settings,<br>aged over 65 years,<br>their family and health<br>care staff.<br><b>Country of origin:</b><br>The following are<br>mentioned but country<br>is not listed for all<br>studies. United States,<br>Australia, New Zealand,<br>Canada, Sweden,<br>Iceland, Finland, United<br>Kingdom,<br><b>Setting:</b><br>Residential settings<br><b>Interventions:</b><br>Partners in Caregiving<br>(PIC (n=1),<br>Family Involvement in<br>Care (FIC) (n=2),<br>Family meeting<br>intervention (n=1)<br><b>Outcomes:</b><br>Subjective and<br>objective measure of<br>staff-family relationship<br>staff outcomes related<br>to constructive staff-<br>family relationship (e.g.<br>decreased stress,<br>increased job<br>satisfaction, more | between family members<br>and health care staff:<br>communication,<br>information, education<br>and administrative<br>support. Based on the<br>evidence analysed in this<br>systematic review, staff<br>and family education on<br>relationship<br>development, power and<br>control issues,<br>communication skills and<br>negotiating techniques is<br>essential to promoting<br>constructive staff-family<br>relationships. Managerial<br>support, such as<br>addressing workloads and<br>staffing issues;<br>introducing care models<br>focused on collaboration<br>with families; and<br>providing practical<br>support for staff<br>education, is essential to<br>gaining sustained benefits<br>from interventions<br>designed to promote<br>constructive family-staff<br>relationships. |
|  |  |  |   | inclusive practice,  |  |

| Author               | Study quality  | Objectives of the   | Inclusion criteria for the   | Characteristics of the  | The conclusions of the  |
|----------------------|--|---|--|---|---|
| Year                 | SBU Domain(s)  | systematic review   | systematic review  | studies included in the   | systematic review's   |
| •                    |  |   | Literature search (date)   | systematic review   | author(s)   |
| Country<br>Reference | Quantitative/<br>qualitative<br>Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder - särskilt<br>boende (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative | To determine<br>effectiveness of multi-<br>component palliative care<br>service delivery<br>interventions for<br>residents of care homes<br>for older people. Second,<br>to describe the range and<br>quality of outcome<br>measures. | Literature search (date)  Inclusion criteria  1 study: All residents in units at time of initial chart review.  1 study: Non reported - probably all residents. 1 study: Residents diagnosed with endstage dementia, identified by staff as usually unable to engage in group programmes for residents with dementia, at least 2 symptoms, advance directives requesting no cardiopulmonary resuscitation.  Literature search All to February 2010 | systematic review<br>improved retention of<br>staff, increased<br>satisfaction with<br>relationship with<br>resident/patient and<br>family)<br>family satisfaction with<br>the relationship with<br>staff resident<br>satisfaction related to<br>constructive staff-<br>family relationships<br>Follow-up time:<br>Not stated.<br>Number of studies:<br>3<br>Study design:<br>RCT (n=277)<br>CBA (n=458)<br>Number of<br>participants:<br>735 particpants.<br>Intervention = 487<br>Control = 248<br>Characteristics of<br>participants:<br>Average age varied<br>from 80.0 to 87.9 years.<br>Female (75 to 81%),<br>reflecting the higher<br>proportion of women | author(s)         Clearly a need for         effective palliative care         interventions in care         homes for older people,         and the core principles         and practices of palliative         care, such as advance         care planning and         symptom management         could benefit all         residents, not just those         at the end of life. The         review found potentially         promising results for 3         interventions: assessing         residents' suitability for         specialist palliative care         and making         recommendations to         their physicians, |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   |  | and moving residents                                       |
|  |  |  |   | Setting:   | with end-stage dementia                                    |
|  |  |  |   | 12 nursing homes (with   | to special units in the                                    |
|  |  |  |   | own hospice services or  | care home. However,  |
|  |  |  |   | arrangements with  | without further  |
|  |  |  |   | external hospice   | evaluation, we cannot                                      |
|  |  |  |   | services) and 3 long-  | recommend the use of                                       |
|  |  |  |   | term care facilities.  | the interventions in                                       |
|  |  |  |   |  | clinical practice. There is                                |
|  |  |  |   | Country of origin:   | an absence of a shared                                     |
|  |  |  |   | USA  | understanding in the                                       |
|  |  |  |   |  | literature of what a                                       |
|  |  |  |   | Interventions:   | palliative care  |
|  |  |  |   | Structured interview to  | intervention for residents                                 |
|  |  |  |   | identify residents   | should look like. Some                                     |
|  |  |  |   | suitable for palliative  | features of the  |
|  |  |  |   | care and asked their   | interventions evaluated                                    |
|  |  |  |   | physicians to refer  | in this review are likely to                               |
|  |  |  |   | them to specialist   | be important:  |
|  |  |  |   | palliative care (n=107).   | relationships between                                      |
|  |  |  |   | Development of   | care homes and specialist                                  |
|  |  |  |   | palliative care  | palliative care services                                   |
|  |  |  |   | leadership teams,  | who can provide  |
|  |  |  |   | technical assistance   | specialist support for                                     |
|  |  |  |   | meetings for team  | residents with complex                                     |
|  |  |  |   | members, education in  | needs. Specialist services                                 |
|  |  |  |   | palliative care for all  | can also provide training                                  |
|  |  |  |   | staff, feedback on   | and advice to care home                                    |
|  |  |  |   | performance (n=345).   | staff who could provide a                                  |
|  |  |  |   | Residents transferred  | general palliative   |
|  |  |  |   | to special units in the  | approach to care which is                                  |
|  |  |  |   | homes, interdisciplinary   | appropriate for all  |
|  |  |  |   | teams to develop   | residents, regardless of                                   |
|  |  |  |   | individualized care  | their diagnosis or   |
|  |  |  |   | plans, holistic care, and  | prognosis. However,  |
|  |  |  |   | staff education in   | training is a necessary but                                |
|  |  |  |   | palliative care (n=35).  | not sufficient condition to                                |

| Author<br>Year<br>Country<br>Reference  | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|---|---|--|---|--|--|
|   |   |  |   | Outcomes:<br>Six-month mortality<br>Family rating of quality<br>of care (N = 17)<br>Resident in pain<br>Behaviours associated<br>with dementia<br>Discomfort Physical<br>complications<br>Follow-up time:<br>Study 1: Residents: for<br>6 months or until<br>death. Bereaved<br>relatives 2 months<br>post-death. Study 2: 6<br>months post<br>intervention.<br>Study 3: 2 months post<br>intervention | improve the care of<br>residents. Other<br>components, such as the<br>development of<br>multidisciplinary teams,<br>are also likely to be<br>important. Such teams<br>were included in two of<br>the interventions and are<br>a key aspect of a<br>palliative approach to<br>care.   |
| Hill et al<br>2017<br>Australia<br>[43] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – ordinärt<br>boende. (Maintaining<br>and stimulating work<br>methods - community<br>settings)<br>Quantitative | Previous meta-analyses<br>indicate that<br>computerised cognitive<br>training (CCT) is a safe<br>and efficacious<br>intervention for cognition<br>in older adults. However,<br>efficacy varies across<br>populations and cognitive<br>domains, and little is<br>known about the efficacy<br>of CCT in people with<br>mild cognitive<br>impairment or dementia. | Inclusion criteria:<br>Randomized controlled<br>trials of CCT in older adults<br>with mild cognitive<br>impairment or dementia.<br>Literature search:<br>From inception to July 1,<br>2016. | Number of studies:<br>25<br>Study design:<br>RCT<br>Number of<br>participants:<br>Mild cognitive<br>impairment: n=686,<br>CCT: N=351, control:<br>N=335. Mean age 67<br>and 81 years old, and<br>51.88% of participants<br>were female.  | CCT is efficacious on<br>global cognition, select<br>cognitive domains, and<br>psychosocial functioning<br>in people with mild<br>cognitive impairment.<br>This intervention<br>therefore warrants<br>longer-term and larger-<br>scale trials to examine<br>effects on conversion to<br>dementia. Conversely,<br>evidence for efficacy in<br>people with dementia is<br>weak and limited to trials |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|---|--|
|  |  |                                     |   | Dementia: n=389, CCT:<br>N=201, control: N=188.<br>Mean age 66 and 81<br>years old, and 63.5% of<br>participants were<br>female.                                | of immersive<br>technologies.                              |
|  |  |                                     |   | Characteristics of<br>participants:<br>Older adults with mild<br>cognitive<br>impairment or<br>dementia.  |  |
|  |  |                                     |   | Setting:<br>Supervised home-<br>based.  |  |
|  |  |                                     |   | <b>Country of origin:</b><br>Not stated apart from<br>Australia   |  |
|  |  |                                     |   | Interventions:<br>At least 4 hours of drill<br>and practice, with a<br>clear cognitive<br>rationale, videogames,<br>or virtual reality, had to<br>be completed. |  |
|  |  |                                     |   | Outcomes:<br>Global cognition,<br>memory, working<br>memory, and attention<br>and helps improve<br>psychosocial   |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|--|--|---|
|  |  | To establish the best<br>available evidence for the<br>effectiveness and safety<br>of topical skin care<br>interventions for<br>residents of aged care<br>facilities. | Literature search (date) Inclusion criteria: Study designs of interest to this review were systematic reviews, randomized and non-randomized controlled trials. The review considered studies that included adults aged 65 years and over residing in an aged care facility. Studies with adults aged 65 years and over and in long-term care were also considered when aged care studies were not available when addressing specific skin conditions. Interventions of interest were any non-medical intervention or program designed to promote or improve the integrity of skin in older adults. Excluded were studies that | systematic review<br>functioning, including<br>depressive symptoms.<br>Follow-up time<br>Is reported in a<br>supplement.<br>Number of studies:<br>Ten studies and 1<br>review.<br>Study design:<br>RCT, CCT, case –<br>control, retrospective,<br>repeated measure<br>Number of<br>participants:<br>12-93<br>Characteristics of<br>participants:<br>Some information<br>about frailty and<br>continence status.<br>Setting:<br>Nursing home, long<br>term care<br>Country of origin:<br>Not stated | author(s)<br>Many of the studies<br>showed trends favouring<br>a specific treatment but<br>were underpowered and<br>therefore a statistically<br>significant difference<br>between two groups, if<br>one truly existed, was<br>unlikely to be identified.<br>More research is<br>warranted, specifically<br>into the effectiveness of<br>no-rinse cleansers on<br>overall skin condition,<br>topical skin care to<br>prevent skin tears and<br>dermatitis and topical<br>skin care to reduce skin<br>dryness. |
|  |  |   | evaluated pressure<br>relieving techniques for the<br>prevention of skin<br>breakdown.   | Interventions:<br>Absorbent products,<br>no-rinse cleansers, skin<br>creams, emollient   |   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|--|---|--|
|  |  |  | Outcome measures<br>included the incidence of<br>adverse skin conditions<br>such as rash, skin irritation,<br>haematoma or tears during<br>the study period. Patient<br>satisfaction was also<br>considered.<br>Literature search:<br>April 2003       | soaps and structured<br>skin cleansing regimes<br>Outcomes:<br>General skin condition,<br>pressure sores, dry skin,<br>skin tears, dermatitis,<br>satisfaction<br>Follow-up time:<br>Not stated   |  |
| Huang et al<br>2015<br>Taiwan<br>[45]  | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – ordinärt<br>boende<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods – both<br>community and<br>institutional settings)<br>Quantitative | To investigate the<br>immediate and long-term<br>(6 -10 months) effects of<br>reminiscence therapy on<br>cognitive functions and<br>depressive symptoms in<br>elderly people with<br>dementia. | Inclusion criteria:<br>All RCTs of reminiscence<br>therapy performed for<br>elderly people with<br>dementia. Outcome<br>measures comprising<br>cognitive functions and<br>depressive symptoms were<br>included.<br>Literature search:<br>December 2014 | Number of studies:<br>12<br>Study design:<br>RCT<br>Number of<br>participants:<br>9 to 268, in total, 1325<br>Characteristics of<br>participants:<br>Participants with<br>various types of<br>dementia, including<br>those with Alzheimer<br>dementia, vascular<br>dementia, and<br>dementia secondary to<br>medical disorders.<br>Setting:<br>Institutional and<br>community setting | This meta-analysis<br>including more recent<br>RCTs shows that<br>reminiscence therapy<br>yields a small-size effect<br>on cognitive functions<br>and a Moderate-size<br>effect on depressive<br>symptoms in elderly<br>people with dementia.<br>Long-term effects of<br>reminiscence therapy on<br>cognitive functions and<br>depressive symptoms<br>were not confirmed.<br>Reminiscence therapy is<br>more effective for<br>depressive symptoms in<br>institutionalized residents<br>with dementia than for<br>those in community-<br>dwelling elderly adults.<br>Because reminiscence<br>therapy is an easy-to-<br>perform and easily<br>administered |

| Author<br>Year<br>Country | Study quality<br>SBU Domain(s)<br>Quantitative/       | Objectives of the systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review               | The conclusions of the<br>systematic review's<br>author(s)  |
|---------------------------|---|---|---|--|---|
| Reference                 | qualitative   |   | ,   |  |   |
|                           |   |   |   | Country of origin:<br>Not clearly stated apart<br>from China<br>Interventions: | intervention, health care<br>providers should adopt it<br>in multidimensional<br>treatments to improve<br>cognitive functions and |
|                           |   |   |   | Group or individual<br>reminiscence therapy<br>sessions, 5-12 weeks            | depressive symptoms in<br>elderly people with<br>dementia, particularly in<br>institutionalized residents                         |
|                           |   |   |   | Outcomes:  | with dementia. Because  |
|                           |   |   |   | Cognitive function and depressive symptoms                                     | long-term effects of<br>reminiscence therapy on<br>cognitive functions and  |
|                           |   |   |   | Follow-up time:  | depressive symptoms in  |
|                           |   |   |   | 6-10 months when   | elderly people with   |
|                           |   |   |   | stated   | dementia were not<br>confirmed, additional<br>well-designed RCTs<br>should be conducted to<br>clarify this.                       |
| Hutchinson et al          | Moderate  | To systematically   | Publications:   | Number of studies:   | The findings indicate that  |
| 2010                      |   | examine published and   | Literature in the English   | 14 articles  | the strength of the   |
| Australia<br>[46]         | SBU Domain(s):<br>Behovsbedömning<br>och uppföljning. | grey research reports in<br>order to assess the state<br>of the science regarding | language<br>Articles or reports of<br>research published up to              | Study design:<br>1) Comparison between   | evidence with respect to<br>the validity and reliability<br>of RAI-MDS 2.0 QI is  |
|                           | (Needs assessment<br>and follow-up: older             | the validity and reliability<br>of the RAI-MDS 2.0 QI.                            | December 2008   | RAI-MDS 2.0 data<br>routinely collected by                                     | limited, and further research is warranted.   |
|                           | persons)  |   | Primary purpose:  | facility staff and that  | While the QIs provide a   |
|                           |   |   | Examining reliability and/or  | collected by trained   | useful tool for quality   |
|                           | Quantitative  |   | validity of Resident  | research nurses (n=2);   | monitoring and with   |
|                           |   |   | Assessment Instrument<br>(RAI)-Minimum Data Set 2.0                         | Comparison between<br>data collected using the<br>RAI-MDS 2.0                  | which to inform quality<br>improvement programs,<br>caution should be   |
|                           |   |   | Literature search:  | instrument and that  | exercised when  |
|                           |   |   | Not stated; publications  | collected using another  | interpreting the QI   |
|                           |   |   | published up to December  | method designed to   | results. Importantly, the   |
|                           |   |   | 2008 included   | measure the same   | results should be   |

| Year S<br>Country C | tudy quality<br>BU Domain(s)<br>Quantitative/<br>Jualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|---------------------|--|--|---|---|---|
|                     |  |  |   | resident characteristics<br>(n=12).<br>Number of<br>participants:<br>N=109-5758/study<br>Characteristics of<br>participants:<br>Mean age: Not stated<br>Age range: Not stated<br>Gender distribution:<br>Not stated<br>Setting:<br>Residential long-term<br>care<br>Country of origin:<br>United States.<br>Intervention/assessment<br>Instrument (RAI)-<br>Minimum Data Set 2.0<br>Outcomes:<br>Validity and reliability<br>of multiple indicators<br>Validity and reliability<br>of single indicators<br>(falls, depression,<br>depression without<br>treatment,<br>incontinence, urinary | contextualized and<br>interpreted in<br>conjunction with other<br>valid and reliable sources<br>of information and<br>evidence about care<br>processes. Finally, this<br>review indicates the need<br>for further validation of<br>the RAI-MDS 2.0 Qis. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|---|---|--|--|
| Joseph et al                           | Moderate   | To provide an overview  | Study design:   | loss, bedfast, restraint,<br>pressure ulcers, pain)<br>Follow-up time:<br>Not applicable<br>Number of studies:   | This review found 66   |
| 2016<br>USA & South<br>Korea<br>[47]   | SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder - särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative and<br>qualitative | and synthesis of the most<br>recent empirical evidence<br>addressing the impact of<br>the physical environment<br>on residents and staff of<br>residential health, care,<br>and support facilities. | Study design:Randomized controlled,quasi-randomizedcontrolled, controlledbefore-and-after,historically controlled andcohort studies, and cross-sectional studies.Participants:Older adults 55 years of ageor older, health personnelsuch as medical staff,nurses, and physicians.Setting:Residential care facilities(i.e., assisted livingfacilities, group homes,homes for the aged,nursing homes such asresidential health, care, andsupport facility (RHCSF).Intervention:Physical environmentcomponent that is beingevaluated.Outcomes:Not clear, Resident qualityof life, resident safety, and | Number of studies:66Study design:<br>Randomized controlled,<br>quasi-randomized<br>controlled, controlled<br>before-and-after,<br>historically controlled<br>and cohort studies, and<br>cross-sectional studies.Number of<br>participants:<br>Not statedNot statedCharacteristics of<br>participants:<br>Not stated specifically<br>for each study.Setting:<br>Majority of the studies<br>in this sample were<br>conducted in nursing<br>home (NH)<br>environment alone (32<br>studies). Eight studies<br>were conducted in two<br>different settings (3<br>studies in skilled<br>nursing facility (SNFs)/ | This review found 66<br>studies examining the<br>relationship between the<br>built environment and<br>outcomes in three broad<br>domains of resident<br>quality of life, resident<br>safety, and staff and<br>organizational outcomes.<br>The studies address a<br>range of topics including<br>the impact on elderly<br>residents of the facility<br>scale and size, outdoor<br>environments, and<br>environmental quality. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)                     | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
|  |  |  | staff and organizational<br>outcomes.<br>Literature search:<br>January 2000 and October<br>2012 | assisted living facility<br>(ALF) and 2 studies in<br>hospitals/unknown<br>type of long-term care<br>settings, 2 studies in<br>hospitals/post-acute<br>facilities, and 1 study in<br>retirement<br>communities/ single-<br>family community<br>dwellings). One study<br>was conducted in three<br>different settings<br>simultaneously (i.e.,<br>ALF, NH, and care<br>homes). Other than<br>studies that focused<br>solely on NH settings, a<br>few studies focused on<br>just one type of setting<br>such as ALF (2 studies),<br>care homes (3 studies),<br>and retirement<br>communities (3<br>studies). Seventeen<br>studies indicated long-<br>term care settings<br>generally without<br>specifying the type of<br>RHCSF<br><b>Country of origin:</b><br>Not stated (not limiting<br>to US).<br><b>Interventions and</b> |  |
|  |  |  |   | outcomes:   |  |

| Author    | Study quality | Objectives of the | Inclusion criteria for the | Characteristics of the     | The conclusions of the |
|-----------|---------------|-------------------|----------------------------|----------------------------|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review          | studies included in the    | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)   | systematic review          | author(s)              |
| Reference | qualitative   |                   |                            |                            |                        |
|           |               |                   |                            | Resident quality of life   |                        |
|           |               |                   |                            | including facility-level   |                        |
|           |               |                   |                            | design factors, site       |                        |
|           |               |                   |                            | optimization/outdoor       |                        |
|           |               |                   |                            | environments, unit         |                        |
|           |               |                   |                            | configuration and          |                        |
|           |               |                   |                            | layout, small-scale        |                        |
|           |               |                   |                            | facilities, public-private |                        |
|           |               |                   |                            | space gradient, support    |                        |
|           |               |                   |                            | for wayfinding, unit       |                        |
|           |               |                   |                            | density and design,        |                        |
|           |               |                   |                            | room configuration,        |                        |
|           |               |                   |                            | daylight and lighting,     |                        |
|           |               |                   |                            | furniture fixtures and     |                        |
|           |               |                   |                            | equipment, physical        |                        |
|           |               |                   |                            | restraint, disguising      |                        |
|           |               |                   |                            | doorways, multi-           |                        |
|           |               |                   |                            | sensory environments,      |                        |
|           |               |                   |                            | overall environmental      |                        |
|           |               |                   |                            | quality, ambient           |                        |
|           |               |                   |                            | environment.               |                        |
|           |               |                   |                            | Resident safety            |                        |
|           |               |                   |                            | -falls including facility- |                        |
|           |               |                   |                            | level design factors,      |                        |
|           |               |                   |                            | furniture, fixtures, and   |                        |
|           |               |                   |                            | equipment, interior        |                        |
|           |               |                   |                            | materials,                 |                        |
|           |               |                   |                            | environmental /            |                        |
|           |               |                   |                            | condition,                 |                        |
|           |               |                   |                            | Health care-associated     |                        |
|           |               |                   |                            | infections including       |                        |
|           |               |                   |                            | room configuration,        |                        |
|           |               |                   |                            | environmental              |                        |
|           |               |                   |                            | conditions                 |                        |
|           |               |                   |                            | Medication safety          |                        |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|--|--|--|---|
|  |   |  |  | Room configuration, -<br>environmental<br>conditions (noise)<br>Staff and organizational<br>outcomes: facility-level<br>design factors, unit<br>type, furniture, fixtures,<br>and equipment.<br>Follow-up time:<br>Not applicable or not<br>stated specifically for<br>each study  |   |
| Jutkowitz et al<br>2016<br>USA<br>[48] | Moderate<br>SBU domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative | To evaluate the efficacy<br>of nonpharmacological<br>care-delivery<br>interventions (staff<br>training, care-delivery<br>models, changes to the<br>environment) to reduce<br>and manage agitation and<br>aggression in nursing<br>home and assisted living<br>residents. | Inclusion criteria:Population:Facility caregiving staff.Publication period:Studies published beforeAugust 2015.Study design:RCTs evaluatingnonpharmacologicalinterventions designed toreduce agitation oraggression in individualswith dementia.Setting:Nursing homes and assistedliving facilities.Other criteria:English | each study         Number of studies:         19         Study design:         RCT (n=19)         Number of         participants:         Not summarised but         ranges between n=31         and n=659.         Characteristics of         participants:         Not stated.         Country of origin:         Australia (n=1), Norway         (n=1), Netherlands         (n=4), United Kingdom         (n=4), Germany (n=1),         France (n=1), United         States (n=6), Canada         (n=1) | Evidence was insufficient<br>regarding the efficacy of<br>nonpharmacological care-<br>delivery interventions to<br>reduce agitation or<br>aggression in nursing<br>home and assisted living<br>facility residents with<br>dementia. |

| Author      | Study quality       | Objectives of the         | Inclusion criteria for the | Characteristics of the     | The conclusions of the   |
|-------------|---------------------|---------------------------|----------------------------|----------------------------|--------------------------|
| Year        | SBU Domain(s)       | systematic review         | systematic review          | studies included in the    | systematic review's      |
| Country     | Quantitative/       |                           | Literature search (date)   | systematic review          | author(s)                |
| Reference   | qualitative         |                           |                            |                            |                          |
|             |                     |                           | Literature search:         |                            |                          |
|             |                     |                           | July 2015.                 | Setting:                   |                          |
|             |                     |                           |                            | Nursing homes and          |                          |
|             |                     |                           |                            | assisted living facilities |                          |
|             |                     |                           |                            |                            |                          |
|             |                     |                           |                            | Interventions:             |                          |
|             |                     |                           |                            | 22 interventions of 19     |                          |
|             |                     |                           |                            | studies: Dementia care     |                          |
|             |                     |                           |                            | mapping (n=3)              |                          |
|             |                     |                           |                            | Person-centred care        |                          |
|             |                     |                           |                            | (n=3)                      |                          |
|             |                     |                           |                            | Clinical guidelines to     |                          |
|             |                     |                           |                            | reduce antipsychotic       |                          |
|             |                     |                           |                            | and other psychotropic     |                          |
|             |                     |                           |                            | drug use (n=3)             |                          |
|             |                     |                           |                            | Emotion-oriented care      |                          |
|             |                     |                           |                            | (n=2)                      |                          |
|             |                     |                           |                            | Additional mutually        |                          |
|             |                     |                           |                            | distinct types of staff    |                          |
|             |                     |                           |                            | training and               |                          |
|             |                     |                           |                            | environmental changes      |                          |
|             |                     |                           |                            | (n=11)                     |                          |
|             |                     |                           |                            |                            |                          |
|             |                     |                           |                            | Outcomes: Resident         |                          |
|             |                     |                           |                            | well-being, agitation,     |                          |
|             |                     |                           |                            | aggression, general        |                          |
|             |                     |                           |                            | behavior antipsychotic     |                          |
|             |                     |                           |                            | and other psychotropic     |                          |
|             |                     |                           |                            | use)                       |                          |
|             |                     |                           |                            |                            |                          |
|             |                     |                           |                            | Follow-up time:            |                          |
|             |                     |                           |                            | 2 weeks to 20 months.      |                          |
| Kelly et al | Moderate            | To investigate the impact | Study design:              | Number of studies:         | The impact of cognitive  |
| 2014        |                     | of cognitive training and | Randomized controlled      | n=31                       | training on everyday     |
| Ireland     | SBU Domain(s):      | general mental            | trials                     |                            | functioning is largely   |
| [49]        | Upprätthållande och | stimulation on the        |                            |                            | under investigated. More |
|             | stimulerande        | cognitive and everyday    | Participants:              |                            | research is required to  |

| Author Stud                      | dy quality  | Objectives of the  | Inclusion criteria for the   | Characteristics of the   | The conclusions of the   |
|----------------------------------|---|--|--|--|--|
|                                  | J Domain(s)   | systematic review  | systematic review  | studies included in the  | systematic review's  |
| Country Qua                      | antitative/   | -  | Literature search (date)   | systematic review  | author(s)  |
| Reference qua                    | alitative   |  |  |  |  |
| met<br>boe<br>and<br>met<br>sett | etssätt och<br>toder - ordinärt<br>ende (Maintaining<br>I stimulating work<br>thods - community<br>tings)<br>antitative | functioning of older<br>adults without known<br>cognitive impairment.<br>Examine transfer and<br>maintenance of<br>intervention effects, and<br>the impact of training in<br>group versus individual<br>settings | Older adults (>50) with no<br>known existing cognitive<br>impairment.<br>Setting:<br>Community dwelling<br>Intervention:<br>Cognitive training or<br>general mental stimulation<br>Outcomes:<br>Cognitive function<br>Literature search:<br>2012 | Study design:<br>All Randomized<br>controlled trials<br>Number of<br>participants:<br>1806 participants in<br>cognitive training<br>groups and 386 in<br>general mental<br>stimulation groups.<br>1541 'no intervention'<br>controls and 822 active<br>controls.<br>Characteristics of<br>participants:<br>Mean age not<br>calculated. Inclusion<br>starts from 50 years of<br>age. Main part of the<br>studies analyse<br>participants older than<br>60 years of age (n=29).<br>Setting:<br>Community dwelling<br>Country of origin:<br>Not stated<br>Interventions:<br>The most common<br>cognitive training | determine if general<br>mental stimulation can<br>benefit cognitive and<br>everyday functioning.<br>Transfer and<br>maintenance of<br>intervention effects are<br>most commonly reported<br>when training is adaptive,<br>with at least ten<br>intervention sessions and<br>a long-term follow-up.<br>Memory and subjective<br>cognitive performance<br>might be improved by<br>training in group versus<br>individual settings. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|--|--|
|  |  |                                     |   | interventions were<br>diverse and included<br>activities such as<br>playing piano, acting,<br>and helping children<br>with reading difficulties.<br>The 'no intervention'<br>controls received either<br>no contact, minimum<br>social support, or were<br>placed on a waiting list.<br>Active control groups<br>included educational<br>DVDs or lectures,<br>health-promotion<br>training, non-brain<br>training computer<br>games, or some form of |  |
|  |  |                                     |   | unstructured learning.<br><b>Outcomes:</b><br>Meta-analysis results<br>revealed that compared<br>to active controls,<br>cognitive training<br>improved performance<br>on measures of<br>executive function<br>(working memory, p =<br>0.04; processing speed,<br>p < 0.0001) and<br>composite measures of<br>cognitive function (p =<br>0.001). Compared to no<br>intervention, cognitive<br>training improved<br>performance on                     |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|---|--|---|---|
| Kimber et al<br>2015<br>UK<br>[50]     | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – både<br>särskilt och ordinärt<br>boende (Maintaining<br>and stimulating work<br>methods – both<br>community and<br>institutional settings)<br>Quantitative | To synthesise evidence<br>from nonrandomised<br>studies aiming to improve<br>nutritional intake in<br>nutritionally vulnerable<br>individuals and to<br>describe their effects on<br>cost, nutritional, clinical<br>and patient centred<br>outcomes | Inclusion criteria:<br>Studies were eligible for<br>inclusion if they were non-<br>RCTs, before-and-after<br>studies or were prospective<br>studies providing either<br>quantitative or qualitative<br>data. Case studies (or those<br>with insufficient detail to<br>permit replication or<br>quality appraisal) were<br>excluded<br>Literature search:<br>Searching was undertaken<br>three times: To the end of<br>October 2011 (all<br>databases); to 31 March<br>2013 (all databases); and to<br>3 May 2013 (Scopus only) | measures of memory<br>(face-name recall, p=<br>0.02; immediate recall,<br>p =0.02; paired<br>associates, p =0.001)<br>and subjective cognitive<br>function (p = 0.01)<br>Follow-up time:<br>Not stated per<br>outcome. (Weeks to<br>years)<br>Number of studies:<br>41<br>Study design:<br>Controlled trials (n=35)<br>and observational<br>studies (n=6)<br>Population:<br>Adults (Included studies<br>aged 60 an over) who<br>were malnourished,<br>judged to be at<br>nutritional risk or were<br>considered to have the<br>potential to benefit<br>from improved<br>nutritional care.<br>Participants were<br>identified as<br>malnourished or at risk<br>of malnutrition based<br>on published clinical<br>guidelines. | This systematic review<br>describes a range of<br>interventions that may be<br>implemented in clinical<br>practice. A limited range<br>of outcomes are<br>reported, and it is difficult<br>to draw any meaningful<br>conclusions on the effect<br>of the different methods. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|---|--|
|  |  |                                     |   | Setting:<br>Eligible participants<br>were either in a<br>hospital or a residential<br>care home (RCH)<br>setting, or were<br>receiving home care<br>Number of |  |
|  |  |                                     |   | participants:<br>3 751<br>Country of origin:<br>Not stated  |  |
|  |  |                                     |   | Interventions:<br>Changes to the<br>organisation of<br>nutritional care (n =<br>15), changes to the<br>feeding environment (n                                 |  |
|  |  |                                     |   | = 11), modification to<br>meals (n = 6),<br>supplementation of<br>meals (n = 7) and<br>recipients of home<br>delivered meals (n = 2).                         |  |
|  |  |                                     |   | Outcomes:<br>The primary outcomes<br>were: Nutritional<br>intake, health-related<br>quality of life, patient  |  |
|  |  |                                     |   | satisfaction, patient and<br>staff experience and<br>morbidity/<br>complications. The   |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|--|---|---|
|  |  |   |  | secondary outcomes<br>were: Nutritional<br>status, clinical and<br>other functional<br>measures, hospital<br>admission and<br>institutionalization,<br>length of hospital stay,<br>adverse effects, death<br>from any cause and<br>costs.<br>Follow-up time:<br>Per outcome or unclear  |   |
| Konno et al<br>2014<br>Japan<br>[51]   | Moderate<br>SBU Domain(s):<br>Stimulerande och<br>upprätthållande<br>arbetssätt - särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative | To examine what<br>interventions effectively<br>manage or reduce the<br>resistance-to care<br>behaviours of nursing<br>home residents with<br>dementia. | Inclusion criteria:<br>(1) Examined<br>any non-pharmacological<br>intervention to reduce the<br>resistance-to-care<br>behaviours of people with<br>dementia over the<br>age of 55, who were living<br>in a residential-care setting.<br>(2) Used outcome<br>measures of resistance-to-<br>care frequency and<br>intensity during personal<br>care; and (3) were<br>randomized<br>controlled trials (RCT), or<br>quasi-experimental studies,<br>published<br>in English.<br>Literature search | Number of studies:         19         Study design:         Quasiexperimental (16         studies), RCT (3 studies)         Number of         participants:         7-127         Characteristics of         participants:         Mainly women with         Moderate-to-severe         dementia, with a mean         age of 80–90 years.         Setting:         Nursing home | <b>Conclusion:</b><br>We reviewed the effects<br>of non-pharmacological<br>interventions on the<br>resistance-to-care<br>behaviours of residents<br>with dementia in a<br>personal-care context.<br>Interventions were<br>mostly targeted for<br>mealtime care, bathing<br>and morning care. The<br>level of recommendation<br>for the non-<br>pharmacological<br>interventions for<br>resistance-to-care<br>behaviours is low because<br>of problems in study<br>design, measurement of<br>resistance to care and the<br>evaluation of |
|  |  |   | Literature search<br>December 2012   |   | evaluation of<br>interventions, regardless  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|--|
|  |  |  |   | Country of origin:<br>USA (11), Canada (3),<br>Taiwan (3), Belgium (1),<br>Sweden (1)<br>Interventions:<br>Interventions with<br>environmental control:<br>mealtime music<br>interventions (9<br>studies), bathing care (3<br>studies), music<br>intervention for<br>morning care (1 study).<br>Educational<br>interventions for<br>caregivers:<br>A person-centred<br>educational programme<br>for bathing (4 studies)<br>An ability-focused<br>educational<br>intervention for daily<br>care and morning care<br>(five studies)<br>Outcomes:<br>Disruptive behaviour,<br>problem behaviour,<br>agitation,<br>aggression and<br>resistance-to-care. | of the type of care.<br>However, most of the<br>studies showed<br>significant reductions in<br>resistant-to-care<br>behaviours. Providing<br>culturally sensitive,<br>person-centred care on<br>the basis of individual<br>preferences and abilities<br>is a basic principle for<br>personal care considering<br>the alternative of non-<br>personcentred care.<br>Future research needs to<br>overcome the problem of<br>the measurement and<br>evaluation of the effects<br>of non-pharmacological<br>interventions during<br>personal care. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|---|--|---|
|  |  |   |   | Follow-up time:<br>Post-intervention<br>periods are not<br>specified   |   |
| Lai et al<br>2009<br>Hong Kong<br>[52] | Moderate<br>SBU Domain(s):<br>Särskilda<br>boendeformer som<br>insats. (Institutional<br>care as an<br>intervention)<br>Quantitative | To evaluate the effect of<br>special care units (SCUs)<br>on behavioural problems,<br>mood, use of restraints<br>and psychotropic<br>medication in patients<br>with dementia. | Inclusion criteria:<br>Types of studies:<br>RCTs in which the<br>outcomes were compared<br>against traditional nursing<br>units. No limit concerning<br>the number of participants<br>in the trials; double-blind<br>assessment not required.<br>Studies where participants<br>received more than one<br>intervention sequentially<br>were excluded unless<br>results obtained during the<br>first treatment phase<br>assessing the outcomes of<br>SCU placement were clearly<br>documented. Included had<br>to comprise pre- and post-<br>intervention testing with at<br>least two-time<br>measurement points.<br>Clinical trials that<br>investigated the effect of a<br>certain dimension were<br>excluded, as were case<br>studies. Clinical trials that<br>included dementia subjects<br>who had no behavioural | Number or studies:         In review: 8 studies         In meta-analysis: 4         Study design:         No RCTs identified;         therefore, inclusion of         non-RCTs with matched         controls. Quasi-         experimental study         (n=1), prospective         cohort study (n=4),         prospective matched         cohort study (n=2),         prospective case         controlled cohort study         (n=1)         Number of         participants:         21-1423/study         Characteristics of         participants:         Mean age: Not stated         Age range: Not stated         Gender distribution: 9-         80%. | There are no identified<br>RCTs investigating the<br>effects of SCUs on<br>behavioural symptoms in<br>dementia, and no strong<br>evidence of benefit from<br>the available non-RCTs. It<br>is probably more<br>important to implement<br>best practice than to<br>provide a specialized care<br>environment. The routine<br>collection of data on<br>behaviour, restraint and<br>psychotropic drug use<br>across multiple nursing<br>home settings offers the<br>best modality for formal<br>evaluation of the benefit<br>or otherwise of SCUs. |
|  |  |   | problems at baseline were<br>included if onset of new<br>agitated behaviour was an  | Special care units for dementia.   |   |

| Author<br>Year | Study quality<br>SBU Domain(s) | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review   | Characteristics of the studies included in the  | The conclusions of the systematic review's |
|----------------|--------------------------------|--|---|---|--|
| Country        | Quantitative/                  |  | Literature search (date)  | systematic review   | author(s)                                  |
| Reference      | qualitative                    |  | outcome measure of those<br>trials.Intervention group:<br>Patients with a confirmed<br>diagnosis of dementia or<br>Alzheimer's disease or<br>related disorders (ADRD).Control group:<br>People with dementia<br>and/or ADRD who resided<br>in long-term care settings<br>that were not specifically<br>designed.Exclusion:<br>People with dementia<br>and/or ADRD who live in<br> | Country of origin:<br>United States (n=3),<br>Canada (n=1), Germany<br>(n=1), Italy (n=1), multi-<br>national (France, Italy,<br>Sweden; n=1), No<br>information (n=1).<br>Interventions:<br>SCU<br>Outcomes:<br>Agitated behaviours<br>Use of physical<br>restraints, psychotropic<br>medications, mood,<br>well-being, quality of<br>life.<br>Follow-up time<br>3-18 months |  |
|                |                                |  | Literature search:<br>6 September 2007  |   |  |

| Author       | Study quality           | Objectives of the           | Inclusion criteria for the    | Characteristics of the  | The conclusions of the      |
|--------------|-------------------------|-----------------------------|-------------------------------|-------------------------|-----------------------------|
| Year         | SBU Domain(s)           | systematic review           | systematic review             | studies included in the | systematic review's         |
| Country      | Quantitative/           |                             | Literature search (date)      | systematic review       | author(s)                   |
| Reference    | qualitative             |                             |                               |                         |                             |
| Fraser et al | Moderate                | To explore the value of     | Inclusion criteria:           | Number of studies:      | Music therapy               |
| 2014         |                         | using participatory arts    | Interventions with people     | 5                       | interventions are           |
| Australia    | SBU Domain(s):          | activities (such as music,  | 65 or older. Interventions    |                         | believed to have            |
| [53]         | Stimulerande och        | dance, singing and the      | within residential care       | Study design:           | beneficial outcomes for     |
|              | upprätthållande         | visual arts) in residential | settings and/or for           | 2 used quantitative     | people with dementia.       |
|              | arbetssätt och          | care settings to enhance    | residents in care, taking     | approaches              | Such benefits include       |
|              | metoder – särskilt      | the health and well-being   | account of cultural           | 1 used mixed methods    | "providing frameworks       |
|              | boende. (Maintaining    | of older people.            | differences in the names      | 2 used qualitative      | for meaningful activity     |
|              | and stimulating work    |                             | used for such provision in    |                         | and stimulation, the        |
|              | methods -               |                             | other countries.              | Number of               | management of               |
|              | institutional settings) |                             | Participatory arts activities | participants:           | problematic behaviour       |
|              |                         |                             | such as playing music,        | N=169                   | such as agitation,          |
|              | Quantitative and        |                             | singing, creating visual art, |                         | improved activity           |
|              | qualitative             |                             | creating physical art such as | Characteristics of      | participation, social       |
|              |                         |                             | clay modelling, performing    | participants            | interaction and emotional   |
|              |                         |                             | arts such as acting or        | Alzheimer's/dementia/   | and cognitive skills."      |
|              |                         |                             | reciting poetry. Qualitative, | mixture of conditions.  | Participatory music         |
|              |                         |                             | quantitative, mixed and/or    | Aged 65 years and over. | interventions, seem to      |
|              |                         |                             | multimethod research.         | (range 43–97)           | provide many similar        |
|              |                         |                             | English language.             |                         | benefits, and can be led    |
|              |                         |                             |                               | Setting:                | by non-specialist           |
|              |                         |                             | Literature search:            | Residential care.       | caregivers and others       |
|              |                         |                             | Articles published between    |                         | within the community.       |
|              |                         |                             | 2000 and 2013.                | Country of origin:      |                             |
|              |                         |                             |                               | Australia, England,     | Multi-centre studies        |
|              |                         |                             |                               | France, Sweden, USA.    | need to be conducted        |
|              |                         |                             |                               |                         | using similar care settings |
|              |                         |                             |                               | Interventions:          | and with residents who      |
|              |                         |                             |                               | -Participative          | have similar                |
|              |                         |                             |                               | percussion              | characteristics. Need for   |
|              |                         |                             |                               | accompaniment           | longitudinal studies which  |
|              |                         |                             |                               | amongst Alzheimers      | explore impact over time,   |
|              |                         |                             |                               | resident to know songs  | and which also use pre-     |
|              |                         |                             |                               | or participative and    | and post-intervention       |
|              |                         |                             |                               | collaborative recipe    | measures. It seems          |
|              |                         |                             |                               | completion through a    | particularly important to   |
|              |                         |                             |                               |                         | try and understand in       |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative                      | Objectives of the<br>systematic review                                     | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|--|---|--|---|
|  |   |  |   | mixture of culinary<br>tasks.<br>-Visual arts activities.<br>-Music participatory<br>singing.<br>-   | more detail the balance<br>between the impact of<br>the "arts" activities and<br>the relevance of the<br>"participation" element.                     |
|  |   |  |   | Music/dancing/singing/<br>listening participatory<br>singing, playing and<br>listening to music.<br>Outcomes:  | The role of the caregiver<br>in the triangle of<br>relationships between<br>artist–caregiver–older<br>person needs more<br>attention.                 |
|  |   |  |   | Well-being, mood,<br>engagement and<br>memory, quality of life,<br>meaningful activity and<br>stimulation.<br>Management of<br>problematic behaviour<br>such as agitation,<br>activity participation,<br>social interaction,<br>emotional and cognitive<br>skills. | Participatory arts-based<br>activities have a role to<br>play in improving the QoL<br>amongst older people<br>living in residential care<br>settings. |
|  |   |  |   | Follow-up time:<br>Duration of<br>interventions: 2-hours<br>twice per week to 4<br>weeks, 6 weeks, 5<br>months, 9 months.  |   |
| Leah<br>2016<br>UK<br>[54]             | Moderate<br>SBU Domain(s):<br>Stimulerande och<br>upprätthållande<br>arbetssätt och | To evaluate the best ways<br>of supporting people with<br>dementia to eat. | Inclusion criteria:<br>Dementia, hydration,<br>nutrition, older people,<br>systematic review.<br>Literature search: | Number of studies:<br>22<br>Study design:<br>CCT, cohort, RCT,<br>interrupted time series,   | The strongest evidence is<br>shown in the more<br>complex educational<br>programmes for people<br>with dementia. The<br>evidence suggests that        |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|--|---|---|--|
|  | metoder – ordinärt<br>boende.<br>Stimulerande och<br>upprätthållande<br>arbetssätt och<br>metoder – särskilt<br>boende.<br>(Maintaining and<br>stimulating work<br>methods – both<br>community and<br>institutional settings)<br>Quantitative |  | January 2004 to July 2015   | interrupted time series<br>crossover.<br>Number of<br>participants:<br>Educational: (n=1 283)<br>I=609, C=623.<br>Environmental or<br>routine changes<br>(n=436), I=141, C=137<br>(not stated for all<br>studies).<br>Assistance with eating<br>(n=210).<br>Mixed interventions<br>(n=116).   | staff who support people<br>with dementia to eat<br>should undertake<br>face-to-face education<br>programmes and aim to<br>give people enough time<br>when helping them to<br>eat. However, cultural<br>change may be needed to<br>ensure that individual<br>assessments are carried<br>out to identify those<br>having difficulty eating,<br>and to ensure they are<br>afforded enough time to<br>eat their meals.  |
|  |   |  |   | Characteristics of<br>participants:<br>People with dementia.<br>People with<br>mild/Moderate<br>Alzheimer's.<br>Setting:<br>Living at home, long-<br>term dementia<br>specialist units, long-<br>term care,<br>rehabilitation unit,<br>nursing homes,<br>residential home.<br>Country of origin:<br>US (8), Taiwan (5),<br>Sweden (1), Finland (1),<br>Spain (2), Canada (2), | People living with<br>dementia experience a<br>range of difficulties with<br>eating, because of the<br>different areas of the<br>brain that can be<br>affected, as well as the<br>individual's personality<br>and life history. We can<br>try to make changes to<br>address these difficulties<br>based on our<br>understanding of damage<br>to the brain and how the<br>person sees and<br>experiences the world.<br>The eating difficulties<br>experienced by people<br>with dementia are unique |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|---|---|---|
|  |  |   |   | France (2), New<br>Zealand (1).<br>Interventions:<br>Educational<br>programmes (n=10),<br>environmental or<br>routine changes (n=8),<br>assistance with eating<br>(n=2), mixed<br>interventions (n=2).  | to each person;<br>successful interventions<br>will therefore need to be<br>based on assessments of<br>each individual's<br>difficulties and what<br>would be practical in<br>their care environment. |
|  |  |   |   | Outcomes:<br>Increases in the time<br>people with dementia<br>spent sitting, increased<br>food/calorie<br>consumption, positive<br>response from<br>caregivers in terms of<br>reported improvement<br>in knowledge among<br>professional carers and<br>attitudes towards<br>people with dementia.<br>(summarised) |   |
|  |  |   |   | Follow-up time:<br>1 year (only stated in 1<br>study).  |   |
| Liu et al<br>2014<br>USA<br>[55]       | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt – särskilt<br>boende. (Maintaining | To evaluate the effects of<br>interventions on<br>mealtime difficulties in<br>older adults with<br>dementia | Inclusion criteria:<br>Any comparator, or none at<br>all (e.g., placebo, no<br>therapy, another active<br>therapy, or no control<br>therapy). | Number of studies:<br>22<br>Study design:<br>RCT (n=9), CCT (n=5),<br>cohort (n=2),   | Mealtime difficulties in<br>older adults with<br>dementia still exist, and<br>various types of effective<br>interventions should be<br>implemented to alleviate<br>eating or feeding                  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review                     | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|--|
|  | and stimulating work<br>methods -<br>institutional settings)   |  | Literature search:<br>September 2012  | interrupted time series<br>(n=6).<br>Population:   | difficulties and reduce<br>adverse outcomes. By<br>evaluating studies of<br>almost the last decade,  |
|  | Quantitative   |  |   | Older adults aged 65<br>years old or above, with<br>dementia of any type<br>and any stage. | this systematic review<br>provides updated<br>evidence for clinical<br>practice and points out<br>priorities for nursing   |
|  |  |  |   | Number of<br>participants:<br>2082 older adults and<br>95 nursing<br>professionals.        | research. Such evidence<br>was based on a body of<br>research with <b>Moderate</b><br>quality and existing<br>limitations, and more<br>methodologically rigorous |
|  |  |  |   | <b>Country of origin:</b><br>USA, Canada, Taiwan,<br>Spain, France,                        | studies need to be<br>conducted.   |
|  |  |  |   | Netherlands, Finland<br>and New Zealand  | "Nutritional<br>supplements" showed<br><b>Moderate</b> evidence to   |
|  |  |  |   | Setting:<br>Long-term care, nursing<br>home, day care                                      | increase food intake,<br>body weight and BMI.<br>"Training/education<br>programs" demonstrated   |
|  |  |  |   | Interventions:<br>Any intervention on<br>mealtime difficulties in<br>which the study       | Moderate evidence to<br>increase eating time and<br>decrease feeding<br>difficulty. Both "training/  |
|  |  |  |   | analyzes its effect on<br>the outcome of<br>interest.                                      | education programs" and<br>"feeding assistance"<br>were insufficient to  |
|  |  |  |   | Outcomes:<br>behavioral and<br>functional outcomes   | increase food intake.<br>"Environment/<br>routine modification"<br>indicated low evidence to   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|--|
|  |  |  |   | feeding difficulties,<br>eating ability, frequency<br>and time of self-<br>feeding, physical or<br>verbal assistance/<br>prompts, level of<br>dependence, agitation,<br>cognitive and<br>behavioral function and<br>behavioral function and<br>behavioral<br>disturbance),<br>nutritional outcomes<br>(e.g., food intake, body<br>weight, BMI, nutritional<br>status, body<br>composition,<br>biochemical<br>parameters), and other<br>adverse e.g.,<br>occurrence of fractures,<br>pressure ulcers and<br>hospitalization).<br>Caregiver outcomes<br>included knowledge,<br>attitude and behaviors<br>in nursing assistants,<br>staffing time and<br>caregiver's burden.<br><b>Follow-up time:</b><br>Not clear | insufficient to decrease<br>agitation. Evidence was<br>sparse on nutritional<br>status, eating ability,<br>behavior disturbance,<br>behavioral and cognitive<br>function, or level of<br>dependence. |
| Liu et al                              | Moderate   | To summarise available                 | Inclusion criteria:   | Number of studies:   | Effective interventions  |
| 2015                                   |  | interventions and                      | Older adults (≥ 65 years  | 11   | should be based on   |
| USA                                    | SBU Domain(s):   | evaluate their                         | old) with dementia who  |  | multilevel),   |
| [56]                                   | Upprätthållande och  | effectiveness on eating                | were involved in oral eating  | Study design:  | multi-component  |
| -                                      | stimulerande   | performance among                      | or feeding.   |  | individualized care  |

| Author    | Study quality           | Objectives of the         | Inclusion criteria for the    | Characteristics of the                            | The conclusions of the     |
|-----------|-------------------------|---------------------------|-------------------------------|---|----------------------------|
| Year      | SBU Domain(s)           | systematic review         | systematic review             | studies included in the                           | systematic review's        |
| Country   | Quantitative/           |                           | Literature search (date)      | systematic review                                 | author(s)                  |
| Reference | qualitative             |                           |                               |   |                            |
|           | arbetssätt – särskilt   | older adults with         |                               | 5 RCTs, 2 CCTs, 2                                 | approaches to achieve      |
|           | boende. (Maintaining    | dementia in LTC settings. | Excluded if subjects were     | interrupted time series,                          | optimal eating             |
|           | and stimulating work    |                           | experiencing enteral          | 2 single group repeated                           | performance among LTC      |
|           | methods -               |                           | nutrition or parenteral       | measures.   | residents with dementia.   |
|           | institutional settings) |                           | nutrition approaches.         |   | By evaluating studies      |
|           |                         |                           |                               | Number of   | within the last three      |
|           | Quantitative            |                           | Any behavioral or             | participants:                                     | decades, this review       |
|           |                         |                           | environmental intervention    | 530 (range 5-134).                                | provides preliminary       |
|           |                         |                           | on optimizing oral feeding    |   | support for using training |
|           |                         |                           | or eating performance or      | Characteristics of                                | programs and mealtime      |
|           |                         |                           | behaviors, in which the       | participants:                                     | assistance to optimize     |
|           |                         |                           | study analyzes its effect on  | Older adults with                                 | eating performance in      |
|           |                         |                           | the outcome of interest.      | dementia, aged 65-96                              | this population.           |
|           |                         |                           |                               | years and 86 nursing                              |                            |
|           |                         |                           | Excluded if interventions     | caregivers (e.g.,                                 |                            |
|           |                         |                           | were only nutritional         | registered nurses,                                |                            |
|           |                         |                           | supplementation,              | nursing assistants,                               |                            |
|           |                         |                           | nutritional education, or     | certified assistant                               |                            |
|           |                         |                           | music.                        | nurses, licensed                                  |                            |
|           |                         |                           |                               | practical nurses).                                |                            |
|           |                         |                           | Any comparator, or none at    |   |                            |
|           |                         |                           | all (e.g., placebo, no        | Setting:  |                            |
|           |                         |                           | therapy, another active       | 21 LTC facilities (e.g.,                          |                            |
|           |                         |                           | therapy, or no control        | assisted living, nursing                          |                            |
|           |                         |                           | therapy).                     | home, geriatric centers,<br>Alzheimer specialized |                            |
|           |                         |                           | Outcomes: self-feeding or     | center).  |                            |
|           |                         |                           | eating performance (e.g.,     |   |                            |
|           |                         |                           | eating independence,          | Country of origin:                                |                            |
|           |                         |                           | eating frequency, eating      | Taiwan, USA, Canada                               |                            |
|           |                         |                           | task participation and        | ranwan, USA, Canaua                               |                            |
|           |                         |                           | assistance, self-feeding      | Interventions:                                    |                            |
|           |                         |                           | ability, feeding difficulty). | Training programs for                             |                            |
|           |                         |                           | aziney, recaing annearcy).    | residents or nursing                              |                            |
|           |                         |                           | Excluded if only any of the   | assistants at intra- or                           |                            |
|           |                         |                           | following outcomes are        | interpersonal levels,                             |                            |
|           |                         |                           | available: 1) nutritional     | mealtime assistance                               |                            |

| Author    | Study quality | Objectives of the | Inclusion criteria for the  | Characteristics of the  | The conclusions of the |
|-----------|---------------|-------------------|---|---|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review   | studies included in the   | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)  | systematic review   | author(s)              |
| Reference | qualitative   |                   |   |   |                        |
| Neterence |               |                   | intake (e.g., food/liquid<br>intake, dietary intake/<br>consumption, energy/<br>carbohydrate/protein/fat<br>intake, calories<br>consumption); 2)<br>anthropometric parameters<br>(e.g., weight, height, BMI,<br>MNA, biceps, triceps and<br>sub scapular skin fold,<br>brachial and calf<br>circumference, upper-arm<br>circumference); 3) Serum<br>biochemical parameters<br>(e.g., albumin, transferrin,<br>B12, haemoglobin,<br>proteinogram, total serum<br>proteins/cholesterol, pre-<br>albumin, lympoocyte count,<br>calcium, posphorus, acid,<br>uric acid, folic acid, iron,<br>zinc, vitamin A, B and E<br>levels, and flavonids), 4)<br>disruptive behaviors or<br>behavioral disturbances<br>(e.g., agitation, depression,<br>aggression, wondering,<br>leaving during mealtimes);<br>and 5) other adverse events<br>(e.g., cognitive<br>deterioration, morbidity,<br>mortality, hospitalization,<br>number of infectious<br>events and days in bed). | from nursing caregivers<br>at interpersonal level,<br>environment<br>modification at<br>environmental level,<br>and multicomponent<br>interventions at both<br>personal (i.e., resident<br>or nursing staff) and<br>environmental levels.<br>Duration up to 6<br>months.<br><b>Outcomes:</b><br>Self-feeding or eating<br>performance (e.g.,<br>eating independence,<br>eating frequency,<br>eating task<br>participation and<br>assistance, self-feeding<br>ability, feeding<br>difficulty).<br><b>Follow-up time:</b><br>Not stated |                        |
|           |               |                   | RCTs, Con-trolled Clinical  |   |                        |
|           |               |                   | Trials [interrupted time  |   |                        |

| AuthorStudy quYearSBU DomCountryQuantitaReferencequalitation   | ain(s) systematic review<br>tive/  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|--|---|
|  |  | series, single group<br>repeated measures<br>Literature search:<br>June 2014  |  |   |
| stimulera<br>arbetssät<br>metoder<br>boende.<br>Upprätth<br>stimulera<br>arbetssät<br>metoder<br>boende.<br>and stimu<br>methods<br>commun | ain(s):<br>ain(s):<br>allande och<br>nde<br>t och<br>- särskilt<br>allande och<br>clinically effective for<br>reducing agitation in<br>adults with dementia,<br>considering the followin<br>dementia severity;<br>setting; whether the<br>intervention is with the<br>person with dementia,<br>t och<br>nde<br>t och<br>- ordinärt<br>Maintaining<br>ulating work<br>- both<br>ty and<br>nal settings) | separate groups or<br>before/after comparisons<br>- studies with agitation<br>results reported as<br>quantitative outcome<br>- Studies in which all | Number of studies:<br>In review: 160 studies;<br>97 studies rated as high<br>quality are described in<br>the tables in meta-<br>analysis: 3 studies<br>Study design:<br>RCTs, Within-subjects,<br>Non-randomised<br>crossover, Non-<br>randomised case-<br>matched controls,<br>Quasi-experimental,<br>Non-randomised<br>within-subjects,<br>Matched controls, Non-<br>randomised-matched<br>groups, Non-<br>randomised matched<br>controls<br>Number of<br>participants:<br>N=4-387/study<br>Characteristics of<br>participants:<br>Mean age: Not stated<br>Age range: Not stated<br>Gender distribution: | There is consistent<br>evidence that teaching<br>staff in care homes to<br>communicate and<br>consider the person with<br>dementia's needs rather<br>than focus on completing<br>tasks with them was<br>helpful for severe<br>agitation, as were touch<br>therapies. Activities and<br>structured music therapy<br>helped to decrease the<br>level of agitation in care<br>homes but was not<br>specifically tested in<br>severe agitation. We<br>suggest using a manual<br>with managers and staff<br>of care homes to ensure<br>the permanent and<br>consistent<br>implementation of<br>effective interventions.<br>Future studies should<br>consider cost-<br>effectiveness, and<br>treatments for people in<br>their own homes. |

| Author    | Study quality | Objectives of the | Inclusion criteria for the | Characteristics of the  | The conclusions of the |
|-----------|---------------|-------------------|----------------------------|---|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review          | studies included in the   | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)   | systematic review   | author(s)              |
| Reference | qualitative   |                   |                            |   |                        |
|           |               |                   |                            | Setting:<br>Any setting<br>Country of origin:<br>USA (n=77), Australia<br>(n=13), the UK (n=13),<br>Canada (n=10), Italy<br>(n=7), Taiwan, Province<br>of China (n=7), the<br>Netherlands (n=6),<br>Republic of Korea (n=6),<br>Japan (n = 4), Sweden<br>(n=4), China/Hong Kong<br>(n=3), Germany (n=3),<br>France (n=2), Islamic |                        |
|           |               |                   |                            | Republic of Iran (n=2),<br>Iceland (n=1), Israel<br>(n=1) Norway (n=1),<br>Spain (n=1).<br>Interventions:<br>Intervention categories:<br>psychological,<br>behavioural, sensory or<br>environmental.<br>Subdivided into:  |                        |
|           |               |                   |                            | Working with person<br>with dementia:<br>- activities<br>- music therapy<br>- sensory interventions<br>- light therapy<br>- aroma therapy<br>- exercise<br>- pet therapy  |                        |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   | <ul> <li>- dementia specific<br/>therapy</li> <li>- home-like care</li> <li>Working through paid<br/>caregivers</li> <li>- person-centred care<br/>and communication<br/>skills</li> <li>- dementia care<br/>mapping (DCM)</li> <li>- behavioural<br/>management and<br/>communication skills</li> </ul> |  |
|  |  |  |   | <ul> <li>changing the<br/>environment</li> <li>mixed interventions</li> <li>Working with family<br/>caregivers in the home<br/>of person with<br/>dementia</li> <li>training in behavioural<br/>management</li> <li>CBT</li> </ul>   |  |
|  |  |  |   | Outcomes:<br>Clinically significant<br>agitation, decreasing<br>mean agitation<br>symptoms.<br>Secondary outcomes:<br>Functioning<br>Quality of life   |  |

| Author<br>Year  | Study quality<br>SBU Domain(s)   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review  | Characteristics of the studies included in the  | The conclusions of the<br>systematic review's  |
|---|--|--|--|---|--|
| Country   | Quantitative/  |  | Literature search (date)   | systematic review   | author(s)  |
| Reference   | qualitative  |  |  |   |  |
| Kererence         Low et al         2011         Australia         [58] | Qualitative         Moderate         SBU Domain(s):         Integrerade insatser         eller aktiviteter och         informationsöverförin         g. (Integrated         measures or         activities)         Quantitative | To evaluate the outcomes<br>of case management,<br>integrated care and<br>consumer directed home<br>and community care<br>services for older<br>persons, including those<br>with dementia. | Study design/methods:<br>Quantitative outcomes.<br>Population:<br>Community dwelling, with<br>either a majority aged 65<br>years and over, or with a<br>subsample of persons aged<br>65 and over for whom<br>results were reported<br>separately. Not samples<br>with specific medical<br>illness, except for<br>dementia.<br>Intervention:<br>Case management<br>Integrated care<br>Consumer directed care<br>Language:<br>Written in English.<br>Literature search:<br>2004 – May 2009 | Number or studies:<br>35 articles<br>Study design:<br>RCTs (n=12), non-<br>randomized trials (n=5),<br>observational studies<br>(n=13), randomized trial<br>evaluated effects of<br>computerised system<br>(n=1).<br>Number of<br>participants:<br>N=85-18143/study<br>Characteristics of<br>participants:<br>Mean age: 67.7-83.3<br>years<br>Age range: Not stated<br>Gender distribution:<br>3.8-85.7% women<br>Setting:<br>Home and community<br>services<br>Country of origin:<br>United States (n=17),<br>Canada (n=3), United<br>Kingdom (n=3), Finland<br>(n=2), Italy (n=2),<br>Australia (n=1), Spain<br>(n=1), Europe (n=1), not<br>specified (n=1) | This is the first systematic<br>review comparing<br>different models of non-<br>medical home and<br>community services for<br>older persons. Each<br>model impacts on<br>different outcomes which<br>relate to the focus of the<br>model. Instead of asking<br>which model is the best<br>at improving outcomes,<br>we should be asking how<br>to combine the successful<br>features of all three<br>models to maximize<br>outcomes. |

| Author    | Study quality | Objectives of the | Inclusion criteria for the | Characteristics of the    | The conclusions of the |
|-----------|---------------|-------------------|----------------------------|---------------------------|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review          | studies included in the   | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)   | systematic review         | author(s)              |
| Reference | qualitative   |                   |                            | · · · ·                   |                        |
|           |               |                   |                            | Interventions:            |                        |
|           |               |                   |                            | Case management           |                        |
|           |               |                   |                            | (n=14)                    |                        |
|           |               |                   |                            | Integrated care: (n=11)   |                        |
|           |               |                   |                            | Consumer directed care    |                        |
|           |               |                   |                            | (n=6)                     |                        |
|           |               |                   |                            | Outcomes:                 |                        |
|           |               |                   |                            | Clinical outcomes:        |                        |
|           |               |                   |                            | Function (ADLs, IADLs),   |                        |
|           |               |                   |                            | Cognition, Medication     |                        |
|           |               |                   |                            | management, Quality       |                        |
|           |               |                   |                            | of Life, Physical health, |                        |
|           |               |                   |                            | Social interaction or     |                        |
|           |               |                   |                            | support, Depression,      |                        |
|           |               |                   |                            | psychological health,     |                        |
|           |               |                   |                            | Risk of mortality,        |                        |
|           |               |                   |                            | Caregiver                 |                        |
|           |               |                   |                            | burden/distress, Pain     |                        |
|           |               |                   |                            | Satisfaction:             |                        |
|           |               |                   |                            | Satisfaction with care,   |                        |
|           |               |                   |                            | Caregiver satisfaction,   |                        |
|           |               |                   |                            | Life satisfaction         |                        |
|           |               |                   |                            | Service use:              |                        |
|           |               |                   |                            | Risk of nursing home      |                        |
|           |               |                   |                            | admission, Risk of        |                        |
|           |               |                   |                            | hospital admissions,      |                        |
|           |               |                   |                            | Risk of emergency         |                        |
|           |               |                   |                            | admissions, Community     |                        |
|           |               |                   |                            | service use, Length of    |                        |
|           |               |                   |                            | hospital stay             |                        |
|           |               |                   |                            | Follow-up time:           |                        |
|           |               |                   |                            | 3 weeks to 3 years        |                        |

| Author                                 | Study quality  | Objectives of the  | Inclusion criteria for the  | Characteristics of the  | The conclusions of the   |
|--|--|--|---|---|--|
| Year                                   | SBU Domain(s)  | systematic review  | systematic review   | studies included in the   | systematic review's  |
| Country                                | Quantitative/  |  | Literature search (date)  | systematic review   | author(s)  |
| Reference                              | qualitative  |  |   |   |  |
| Low et al<br>2015<br>Australia<br>[59] | quantative         Moderate         SBU Domain(s):         Stimulerande och         upprätthållande         arbetssätt och         metoder – särskilt         boende. (Maintaining         and stimulating work         methods -         institutional settings)         Quantitative | <ol> <li>To systematically<br/>identify and describe<br/>studies that have<br/>investigated the effects of<br/>interventions to change<br/>staff practice or care<br/>approaches in order to<br/>improve resident<br/>outcomes in nursing<br/>homes.</li> <li>To identify<br/>interventions or<br/>intervention components<br/>which lead to successful<br/>staff practice or care<br/>approach change in<br/>nursing homes.</li> <li>To identify potential<br/>barriers and enablers to<br/>staff practice or care<br/>approach change in<br/>nursing homes.</li> </ol> | Inclusion criteria:<br>Higher quality studies.<br>Studies with 3 or more sites<br>in each group. Clustered<br>trials with at least two<br>intervention sites and two<br>control sites. At least 3<br>intervention and 3 control<br>sites in order to reduce the<br>possibility of site-specific<br>confounding and increase<br>generalizability. Nursing<br>homes. Changing the care<br>practices of staff for the<br>benefit of the residents.<br>Literature search:<br>December, 2013 | Number of studies:<br>63<br>Study design:<br>Randomized controlled<br>trials and quasi-<br>experimental controlled<br>trials<br>Number of<br>participants:<br>Control: 117 233 (61<br>facilities, 9 665 cities)<br>Intervention:<br>70 539 (37 facilities,<br>7 182 cities).<br>Characteristics of<br>participants:<br>Residential care of<br>older people.<br>Setting:<br>Facilities catering for<br>permanent residential<br>care of older people<br>including providing<br>housekeeping, personal<br>care, meals, activities<br>and nursing home.<br>Country of origin:<br>Australia, Sweden, USA,<br>UK, Hong Kong,<br>Belgium, Netherlands,<br>Germany | Changing staff practice in<br>nursing homes is possible<br>but complex.<br>Interventionists should<br>consider barriers and<br>feasibility of program<br>components to impact on<br>each intended outcome. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   | Interventions:<br>Oral health, n=3 studies<br>C: 562, l: 565<br>Hygiene and infection<br>control, n=3 studies<br>C: 1959, l: 3274<br>Nutrition, n=2 studies<br>C: 1229, l: 601<br>Nursing home acquired<br>pneumonia prevention<br>and management, n=4<br>studies C: 549, l: 574<br>+ 10 sites,<br>Depression, n=2 studies<br>C: 13, l: 46 + 33 sites<br>Appropriate<br>prescribing, n=7 studies<br>C: 3 287, l: 2 952<br>Physical restraint, use<br>n=3 studies<br>C: 2 183, l: 2 477<br>Management of<br>behavioral and<br>psychological<br>symptoms of dementia,<br>n=6 studies<br>C: 1 230, l: 1 122 |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
|  |  |  |   | Falls reduction and<br>prevention, n=11<br>C: 100 363 + 25 cites<br>I: 38 592 + 23 cites  |  |
|  |  |  |   | Quality improvement,<br>n=9<br>C: 1 724 + 61 facilities,<br>9 665 cites<br>I: 2 787 + 57 facilities,<br>7 091 cites   |  |
|  |  |  |   | Philosophy of care and<br>aspects of culture of<br>care, n=10 studies<br>C: 954, I: 1 196   |  |
|  |  |  |   | Other studies, n=5<br>studies<br>C: 3 127, l: 3 178   |  |
|  |  |  |   | Outcomes:<br>Change in staff<br>behavior (not just<br>attitudes or<br>knowledge), change in<br>other staff outcomes<br>(e.g. staff turnover,<br>absenteeism or stress)<br>change in resident<br>clinical outcomes (but<br>not just satisfaction<br>with care) |  |
|  |  |  |   | with care).   |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|--|--|---|
| •                                      | -  | To identify the effects of<br>ACP interventions on<br>nursing home residents. | Inclusion criteria:<br>Studies examining an effect<br>of advance care planning<br>on nursing home residents.<br>Nursing homes (defined as<br>residential aged care<br>facilities, long-term care<br>units, and skilled nursing<br>facilities or care homes).<br>ACP (defined as any<br>advance discussions or<br>directives, including<br>medical treatment orders,<br>with effect on nursing<br>home residents).<br>Randomized controlled<br>trials, controlled trials,<br>pre/poststudy design trials,<br>and prospective trials.<br>Literature search:<br>April 2015. | Follow-up time:<br>16 weeks, 26 weeks, 52<br>weeks, 78 weeks, 100<br>weeks, 0-16 months<br>Number of studies:<br>13<br>Study design:<br>(5 Systematic reviews)<br>Controlled trial n=5<br>Prospective cohort n=5<br>Pre- postintervention<br>n=2<br>RCT n=1<br>Number of<br>participants:<br>I: 4 465<br>C: 5 025 (numbers not<br>reported in all studies)<br>Characteristics of<br>participants:<br>Frail older people<br>Age and gender not<br>stated<br>Setting:<br>Nursing home<br>population (residential<br>aged care facilities,<br>long-term care units, | ACP has beneficial effects<br>in the nursing home<br>population. The types of<br>ACP interventions vary,<br>and it is difficult to<br>identify superiority in<br>effectiveness of one<br>intervention over<br>another. Outcome<br>measures also vary<br>considerably between<br>studies although<br>hospitalization, place of<br>death, and actions being<br>consistent with resident's<br>wishes are by far the<br>most common.<br>Very few studies with<br>high quality methodology<br>have been undertaken in<br>the area with a significant<br>lack of randomized<br>controlled trials. More<br>robust studies, especially<br>randomized controlled<br>trials, are required to<br>support the findings. |
|  |  |   |  | and skilled nursing<br>facilities or care homes)   | support the mulligs.  |

| Country Quantitative<br>Reference qualitative | s) systematic review | systematic review<br>Literature search (date) | studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|---|----------------------|---|---|--|
|   |                      |   | Country of origin:<br>Australia, Canada, Hong<br>Kong, USA (n=7), UK,<br>The Netherlands,<br>Singapore/Netherlands  |  |
|   |                      |   | Interventions:<br>The ACP interventions<br>included (1) 5 studies<br>evaluating educational<br>programs; (2) 5 studies<br>introducing or<br>evaluating a new ACP<br>form; (3) 2 studies<br>introducing an ACP<br>program with a<br>palliative care initiative;<br>and (4) 1 study<br>observing the effect of<br>do not resuscitate<br>orders on medical<br>treatments for<br>respiratory infections. A<br>range of effects of ACP<br>was demonstrated in<br>the study populations.<br>Hospitalization was the<br>most frequent outcome<br>measure. Of note, in<br>the 2 studies that<br>included mortality, the<br>decrease in<br>hospitalization was not<br>associated with<br>increased mortality.<br>Place of death is |  |

| Author      | Study quality          | Objectives of the           | Inclusion criteria for the   | Characteristics of the                       | The conclusions of the     |
|-------------|------------------------|-----------------------------|------------------------------|--|----------------------------|
| Year        | SBU Domain(s)          | systematic review           | systematic review            | studies included in the                      | systematic review's        |
| Country     | Quantitative/          |                             | Literature search (date)     | systematic review                            | author(s)                  |
| Reference   | qualitative            |                             |                              |  |                            |
|             |                        |                             |                              | effect of ACP. Medical                       |                            |
|             |                        |                             |                              | treatments being                             |                            |
|             |                        |                             |                              | consistent with ones'                        |                            |
|             |                        |                             |                              | wishes were increased                        |                            |
|             |                        |                             |                              | with ACP although not                        |                            |
|             |                        |                             |                              | to 100% compliance.                          |                            |
|             |                        |                             |                              | Two studies showed a                         |                            |
|             |                        |                             |                              | decrease in overall                          |                            |
|             |                        |                             |                              | health costs. One study                      |                            |
|             |                        |                             |                              | found an increase in                         |                            |
|             |                        |                             |                              | community palliative<br>care use but not in- |                            |
|             |                        |                             |                              | patient hospice                              |                            |
|             |                        |                             |                              | referrals.                                   |                            |
|             |                        |                             |                              |  |                            |
|             |                        |                             |                              | Outcomes:                                    |                            |
|             |                        |                             |                              | Hospitalization and                          |                            |
|             |                        |                             |                              | costs, place of death,                       |                            |
|             |                        |                             |                              | mortality, QOL/                              |                            |
|             |                        |                             |                              | satisfaction, actions                        |                            |
|             |                        |                             |                              | consistent with wishes,                      |                            |
|             |                        |                             |                              | use of life-sustaining                       |                            |
|             |                        |                             |                              | treatments, palliative                       |                            |
|             |                        |                             |                              | care and hospice.                            |                            |
|             |                        |                             |                              |  |                            |
|             |                        |                             |                              | Follow-up time:<br>Not stated                |                            |
| Mason et al | Moderate               | To review the evidence      | Inclusion criteria:          | Number of studies:                           | The literature review      |
| 2007        |                        | for different models of     | Effectiveness studies had to | 42 studies were                              | provides some evidence     |
| UK          | SBU Domain(s):         | community-based respite     | be well controlled, with     | included in the review:                      | that respite for carers of |
| [61]        | Särskilda              | care for frail older people | uncontrolled studies         | 20 systematic reviews,                       | frail elderly people may   |
|             | boendeformer som       | and their carers, where     | included only in the         | 22 effectiveness studies                     | have a small positive      |
|             | insats. (Institutional | the participant group       | absence of higher quality    | (10 RCTs, 7 quasi-                           | effect upon carers in      |
|             | care as an             | included older people       | evidence. Economic           | experimental studies                         | terms of burden and        |
|             | intervention)          | with frailty, disability,   | evaluations had to compare   | and 5 uncontrolled                           | mental or physical health. |
|             |                        | cancer or dementia.         | 2 or more options and        | studies), and 5                              | Carers were generally      |
|             | Quantitative           | Where data permitted,       |                              | economic evaluations.                        | very satisfied with        |

| Author<br>Year<br>Country | Study quality<br>SBU Domain(s)<br>Quantitative/ | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|---------------------------|---|--|--|---|--|
| Reference                 | qualitative                                     | subgroups of carers and<br>care recipients, for whom<br>respite care is particularly<br>effective or cost-<br>effective, were to be<br>identified. | consider both costs and<br>consequences.<br>Literature search:<br>March 2005. Ongoing and<br>recently completed<br>research databases were<br>searched in July 2005. | Study design:<br>Randomised trials n=10<br>Quasi-experimental<br>studies n=7<br>Uncontrolled studies<br>n=5.Number of<br>participants:<br>Recipients: n=3 205,<br>dyads n=1 730.Male %: 13, 17, 20, 23,<br>26.3, 28, 33, 35.8, 40,<br>43, 45, 47.6, 50, 63.1,<br>96.Mean age: 66, 68.3,<br>74.5, 75.8, 76.2, 77.2,<br>78, 79.5, 80.4, 81.5.Characteristics of<br>participants:<br>Older people receiving<br>respite care, including<br>those with frailty,<br>disability, dementia or<br>cancer, and their carers<br>care recipient: person<br>being cared for<br>(patient, older person)<br>dyad: carer and care<br>recipient frail: having<br>one or more long-term<br>health problems and/or<br>difficulties in one or | respite. No reliable<br>evidence was found that<br>respite either benefits or<br>adversely affects care<br>recipients, or that it<br>delays entry to residential<br>care. Economic evidence<br>suggests that day care is<br>at least as costly as usual<br>care. Pilot studies are<br>needed to inform full-<br>scale studies of respite in<br>the UK. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|---|--|
|  |  |                                     |   | more aspects of<br>personal care (e.g. as<br>assessed against the<br>Activities of Daily Living<br>Index), such that<br>support to live<br>independently is<br>required.<br>older: aged 65 years or<br>above.<br>Setting:<br>Day care, host-family,   |  |
|  |  |                                     |   | in-home, institutional<br>and video respite.<br>Studies of respite care<br>services in all settings<br>apart from acute<br>medical and/or surgical<br>inpatient wards were<br>eligible for inclusion in<br>the review. Settings<br>such as nursing and<br>residential homes,<br>hospices, community |  |
|  |  |                                     |   | and GP-run hospital<br>units, day centres and<br>domiciliary settings<br>were all eligible for<br>inclusion.<br>Country of origin:<br>Australia n=2<br>Canada n=2<br>Germany n=1  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
|  |  |  |   | Spain n=1, UK n=5, USA<br>n=11.   |  |
|  |  |  |   | Interventions:<br>For the purposes of the<br>review, 'respite care' is<br>defined as care<br>provided intermittently<br>in the home,<br>community or<br>institution in order to<br>provide temporary<br>relief to the principal<br>carer. Respite care<br>includes, but is not<br>limited to:<br>• day care<br>• in-home respite (day<br>or overnight)<br>• host family respite<br>• institutional respite<br>(overnight)<br>• programmes<br>• video respite. |  |
|  |  |  |   | Outcomes:<br>Data on the following<br>categories of outcome<br>measures (as reported<br>for carers and care<br>recipients separately,<br>and by the care<br>recipient, carer or<br>clinician) were<br>included:<br>• quality of life<br>(carer/care recipient)  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|--|--|--|--|
|  |   |  |  | <ul> <li>physical health<br/>(carer/care recipient)</li> <li>mental/psychological<br/>health (carer/care<br/>recipient)</li> <li>satisfaction<br/>(carer/care recipient)</li> <li>carer burden</li> <li>utilisation of any<br/>health and social<br/>services (carer/care<br/>recipient)</li> <li>utilisation of informal<br/>or voluntary support<br/>services (carer/care<br/>recipient)</li> <li>(time to)<br/>institutionalisation</li> <li>time spent on caring<br/>tasks</li> <li>activities of daily<br/>living (ADL).</li> </ul> |  |
| Mignani et al<br>2017<br>Italy<br>[62] | Moderate<br>SBU Domain(s):<br>Stimulerande och<br>upprätthållande<br>arbetssätt och<br>metoder – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings) | To search and synthesize<br>qualitative studies<br>exploring the<br>perspectives of older<br>people living in long-term<br>care facilities and of their<br>family members about<br>advance care planning<br>(ACP) discussions. | <ul> <li>Inclusion criteria:</li> <li>1. Studies with a study<br/>population including older<br/>people age &gt;65 years) living<br/>in long-term care facilities<br/>(including nursing homes<br/>and care homes) and/or<br/>their family members.</li> <li>2. Qualitative studies or<br/>mixed method studies</li> </ul> | Number of studies:<br>9<br>Study design:<br>Qualitative (semi<br>structured interviews,<br>focus groups etc)<br>Number of<br>participants:<br>135 older persons, 133<br>family caregivers  | <b>Conclusion:</b><br>Despite their willingness<br>to be involved in a shared<br>decision making process<br>regarding EOL care, older<br>residents of long-term<br>care settings across the<br>globe and their family<br>members still know and<br>have little experience<br>with ACP. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|--|--|--|
|  | Qualitative  |  | <ul> <li>including a qualitative component.</li> <li>3. Studies whose main aim included exploring participants' opinions and attitudes about ACP discussions.</li> <li>4. Studies published in English.</li> <li>Literature search: November 2015</li> </ul> | Characteristics of<br>participants:<br>66-104 years<br>Setting:<br>Long-term care facilities<br>(including nursing<br>homes and care homes)<br>but also participants<br>from other settings as<br>well (ie, community<br>center, acute geriatric<br>ward, medical oncology<br>ward, palliative care<br>unit, and home services<br>for older people)<br>Country of origin:<br>Australia (I), Belgium<br>(2), Norway (2), UK (2),<br>USA (2).<br>Interventions:<br>Advance care planning<br>discussion<br>Outcomes:<br>Four main themes: I)<br>plans already made; 2)<br>EOL care and decision-<br>making; 3) opinions and<br>attitudes toward ACP;<br>and 4) how, when,<br>about what, and with<br>whom to carry out ACP. | Further, methodologically<br>rigorous studies<br>specifically addressing<br>older people living in<br>long-term care facilities in<br>different cultural contexts<br>are needed in order to<br>explore and understand<br>their perspectives and<br>authentically provide<br>person-centered EOL<br>care. |

| Author<br>Year  | Study quality<br>SBU Domain(s)   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review   | Characteristics of the studies included in the   | The conclusions of the systematic review's   |
|---|--|---|---|--|--|
| •   | -  |   | Literature search (date)  | systematic review  | aution(s)  |
| Country<br>Reference<br>Milne et al<br>2002<br>UK & Australia<br>[63] | Quantitative/<br>qualitative         qualitative         Moderate         SBU Domain(s):         Stimulerande och<br>upprätthållande<br>arbetssätt och<br>metoder – särskilt<br>boende och ordinärt<br>boende. (Maintaining<br>and stimulating work<br>methods – both<br>community and | To examine trials for<br>improvement in<br>nutritional status and<br>clinical outcomes when<br>extra protein and energy<br>were provided, usually as<br>commercial 'sip-feeds'. | Literature search (date) Inclusion criteria: Randomised and quasi- randomised controlled trials of oral protein and energy supplementation in older people, with the exception of groups recovering from cancer treatment or in critical care. Literature search: November 2007 | systematic review<br>Follow-up time:<br>Not applicable<br>Number of studies:<br>62<br>(meta analyses is based<br>on up to 42 studies)<br>Study design:<br>Randomised and quasi-<br>randomised controlled<br>trials<br>Number of<br>participants:   | author(s)<br>Supplementation<br>produces a small but<br>consistent weight gain in<br>older people. Mortality<br>may be reduced in older<br>people who are<br>undernourished. There<br>may also be a beneficial<br>effect on complications<br>which needs to be<br>confirmed.   |
|   | institutional settings)<br>Quantitative  |   |   | 10 87 participants.<br>Range 10 - 4023<br>(42 trials had fewer<br>than 100 participants).<br><b>Characteristics of</b><br><b>participants:</b><br>Female: approximately<br>55% of participants.<br>Forty studies (48%<br>participants) included<br>older people with no<br>specified disease or<br>condition. The mean<br>age reported in studies<br>varied from 65 to 88<br>years (not reported in<br>seven studies).<br><b>Setting:</b><br>Hospitalised in-patients<br>with acute conditions.<br>Other participants were | However, this updated<br>review found no evidence<br>of improvement in<br>functional benefit or<br>reduction in length of<br>hospital stay with<br>supplements. Additional<br>data from large-scale<br>multi-centre trials are still<br>required.<br>Trials should also focus<br>more on primary<br>outcomes of relevance to<br>patients such as<br>improvement in function<br>or quality of life<br>measures. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
|  |  |  |   | either in long-stay /<br>care of the elderly /<br>continuing care wards<br>or nursing homes (14%,<br>15 studies), or at home<br>in the community (15%,<br>21 studies).                        |  |
|  |  |  |   | <b>Country of origin:</b><br>Europe, USA, Canada,<br>Australia and Hong<br>Kong.<br>The number of<br>participants in<br>trials varied greatly<br>between                                      |  |
|  |  |  |   | Interventions:<br>Interventions were<br>aimed at improving the<br>intake of protein and<br>energy using only the<br>normal oral route.<br>Protein was provided<br>together with non-          |  |
|  |  |  |   | protein energy sources<br>such as carbohydrate<br>and fat, and with or<br>without added minerals<br>and vitamins.<br>Supplements in the<br>form of:<br>• commercial sip feeds<br>• milk based |  |
|  |  |  |   | <ul> <li>supplements</li> <li>via the fortification of normal food sources.</li> </ul>  |  |

| Author    | Study quality | Objectives of the | Inclusion criteria for the | Characteristics of the  | The conclusions of the |
|-----------|---------------|-------------------|----------------------------|---|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review          | studies included in the   | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)   | systematic review   | author(s)              |
| Reference | qualitative   |                   |                            |   |                        |
|           |               |                   | Literature search (date)   | systematic review Primary outcomes: all cause mortality morbidity functional status. Secondary outcomes: participants' perceived quality of life length of hospital stay number of primary care contacts adverse effects of nutritional supplementation; level of care and support required; number of hospital / care home admissions / re admissions; nutritional status (change in anthropometry, for example percentage weight change, percentage change arm muscle circumference); percentage change in dietary intake compliance with intervention economic outcomes. | author(s)              |
|           |               |                   |                            | economic outcomes.  |                        |
|           |               |                   |                            | Follow-up time:   |                        |
|           |               |                   |                            | Range: one week to 18   |                        |
|           |               |                   |                            | months  |                        |

| Author           | Study quality                             | Objectives of the                  | Inclusion criteria for the                      | Characteristics of the     | The conclusions of the                      |
|------------------|---|------------------------------------|---|----------------------------|---|
| Year             | SBU Domain(s)                             | systematic review                  | systematic review                               | studies included in the    | systematic review's                         |
| Country          | Quantitative/                             |                                    | Literature search (date)                        | systematic review          | author(s)                                   |
| Reference        | qualitative                               |                                    |   |                            | -   |
| Montgomery et al | Moderate                                  | To assess the                      | Inclusion criteria:                             | Number of studies:         | Research in this field is                   |
| 2008             |   | effectiveness of personal          | Older adults (65+) living in                    | 4                          | limited. Personal                           |
| USA              | SBU Domain(s):                            | assistance for older adults        | the community who require                       |                            | assistance is expensive                     |
| [64]             | Stimulerande och                          | with impairments, and              | assistance to perform tasks                     | Study design:              | and difficult to organise,                  |
|                  | upprätthållande                           | the impacts of personal            | of daily living (e.g., bathing                  | RCT (n=1), quasi-          | especially in places that                   |
|                  | arbetssätt och                            | assistance on others,              | and eating) and participate                     | randomised Non-            | do not already have                         |
|                  | metoder – ordinärt                        | compared to other<br>interventions | in normal activities due to                     | randomised (n=3)           | services in place. When<br>implementing new |
|                  | boende. (Maintaining and stimulating work | interventions                      | permanent impairments.<br>Controlled studies of | Number of                  | programmes, recipients                      |
|                  | methods - community                       |                                    | personal assistance in                          | participants:              | could be randomly                           |
|                  | settings)                                 |                                    | which participants were                         | Total n=1 642              | assigned to different                       |
|                  | settings                                  |                                    | prospectively assigned to                       | 10(0111-1-042              | forms of assistance.                        |
|                  | Quantitative                              |                                    | study groups and in which                       | Study 1. Receiving         | While advocates may                         |
|                  | quantitative                              |                                    | control group outcomes                          | personal assistance        | support personal                            |
|                  |   |                                    | were measured                                   | (n=49 adults)              | assistance for myriad                       |
|                  |   |                                    | concurrently with                               | Nursing homes (n=49)       | reasons, this review                        |
|                  |   |                                    | intervention group                              | Average 78 and 80          | demonstrates that                           |
|                  |   |                                    | outcomes were included.                         | years.                     | further studies are                         |
|                  |   |                                    |   | Mostly female (28 and      | required to determine                       |
|                  |   |                                    | Literature search:                              | 28).                       | which models of personal                    |
|                  |   |                                    | June 2005                                       |                            | assistance are most                         |
|                  |   |                                    |   | Study 2. 79% female,       | effective and efficient.                    |
|                  |   |                                    |   | 59% white, 40%             |   |
|                  |   |                                    |   | Hispanic.                  |   |
|                  |   |                                    |   | Study 3. 4 sites who       |   |
|                  |   |                                    |   | continued to receive       |   |
|                  |   |                                    |   | personal assistance        |   |
|                  |   |                                    |   | (n=175), 7 sites with      |   |
|                  |   |                                    |   | cluster care (n=229).      |   |
|                  |   |                                    |   | Those receiving            |   |
|                  |   |                                    |   | personal assistance        |   |
|                  |   |                                    |   | were more likely to be     |   |
|                  |   |                                    |   | black (62% versus 38%),    |   |
|                  |   |                                    |   | less likely to be Hispanic |   |
|                  |   |                                    |   | (14% and 28%), and less    |   |
|                  |   |                                    |   | likely to live with        |   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   | someone (17% and<br>28%).<br>Study 4. Intervention<br>group (n=101), controls<br>(n=101). Most<br>participants and<br>assistants were white.<br><b>Characteristics of</b><br><b>participants:</b><br>Older adults (65+) living<br>in the community who<br>require assistance to<br>perform tasks of daily<br>living (bathing, eating,<br>getting around, etc.)<br>and to participate in<br>normal activities due to<br>permanent<br>impairments. Older<br>adults living outside<br>their own homes (e.g.,<br>in nursing homes) were<br>excluded. Studies in<br>which the majority<br>(51% or more) of<br>participants had been<br>diagnosed as suffering<br>from dementia at<br>baseline were excluded<br>as their reasons for<br>receiving assistance and<br>goals might differ from<br>other older adults. |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|--|--|
|  |  |                                     |   | Setting:<br>In the community,<br>receiving personal<br>assistance. Nursing<br>homes. Users of the<br>state's personal care<br>benefit Living with<br>family or friends.<br>Cluster care.<br>Country of origin:<br>USA  |  |
|  |  |                                     |   | Interventions:<br>Personal assistance<br>compared to other<br>forms of support or to<br>'no-intervention'<br>(which may include<br>unpaid care) in which<br>participants were<br>prospectively assigned<br>to study groups and in<br>which control group<br>outcomes were<br>measured concurrently<br>with intervention group<br>outcomes. |  |
|  |  |                                     |   | Participants received a<br>monthly allowance that<br>could be used to hire<br>caregivers. Intervention<br>participants received<br>approximately 19 hours<br>of paid care per week   |  |

| compared to 16.6 hours<br>of paid care per week in<br>the control group. The<br>intervention allowed<br>people to hire relatives   |  |
|--|--|
| 'during a time when<br>agency workers were in<br>short supply'.         Participants reported<br>difficulty budgeting for<br>the programme and<br>completing paperwork;<br>they were less likely<br>than younger adult<br>participants in a related<br>trial to receive the<br>intervention. Of those<br>who received a<br>payment in the 8th<br>month of the study,<br>86% of participants<br>used it to pay workers,<br>using 81% for this<br>purpose (data available<br>for 267 participants). Of<br>those who hired a<br>worker in the first 9<br>months, 45% hired a<br>worker who lived with<br>the participants; 20% of<br>participants intervention<br>hire a worker but were<br>unable to do so (data<br>available for 402<br>participants) |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
| Kelerence                              |  |  |   | Participants in both<br>groups received paid<br>assistance. Those<br>switched to cluster care<br>received assistance that<br>was organised in blocks<br>of time and over which<br>the users had less<br>control.<br>Intervention group<br>lived with an assistant,<br>41% of whom spent<br>more than 8 hours per<br>day giving assistance in<br>household tasks,<br>activities of daily living<br>and participating in<br>activities. Assistants<br>provided help with<br>laundry (97%), personal<br>shopping (83%),<br>cleaning clients' rooms<br>(80%), transportation to<br>social activities (77%),<br>handling money (65%),<br>grooming (49%),<br>bathing (37%), dressing<br>(26%), and preparing<br>special diets (21%).<br>Most did not work<br>outside the home; they<br>typically earned \$6,000<br>to \$7,000 excluding<br>program payments |  |
|  |  |  |   |   |  |

| Author<br>Year           | Study quality<br>SBU Domain(s) | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review | Characteristics of the studies included in the  | The conclusions of the<br>systematic review's           |
|--------------------------|--------------------------------|---|---|---|---|
| Country                  | Quantitative/                  | systematic review                       | Literature search (date)                        | systematic review   | author(s)   |
| Reference                | qualitative                    |   |   | Systematic review   |   |
|                          |                                |   |   | Outcomes:<br>1) Global quality of life,<br>2) User satisfaction.<br>3) Participation<br>Secondary outcomes              |   |
|                          |                                |   |   | 1) Unmet needs,<br>2)Health outcomes,<br>3) Functional status<br>4) Outwardly directed<br>5) Psychological<br>outcomes, |   |
|                          |                                |   |   | <ul><li>6) Impact on others,</li><li>7) Direct and indirect costs</li></ul>   |   |
|                          |                                |   |   | Follow-up time:<br>3 -16 months   |   |
| Morilla-Herrera et<br>al | Moderate                       | To determine the effectiveness of food- | Inclusion criteria:<br>Types of studies: The    | Number of studies:  | Food-based fortification<br>yielded positive results in |
| 2016                     | SBU Domain(s):                 | based fortification to                  | included studies were                           | /   | the total amount of                                     |
| Spain                    | Upprätthållande och            | prevent risk of                         | randomized controlled                           | Study design:   | ingested calories and                                   |
| [65]                     | stimulerande                   | malnutrition in elderly                 | trials, quasi-experimental,                     | RCT   | protein. Nevertheless,                                  |
| []                       | arbetssätt och                 | patients in community-                  | and interrupted time series                     |   | due to the small number                                 |
|                          | metoder – särskilt             | dwelling,                               | including a longitudinal                        | Population:   | of participants and the                                 |
|                          | boende och ordinärt            | institutionalized, or                   | analysis of the results with                    | Elderly patients who  | poor quality of some                                    |
|                          | boende. (Maintaining           | hospitalized elderly                    | at least two observations,                      | are institutionalized,  | studies, further high                                   |
|                          | and stimulating work           | patients, compared to                   | before and after the                            | hospitalized or   | quality studies are                                     |
|                          | methods – both                 | other methods of                        | intervention.                                   | community-dwelling,   | required to provide                                     |
|                          | community and                  | nutritional support.                    | Types of participants: The                      | with a minimum  | reliable evidence.                                      |
|                          | institutional settings)        |   | Patients include older                          | average age of 65   | Implications for practice:                              |
|                          |                                |   | people aged over 65 years                       | years. older people   | Despite the limited                                     |
|                          | Quantitative                   |   | receiving hospital services                     | aged over 65 years  | evidence, due to their                                  |
|                          |                                |   | for acute or chronic                            | receiving hospital  | simplicity, low cost, and                               |
|                          |                                |   | conditions or as outpatients                    | services for acute or   | positive results in protein                             |
|                          |                                |   | for diverse health                              | chronic conditions or as  | and calories intake,                                    |
|                          |                                |   | problems, in home care                          | outpatients for diverse   | simple dietary  |

| programs, or in residential<br>care in which food-based<br>fortification was applied<br>due to its condition of risk<br>of malnutrition.health problems, in<br>in residential care in<br>which food based<br>fortification or<br>densification with protein<br>fortification was<br>applied due to its<br>condition of risk of<br>malnutrition.interventions based on<br>the food-based<br>fortification or<br>densification with protein<br>fortification was<br>applied due to its<br>condition of risk of<br>malnutrition.interventions based on<br>the food-based<br>dent standard<br>det could be considered<br>Mumber of<br>malnutrition.Number of<br>selected studies compared<br>rod-based fortification<br>with macronutrients<br>agains to ther alternatives<br>and assessed their<br>effectiveness on any<br>nutritional parameter, such<br>as food consumption,<br>functional status or quality<br>of life. Interventions<br>turtional upplementation<br>such as commercial sip<br>feeds, or vitamin and<br>mineral supplements<br>excludedNumber of<br>mestadized the use of oral<br>nutritional upplements<br>compared food-based<br>fortification with protein<br>insitutionalized elderly<br>patientsInterventions<br>densification with protein<br>insitutionalized elderly<br>patientsInterventions<br>densification with protein<br>insitutionalized elderly<br>patientsLiterature search:<br>Nut givenNi givenInterventions found in<br>this review were:<br>administration of<br>interventions found in<br>this review were:<br>administration of<br>informative brochures,<br>informative brochures,Interventions<br>the found based on the food-based<br>fortification with protein<br>institutionalized elderly<br>patientsImage:<br>to the standard<br>patientsInterventions<br>the standard<br>diet could be considered<br>fortification with<br>protein<br>in | Author<br>Year<br>Country | Study quality<br>SBU Domain(s)<br>Quantitative/ | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---------------------------|---|-------------------------------------|--|--|--|
| care in which food-based<br>fortification was applied<br>due to its condition of risk<br>of malnutrition.home care programs, or<br>in residential care in<br>which food based<br>fortification was<br>applied due to its<br>condition of risk of<br>malnutrition.the food-based<br>densitication with protein<br>or energy of the standard<br>applied due to its<br>condition of risk of<br>malnutrition.the food-based<br>densitication with protein<br>or energy of the standard<br>applied due to its<br>condition of risk of<br>malnutrition.the food-based<br>densitication with protein<br>or energy of the standard<br>applied due to its<br>condition of risk of<br>malnutrition.the food-based<br>densitication with protein<br>or energy of the standard<br>applied due to its<br>condition of risk of<br>malnutrition.the food-based<br>densitication with protein<br>  | Reference                 | qualitative                                     |                                     |  |  |  |
| Image: standardized diets, or       studies that include         Image: standardized diets, or       studies that include         Image: standardized diets, or       standardized diets, or   |                           |   |                                     | care in which food-based<br>fortification was applied<br>due to its condition of risk<br>of malnutrition.<br>Types of interventions and<br>outcome measures: The<br>selected studies compared<br>food-based fortification<br>with macronutrients<br>against other alternatives<br>and assessed their<br>effectiveness on any<br>nutritional parameter, such<br>as weight gain, protein or<br>calories intake, or non-<br>nutritional outcomes such<br>as food consumption,<br>functional status or quality<br>of life. Interventions that<br>investigated the use of oral<br>nutritional upplementation<br>such as commercial sip<br>feeds, or vitamin and<br>mineral supplements were<br>excluded<br>Literature search: | home care programs, or<br>in residential care in<br>which food based<br>fortification was<br>applied due to its<br>condition of risk of<br>malnutrition.<br>Number of<br>participants:<br>588<br>Country of origin:<br>Not stated<br>Setting:<br>Community or<br>institutionalized elderly<br>patients<br>Interventions:<br>Compared food-based<br>fortification with<br>macronutrients against<br>other alternatives.<br>Alternative<br>interventions found in<br>this review were:<br>administration of<br>informative brochures,<br>to compare against the<br>usual diet, inclusion of<br>controls in social<br>programs, different | the food-based<br>fortification or<br>densification with protein<br>or energy of the standard<br>diet could be considered<br>in patients at risk of<br>malnutrition.<br>Despite the poor<br>methodological quality of<br>most studies analyzed<br>due to their simplicity,<br>low cost, and absence of<br>contraindications, simple<br>dietary interventions<br>based on the food-based<br>fortification or<br>densification with protein<br>or energy of the standard<br>diet could be considered<br>in patients at risk of<br>malnutrition, because its<br>effect on total amount of<br>Kcal ingested and protein<br>intake. Nevertheless,<br>further studies to<br>determine which<br>modality of enrichment is<br>more effective, and long-<br>term follow-up are<br>needed. Moreover,<br>studies that include<br>functional and quality of<br>life outcomes, as well as<br>cost effectiveness<br>analyses are |
|  |                           |   |                                     |  |  | recommended.   |

| Author<br>Year<br>Country<br>Reference    | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|---|--|--|---|--|--|
| Morris et al<br>2014<br>Australia<br>[66] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande insatser<br>och arbetssätt –<br>ordinärt boende.<br>(Maintaining and<br>stimulating work<br>methods - community<br>settings)<br>Quantitative | To undertake a<br>systematic literature<br>review of studies that<br>assessed the<br>effectiveness of smart<br>technologies in improving<br>or maintaining the social<br>connectedness of older<br>people living at borne. | Inclusion criteria:<br>• Assessed effectiveness of<br>smart technologies on<br>social connectedness (as<br>defined by Thomas et al.<br>[17]) using some form of<br>intervention study<br>• Published in English and<br>available in full-text from<br>peer review journals<br>• Set in a home<br>environment<br>• Included participants<br>aged 45 years or more<br>Literature search:<br>February 2013 | diets provided by the<br>hospital.<br>Outcomes:<br>Weight gain, protein or<br>calories intake, or non-<br>nutritional outcomes<br>such as food<br>consumption,<br>functional status or<br>quality of life.<br>Follow-up time:<br>Highly variable between<br>studies. Probably<br>between 3 days and 6<br>months<br>Number of studies:<br>18<br>Study design:<br>RCT (n=12); cohorts<br>(n=6).<br>Number of<br>participants:<br>Sample sizes: 12–309<br>Characteristics of<br>participants:<br>Mean age: 59–82 years.<br>Setting:<br>Ordinary housing | Despite the interest in<br>the use of smart<br>technologies, and the<br>need to better cater for<br>an ageing population,<br>relatively few studies<br>identified their<br>effectiveness in<br>improving social<br>connectedness in older<br>people living in the<br>community. The<br>multidimensionality of<br>social connectedness and<br>the use of a variety of<br>outcome measures<br>limited the direct<br>compari-son of study<br>outcomes. It is possible |
|   |  |  |   |  | that smart technolo-gies,  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|-------------------------------------|---|--|--|
|  |  |                                     |   | Country of origin:<br>USA (n=11), The<br>Netherlands (n=4),<br>Canada (n=1), Norway<br>(n=1), one<br>undetermined.<br>Interventions:<br>The range of smart<br>technologies under<br>investigation included<br>web based information,<br>intervention and<br>communication<br>programs.<br>• online education<br>program that<br>provided information<br>related to<br>the health condition of<br>interest<br>• email access to health<br>professionals<br>• In addition to online<br>included access to peer-<br>led, asynchronous<br>discussion forums that<br>were monitored or<br>coordinated by a<br>member of the<br>research team.<br>• provision of necessary | such as interactive<br>computer programs with<br>electronic access to<br>clinicians and relevant<br>websites, may help older<br>people to better manage<br>and understand various<br>health conditions. An<br>improved understanding<br>of the condition could<br>potentially result in<br>subsequent<br>improvements in factors<br>that are correlated with<br>social connectedness,<br>such as depression.<br>Further investigation is<br>warranted to deter-mine<br>the effectiveness of smart<br>technologies to enhance<br>positive aspects of social<br>connectedness, such as<br>participa-tion,<br>engagement and social<br>cohesion with friends and<br>family. |
|  |  |                                     |   | equipment as well as<br>training for computer,<br>Internet and email use.  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|--|---|
|  |  |  |   | <ul> <li>use of pre-recorded,<br/>interactive telephone<br/>messages</li> <li>the Nintendo Wii</li> <li>automated, online<br/>self-help program</li> <li>visual and verbal<br/>contact between study<br/>participants</li> <li>Outcomes:<br/>Social connectedness as<br/>social support,<br/>participation,<br/>empowerment,<br/>engagernent, isolation<br/>and loneliness.</li> <li>Follow-up time:<br/>Not clearly stated for all<br/>studies</li> </ul> |   |
| Mottram et al<br>2002<br>UK<br>[67]    | Moderate/High<br>SBU Domain(s):<br>Hemtjänst som insats<br>(Home help as an<br>intervention)<br>Quantitative | To assess the effects of<br>institutional versus at-<br>home care for<br>functionally dependent<br>older people on health<br>outcomes, satisfaction (of<br>functionally dependent<br>older people, relatives<br>and health care<br>professionals), quality of<br>care and costs. | Inclusion criteria:<br>Randomized trials,<br>controlled clinical trials,<br>controlled before and after<br>studies and interrupted<br>time series studies where<br>functionally dependent<br>older people were assigned<br>to either institutional or at-<br>home care.<br>Literature search:<br>1999 | Number of studies:<br>1<br>Study design:<br>RCT<br>Population:<br>older people who, due<br>to chronic physical<br>health problems, are<br>unable to function<br>without support and<br>are assessed as needing<br>institutional care.  | There is insufficient<br>evidence to estimate the<br>likely benefits, harms and<br>costs of institutional or<br>at-home care for<br>functionally dependent<br>older people. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|--|--|
| Reference                              | quantative   |                                     |   | Number of<br>participants:<br>112  |  |
|  |  |                                     |   | Country of origin:<br>Not stated   |  |
|  |  |                                     |   | Setting:<br>Not applicable   |  |
|  |  |                                     |   | Interventions:<br>- Home care in adapted<br>or non-adapted<br>residence<br>- Day-care<br>- Regular respite care<br>- Foster care.  |  |
|  |  |                                     |   | Outcomes:<br>Health outcomes,<br>including mortality,<br>morbidity measures<br>and<br>functional status.<br>- Satisfaction of<br>functionally dependent<br>older people, family<br>and health care<br>professionals. |  |
|  |  |                                     |   | <ul> <li>Quality of the<br/>professional practice.</li> <li>Non-health outcomes<br/>such as functionally<br/>dependent older<br/>people's freedom of<br/>choice of meals, bed<br/>hours, visits etc.</li> </ul>      |  |

| Author<br>Year<br>Country<br>Reference  | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|---|--|---|---|--|---|
| Möhler et al<br>2011<br>Germany<br>[68] | Moderate<br>SBU Domain(s):<br>Upprätthållande och  | 1. To evaluate the<br>effectiveness of<br>interventions for<br>preventing and reducing  | Type of studies:<br>Individual or cluster-<br>randomised controlled<br>trials in which older adults   | - Resource utilization. Follow-up time: 3-12 months Number of studies: 5 Study design:   | There is insufficient<br>evidence to support the<br>effectiveness of<br>interventions for   |
|   | stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative | the use of physical<br>restraints in older people<br>who require long-term<br>nursing care (either in<br>community nursing care<br>or in residential care<br>facilities).<br>2. To evaluate these<br>complex interventions by | or groups of older adults<br>requiring long-term nursing<br>care were allocated either<br>to a restraint reduction<br>programme or usual care<br>(control group). Studies<br>comparing two types of<br>programmes were also<br>included.  | Cluster RCTs.<br>Number of<br>participants:<br>Not stated<br>Characteristics of<br>participants:<br>Mean age: Not stated   | preventing or reducing<br>the use of PR in geriatric<br>long-term care. The<br>review is based on a<br>limited number of studies<br>with various<br>methodological<br>shortcomings.   |
|   |  | retrieving detailed data<br>on implementation.<br>3. To highlight the quality<br>and quantity of research<br>evidence available and to<br>set an agenda for future<br>research.   | Population:<br>Older people of either<br>gender requiring long-term<br>nursing care irrespective of<br>their cognitive status.  | Age range: Not stated<br>Gender distribution:<br>Not stated<br>Setting:<br>Community nursing<br>care or residential care<br>facilities   | The studies showed<br>significant clinical<br>heterogeneity in terms of<br>the components of the<br>interventions and the<br>definitions of PR applied.<br>Bedrails were not always<br>counted as physical  |
|   |  |   | Restraint reduction or<br>prevention programme:<br>1. Educational interventions<br>2. Organisational<br>interventions<br>3. Interventions providing<br>restraint alternatives<br>4. Other interventions: All<br>other interventions, also<br>interventions comprising a<br>combination of these | Country of origin:<br>Norway (n=2), the<br>Netherlands (n=1),<br>Sweden (n=1), United<br>States(n=1)<br>Interventions:<br>Educational<br>programme. In<br>addition, consultation | restraints. Only one study<br>investigated group<br>dwelling units for persons<br>with dementia and no<br>studies in the community<br>setting could be<br>identified. For both<br>settings further studies<br>are needed. Researchers<br>in the field of PR<br>reduction are urgently |

| Author<br>Year<br>Country           | Study quality<br>SBU Domain(s)<br>Quantitative/  | Objectives of the systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|-------------------------------------|--|---|--|---|---|
| Reference                           | qualitative  |   |  |   |   |
|                                     |  |   | Interventions containing<br>drug therapy were<br>excluded<br><b>Outcomes:</b><br>Primary: Number or<br>proportion of residents<br>with at least one PR;<br>Prevention of physical<br>restraints (PR); Reduction<br>of PR.<br>Secondary: Type of PR;<br>Duration of PR use;<br>Prescription of<br>psychotropic drugs;<br>Residents' and caregivers'<br>quality of life; Adverse<br>effects of the interventions<br>employed; Duration of<br>effect of the interventions;<br>Injuries and deaths during<br>the study period<br><b>Literature search:</b> | staff was offered in 4<br>studies.<br>Outcomes:<br>Primary: Physical strain<br>use<br>Secondary: Types of<br>restraints, Multiple<br>restraints, Restraint<br>intensity; Psychotropic<br>medications; Falls and<br>fall-related injuries;<br>Adverse outcomes<br>Follow-up time:<br>6-12 months | weight on the careful<br>development of their<br>complex interventions<br>including theory-based<br>modelling of components<br>and pilot testing of<br>feasibility and<br>acceptability.<br>Evaluation studies should<br>adhere to the best<br>available methodological<br>standards, especially in<br>terms of placing more<br>emphasis on well-<br>designed cluster-<br>randomised controlled<br>trials with rigorous<br>statistical methods<br>adjusting for cluster<br>design. Reporting of<br>complex interventions<br>should comply with<br>existing reporting<br>statements. |
|                                     |  |   | 7 September 2009   |   |   |
| Osakwe et al<br>2017<br>USA<br>[69] | Moderate<br>SBU Domain(s):<br>Behovsbedömning<br>och uppföljning.<br>(Needs assessment<br>and follow-up: older | To describe and compare<br>methods used to assess<br>ADLs among older adult<br>patients skilled nursing<br>facilities and home health<br>care | Inclusion criteria:<br>Quantitative and qualitative<br>primary research studies<br>published in English.<br>The following inclusion<br>criteria were used to   | Number of studies:<br>8 (five cross-sectional,<br>one quasi experimental,<br>one prospective cohort<br>and one retrospective<br>cohort study)   | This review adds to the<br>growing body of evidence<br>to evaluate ADL measures<br>across PAC settings to<br>ensure efficiency of<br>healthcare expenditure<br>and standardization of   |
|                                     | persons)<br>Quantitative   |   | identify relevant studies: a)<br>original research published<br>in English, b) included<br>patient's age 65 years or   | Study design:<br>8 cross-sectional<br>studies, one quasi<br>experimental study,   | assessment. There is<br>substantial variation in<br>the ADL measures of self-<br>care and mobility in SNF   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|-------------------------------------|---|--|---|
|  |  |                                     | older, c) used a<br>standardized ADL<br>instrument in either HHC or<br>SNF.<br>We only included studies of<br>nursing homes with<br>individuals who had a<br>length of stay of 100 days<br>or less and who had a<br>hospitalization prior to<br>their nursing home stay.<br>Instruments that assessed<br>ADLs in SNF and HHC<br>Literature search:<br>April 21, 2016. | one prospective cohort<br>study, one<br>retrospective cohort<br>study.<br>Number of participants<br>131 to 1 023 036.<br>Characteristics of<br>participants:<br>Average age: 77.1 to<br>84.9 years. Females up<br>to 77.2% where stated<br>Setting:<br>Skilled nursing facilities<br>and home health care<br>(4 studies each)<br>Country of origin:<br>Norway and USA<br>Interventions:<br>Five instruments:<br>The Barthel Index and<br>OASIS were used in<br>HHC whereas the MDS<br>2.0, MDS 3.0, and<br>FIMFRG were used in<br>SNF settings.<br>Outcomes:<br>ADL ability levels<br>Follow-up time:<br>On the day or a prior<br>period | and HHC. To address this,<br>uniform ADL terminology<br>and measures are<br>needed, and standardized<br>training is warranted for<br>clinicians assessing ADLs.<br>This is particularly<br>important in HHC where<br>registered nurses or<br>physical therapist can<br>conduct OASIS<br>assessment.<br>Additional research is<br>needed particularly on<br>the reliability and validity<br>of ADL measures using<br>OASIC-C1. |

| Author           | Study quality           | Objectives of the          | Inclusion criteria for the    | Characteristics of the    | The conclusions of the       |
|------------------|-------------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| Year             | SBU Domain(s)           | systematic review          | systematic review             | studies included in the   | systematic review's          |
| Country          | Quantitative/           |                            | Literature search (date)      | systematic review         | author(s)                    |
| Reference        | qualitative             |                            |                               |                           |                              |
| Ostaszkiewicz et | Moderate                | To assessing the           | Inclusion criteria:           | Number of studies:        | This review was              |
| al               |                         | effectiveness of timed     | Randomized or quasi-          | 2                         | challenged by a lack of      |
| 2005             | SBU Domain(s):          | voiding for the            | randomized controlled         |                           | consensus in terminology     |
| Australia & UK   | Upprätthållande och     | management of urinary      | trials on timed voiding for   | Study design:             | for interventions that       |
| [70]             | stimulerande insatser   | incontinence in            | the treatment of urinary      | 1 RCT, 1 CCT              | involve adjustment to        |
|                  | och arbetssätt –        | adults.                    | incontinence in adults. that  |                           | voiding schedules. We        |
|                  | särskilt boende.        | (a) timed voiding is more  | also described a behavioral   | Number of                 | believe that this reflects   |
|                  | (Maintaining and        | effective than no timed    | intervention with an          | participants:             | an incompletely              |
|                  | stimulating work        | voiding.                   | adjustment to the voiding     | 20-278                    | theoretically informed       |
|                  | methods -               |                            | schedule or toileting         |                           | construct of timed           |
|                  | institutional settings) | (b) timed voiding is more  | program that described a      | Characteristics of        | voiding. There is a need,    |
|                  |                         | effective than other       | fixed interval of voiding or  | participants:             | therefore, to review the     |
|                  | Quantitative            | interventions.             | toileting that was delivered  | Mean age 87,3 years       | theory underpinning          |
|                  |                         |                            | either alone or in            | predominantly             | behavioral interventions     |
|                  |                         | (c) timed voiding          | combination with another      | cognitively and           | for the management of        |
|                  |                         | combined with another      | intervention. Urinary         | physically impaired       | urinary incontinence and     |
|                  |                         | intervention is more       | incontinence was defined      | older women               | the definitions used for     |
|                  |                         | effective than that other  | either by symptom             |                           | the various systematic       |
|                  |                         | intervention alone.        | classification or urodynamic  | Setting:                  | voiding programs.            |
|                  |                         |                            | diagnosis and included        | Nursing home setting      | Despite a comprehensive      |
|                  |                         | (d) timed voiding          | urge, stress and mixed        |                           | search, only two trials      |
|                  |                         | combined with another      | incontinence.                 | Country of origin:        | met the inclusion criteria.  |
|                  |                         | intervention is more       | The main outcomes of          | Not stated                | These tested the             |
|                  |                         | effect-ive than timed      | interest were changes in      |                           | hypothesis that timed        |
|                  |                         | voiding alone.             | the frequency or severity of  | Interventions:            | voiding combined with        |
|                  |                         |                            | urinary incontinence or       | Fixed interval of voiding | another intervention is      |
|                  |                         | (e) timed voiding          | changes in the number of      | as one component of       | more effective than usual    |
|                  |                         | combined with another      | individuals with              | the overall intervention  | care. There was              |
|                  |                         | intervention is more       | incontinence. Secondary       | •                         | insufficient evidence for a  |
|                  |                         | effective than usual care. | outcomes of interest          | Outcomes:                 | quantitative estimate.       |
|                  |                         |                            | included changes in (a)       | Day- and nighttime        | Moreover, it is difficult to |
|                  |                         |                            | bladder volume; (b) health    | urinary incontinence      | draw conclusions about       |
|                  |                         |                            | economic measures; (c) the    | Fallow we time            | the effects of time          |
|                  |                         |                            | incidence of urinary tract    | Follow-up time            | voiding from the limited     |
|                  |                         |                            | infection; (d) alterations to | Not stated                | evidence available as the    |
|                  |                         |                            | skin integrity; and (e)       |                           | trials were of variable      |
|                  |                         |                            | altered caregiver burden      |                           | quality. There is a need     |

| Author<br>Year                            | Study quality<br>SBU Domain(s)   | Objectives of the systematic review   | Inclusion criteria for the systematic review  | Characteristics of the studies included in the  | The conclusions of the systematic review's  |
|---|--|---|---|---|---|
| Country<br>Reference                      | Quantitative/<br>qualitative   |   | Literature search (date)  | systematic review   | author(s)   |
| Kererence                                 |  |   | and other quality of life<br>considerations.<br><b>Literature search:</b><br>May 2002   |   | for well-designed and<br>larger trials that address<br>these biases and evaluate<br>different types of<br>systematic voiding<br>programs in a range of<br>different populations and<br>settings. This is<br>important, as it would<br>support the development<br>of criteria that would<br>enable clinicians and<br>consumers to select<br>appropriate and targeted<br>interventions.   |
| Park et al<br>2016<br>Korea & USA<br>[71] | Moderate<br>SBU Domain(s):<br>Stimulerande och<br>upprätthållande<br>arbetssätt och<br>metoder – särskilt<br>boende och ordinärt<br>boende. (Maintaining<br>and stimulating work<br>methods – both<br>community and<br>institutional settings)<br>Quantitative | To screen the pressure<br>ulcer risk by evaluating a<br>predictive function of<br>tools among older adults<br>by use of a meta analysis<br>methodology.<br>Specific aims:<br>(a) examining<br>characteristics of studies<br>which applied assessment<br>tools for risk of pressure<br>ulcers and their outcomes<br>of prevalence of pressure<br>ulcers in older adults<br>through a systematic<br>review.<br>(b) summarising the<br>evidence of overall<br>predic-tive validities and | Inclusion criteria:<br>Selection criteria for this<br>study required the<br>following:<br>a) application of the<br>indexed test (the Norton<br>Pressure Sore Risk-<br>Assessment Scale,<br>Waterlow Pressure Ulcer<br>Risk Assessment, and<br>Braden Scale for Predicting<br>Pressure Sore Risks).<br>(b) inclusion of the<br>predictive validity<br>(sensitivity, specificity, and<br>diagnostic odds ratio) of<br>the indexed tests and<br>outcomes of screening<br>(positive, negative, or false)<br>in the development of<br>pressure ulcers. | Number of studies:         29         Study design:         Prospective (n=23)         Number of         participants:         11 729 participants. 6         studies, n=≤100         persons; 10 studies         >300 persons.         Characteristics of         participants:         7 studies had a male         dominant sample, and         11 were female         dominant. In 17 studies         the mean age was ≥65         years. | The findings indicate that<br>those tools in current use<br>have I limitations in<br>accurately predicting the<br>accuracy in pressure ulcer<br>risks in older adults,<br>because high<br>heterogeneity existed<br>among studies. Strategies<br>to reduce heterogeneity<br>among studies using the<br>Braden Scale should be<br>developed.<br>To provide optimal<br>opportunity for<br>prevention of pressure<br>ulcers for older adults,<br>efforts should be made to<br>modify the current scales<br>by augmenting the<br>strength of the tools and |

| Author<br>Year           | Study quality<br>SBU Domain(s) | Objectives of the systematic review   | Inclusion criteria for the<br>systematic review  | Characteristics of the studies included in the   | The conclusions of the<br>systematic review's   |
|--------------------------|--------------------------------|---|--|--|---|
| Country                  | Quantitative/                  | systematic review   | Literature search (date)   | systematic review  | author(s)   |
| Reference                | qualitative                    |   | Literature search (date)   | Systematic review  | aution(3)   |
|                          |                                | heterogeneity from<br>selected studies by type<br>of screening tools.<br>(c) exploring<br>heterogeneity among the<br>studies by the subgroups<br>of participants (age and<br>gender), care facilities<br>conducting the studies<br>(acute hospital and long-<br>term care), and reference<br>standards. | <ul> <li>(c) focus on age 60 years or<br/>above; and</li> <li>(d) articles published either<br/>on-line or in hard copies.<br/>Literature which did not<br/>provide a full text or an<br/>original study was<br/>excluded.</li> <li>Literature search:<br/>2013</li> </ul> | Country of origin:<br>North America n=14<br>(United States and<br>Canada), Asia (n=6),<br>Europe (n=4), Latin<br>America (n=3), Middle<br>East (n=1,) Oceania<br>(n=1).<br>Setting:<br>Acute care (hospital)<br>admission units; long-<br>term or home care<br>agencies<br>Interventions:<br>Three pressure ulcer<br>risk assessment tools:<br>Braden, Norton, and<br>Waterlow Scales<br>Outcomes:<br>Predictability<br>Follow-up time:<br>Not clear | reducing limitations. The<br>development of more<br>accurate assessment<br>tools for the prediction of<br>pressure ulcers is<br>necessary to insure<br>evidenced-based<br>interventions are<br>targeted where they can<br>have the greatest impact.<br>Overall, the findings<br>indicate that the three<br>scales show a similar<br>predictability ( <b>Moderate</b><br>level) regarding pressure<br>ulcer development and<br>existence of<br>heterogeneity between<br>studies. |
| Petriwskyj et al<br>2016 | Moderate                       | To identify and evaluate  | Inclusion criteria:  | Number of studies:   | Outcomes for these  |
| Australia                | SBU domain(s):                 | the existing evidence and knowledge regarding the   | Population:  | 28 articles with 33 studies were included  | models are at best<br>comparable with   |
| [72]                     | Upprätthållande och            | use of subscription-  | Staff included those in any  | in the full review.  | traditional care with   |
|                          | stimulerande                   | based, person-centered  | roles as employees of the  | However, the part  | limited suggestions that  |
|                          | arbetssätt och                 | culture change models.  | services, and consumers  | covered by this article  | they result in poorer   |
|                          | metoder – särskilt             | Although the broader  | included those receiving or  | includes 19 articles with  | outcomes and sufficient   |
|                          | boende. (Maintaining           | review addressed a range  | accessing services, their  | 27 studies.  | potential for benefits to   |
|                          | and stimulating work           | of research questions,  | carers, and immediate  |  | warrant further   |
|                          | methods -                      | this article focuses on   | family.  | Study design:  | investigation. Although   |
|                          | institutional settings)        | consumer outcomes and   |  | ,  | these models may have   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|---|--|---|--|
|  | Quantitative and qualitatitve                                  | experience, including<br>quality of care, clinical<br>outcomes, and consumer<br>experience of care. | Studies published:<br>Up to and including 2015.<br>Study design:<br>The review considered both<br>qualitative and quantitative<br>studies, including but not<br>limited to randomized<br>controlled trials,<br>nonrandomized controlled<br>trials, quasi-experimental,<br>before and after studies,<br>prospective and<br>retrospective cohort<br>studies and cross sectional<br>studies, and designs such as<br>phenomenology, grounded<br>theory, ethnography, action<br>research, and feminist<br>research.<br>Other criteria: Studies were<br>considered for the review if<br>they<br>reported on subscription-<br>based, person-centered<br>culture change models,<br>including voluntary<br>endorsement or badging<br>systems or rating systems.<br>Language:<br>English<br>Literature search:<br>2015 | No number of each<br>type of study is given.<br>Number of<br>participants:<br>From 10 individuals to<br>16 000 facilities<br>(facility-level data<br>collection).<br>Characteristics of<br>participants:<br>Not stated.<br>Country of origin:<br>United States, Canada,<br>England, and Norway.<br>No numbers given.<br>Setting:<br>Health and aged care<br>services (staff, and<br>consumers).<br>Interventions:<br>Many of the articles<br>offered only<br>limited detail regarding<br>implementation of<br>person-centered care,<br>and the articles<br>described the<br>implementation of<br>different models<br>indicated considerable<br>variation. | the potential to benefit<br>residents, the<br>implementation of<br>person-centered<br>principles may affect the<br>outcomes. |

| Author<br>Year<br>Country                       | Study quality<br>SBU Domain(s)<br>Quantitative/  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|---|--|--|--|---|---|
| Reference                                       | qualitative  |  |  | Systematic retrem   | aution(b)   |
|   |  |  |  | The person-centered<br>models:<br>The Eden alternative<br>(n=4), Green hose (n=2)<br>EverCare (n=4), The<br>Pioneer Network (n=1),<br>VIPS Practice Model<br>(n=2), Planetree (n=1) |   |
|   |  |  |  | Outcomes:<br>The included studies<br>use a multitude of<br>outcome measures. The<br>most important are:   |   |
|   |  |  |  | Resident outcomes<br>including quality of life,<br>clinical outcome.  |   |
|   |  |  |  | Quality of care.<br>Resident and family<br>experience of care   |   |
|   |  |  |  | Follow-up time:<br>Not stated.  |   |
| Pinto-Bruno et al<br>2017<br>Spain & UK<br>[73] | Moderate<br>SBU Domain(s):<br>Stimulerande och<br>upprätthållande<br>arbetssätt – bade<br>ordinärt och särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods – both<br>community and | To assess the effects of<br>ICT-based interventions<br>evaluating their utility to<br>promote 'active ageing'<br>and 'social health' in<br>people with dementia. | Inclusion criteria:<br>Qualitative and quantitative<br>research which analyses<br>the effect of ICT-based<br>interventions to facilitate<br>social participation and<br>social health among people<br>living with dementia.<br>(2) Studies whose<br>participants are aged 55 | Not stated.<br>Number of studies:<br>6<br>Study design:<br>Qualitative (4), mixed<br>methods and one<br>quantitative design.<br>Number of<br>participants:<br>79 (18-34)            | <b>Conclusion:</b><br>Even though the concept<br>of social health is<br>relatively new in the<br>dementia area, it is<br>surprising the lack of<br>papers assessing this<br>fundamental aspect of<br>psychosocial<br>interventions. The scarce<br>evidence gathered in this |
|   | and stimulating work<br>methods – both   |  | (2) Studies whose  | participants:   | p<br>ii   |

| Year SBU<br>Country Quar | y quality Objectives of th<br>Domain(s) systematic revie<br>titative/<br>tative |   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--------------------------|---|---|---|---|
| Qual<br>tive             | tative/Quantita   | diagnosis of dementia<br>(both, living in the<br>community or in residential<br>care facilities).<br>(3) Publications written in<br>English.<br>Literature search<br>May 2016 | Characteristics of<br>participants:<br>Persons with dementia,<br>mostly women<br>Setting:<br>Community living,<br>residential care<br>Country of origin:<br>UK, Finland, Sweden,<br>Netherlands<br>Interventions:<br>different technology<br>hardware<br>such as computers,<br>laptops, mobile phones,<br>monitoring devices and<br>tablets. The aim of<br>these technologies is to<br>avoid the social<br>isolation of people<br>living with dementia<br>encouraging<br>their social<br>participation and social<br>contacts in the<br>community<br>through leisure and<br>cognitive activities. | results based in mostly<br>qualitative studies. The<br>two studies that provided<br>quantitative results show<br>that ICT-based<br>interventions promote<br>more social behaviours<br>than the non-ICT-based<br>interventions used in the<br>control group traditional<br>ones.<br>Although technology has<br>been included in several<br>psychosocial<br>interventions during the<br>last decades, most of the<br>ICT-based interventions<br>focused in cognitive<br>decline (ICT-based<br>cognitive interventions)<br>and daily life activities<br>(assistive technologies).<br>There is a need to<br>develop specific outcome<br>measures to assess all the<br>aspects related to social<br>health as a whole in<br>psychosocial<br>interventions with people<br>with dementia. Further<br>research is also needed in<br>this area and there is also<br>a need for medium- and<br>long-term follow-ups to<br>examine longer term |

| AuthorStudy qualitYearSBU DomainCountryQuantitativeReferencequalitative  | (s) systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|
|  |  |  | Follow-up time:<br>Not applicable   | need are high quality<br>randomised controlled<br>trials.  |
| Ploeg et al<br>2009<br>Canada<br>[74]<br>SBU Domair<br>Insatser mot<br>(Intervention<br>addressing a<br>neglect)<br>Quantitative | våld. and to summarise the<br>s current state of<br>buse and knowledge related to the<br>effectiveness of<br>interventions for elder | s (a) the article addresses<br>abuse of persons aged 60<br>and older; (b) the article<br>describes an intervention | Number of studies:<br>8<br>Study design:<br>RCT and nonequivalent<br>comparison group<br>studies<br>Number of<br>participants:<br>Reported for each study<br>Characteristics of<br>participants:<br>Older persons<br>Setting:<br>Community<br>Country of origin<br>All but one from USA<br>Interventions:<br>Psychoeducational<br>support group,<br>community based elder<br>abuse case<br>management programs,<br>education related to<br>elder abuse and home<br>visits by a domestic<br>violence counselor and | While elder abuse is an<br>increasingly important<br>issue internationally,<br>there is little high-quality<br>research on the<br>effectiveness of<br>interventions. This review<br>highlights the limited<br>number and quality of<br>empirical research<br>studies in the field.<br>Further, the review<br>suggests that there may<br>be both positive and<br>negative consequences of<br>elder abuse<br>interventions. The need<br>for high quality research<br>in the field is critical not<br>only to ensure health and<br>quality of life for older<br>adults but also to ensure<br>wise use of scarce and<br>costly health and social<br>service resources. |

| Author<br>Year<br>Country<br>Reference       | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|--|--|---|
|  |  |  |  | assistance, support, and<br>advocacy in the use of<br>the criminal justice<br>system and case<br>management and other<br>services including a law-<br>oriented program and<br>an advocacybased<br>program.<br>Outcomes:<br>recurrence of abuse,<br>case resolution, and<br>relocation, professional<br>outcomes<br>Follow-up time:<br>Not stated |   |
| Pol et al<br>2013<br>The Netherlands<br>[75] | Moderate<br>SBU domain(s):<br>Insatser eller<br>aktiviteter för att<br>stödja kvarboende<br>(Interventions to<br>support ageing in<br>place)<br>Quantitative and<br>qualitatitve | To study sensor<br>monitoring (use of a<br>sensor network placed in<br>the home environment to<br>observe individuals' daily<br>functioning (activities of<br>daily living and<br>instrumental activities of<br>daily living)) as a method<br>to measure and support<br>daily functioning for older<br>people living<br>independently at home. | Inclusion criteria:<br>Publication period:<br>Between 2000 and October<br>2012.<br>Population:<br>Community-dwelling<br>individuals aged 65 and<br>older.<br>Study design:<br>All study designs.<br>Setting:<br>Participants' homes.<br>Other criteria:<br>English | Number of studies:<br>17<br>Study design:<br>Case-control studies<br>(n=3)<br>Mixed methods studies<br>(n=1)<br>Longitudinal pilot<br>studies (n=1)<br>Single-group pre-post<br>design studies (n=1)<br>Multiple-case studies<br>(n=3)<br>Case studies (n=7)<br>Experiment (n=1).  | The use of sensor<br>monitoring could provide<br>promising opportunities<br>in clinical practice by<br>measuring and<br>supporting daily<br>functioning in older<br>persons living<br>independently, although<br>clear evidence is still<br>lacking. This systematic<br>review also showed that<br>the research has focused<br>largely on the technical<br>aspects of sensor<br>monitoring and less on its<br>application in everyday |
|  |  |  | English  | Number of<br>participants:   | life and clinical practice.<br>Future research should   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)              | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|--|---|---|
|  |  |  | Literature search:<br>18 October 2011, updated<br>9 January 2012 and 25<br>October 2012. | Varied between (n=1)<br>to (n=52).<br>Characteristics of<br>participants:<br>In seven studies, the<br>mean age of the older<br>participants was not<br>specified. The weighted<br>mean age of the<br>participants in the<br>remaining eight studies<br>was 82.6.<br>Country of origin:<br>Not stated.<br>Setting:<br>Participants' home<br>Interventions:<br>Wireless sensor<br>monitoring to measure<br>or support daily<br>functioning for<br>independently living.<br>Outcomes:<br>Studies that focused on<br>daily functioning in<br>terms of ADL or IADL as<br>the primary outcome<br>measure. | focus on facilitating the<br>use of sensor monitoring<br>in everyday life and<br>clinical practice. To<br>encourage this, a<br>roadmap for future<br>research was proposed<br>that includes the<br>participation of the older<br>people themselves. |
|  |  |  |  | Follow-up time:<br>Not all studies had a<br>follow-up time. But for   |   |

| Author<br>Year<br>Country<br>Reference             | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|--|---|---|---|
|  |   |  |   | those who had it<br>ranged between 4<br>hours and 80 months.  |   |
| Reijnders et al<br>2013<br>The Netherlands<br>[76] | Moderate SBU Domain(s): Upprätthållande och stimulerande arbetssätt och metoder – ordinärt boende. (Maintaining and stimulating work methods - community settings) Quantitative | To evaluate the<br>effectiveness of cognitive<br>interventions in healthy<br>older adults and people<br>with mild cognitive<br>impairment, MCI, by<br>taking into account the<br>content and<br>methodological quality of<br>the intervention studies. | Inclusion criteria:<br>(1) randomized controlled<br>trial or clinical study,<br>(2) study population<br>consisting of healthy older<br>adults or people with MCI,<br>(3) any type of cognitive<br>intervention,<br>(4) use of objective and/or<br>subjective outcome<br>measures. Studies were<br>excluded if the language<br>was not English.<br>Literature search:<br>February 2012 | Number of studies:35Study design27 RCTs, 8 clinical trialsPopulation:Consisting of healthyolder adults or peoplewith MCI. Mean age:63.5 – 80.2 years.Number ofparticipants:13-242Country of origin:Not statedSetting:Experimental settingsInterventions:Most interventionsaimed at improvingmemory performanceby training memorystrategies,accompanied withpsychoeducation onmemory, lifestyle, orpractice of attentionalskills, improvingprocessing speed by | This systematic review,<br>evaluating the<br>effectiveness of cognitive<br>interventions in healthy<br>older adults and people<br>with MCI, showed that<br>cognitive interventions<br>can be effective in<br>improving various aspects<br>of objective cognitive<br>functioning memory<br>performance, executive<br>functioning, processing<br>speed, attention, fluid<br>intelligence, and<br>subjective cognitive<br>performance.<br>The results show<br>evidence that cogrnt1ve<br>training can be effective<br>in improving various<br>aspects of objective<br>cognitive functioning;<br>memory performance,<br>executive functioning,<br>processing speed,<br>attention, fluid<br>intelligence, and<br>subjective cognitive<br>performance. A critical<br>comparison between<br>different intervention<br>studies is difficult |

| AuthorStudy qualityYearSBU Domain(s)CountryQuantitative/Referencequalitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|---|---|
|  |  |   | using a computer-based<br>cognitive training<br>program. The duration<br>of an intervention<br>varied between 5 and<br>20 weeks.<br>Objective cognitive<br>functioning; memory<br>performance, executive<br>functioning, processing<br>speed, attention, fluid<br>intelligence, and<br>subjective cognitive<br>performance.<br>Follow-up time:<br>Post intervention up to<br>26 months. | because of the<br>heterogeneity of the<br>intervention programs<br>and the chosen outcome<br>measures. In addition to<br>the heterogeneity of the<br>included intervention<br>studies, the<br>methodological quality of<br>the studies differed<br>widely. The issue whether<br>the effects of cognitive<br>interventions generalize<br>to improvement in<br>everyday life activities is<br>still unresolved and needs<br>to be addressed more<br>explicitly in future<br>research. For future<br>research, inclusion of a<br>core set of outcome<br>measures would be<br>necessary to compare the<br>effectiveness of different<br>cognitive intervention<br>programs. Both objective<br>and subjective outcome<br>measures for specific<br>cognitive domains (e.g.<br>memory, executive<br>functioning) and<br>ecological valid measures<br>that show improvements<br>in daily cognitive<br>functioning should be<br>part of this core set of |

| Author<br>Year                           | Study quality<br>SBU Domain(s)   | Objectives of the<br>systematic review   | Inclusion criteria for the systematic review   | Characteristics of the studies included in the  | The conclusions of the systematic review's  |
|--|--|--|--|---|---|
| Country<br>Reference                     | Quantitative/<br>qualitative   |  | Literature search (date)   | systematic review   | author(s)   |
| Reuther et al<br>2012<br>Germany<br>[77] | Moderate<br>SBU Domain(s):<br>Integrerade insatser<br>eller aktiviteter och<br>informationsöverförin<br>g. (Integrated<br>measures or<br>activities)<br>Quantitative | To describe the effects of<br>case conferences on<br>people with dementia<br>and challenging behavior<br>and the staff in nursing<br>homes.<br>1. What are the key<br>elements of case<br>conferences held on<br>people with dementia<br>and challenging<br>behavior?<br>2. What impact do case<br>conferences have on<br>people with dementia<br>living in nursing homes<br>and their challenging<br>behaviors? | Inclusion criteria:<br>• Studies on the subject of<br>case conferences published<br>before the end of<br>September 2011;<br>• English or German<br>language<br>• Studies in nursing homes<br>• Focus on challenging<br>behavior in people with<br>dementia attended by all<br>those involved with caring<br>for these residents.<br>Literature search:<br>October 2011 | Number of studies:<br>7<br>Study design:<br>4 cluster-<br>randomization, 2 quasi-<br>experimental design, 1<br>pre-post design.<br>Population:<br>Residents and staff in<br>nursing homes<br>Number of<br>participants:<br>10-165 residents and<br>11- 151 staff members<br>Country of origin:<br>Not stated. | Besides this, the<br>methodological quality of<br>future intervention<br>studies should be<br>improved by specifically<br>addressing the quality<br>control items contained<br>in the Consort criteria. In<br>particular, the description<br>of trial design and<br>randomization should be<br>reporting more<br>accurately and follow-up<br>assessments should be<br>included.<br>Case conferences help a<br>care team cope with<br>recurring care problems<br>and approach cases<br>analytically within a<br>team, and case<br>conferences facilitate<br>critical thinking. This is<br>the basis for a sustainable<br>improvement in caring<br>for people with dementia<br>who show challenging<br>behavior. However, good<br>preparation, introduction,<br>and support appear to be<br>essential for using case<br>conferences as a<br>successful intervention.<br>The results of the studies<br>reviewed here indicate<br>that case conferences can<br>reduce challenging |

| Author         | Study quality         | Objectives of the          | Inclusion criteria for the  | Characteristics of the   | The conclusions of the                               |
|----------------|-----------------------|----------------------------|-----------------------------|--------------------------|--|
| Year           | SBU Domain(s)         | systematic review          | systematic review           | studies included in the  | systematic review's                                  |
| Country        | Quantitative/         |                            | Literature search (date)    | systematic review        | author(s)  |
| Reference      | qualitative           |                            |                             |                          |  |
|                |                       | 3. What influence do case  |                             | Setting:                 | behavior of people with                              |
|                |                       | conferences have on the    |                             | Nursing home             | dementia. However, the                               |
|                |                       | subjective strain and the  |                             |                          | validity of these results is                         |
|                |                       | competence                 |                             | Interventions:           | limited by the insufficient                          |
|                |                       | development of staff       |                             | Case conference/s from   | quality of most studies                              |
|                |                       | working with people with   |                             | 2-18 months              | included. Due to the                                 |
|                |                       | dementia?                  |                             |                          | methodological and                                   |
|                |                       |                            |                             | Outcomes:                | content-related                                      |
|                |                       |                            |                             | Challenging behavior,    | differences of the studies,                          |
|                |                       |                            |                             | medication, quality of   | it is not possible to                                |
|                |                       |                            |                             | life.                    | determine a definite<br>effect on the                |
|                |                       |                            |                             | Follow-up time:          |  |
|                |                       |                            |                             | Post intervention to 18  | competence, strain, and                              |
|                |                       |                            |                             | months                   | stress experience of staff<br>working in the nursing |
|                |                       |                            |                             | monuns                   | homes.   |
|                |                       |                            |                             |                          | nomes.   |
|                |                       |                            |                             |                          | The body of evidence                                 |
|                |                       |                            |                             |                          | regarding the effect of                              |
|                |                       |                            |                             |                          | case conferences is weak,                            |
|                |                       |                            |                             |                          | and high-quality studies                             |
|                |                       |                            |                             |                          | with longer intervention                             |
|                |                       |                            |                             |                          | periods are needed. It is                            |
|                |                       |                            |                             |                          | necessary to apply similar                           |
|                |                       |                            |                             |                          | outcome instruments in                               |
|                |                       |                            |                             |                          | different studies.                                   |
| Richards et al | Moderate              | To determine the           | Inclusion criteria:         | Number of studies:       | The assessment of need                               |
| 2003           |                       | effectiveness and costs of |                             | 23 studies after search. | may be insufficient in                               |
| UK             | SBU Domain(s):        | interventions intended to  | Publication period:         | This later drops to 15   | itself for the adequate                              |
| [78]           | Integrerade insatser  | improve access to health   | Cinahl (1982 to June 2000); | due to post-             | provision of post-                                   |
|                | eller aktiviteter och | and social care for older  | Embase (1980 to June        | randomization            | discharge care. Needs                                |
|                | informationsöverförin | patients following         | 2000); Medline (1966 to     | exclusions.              | assessment should be                                 |
|                | g. (Integrated        | discharge from acute       | June 2000); BIDs Social     |                          | combined with a service                              |
|                | measures or           | hospitals.                 | Science Index (1981 to      | Study design:            | that facilitates the                                 |
|                | activities)           |                            | March 2000); National       | RCT (n=15)               | implementation of care                               |
|                |                       |                            | Institute of Social Work    |                          | plans.   |
|                | Quantitative          |                            | Caredata (1995 to June      |                          |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
| Reference                              | qualitative  |  | <ul> <li>2000, or 1975 onwards for<br/>British Journal of Social<br/>Work); Silver-platter<br/>Psychlit (1989 to March<br/>2000); and Silverplatter<br/>Social Abstracts (1963 to<br/>March 2000).</li> <li>Population:<br/>Older people (aged 60<br/>years or over)</li> <li>Study design:<br/>RCTs evaluating needs<br/>assessment methods and<br/>patient discharge<br/>coordinator roles.<br/>Economic evaluations<br/>conducted alongside RCTs<br/>were also selected.</li> <li>Literature search:<br/>June 2000.</li> </ul> | Number of<br>participants:<br>Not stated.Characteristics of<br>participants:<br>Older people (aged 60<br>years or over) of any<br>level of frailty, whose<br>expected location upon<br>discharge was the<br>patient's home.Country of origin:<br>USA (n=11), Canada<br>(n=1), Italy (n=1),<br>Germany (n=1),<br>Australia (n=1)Interventions:<br>Geriatric consultation<br>teams (GCT) (n=3)<br>Inpatient geriatric<br>evaluation and<br>management (GEM)<br>(n=4)<br>Outpatient geriatric<br>evaluation and<br>management (GEM)<br>(n=3)<br>Coordinator roles (n=5)Outcomes: |  |
|  |  |  |   | Outcomes assessed<br>included: referrals to or<br>use of health and social<br>care (n=15); mortality  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review        | Inclusion criteria for the<br>systematic review<br>Literature search (date)          | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)      |
|--|--|---|--|--|---|
|  |  |   |  | (n=13); patients'<br>functional health status<br>and disability (n=13);<br>and patient perceptions<br>of health (N=5), quality<br>of life (n=3), cognitive<br>functioning and<br>psychological well-<br>being (n=10), social<br>support (n=2) and the<br>adequacy of services<br>(n=4).<br><b>Follow-up time:</b><br>Between 30 days and 3<br>years. |   |
| SBU<br>2013                            | Moderate   | Att granska det<br>vetenskapliga underlaget   | Inclusion criteria:  | Number of studies  | Uppmärksamhetsträning<br>och hjälp till toalettbesök            |
| Sweden                                 | SBU Domain(s):   | för behandling av                             | Population:  | Church and a stream  | (prompted voiding) i  |
| [79]                                   | Stimulerande och<br>upprätthållande<br>arbetssätt och          | urininkontinens hos äldre<br>och sköra äldre. | Personer med urinläckage<br>och som är ≥65 år. Inklusive<br>undergrupper som tillhör | Study design:<br>RCT   | kombination med<br>funktionell träning<br>jämfört med sedvanlig |
|  | metoder – särskilt   |   | gruppen de sköra äldre/  | Number of  | vård minskar antal  |
|  | boende. (Maintaining   |   | mest sjuka äldre, vilka  | participants:  | inkontinensepisoder hos   |
|  | and stimulating work<br>methods -                              |   | definieras som personer<br>som är beroende av  | 259 (112-147)  | sköra äldre. Det<br>vetenskapliga                               |
|  | institutional settings)  |   | äldreomsorg och/eller  | Characteristics of   | underlaget är begränsat.  |
|  | Treatment not  |   | samsjuklighet.   | participants:<br>Frail elderly (mean age   | Det saknas studier för om                                       |
|  | included   |   | Intervention: Behandling   | 85-88 years)   | uppmärksamhetsträning   |
|  |  |   | kan bestå av kirurgisk   |  | och hjälp till toalettbesök                                     |
|  | Quantitative   |   | behandling, farmakologisk  | Setting:   | i kombination med   |
|  |  |   | behandling,  | Nursing home   | funktionell träning   |
|  |  |   | behandlingsprogram   | Country of origin,   | påverkar livskvaliteten   |
|  |  |   | (toaletträning mm),<br>alternativmedicin,  | Country of origin:<br>The Netherlands  | hos äldre och sköra äldre.<br>Vetenskapligt underlag            |
|  |  |   | bäckenbottenträning,   |  | saknas.   |

| Author    | Study quality | Objectives of the | Inclusion criteria for the  | Characteristics of the  | The conclusions of the |
|-----------|---------------|-------------------|---|---|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review   | studies included in the   | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)  | systematic review   | author(s)              |
| Reference | qualitative   |                   |   |   |                        |
| Keterence |               |                   | blåsträning, elstimulering,<br>komplexa interventioner<br>(vårdprogram mm), miljö<br>(personal, lokal, utbildning)<br>samt livsstilsinterventioner<br>(dryck, träning mm).<br>Jämförelsegruppen kan ha<br>fått sedvanlig vård, annan<br>definierad behandling,<br>ingen aktiv behandling eller<br>placebo.<br>Endast studier med<br>relevant jämförelsegrupp<br>inkluderades. Undantag för<br>kirurgistudier.<br>Utfallsmått: För att en<br>studie skulle inkluderas<br>måste minst ett primärt<br>utfallsmått rapporteras.<br>Primära utfallsmått var<br>patientens (eller via<br>närstående) upplevelse,<br>antal inkontinensepisoder<br>per dag/vecka utvärderat<br>med lista, symtomskattning<br>(formulär), livskvalitet eller<br>påverkan på det dagliga<br>livet samt biverkningar.<br><b>Study design:</b><br>Randomiserad kontrollerad<br>studie eller en kontrollerad | Interventions:<br>Uppmärksamhets-<br>träning och hjälp till<br>toalettbesök (prompted<br>voiding) i kombination<br>med funktionell träning<br>Outcomes:<br>Urinary incontinence<br>frequency (andel våta<br>kontrollerade skydd)<br>Follow-up time:<br>12-32 weeks. |                        |
|           |               |                   | Litoroturo coorch   |   |                        |
|           |               |                   | Literature search   |   |                        |
|           |               |                   | October 2012  |   |                        |

| Author     | Study quality         | Objectives of the           | Inclusion criteria for the                   | Characteristics of the                          | The conclusions of the      |
|------------|-----------------------|-----------------------------|--|---|-----------------------------|
| Year       | SBU Domain(s)         | systematic review           | systematic review                            | studies included in the                         | systematic review's         |
| Country    | Quantitative/         |                             | Literature search (date)                     | systematic review                               | author(s)                   |
| Reference  | qualitative           |                             |  | •   |                             |
| Shaw et al | Moderate              | To assess the               | Inclusion criteria:                          | Number of studies:                              | There was some evidence     |
| 2009       |                       | effectiveness and           | <ul> <li>studies assessed an</li> </ul>      | Quantitative: 104 (16 in                        | to support respite having   |
| UK         | SBU Domain(s):        | cost-effectiveness of       | intervention designed to                     | meta analysis)                                  | a positive effect on carers |
| [80]       | Anhörigstöd och       | breaks in care in           | provide the carer with a                     | Qualitative: 70.                                | but the evidence was        |
|            | familjeorienterat     | improving the well-being    | break from caring, and they                  |   | limited and weak. There     |
|            | arbete (Support to    | of informal carers of frail | assessed carer outcomes                      | Study design:                                   | was a lack of good-quality  |
|            | informal carers)      | and disabled older people   | <ul> <li>the care recipient</li> </ul>       | RCT (9), quasi                                  | larger trials and respite   |
|            |                       | living in the community     | population was aged 65                       | experimental (17),                              | interventions were          |
|            | Quantitative/qualitat | and to identify carer       | years or over (or included                   | before-after (14);                              | varied, often with poor     |
|            | ive                   | needs and barriers to       | subsample analysis of                        | observational (19),                             | descriptions of the         |
|            |                       | uptake of respite           | participants over 65 years)                  | cross-sectional (45).                           | characteristics of          |
|            |                       | services.                   | <ul> <li>the respite intervention</li> </ul> |   | interventions and limited   |
|            |                       |                             | was compared with no                         | Number of                                       | provision and uptake.       |
|            |                       |                             | respite or another                           | participants:                                   | There was also a lack of    |
|            |                       |                             | intervention.                                | Reported in appendix 4-                         | economic analysis.          |
|            |                       |                             |  | 9.  |                             |
|            |                       |                             | All types of study design                    |   | There was no evidence of    |
|            |                       |                             | were included randomised                     | Characteristics of                              | negative effects on care    |
|            |                       |                             | and non-randomised                           | participants:                                   | recipients.                 |
|            |                       |                             | controlled trials (RCTs),                    | Frail elderly, over the                         |                             |
|            |                       |                             | longitudinal before-and-                     | age of 65 years in                              |                             |
|            |                       |                             | after studies, and                           | receipt of informal care                        |                             |
|            |                       |                             | observational studies using                  | from a relative or friend                       |                             |
|            |                       |                             | cross-sectional or                           |   |                             |
|            |                       |                             | longitudinal methods].                       | Setting:  |                             |
|            |                       |                             | Studies were not excluded                    | Respite care                                    |                             |
|            |                       |                             | on the basis of language or                  |   |                             |
|            |                       |                             | year of publication.                         | Country of origin:                              |                             |
|            |                       |                             |  | USA, Canada, Australia,                         |                             |
|            |                       |                             | Studies were included in                     | New Zealand,                                    |                             |
|            |                       |                             | the qualitative review if:                   | Hongkong and                                    |                             |
|            |                       |                             | thou omploused sustitution                   | Germany. Qualitative                            |                             |
|            |                       |                             | - they employed qualitative                  | studies also from Japan,<br>Iceland and Sweden. |                             |
|            |                       |                             | methods (face-to-face semi                   | iceiand and Sweden.                             |                             |
|            |                       |                             | structured/in-depth                          |   |                             |
|            |                       |                             | interviews; focus groups;                    |   |                             |
|            |                       |                             | open questions in                            |   |                             |

| Author         | Study quality  | Objectives of the        | Inclusion criteria for the    | Characteristics of the   | The conclusions of the    |
|----------------|----------------|--------------------------|-------------------------------|--------------------------|---------------------------|
| Year           | SBU Domain(s)  | systematic review        | systematic review             | studies included in the  | systematic review's       |
| Country        | Quantitative/  |                          | Literature search (date)      | systematic review        | author(s)                 |
| Reference      | qualitative    |                          |                               |                          |                           |
|                |                |                          | questionnaires) they          | Interventions:           |                           |
|                |                |                          | reported the views of         | Institutional, in-home,  |                           |
|                |                |                          | carers and/or recipients      | day care, mixed.         |                           |
|                |                |                          | - the care recipient          |                          |                           |
|                |                |                          | population was aged 65        | Outcomes:                |                           |
|                |                |                          | years or over, the mean age   | Recipients:              |                           |
|                |                |                          | was 65 years or over,         | institutionalization     |                           |
|                |                |                          | or analysis identified those  | Carers: quality of life, |                           |
|                |                |                          | over the age of 65 years      | burden, anger, anxiety,  |                           |
|                |                |                          | when reporting findings       | depression.              |                           |
|                |                |                          | and either:                   | Follow-up time:          |                           |
|                |                |                          | they reported views of resp   | Up to 15 months.         |                           |
|                |                |                          | i te care or reported respite |                          |                           |
|                |                |                          | as a theme in relation to     |                          |                           |
|                |                |                          | other types of care, e.g.     |                          |                           |
|                |                |                          | care aimed to change the      |                          |                           |
|                |                |                          | state of the care recipient   |                          |                           |
|                |                |                          | or: views of respite          |                          |                           |
|                |                |                          | included respite care         |                          |                           |
|                |                |                          | service                       |                          |                           |
|                |                |                          | provision/satisfaction with   |                          |                           |
|                |                |                          | services impact of respite    |                          |                           |
|                |                |                          | on the carer and/or care      |                          |                           |
|                |                |                          | recipient unmet               |                          |                           |
|                |                |                          | needs/perceived needs for     |                          |                           |
|                |                |                          | respite care reasons for      |                          |                           |
|                |                |                          | utilising or not utilising    |                          |                           |
|                |                |                          | respite care.                 |                          |                           |
|                |                |                          | Literature search:            |                          |                           |
|                |                |                          | April 2008                    |                          |                           |
| Sheppard et al | Moderate       | To systematically assess | Inclusion criteria:           | Number of studies:       | Overall, for persons with |
| 2016           |                | the quality of the       | All randomized and non-       | 14                       | dementia, there was       |
| Canada         | SBU Domain(s): | research examining the   | randomized studies            |                          | strong evidence for the   |
| [81]           |                | benefits of Montessori-  | examining the effect of       | Study design:            | benefits of Montessori-   |

| Author    | Study quality | Objectives of the                              | Inclusion criteria for the   | Characteristics of the   | The conclusions of the   |
|-----------|---------------|--|--|--|--|
| Year      | SBU Domain(s) | systematic review                              | systematic review  | studies included in the  | systematic review's  |
| Country   | Quantitative/ |  | Literature search (date)   | systematic review  | author(s)  |
| Reference | qualitative   |  |  |  |  |
| •         |               | based activities for<br>persons with dementia. | Literature search (date)<br>Montessori-based activities<br>for persons with dementia<br>were considered for this<br>systematic review if they<br>had been published in<br>English in a peer-reviewed<br>journal.<br>Literature search:<br>April 2015 | systematic reviewRCT, within subjects,<br>randomized cross-over,<br>pre-postPopulation:<br>Persons with dementiaNumber of<br>participants:<br>Unclear in the main text<br>and dependent on<br>outcomeCountry of origin:<br>USA, Taiwan and<br>AustraliaSetting:<br>Nursing homes, day<br>care etc.Interventions:<br>Montessori-based<br>activities adopt<br>rehabilitation<br>principles, which<br>include task<br>breakdown, guided<br>repetition, and the use<br>of self correcting,<br>modifiable tasks with<br>progressive difficulty<br>such as moving from<br>simple to complex, as<br>well as from concrete | author(s)<br>based activities on eating<br>behaviors, but weak<br>evidence for the benefits<br>on cognition. The level of<br>evidence for the benefits<br>of Montessori-based<br>activities on engagement<br>and affect varied from<br>strong to weak. The dose-<br>response characteristics<br>of the Montessori<br>interventions, including<br>duration, session<br>frequency, and<br>facilitation format varied<br>highly across studies,<br>suggesting that more<br>research is needed to<br>help standardize the<br>approach and learn what<br>minimum participation<br>schedule is needed to<br>provide clinically relevant<br>outcomes. Similarly,<br>future research is needed<br>to examine the benefits<br>of Montessori<br>interventions long-term,<br>both with and without<br>ongoing participation in<br>the activities. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|---|---|---|--|
|  |   |   |   | Outcomes:<br>Cognition, eating<br>behaviors, affect,<br>engagement.   |  |
|  |   |   |   | Follow-up time:<br>Very various and<br>depending on outcome   |  |
| Shier et al<br>2014<br>USA<br>[82]     | Moderate<br>SBU Domain(s):<br>Särskilda<br>boendeformer som<br>insats (Institutional<br>care as an<br>intervention)<br>Quantitative/qualitat<br>ive | <ul> <li>(a) What are the nature<br/>and scope of nursing<br/>home culture change<br/>interventions that have<br/>been studied?</li> <li>(b) How has culture<br/>change and the extent of<br/>adherence to<br/>interventions been<br/>measured?</li> <li>(c) How have culture<br/>change outcomes been<br/>measured?</li> <li>(d) What is the<br/>relationship between<br/>nursing home culture<br/>change interventions and<br/>outcomes?</li> </ul> | Inclusion criteria:<br>(a) the setting was nursing<br>homes providing care to<br>adults in United States,<br>Canada, or United<br>Kingdom.<br>(b) the intervention focused<br>on more than quality<br>improvement,<br>management interventions,<br>health information<br>technology, infection<br>control, or medication<br>prescribing (i.e., it had to<br>additional reference<br>resident direc-tion, home<br>environment, close<br>relationships, staff<br>empowerment, or<br>collaborative decision<br>making); and if an outcome<br>study, it.<br>(c) employed a research<br>design with a comparator<br>group (randomized<br>controlled trial,<br>nonrandomized controlled | Number of studies:<br>36 (31 peer-reviewed<br>articles reporting on 27<br>distinct studies and 9<br>gray literature<br>publications).<br>Study design:<br>RCT, pre-post.<br>Number of<br>participants:<br>4-349<br>Characteristics of<br>participants:<br>Information about age<br>range and gender is not<br>stated.<br>Setting:<br>Nursing home<br>Country of origin:<br>USA, Canada and UK<br>Interventions:<br>Resident direction<br>Home environment | Nursing home culture<br>change has face validity<br>in terms of its value, and<br>there are potential policy<br>opportunities to support<br>the development of data<br>to determine its<br>effectiveness. For<br>example, the survey and<br>certification process<br>could prioritize measures<br>that are shown to be<br>sensitive to change and<br>have a clear causal<br>relationship with culture<br>change. Doing so would<br>be an advantage, as<br>culture change is growing<br>in the absence of<br>consistent evidence as to<br>its efficacy. The variation<br>in the way each domain<br>of culture change is<br>operationalized and each<br>type of intervention<br>outcome is measured<br>makes it difficult to<br>conclude whether a<br>particular domain of |

| <br>vstematic review sy<br>Li   | nclusion criteria for the<br>systematic review<br>.iterature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|---|--|--|--|
| st<br>cc<br>ar<br>(c<br>in<br>in<br>in<br>(e<br>b<br>g<br>q<br>fa<br>o<br>v | rial, cohort study, pre-post<br>study with and without<br>concurrent comparator,<br>and case control study).<br>d) there was sufficient<br>nformation to evaluate<br>ntervention effectiveness<br>e) the outcomes that could<br>be classified into resident,<br>quality of care or services,<br>amily, staff, and<br>organizational<br>.iterature search<br>uly 2012 | Relationships<br>Staff empowerment<br>Collaborative<br>management Change<br>Quality Improvement<br>Processes<br><b>Outcomes:</b><br>Resident, family, staff,<br>quality of care and<br>services, and<br>organisational<br>outcomes<br><b>Follow-up time:</b><br>Not stated | culture change is<br>associated with a<br>par-ticular outcome. As a<br>result, nursing homes<br>wanting to import culture<br>change are currently<br>unable to use the<br>published literature to<br>identify the best tested<br>approaches to be<br>implemented now. This<br>lack of clear association<br>between culture change<br>and outcomes is<br>unfortunate because<br>comprehensive culture<br>change may require<br>substantial buy-in from all<br>nursing home leadership<br>and staff and require<br>considerable resources.<br>This means that nursing<br>homes would benefit<br>from the ability to weigh<br>these investments against<br>the anticipated benefits.<br>Providers need sufficient<br>information for selecting<br>interventions based on<br>the expectation of<br>improving measurable<br>outcomes. Future studies<br>should carefully measure<br>the process of<br>implementation and<br>fidelity to the culture |

| Author<br>Year | Study quality<br>SBU Domain(s) | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review | Characteristics of the studies included in the | The conclusions of the<br>systematic review's    |
|----------------|--------------------------------|--|---|--|--|
| Country        | Quantitative/                  | systematic review                      | Literature search (date)                        | systematic review                              | author(s)  |
| Reference      | qualitative                    |  | Literature search (date)                        | systematic review                              | aution(s)  |
|                | 4                              |  |   |  | improve understanding of                         |
|                |                                |  |   |  | the extent to which                              |
|                |                                |  |   |  | changes in intervention                          |
|                |                                |  |   |  | outcomes can be                                  |
|                |                                |  |   |  | attributed to change in                          |
|                |                                |  |   |  | nursing borne culture.                           |
|                |                                |  |   |  | Studies should also begin                        |
|                |                                |  |   |  | from a well                                      |
|                |                                |  |   |  | conceptualized                                   |
|                |                                |  |   |  | framework and measure,                           |
|                |                                |  |   |  | using validated tools,                           |
|                |                                |  |   |  | outcomes that are most                           |
|                |                                |  |   |  | likely related by a clear                        |
|                |                                |  |   |  | causal hypothesis to                             |
|                |                                |  |   |  | domains of culture                               |
|                |                                |  |   |  | change and are sensitive                         |
|                |                                |  |   |  | to change. Results from                          |
|                |                                |  |   |  | these types of studies                           |
|                |                                |  |   |  | would facilitate the                             |
|                |                                |  |   |  | interpretation of findings,                      |
|                |                                |  |   |  | and if positive, would                           |
|                |                                |  |   |  | provide evidence to guide                        |
|                |                                |  |   |  | providers implementing                           |
|                |                                |  |   |  | culture change, and help strengthen the argument |
|                |                                |  |   |  | for local, state, and                            |
|                |                                |  |   |  | federal policy changes to                        |
|                |                                |  |   |  | support adoption of                              |
|                |                                |  |   |  | culture change practices.                        |
| Shizheng et al | Moderate                       | To examine the efficacy                | Study design:                                   | Number of studies:                             | Weak evidence shows                              |
| 2015           | moderate                       | of Taichi exercise in                  | Randomized controlled                           | n=5  | that Taichi exercise has a                       |
| China          | SBU Domain(s):                 | promoting self-reported                | studies.  |  | beneficial effect in                             |
| [83]           | Upprätthållande och            | sleep quality in older                 |   | Study design:                                  | improving self-rated                             |
| []             | stimulerande                   | adults                                 | Participants:                                   | All randomized                                 | sleep quality for older                          |
|                | arbetssätt och                 |  | People aged 60 and over                         | controlled studies.                            | adults, suggesting that                          |
|                | metoder - ordinärt             |  |   |  | Taichi could be an                               |
|                | boende. (Maintaining           |  | Setting:  |  | effective alternative and                        |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative           | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review´s<br>author(s)   |
|--|--|--|---|---|--|
|  | and stimulating work<br>methods - community<br>settings)<br>Quantitative |  | Not reported         Intervention:         Tai chi exercise         Outcomes:         Only those studies in which sleep quality was considered as primary outcomes: Pittsburgh Sleep Quality Index (PSQI)         Literature search:         December 2013. | Number of<br>participants:<br>n=460 (range 62 to 118)<br>243 participants were<br>allocated in<br>intervention groups and<br>227 in control groupsCharacteristics of<br>participants:<br>Mean ages ranging<br>from 65.94 and 75.45<br>years old. The<br>participants were<br>predominantly the<br>female elderly, with a<br>proportion of 59.1 %.Setting:<br>All in community<br>settings.Country of origin:<br>USA n=2, Iran n=1,<br>China n=1, Germany<br>n=1Interventions:<br>Tai chiOutcomes:<br>All suffered from same<br>methodological flaws.<br>The results of this study<br>showed that Taichi has<br>beneficial effect on<br>sleep quality in older | complementary approach<br>to existing therapies for<br>older people with sleep<br>problems. More rigorous<br>experimental studies are<br>required. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|--|--|
|  |  |                                     |   | people, as indicated by<br>decreases in the global<br>Pittsburgh Sleep Quality<br>Index score [<br>standardized mean<br>difference = -0.87, 95%<br>confidence intervals<br>(95% confidence<br>interval) ( -1 .25, -0.49)<br>], as well as i ts sub-<br>domains of subjective<br>sleep quality [<br>standardized mean<br>difference = -0.83, 95%<br>confidence interval (-<br>1.08, -0.57)], sleep<br>latency [standardized<br>mean difference = -<br>0.75, 95% confidence<br>interval (-1.42, -0.07)],<br>sleep duration<br>[standard-ized mean<br>difference = -0.55, 95%<br>confidence interval (- |  |
|  |  |                                     |   | 0.90, -0.21 )], habitual<br>sleep efficiency<br>[standardized mean<br>difference = -0.49, 95%<br>confidence interval (-<br>0.74, -0.23)], sleep<br>disturbance<br>[standardized mean<br>difference = -0.44, 95%<br>confidence interval (-<br>0.69, -0.19)], and<br>daytime dysfunction<br>[standardized mean   |  |

| Author<br>Year<br>Country | Study quality<br>SBU Domain(s)<br>Quantitative/  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|---------------------------|--|--|---|--|--|
| Country<br>Reference      | Quantitative/<br>qualitative         qualitative         Moderate         SBU domain(s):         Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)         Quantitative | To compare the effect of<br>intensified oral care<br>interventions given by<br>dental or nursing<br>personnel on mortality<br>from healthcare-<br>associated pneumonia<br>(HAP) in elderly adults in<br>hospitals or nursing<br>homes with the effect of<br>usual oral care. | Literature search (date)<br>Inclusion criteria:<br>Publication period:<br>January 1, 1996 – August<br>18, 2015<br>Population:<br>Elderly adults in hospitals<br>or nursing homes (mean<br>age ≥65).<br>Study design:<br>RCT covering one of three<br>oral care interventions:<br>given by dental personnel<br>(dental hygienists or<br>dentists) (11), given by<br>nursing personnel (12),<br>given by dental or nursing<br>personnel (13). Comparison<br>was with usual oral care.<br>Setting: | systematic review<br>difference = -0.34, 95%<br>confidence interval (-<br>0.59, -0.09)]. Daytime<br>sleepiness<br>improvement was also<br>observed.<br>Follow-up time:<br>12 weeks to 6 months<br>depending on outcome.<br>Number of studies:<br>5<br>Study design:<br>RCT (n=5)<br>Number of<br>participants:<br>3 944<br>Characteristics of<br>participants:<br>Not stated.<br>Country of origin:<br>Japan (n=2), United<br>States (n=2), France<br>(n=1).<br>Setting:<br>Hospitals and nursing<br>homes | author(s)         Oral care interventions         given by dental personnel         may reduce mortality         from HAP (low certainty         of evidence, Grading of         Recommendations         Assessment,         Development and         Evaluation (GRADE)         whereas oral care         interventions given by         nursing personnel         probably result in little or         no difference from usual         care (moderate certainty)         of evidence, GRADE in         elderly adults in hospitals         or nursing homes. |
|                           |  |  | Nursing homes or hospitals.<br>Other criteria:  | Interventions:<br>Two RCTs compared<br>the effect on mortality<br>from pneumonia of  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)                               | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
|  |  |  | Language English, Danish,<br>Norwegian and Swedish.<br>Literature search:<br>August 18 <sup>th</sup> 2015 | intensified oral care<br>interventions provided<br>by dental personnel<br>(dentists or dental<br>hygienists) with that of<br>usual oral care in<br>elderly adults in<br>hospitals or nursing<br>homes.<br>Three RCTs compared<br>the effect on mortality<br>from HAP of intensified<br>oral care interventions<br>provided by nursing<br>personnel with that of<br>usual oral care in<br>elderly adults in<br>hospitals and nursing<br>homes reported<br>mortality from HAP<br>ranged from 1.7% to<br>28.1% in the<br>intervention groups and<br>from 1.6% to 20.0% in<br>the control groups.<br><b>Outcomes:</b><br>Mortality from<br>healthcare-associated<br>pneumonia (HAP).<br><b>Follow-up time:</b> 1,5<br>years to 2,5 years. |  |

| Author      | Study quality           | Objectives of the          | Inclusion criteria for the      | Characteristics of the  | The conclusions of the       |
|-------------|-------------------------|----------------------------|---------------------------------|-------------------------|------------------------------|
| Year        | SBU Domain(s)           | systematic review          | systematic review               | studies included in the | systematic review's          |
| Country     | Quantitative/           |                            | Literature search (date)        | systematic review       | author(s)                    |
| Reference   | qualitative             |                            |                                 | -,                      |                              |
| Soril et al | Moderate                | To determine the           | Inclusion criteria:             | Number of studies:      | The complex and multi-       |
| 2014        |                         | effectiveness of built     | Behavioral and                  | 5                       | dimensional nature of        |
| Canada      | SBU Domain(s):          | environment                | psychological symptoms of       |                         | BPSD requires a              |
| [85]        | Upprätthållande och     | interventions, in          | dementia (BPSD) or              | Study design:           | multifaceted                 |
|             | stimulerande            | comparison to usual care   | responsive behaviors in         | Non-randomized          | management approach.         |
|             | arbetssätt och          | or no intervention, on the | dementia.                       | comparative cohort      | Responsiveness to an         |
|             | metoder – särskilt      | frequency and/or severity  |                                 | studies (n=5)           | intervention is likely to be |
|             | boende. (Maintaining    | of BPSD among residents    | Long-term care (LTC) or         |                         | highly individualized, with  |
|             | and stimulating work    | in LTC.                    | unit or facility specialized in | Population:             | the degree of response to    |
|             | methods -               |                            | dementia care.                  | Residents in long term  | therapy based on an          |
|             | institutional settings) |                            |                                 | care.                   | individual's background      |
|             |                         |                            | Environmental                   |                         | and the complexity of        |
|             | Quantitative            |                            | interventions (e.g.             | Number of               | their symptoms. The          |
|             |                         |                            | architectural design,           | participants:           | interventions to the built   |
|             |                         |                            | decorative change,              | 32-185                  | environment examined         |
|             |                         |                            | relocation in physical space,   |                         | within this present review   |
|             |                         |                            | etc.)                           | Country of origin:      | serve as a reminder that     |
|             |                         |                            |                                 | Australia, Canada, USA, | one's physical and social    |
|             |                         |                            | Outcome measure related         | Scotland                | surroundings have large      |
|             |                         |                            | to BPSD (change in              |                         | influence over one's         |
|             |                         |                            | frequency and/or severity)      | Setting:                | psychological                |
|             |                         |                            |                                 | Long-term care (LTC) or | well-being. However,         |
|             |                         |                            | Original Data                   | unit or facility        | there remains a dearth of    |
|             |                         |                            | - Randomized or                 | specialized in dementia | high-quality evidence to     |
|             |                         |                            | Nonrandomized                   | care.                   | conclusively guide the       |
|             |                         |                            | - Quasi-experimental Trials     |                         | selection of any particular  |
|             |                         |                            | - Prospective Comparative       | Interventions:          | built environment            |
|             |                         |                            | Cohort Studies                  | Environmental           | intervention. Given the      |
|             |                         |                            | - English or French             | interventions (e.g.     | growing evidence             |
|             |                         |                            | language                        | architectural design,   | concerning the               |
|             |                         |                            |                                 | decorative change,      | effectiveness of other       |
|             |                         |                            | Literature search:              | relocation in physical  | nonpharmacological           |
|             |                         |                            | June 2013                       | space, etc.) Three      | approaches to managing       |
|             |                         |                            |                                 | general categories of   | BPSD, changes to the         |
|             |                         |                            |                                 | intervention were       | built environment            |
|             |                         |                            |                                 | identified: a change or | likely serve as only one     |
|             |                         |                            |                                 | redesign of existing    | component of the arsenal     |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review        | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|---|---|---|
|  |  |   |   | physical structures or<br>spaces within the<br>environment the<br>addition of physical<br>objects or spaces to the<br>existing environment;<br>and the relocation of<br>the study population to<br>a novel living<br>environment. | of therapies in managing<br>BPSD among residents in<br>LTC. |
|  |  |   |   | Outcomes:<br>behavioral and<br>psychological<br>symptoms of dementia<br>(BPSD).   |   |
|  |  |   |   | Follow-up time:<br>Post intervention to 5<br>months   |   |
| Stern et al<br>2009                    | Moderate   | To determine the best available evidence in   | Inclusion criteria:<br>Adults aged 60 years and                             | Number of studies:<br>17  | Results from 17<br>epidemiological studies                  |
| Australia                              | CRU Domoin(s);   |   | older with or without a   | 17  | showed that the evidence                                    |
| [86]                                   | SBU Domain(s):<br>Stimulerande och                             | relation to physical<br>leisure activities in | clinical diagnosis of   | Study design:   | is conflicting and no solid                                 |
| [80]                                   | upprätthållande  | preventing dementia                           | dementia, living in the   | Two case-controls and   | conclusions could be  |
|  | arbetssätt och   | among older adults.                           | community or residential  | 15 cohort.  | drawn. Although the   |
|  | metoder – ordinärt   |   | care setting.   | 15 001010   | findings of the present                                     |
|  | boende.  |   |   | Number of   | review did not show a                                       |
|  |  |   | Types of intervention:  | participants:   | strong association  |
|  | Stimulerande och   |   | Physical leisure activities   | 180-551   | between engagement  |
|  | upprätthållande  |   | that require active   |   | and this particu-lar  |
|  | arbetssätt och   |   | movement of the body  | Characteristics of  | outcome, physical activity                                  |
|  | metoder – särskilt   |   | including gardening, playing  | participants:   | has been linked to many                                     |
|  | boende (Maintaining  |   | sports, exercises and any   | Age groups varied and   | other physiological,  |
|  | and stimulating work<br>methods – both                         |   | other activities.   | same studies focused  | psychological and social benefits.28 It is not              |
|  | methods – both   |   | Turne of outport  | on specific populations   |   |
|  |  |   | Type of outcomes:   |   | related to any serious                                      |

| Author      | Study quality                                | Objectives of the          | Inclusion criteria for the                                 | Characteristics of the                          | The conclusions of the                       |
|-------------|--|----------------------------|--|---|--|
| Year        | SBU Domain(s)                                | systematic review          | systematic review  | studies included in the                         | systematic review's                          |
| Country     | Quantitative/                                |                            | Literature search (date)                                   | systematic review                               | author(s)                                    |
| Reference   | qualitative                                  |                            |  |   |  |
|             | community and                                |                            | The presence or absence of                                 | Setting:  | adverse effects and is                       |
|             | institutional settings)                      |                            | dementia as determined by                                  | Community settings                              | relatively cheap and                         |
|             |  |                            | cognitive function tests,                                  | and combinations with                           | enjoyable to partake in, it                  |
|             | Quantitative                                 |                            | mental examination scores,                                 | clinical settings.                              | would seem rational to                       |
|             |  |                            | DSM classification   |   | continue to engage and                       |
|             |  |                            | (Diagnostic and Statistical                                | Country of origin:                              | promote physical                             |
|             |  |                            | Manual of Mental   | Sweden, Japan, Finland,                         | activities; however, the                     |
|             |  |                            | Disorders) and other valid                                 | France, China, Australia,                       | current literature is                        |
|             |  |                            | dementia diagnostic tools.                                 | Canada, USA                                     | equivocal as to whether                      |
|             |  |                            | Turne of studies.  | Intoniontions                                   | this will prevent the                        |
|             |  |                            | Type of studies:<br>Randomised controlled                  | Interventions<br>Physical activities such       | development or onset of dementia             |
|             |  |                            | trials and other   | as eg. sports, walking,                         | dementia                                     |
|             |  |                            | experimental designs were                                  | dancing, gardening.                             |  |
|             |  |                            | considered for the review.                                 | uaricing, garuering.                            |  |
|             |  |                            | In their absence, other                                    | Outcomes:                                       |  |
|             |  |                            | study designs such as                                      | Dementia  |  |
|             |  |                            | cohort, case-control and                                   | D cilication                                    |  |
|             |  |                            | cross-sectional were                                       | Follow-up time:                                 |  |
|             |  |                            | included. Only articles                                    | 1-36 years                                      |  |
|             |  |                            | published in the English                                   | ,   |  |
|             |  |                            | language were included                                     |   |  |
|             |  |                            | with no publication date                                   |   |  |
|             |  |                            | restriction.   |   |  |
|             |  |                            |  |   |  |
|             |  |                            | Literature search  |   |  |
|             |  |                            | October 2008   |   |  |
| Stern et al | Moderate                                     | To synthesize the best     | Inclusion criteria:  | Number of studies:                              | The current evidence                         |
| 2011        |  | available evidence on the  | Population: Older people                                   | 8   | base for the effects of                      |
| Australia   | SBU Domain(s):                               | effects of canine-assisted | who resided in long term                                   | Charles de sta                                  | canine-assisted                              |
| [87]        | Upprätthållande och                          | interventions on the       | care facilities and who                                    | Study design:                                   | interventions in long term                   |
|             | stimulerande                                 | health and social care of  | received CAIs.   | RCT   | care facilities is                           |
|             | arbetssätt och<br>metoder – särskilt         | the older population       | Intervention: CAIs grouped                                 | Bonulation:                                     | methodologically weak<br>and is unable to be |
|             |  | residing in long-term      | Intervention: CAIs, grouped<br>as either CAAs or CATs. For | <b>Population</b> :<br>Older people residing in | pooled. No solid                             |
|             | boende. (Maintaining<br>and stimulating work | care.                      | the purpose of this review                                 | long term care (range                           | recommendations can be                       |
|             |  |                            | CAAs were defined as "the                                  | 51-101 years).                                  | made, however some                           |
|             |  |                            | CAAS were defined as "the                                  | ST-TOT YEARS).                                  | made, nowever some                           |

| Author    | Study quality           | Objectives of the | Inclusion criteria for the   | Characteristics of the   | The conclusions of the      |
|-----------|-------------------------|-------------------|------------------------------|--------------------------|-----------------------------|
| Year      | SBU Domain(s)           | systematic review | systematic review            | studies included in the  | systematic review's         |
| Country   | Quantitative/           |                   | Literature search (date)     | systematic review        | author(s)                   |
| Reference | qualitative             |                   |                              |                          |                             |
|           | methods -               |                   | utilization of canines that  |                          | preliminary conclusions     |
|           | institutional settings) |                   | meet specific criteria to    | Number of                | based on the results of     |
|           |                         |                   | provide participants with    | participants:            | single studies are          |
|           | Quantitative            |                   | opportunities for            | 36-80 participants.      | provided. Caution is        |
|           |                         |                   | motivational, educational,   |                          | advised when                |
|           |                         |                   | and/or recreational          | Country of origin:       | interpreting these results. |
|           |                         |                   | benefits to enhance quality  | USA                      | Implications for practice:  |
|           |                         |                   | of life"50 CATs were         |                          | Due to the poor quality of  |
|           |                         |                   | defined as a goal-directed   | Setting:                 | evidence located on this    |
|           |                         |                   | intervention directed        | Single long-term care    | topic the use of canine-    |
|           |                         |                   | and/or delivered by a        | facility or multiple     | assisted interventions      |
|           |                         |                   | health/human service         | facilities.              | cannot currently be         |
|           |                         |                   | professional with            |                          | recommended nor             |
|           |                         |                   | specialized expertise, and   | Interventions:           | refuted. If, however, a     |
|           |                         |                   | within the scope of practice | All interventions        | long-term care facility is  |
|           |                         |                   | of his/her profession.       | involved interaction     | considering implementing    |
|           |                         |                   |                              | between the              | canine-assisted             |
|           |                         |                   | Control: usual care,         | participant and the dog  | interventions for older     |
|           |                         |                   | alternative therapeutic      | in an unstructured       | residents they should be    |
|           |                         |                   | interventions or no          | fashion. The             | aware that canine-          |
|           |                         |                   | intervention, on the proviso | opportunity to let the   | assisted activities may     |
|           |                         |                   | that descriptions of usual   | participant touch, talk, | produce some short-term     |
|           |                         |                   | care and/or therapeutic      | brush and generally      | beneficial effects but they |
|           |                         |                   | interventions were           | interact with the dog    | are similar to those seen   |
|           |                         |                   | provided.                    | was at the discretion of | from organizing visits      |
|           |                         |                   |                              | the participant.         | from people or arranging    |
|           |                         |                   | Outcomes:                    |                          | interactions with animal-   |
|           |                         |                   | Physical, emotional, social  | Outcomes:                | like inanimate objects.     |
|           |                         |                   | functioning                  | Autistic Spectrum        | Implications for research:  |
|           |                         |                   |                              | Disorder outcomes,       | Due to the lack of well-    |
|           |                         |                   | Literature search:           | medical outcomes,        | designed trials further     |
|           |                         |                   | 2009                         | emotional well-being     | higher quality              |
|           |                         |                   |                              | and observable           | experimental studies that   |
|           |                         |                   |                              | behaviors.               | examine the effects of      |
|           |                         |                   |                              |                          | canine-assisted             |
|           |                         |                   |                              | Follow-up time:          | interventions on older      |
|           |                         |                   |                              | Unclear                  | long-term care residents    |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|--|--|---|--|
| Strout et al                           | Moderate  | To systematically identify,  | Inclusion criteria:  | Number of studies:  | should be conducted.<br>Trials need to be<br>conducted following a<br>standardized rigorous<br>process.<br>Intellectual and physical   |
| 2016<br>USA<br>[88]                    | SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – ordinärt<br>boende. (Maintaining<br>and stimulating work<br>methods - community<br>settings)<br>Quantitative | appraise, and summarise<br>research on the effects of<br>behavioral interventions<br>to prevent cognitive<br>decline in community-<br>dwelling older adults<br>using a holistic wellness<br>framework. | Publication period: PubMed<br>MEDLINE (1947-2014),<br>EMBASE (1980-2014),<br>CENTRAL (1966-2014),<br>CINAHL (1937-2014),<br>PsycINFO (1887-2014),<br>ALOIS (1982-2014), and The<br>(NYAM) Grey Literature<br>Report (1999-2014).<br>Population:<br>Community-dwelling men<br>or women aged 60 and<br>older<br>Study design:<br>Must include at least one<br>behavioral intervention<br>from one or more<br>dimension of wellness:<br>Occupational, Social,<br>Physical, Intellectual,<br>Emotional, Spiritual.<br>Measurement:<br>Must include<br>measurements from at<br>least three of the following<br>cognitive domains: | 18         18         Study design:<br>RCT (n=18)         Number of<br>participants:<br>n=6254 individuals.<br>Ranging between<br>(n=31) and (n=2832)         Characteristics of<br>participants:<br>Mean age between<br>(n=67 and (n=83)         Country of origin:<br>Not stated.         Setting:<br>Community         Interventions:<br>Intellectual exercises<br>(n=12)         Physical exercises (n=6)         Outcomes:<br>Cognitive measures | interventions were most<br>studied, with varied<br>results. Future research is<br>needed using more-<br>consistent methods to<br>measure cognition.<br>Researchers should<br>include the National<br>Institutes of Health<br>Toolbox Cognition Battery<br>among measurement<br>tools to facilitate<br>effective data<br>harmonization, pooling,<br>and comparison. |
|  |   |  | executive function,<br>attention, episodic   | such as memory (n=17),<br>processing speed  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|--|---|---|
|  |  |  | memory, language,<br>processing speed, working<br>memory.<br>Setting:  | (n=13), excecutive<br>function (n=12),<br>attention (n=11) and<br>language (n=5).   |   |
|  |  |  | Community.   | Follow-up time:<br>3 weeks to 1 year.   |   |
|  |  |  | Literature search:<br>July 2014.   |   |   |
| Sutton et al<br>2016<br>UK<br>[89]     | Moderate<br>SBU Domain(s):<br>Behovsbedömning<br>och uppföljning.<br>(Needs assessment<br>and follow-up: older<br>persons)<br>Quantitative | To systematically and<br>critically evaluate the<br>available evidence<br>concerning the reliability<br>and validity of multi-<br>component frailty<br>assessment tools that<br>were specifically<br>developed to assess<br>frailty in older adult<br>populations; establishing<br>the tool with the best<br>evidence to support its<br>use in both research and<br>clinical settings. | Inclusion criteria:<br>• Study participants were<br>at least 60 years old.<br>• The study described a<br>multi-component tool<br>(de-fined as a tool that<br>assesses at least two<br>indicators of frailty. Single-<br>component tools were<br>excluded due to the<br>multifactorial and complex<br>nature of the frailty<br>syndrome).<br>• The study described a<br>tool that was specifically<br>developed to assess frailty<br>• The main purpose of the<br>study was the development<br>and/or evaluation of the<br>reliability and validity of a<br>multi-component tool to<br>assess frailty.<br>• The study applied the<br>original version of a multi-<br>component tool to assess<br>frailty.<br>• The study reported | Number of studies:<br>73<br>Study design:<br>Assessment tools<br>Number of<br>participants:<br>24 – 31 115<br>Characteristics of<br>participants:<br>Overall mean age of the<br>participants as<br>calculated by pooling<br>the mean ages from 55<br>studies was 77.0 years.<br>Female 31.2 – 100%.<br>Setting:<br>Community, hospital<br>and long term settings.<br>Country of origin:<br>Austria, UK, Canada,<br>Poland, Italy, Belgium,<br>Netherlands, Germany, | This review provides an<br>up-to-date<br>comprehensive list of all<br>multi-component frailty<br>assessment tools for<br>which there is published<br>psychometric data. It<br>identifies a large number<br>of multi-component<br>frailty assessment tools in<br>existence; however, the<br>breadth and quality of<br>the psy-chometric<br>properties of these tools<br>is limited. Only the FI-CGA<br>and TFI have both<br>reliability and validity<br>data within statistically<br>significant parameters<br>and of fair-excellent<br>quality. However, this<br>should be interpreted<br>with caution as a score of<br>fair' on the COSMIN<br>checklist means that the<br>evidence is only of<br>questionable quality. |

| Author<br>Year<br>Country<br>Reference   | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|---|---|---|---|--|
|  |   |   | must have reported<br>inferential validation,<br>studies reporting<br>descriptive data alone were<br>excluded).<br>• Studies were available in<br>English or were translated<br>wherever possible.<br>Literature search:<br>30 March 2015   | Japan, Switzerland,<br>Greece, Portugal, Spain,<br>Sweden, Denmark,<br>Israel.<br>Interventions:<br>38 multicomponent<br>frailty assessment tools<br>Outcomes:<br>Psychometric property<br>and use in clinical and<br>research settings<br>Follow-up time:<br>1-348 months          | At present, the TFI has<br>the most robust<br>evidence-base supporting<br>its reliability and validity<br>in assessing frailty.<br>However, the<br>psychometric properties<br>of the TFI and all other<br>multi-component frailty<br>assess-ment tools require<br>further in-depth<br>evaluation before they<br>can fulfil the criteria for a<br>gold standard assessment<br>tool, and before definitive<br>conclusions regarding the<br>best tool for use in<br>research and clinical<br>settings can be drawn. |
| Tam-Tham et al<br>2013<br>Canada<br>[90] | Moderate<br>SBU Domain(s):<br>Integrerade insatser,<br>samverkan eller<br>informationsöverförin<br>g. (Integrated<br>measures or<br>activities)<br>Quantitative | To evaluate the<br>effectiveness of dementia<br>case management<br>compared with usual care<br>on reducing long-term<br>care placement,<br>hospitalization, and<br>emergency department<br>visits for adult patients<br>with dementia. Also, to<br>evaluate the<br>effectiveness of this<br>intervention on delaying<br>time to long-term care<br>placement and<br>hospitalization. | Inclusion criteria:<br>The study design was an<br>RCT, the study population<br>included adults living in the<br>community and diagnosed<br>with dementia (regard-less<br>of methods used to make<br>the diagnosis) and their<br>caregivers, the study<br>compared standard<br>practice or usual care as<br>defined in the article to CM<br>intervention involving at<br>least one healthcare<br>professional (e.g., nurse or<br>social worker) and<br>providing at least one key<br>compo-nent of care (i.e., | Number of studies:<br>17<br>Study design:<br>RCT<br>Number of<br>participants:<br>5257 and 4909<br>caregiver-care recipient<br>dyads, respectively.<br>Characteristics of<br>participants:<br>Mean age varying<br>between 70 and 81<br>years. 32-70% were<br>women. The majority of | Our results suggest that<br>dementia CM may have a<br>short-term positive effect<br>on reducing the risk of<br>LTC placement among<br>older people with<br>demen-tia residing in the<br>community. However,<br>other sources of resource<br>utilization (including<br>hospitalization and<br>emergency department<br>visits) and longer-term<br>effects of dementia CM<br>on risk of LTC placement<br>warrant further<br>investigation.  |

| Author    | Study quality | Objectives of the | Inclusion criteria for the     | Characteristics of the                 | The conclusions of the |
|-----------|---------------|-------------------|--------------------------------|--|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review              | studies included in the                | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)       | systematic review                      | author(s)              |
| Reference | qualitative   |                   |                                |  |                        |
|           |               |                   | assessment and planning,       | studies included                       |                        |
|           |               |                   | education, emotional           | participants with mild                 |                        |
|           |               |                   | support, service facilitation, | to Moderate levels of                  |                        |
|           |               |                   | or legal advice and financial  | dementia severity at                   |                        |
|           |               |                   | counseling) for caregivers     | baseline.                              |                        |
|           |               |                   | and people with dementia,      |  |                        |
|           |               |                   | and the study reported on      | Setting:                               |                        |
|           |               |                   | at least one of the resource   | Community living                       |                        |
|           |               |                   | utilization measures,          | persons and their                      |                        |
|           |               |                   | namely, LTC placements,        | caregivers                             |                        |
|           |               |                   | hospitalizations, emergency    |  |                        |
|           |               |                   | department visits, time to     | Country of origin:                     |                        |
|           |               |                   | LTC placement, or time to      | USA, Canada, Australia,                |                        |
|           |               |                   | hospitalization.               | Finland, Italy,                        |                        |
|           |               |                   | No language restrictions       | Netherlands, UK                        |                        |
|           |               |                   | were applied;                  |  |                        |
|           |               |                   |                                | Interventions:                         |                        |
|           |               |                   | Literature search:             | Interventions involved a               |                        |
|           |               |                   | October 2011                   | single case manager                    |                        |
|           |               |                   |                                | from a variety of                      |                        |
|           |               |                   |                                | professions (e.g., social              |                        |
|           |               |                   |                                | worker or nurse), a                    |                        |
|           |               |                   |                                | partner (e.g. a                        |                        |
|           |               |                   |                                | psychologist working                   |                        |
|           |               |                   |                                | with an occupational                   |                        |
|           |               |                   |                                | ther-apist), or a                      |                        |
|           |               |                   |                                | multidisciplinary team-                |                        |
|           |               |                   |                                | based model (e.g., a                   |                        |
|           |               |                   |                                | team consisting of a                   |                        |
|           |               |                   |                                | psychiatrist, dietitian, psychologist, |                        |
|           |               |                   |                                | occupational therapist,                |                        |
|           |               |                   |                                | physical therapist,                    |                        |
|           |               |                   |                                | social worker, and/or                  |                        |
|           |               |                   |                                | nurse) with different                  |                        |
|           |               |                   |                                | types of professionals                 |                        |
|           |               |                   |                                |  |                        |
|           |               |                   |                                | act-ing to fulfi.11 the                |                        |

| Author      | Study quality  | Objectives of the         | Inclusion criteria for the | Characteristics of the  | The conclusions of the     |
|-------------|----------------|---------------------------|----------------------------|-------------------------|----------------------------|
| Year        | SBU Domain(s)  | systematic review         | systematic review          | studies included in the | systematic review's        |
| Country     | Quantitative/  |                           | Literature search (date)   | systematic review       | author(s)                  |
| Reference   | qualitative    |                           |                            |                         |                            |
|             |                |                           |                            | demands of CM. The      |                            |
|             |                |                           |                            | delivery of CM varied   |                            |
|             |                |                           |                            | from home visits to     |                            |
|             |                |                           |                            | telephone counseling    |                            |
|             |                |                           |                            | or a combination of     |                            |
|             |                |                           |                            | both. The duration of   |                            |
|             |                |                           |                            | the intervention also   |                            |
|             |                |                           |                            | ranged from a single    |                            |
|             |                |                           |                            | visit lasting           |                            |
|             |                |                           |                            | approximately 3 h to    |                            |
|             |                |                           |                            | continued CM for the    |                            |
|             |                |                           |                            | entire length of        |                            |
|             |                |                           |                            | follow-up. Variation in |                            |
|             |                |                           |                            | the control groups was  |                            |
|             |                |                           |                            | also observed. Control  |                            |
|             |                |                           |                            | groups included usual   |                            |
|             |                |                           |                            | care ( e.g. educational |                            |
|             |                |                           |                            | materials and           |                            |
|             |                |                           |                            | availability of a       |                            |
|             |                |                           |                            | counselor), respite,    |                            |
|             |                |                           |                            | and, to a lesser degree |                            |
|             |                |                           |                            | than the intervention   |                            |
|             |                |                           |                            | group, access to a case |                            |
|             |                |                           |                            | manager and to          |                            |
|             |                |                           |                            | community services.     |                            |
|             |                |                           |                            | Outcomes:               |                            |
|             |                |                           |                            | Risk of long-term care  |                            |
|             |                |                           |                            | placement, time to      |                            |
|             |                |                           |                            | placement and hospital  |                            |
|             |                |                           |                            | and emergency           |                            |
|             |                |                           |                            | 0 /                     |                            |
|             |                |                           |                            | Follow-up time:         |                            |
|             |                |                           |                            | 6 months - 15.9 years   |                            |
| Toles et al | Moderate       | To systematically review, | Study design:              | Number of studies       | Although the risk for bias |
| 2016        |                | studies of patients       | Randomized controlled      | n=6                     | was high across studies,   |
| USA         | SBU Domain(s): | discharged from skilled   | trials, non-randomized     |                         | the findings suggest that  |

| Author    | Study quality   | Objectives of the  | Inclusion criteria for the  | Characteristics of the  | The conclusions of the  |
|-----------|---|--|---|---|---|
| Year      | SBU Domain(s)   | systematic review  | systematic review   | studies included in the   | systematic review's   |
| Country   | Quantitative/   |  | Literature search (date)  | systematic review   | author(s)   |
| Reference | qualitative   |  |   |   |   |
| [91]      | Integrerade insatser,<br>samverkan eller<br>informationsöverförin<br>g. (Integrated<br>measures or<br>activities)<br>Quantitative | nursing facilities (SNFs) to<br>home. Study findings<br>were assessed<br>(I) to identify whether<br>transitional care<br>interventions, as<br>compared to usual care,<br>improved clinical<br>outcomes such as<br>mortality, readmission<br>rates, quality of life or<br>functional status; and<br>(2) to describe<br>intervention<br>characteristics, resources<br>needed for<br>implementation, and<br>methodologic challenges | controlled trials, and non-<br>randomized before and<br>after studies that were<br>published in English after<br>January 1, 2000.<br><b>Participants:</b><br>Older adults not specified<br><b>Setting:</b><br>Skilled nursing facilities and<br>home<br><b>Interventions</b><br>All interventions -<br>Discharged from SNFs to<br>home<br><b>Outcomes:</b><br>One clinical outcome such<br>as mortality, hospital<br>readmission rates,<br>preparedness for discharge,<br>and functional status<br><b>Literature search:</b><br>September 1, 2015 | Study design:<br>RCT n=2. Non-<br>randomized controlled<br>trials n=1, before and<br>after study n=3<br>Number of participants<br>N=619 (17 to 217)<br>Characteristics of<br>participants<br>In 5 studies,<br>participants had<br>average age ranging<br>from 77-80 years;<br>female gender (61-<br>74%); white non-<br>Hispanic race (73-89%);<br>and diverse medical<br>conditions such as<br>fractures, congestive<br>heart failure and<br>pneumonia. In one<br>study, participants were<br>95% male, and in a<br>second study,<br>participants were<br>treated exclusively for<br>cardiac medical<br>conditions.<br>Setting:<br>From SNF, veteran<br>affairs hospital, home<br>health agency, health<br>maintenance<br>organization | there is promising but<br>limited evidence that<br>transitional care improves<br>clinical outcomes for SNF<br>patients. Evidence in the<br>review identifies needs<br>for further study, such as<br>the need for randomized<br>studies of transitional<br>care in SNFs, and<br>methodological<br>challenges to studying<br>transitional care for SNF<br>patients. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|-------------------------------------|---|--|--|
|  |  |                                     |   | <b>Country of origin:</b><br>All from USA.   |  |
|  |  |                                     |   | Interventions:<br>A nurse and social<br>worker provided<br>transitional care in the<br>SNF and at home, Usual<br>care & staff nurses<br>provided exercise<br>monitoring and training<br>in cardiac self-<br>management in the<br>SNF/home care visits,<br>usual care and<br>pharmacist medication.<br>Staff nurses provided<br>transitional care in the<br>SNF and visited/ called<br>after discharge, Usual<br>care & NPs provided<br>transitional care in I<br>post discharge clinic<br>visit. |  |
|  |  |                                     |   | Outcomes:<br>Studies included<br>diverse clinical<br>outcomes; outcomes<br>were classified as (a)<br>Acute Care Use 30 or 60<br>Days after SNF<br>Discharge and (b)<br>Mortality and Other<br>Outcomes, which<br>included mortality,   |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|--|---|--|---|
|  |   |  |   | satisfaction with<br>transitional care,<br>function, and<br>participation in clinical<br>services after discharge<br><b>Follow-up time:</b><br>30 or 60 days, others or  |   |
| Trabal et al<br>2015<br>Spain<br>[92]  | Moderate SBU Domain(s): Upprätthållande stimulerande arbetssätt – både ordinärt och särskilt boende. (Integrated measures or activities) Quantitative | To determine whether<br>dietary enrichment with<br>conventional foods<br>and/or powdered<br>modules improves energy<br>and nutrient intake, the<br>present review was<br>conducted; randomized<br>and nonrandomized<br>studies that assessed the<br>effect of this type of<br>intervention for<br>improving energy and<br>protein intake compared<br>with a standard diet in<br>older adults were<br>evaluated | Inclusion criteria:<br>Studies deemed eligible for<br>review included<br>experimental, quasi-<br>experimental, or<br>observational time series<br>designs and were restricted<br>to those published in<br>English, Catalan, or Spanish.<br>Case series and case studies<br>were excluded. There were<br>no restrictions on the<br>sample size, length of<br>follow-up, comparators, or<br>date and publication status<br>of the studies. Participants<br>described as older adults<br>(over 65 years of age) of<br>any nutritional status (from<br>malnourished to well-<br>nourished) were<br>considered.<br>Literature search:<br>31 January 2014 | not specified<br>Number of studies:<br>9<br>Study design:<br>Cluster randomized<br>(n=4), randomized<br>crossover trial (n=3),<br>non-randomized<br>controlled trial (n=2)<br>Population:<br>Older adults over 65<br>years of age (mean age<br>67-91 years).<br>Number of<br>participants:<br>10-62<br>Country of origin:<br>USA, Sweden,<br>Germany, UK.<br>Setting:<br>Hospital, long-term<br>care facilities (e.g.,<br>nursing homes), or a<br>community setting. | The reviewed studies<br>suggest that dietary<br>enrichment based on<br>low-volume and energy-<br>and nutrient-dense foods<br>is a valid intervention to<br>improve energy intake in<br>older adults and is<br>probably most effective<br>in those who are<br>malnourished. This could<br>likely be the case for<br>protein intake as well, but<br>in the absence of a higher<br>number of studies of<br>sufficient quality, it<br>cannot be confirmed. It is<br>not presently known<br>whether dietary<br>enrichment is a valid<br>intervention to improve<br>the nutritional status or<br>other clinical and<br>functional outcomes in<br>older adults.<br>The lack of conclusive<br>results for most of the |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|--|--|--|
|  |  |  |  | Interventions:<br>Dietary enrichment<br>with conventional foods<br>and/or powdered<br>modules<br>Outcomes:<br>Changes in energy<br>intake, protein intake,<br>nutritional status, body<br>weight, functional<br>status, and episodes of<br>infection<br>Follow-up time:<br>Not clear                         | assessed outcomes<br>justifies the need for<br>largescale clinical trials<br>with long-term<br>interventions to clearly<br>establish the effects and<br>economic consequences<br>of this treatment to<br>address malnutrition in<br>older adults.  |
| Trivedi et al<br>2013<br>UK<br>[93]    | Moderate<br>SBU domain(s):<br>Integrerade insatser<br>eller aktiviteter.<br>(Integrated measures<br>or activities)<br>Quantitative and<br>qualitatitve | To investigate What<br>types of Inter-<br>professional working<br>(IPW) interventions are<br>described in the<br>literature?<br>• How is IPW organised?<br>• What are the outcomes<br>of different models of<br>IPW? | Inclusion criteria:<br>Publication period: 1<br>January 1990– December<br>2010<br>Population:<br>Older people aged 65 and<br>over<br>Study design:<br>The study included<br>randomised controlled<br>trials (RCT) and qualitative<br>studies linked to RCTs that<br>described IPW care for<br>community-dwelling older<br>people aged 65 and over,<br>with multiple long-term<br>conditions. | Number of studies:<br>37 studies in 66 papers<br>and 14 systematic<br>reviews.<br>Study design:<br>RCT (n=37)<br>Number of<br>participants:<br>Ranging between<br>(n=260) and (n=624).<br>Not listed for all<br>studies.<br>Characteristics of<br>participants:<br>Mean age ranging<br>between 68.5 and 84.9 | This review sought to<br>differentiate between the<br>effectiveness of<br>interventions that relied<br>on different models of<br>IPW for the benefit of<br>community based older<br>people. Overall, the<br>proportion of studies<br>demonstrating improved<br>outcomes is similar across<br>the three main IPW<br>models. More than half<br>reported improved<br>health/functional/clinical,<br>and process outcomes,<br>including patient/user<br>satisfaction, with only a<br>few studies reporting<br>favourable caregiver |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)                         | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|-------------------------------------|---|---|--|
|  |  |                                     | Setting:<br>Community-dwelling<br>Other criteria:<br>English<br>Literature search:<br>December 2010 | Setting:<br>Community<br>Country of origin:<br>Canada (n=3), USA<br>(n=18), Hong Kong<br>(n=1), Switzerland<br>(n=1), Norway (n=1),<br>Australia (n=4), United<br>Kingdom (n=3), Finland<br>(n=1), Netherlands<br>(n=1), Sweden (n=1),<br>Germany (n=2), Italy<br>(n=1).<br>Interventions:<br>Case management<br>model (n=7)<br>Collaboration model<br>(n=11)<br>Integrated team model<br>(n=19)<br>Outcomes:<br>Physical and mental<br>functioning such as<br>Activities of daily living<br>(ADL), Mortality,<br>Quality of Life, Geriatric<br>depression scale (GDS),<br>Cognitive health,<br>Caregiver burden, SF-36<br>and Service utilization<br>(admissions to hospital,<br>costs etc), patient/user<br>satisfaction and<br>experiences, Resource | outcomes. The evidence<br>on service use and costs<br>is mixed, which is not<br>unusual for complex care<br>practices and IPW. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|---|---|
|  |  |  |   | use as well as Care<br>processes (See study<br>supplement 4-7)  |   |
|  |  |  |   | Follow-up time:<br>Different time periods<br>between 6 months and<br>3 years.   |   |
| Ueda et al<br>2013<br>Japan<br>[94]    | ModerateSBU Domain(s):Upprätthållande ochstimulerande insatser- ordinärt boende.(Maintaining andstimulating workmethods - communitysettings)Quantitative | To investigate the effects<br>of music therapy on<br>behavioral and<br>psychological symptoms of<br>dementia (BPSD), cognitive<br>function, and activities of<br>daily living in patients<br>with dementia | Inclusion criteria:<br>Study design:<br>The study design had to be<br>either an RCT a controlled<br>clinical trial (CCT), a cohort<br>study, or a CT (before-after<br>studies without control<br>groups and studies with an<br>N of 1 by single-case study<br>were excluded).<br>(2) Intervention: The music<br>types that were used for<br>intervention had to be a<br>single music-related<br>experi-ence or a<br>combination of music-<br>related experiences such as<br>singing, listening,<br>performing, rhythmic<br>exercising, and/or<br>improvising. (3) Study<br>population: The study<br>population comprised older<br>individuals who were<br>formally diagnosed with<br>any type of dementia<br>occurring with Parkinson's | Number of studies:<br>20<br>Study design:<br>RCT (10), CCT (1) and CT<br>(9)<br>Number of<br>participants:<br>651 (12-61)<br>Characteristics of<br>participants:<br>Age range: 75.4±7.9 -<br>89.5±4.5 Patients with<br>senile dementia of<br>Alzheimer's type,<br>vascular type,<br>Parkinson's type,<br>and/or mild to severe<br>mixed types.<br>Information about<br>gender not stated,<br>Setting:<br>Not stated | This systematic review<br>and meta-analysis of<br>RCTs, a CCT, and CTs<br>showed that music<br>therapy influenced BPSD<br>in patients with<br>dementia. The length of<br>the intervention period<br>was associated with the<br>effects of the music<br>therapy. In particular,<br>interventions of >3-<br>month durations strongly<br>decreased anxiety.<br>Furthermore, the effects<br>of music therapy were<br>greater than those of<br>other<br>non-pharmacological<br>interventions. Even<br>though the effects of<br>music therapy were small<br>compared with those of<br>non-pharmacological<br>interventions, music<br>therapy is recommended<br>for the management of<br>BPSD, especially after<br>considering the adverse |

| Author    | Study quality | Objectives of the | Inclusion criteria for the     | Characteristics of the   | The conclusions of the  |
|-----------|---------------|-------------------|--------------------------------|--------------------------|-------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review              | studies included in the  | systematic review's     |
| Country   | Quantitative/ |                   | Literature search (date)       | systematic review        | author(s)               |
| Reference | qualitative   |                   |                                |                          |                         |
|           |               |                   | Disease or Alzheimer's         | Country of origin:       | effects of              |
|           |               |                   | Disease, vascular dementia,    | four were from Europe,   | pharmacological         |
|           |               |                   | frontotemporal dementia,       | three were from USA,     | intervention on one's   |
|           |               |                   | or other types included in     | one was from Australia,  | health. We expect that  |
|           |               |                   | the Diagnostic and             | and twelve were from     | music therapy will make |
|           |               |                   | Statistical Manual of          | Asia.                    | important contributions |
|           |               |                   | Mental Disorders-IV            |                          | to management           |
|           |               |                   | (American Psychiatric          | Interventions:           | strategies designed for |
|           |               |                   | Association, 1994), the        | Almost all studies used  | decreasing BPSD.        |
|           |               |                   | International Classification   | a combination of         |                         |
|           |               |                   | of Diseases-10 (World          | methods such as          |                         |
|           |               |                   | Health and Organization,       | singing, playing musical |                         |
|           |               |                   | 1993), or other accepted       | instruments, and/or      |                         |
|           |               |                   | diagnostic criteria.           | listening to live        |                         |
|           |               |                   |                                | performances. Many       |                         |
|           |               |                   | The primary outcomes           | studies including this   |                         |
|           |               |                   | were changes in                | meta-analysis used       |                         |
|           |               |                   | depression, anxiety, and       | pre-ferred or familiar   |                         |
|           |               |                   | behavioral symptoms such       | music. Some studies      |                         |
|           |               |                   | as agitation, apathy,          | used methods wherein     |                         |
|           |               |                   | elation, and irritability. The | the participants         |                         |
|           |               |                   | secondary outcomes             | listened to recorded     |                         |
|           |               |                   | included changes in            | music through            |                         |
|           |               |                   | cognitive function and ADL.    | headphones and CD        |                         |
|           |               |                   | We extracted these             | players. Three studies   |                         |
|           |               |                   | outcomes, which were           | used the method of       |                         |
|           |               |                   | measured before and after      | rhythmic exercising to   |                         |
|           |               |                   | the treatment period.          | music. One study used    |                         |
|           |               |                   |                                | improvising with         |                         |
|           |               |                   | Literature search:             | drums. The               |                         |
|           |               |                   | February 2011                  | interventionists in      |                         |
|           |               |                   |                                | these studies were       |                         |
|           |               |                   |                                | music therapists,        |                         |
|           |               |                   |                                | students studying music  |                         |
|           |               |                   |                                | therapy, occupational    |                         |
|           |               |                   |                                | therapists, nurses,      |                         |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|--|---|---|
| Country                                | Quantitative/  | To integrate the current<br>international findings and<br>enhance our<br>understanding of the<br>experiences of older<br>people of being cared for<br>in nursing homes. | Literature search (date) Inclusion criteria: 1) peer-reviewed empirical qualitative studies in caring sciences. (2) focused on the experiences of older people being cared for in nursing homes. (3) studies conducted with older people who had an intact or sufficiently intact cognitive status. (4) pub-lished in online | systematic review<br>musicians, or care<br>workers.<br>Outcomes:<br>Behavioral symptoms,<br>ADL, anxiety,<br>depression<br>Follow-up time:<br>10 weeks- 11 months<br>Number of studies:<br>7<br>Study design:<br>Qualitative studies<br>using grounded theory,<br>phenomenology,<br>qualitative descriptive<br>analysis<br>Number of<br>participants:<br>128 older people in 24<br>nursing homes.<br>Characteristics of | author(s)<br>From the older people's<br>perspectives, nursing<br>homes were not always<br>experienced as their own<br>home. The balance<br>between the older<br>people's expectations of<br>the living condition in<br>nursing homes, and<br>nurses' commitments and<br>facilities in nursing homes<br>helps them retain the<br>meaning of being alive.<br>The institutional<br>character of the nursing<br>home restricted the older |
|  |  |   | scientific journals.<br>Literature search:<br>No information (The chosen<br>studies had been published<br>between 2007 and 2015).  | participants:<br>Generally, the studies<br>recruited older people<br>over the age of 60<br>years, both male and<br>female.<br>Setting:  | people's decision making<br>for their own life. The<br>main challenge in nursing<br>home care was to balance<br>the tensions between<br>individual needs and the<br>holistic dimensions of<br>care. The question is why   |
|  |  |   |  | Nursing homes   | the nursing home<br>becomes institutionalized<br>to the point that the  |

| Author<br>Year<br>Country<br>Reference   | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|--|--|---|
|  |  |   |  | Country of origin:<br>Sweden, Canada,<br>Taiwan, Norway, Spain<br>Interventions:<br>The older people's<br>experiences were<br>related to 'care and<br>help in nursing homes',<br>'quality of care' 'nature<br>of care' and 'nursing<br>homes' organization<br>and practice<br>Outcomes:<br>Confrontation of needs,<br>participation in living,<br>adjustment.<br>Follow-up time:<br>Not applicable | 'home' aspect of the<br>nursing home is<br>forgotten, and the older<br>people lose their meaning<br>of life.  |
| van Bokhorstede-<br>van der Schueren<br>et al<br>2014<br>The Netherlands<br>[96] | Moderate<br>SBU Domain:<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative | To assess the criterion<br>and predictive validity of<br>malnutrition screening<br>tools used in nursing<br>homes | Articles were eligible for<br>inclusion if they expressed<br>criterion validity (how well<br>can a tool assess nutritional<br>status) or predictive validity<br>(how well can a tool predict<br>clinical outcome) of<br>malnutrition screening<br>tools in a nursing home<br>population.<br>Included were articles that<br>had been published in the<br>English, German, French,<br>Dutch, Spanish, or<br>Portuguese language. | Number of studies:<br>26<br>Study design<br>Any study design.<br>Articles were eligible<br>for inclusion if they<br>expressed criterion<br>validity (how well can a<br>tool assess nutritional<br>status) or predictive<br>validity (how well can a<br>tool predict clinical<br>outcome) of<br>malnutrition screening<br>tools   | The use of existing<br>screening tools for the<br>nursing home population<br>carries limitations, as<br>none performs better<br>than "fair" in assessing<br>nutritional status or in<br>predicting outcome. Also,<br>no superior tool can be<br>pointed out. This<br>systematic review implies<br>that further<br>considerations regarding<br>malnutrition screening<br>among nursing home<br>residents are required. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  | Literature search:  | Population:  | The review shows that                                      |
|  |  |  | 30 jan 2013   | 55 years or more.  | malnutrition screening in<br>long term care facilities     |
|  |  |  |   | Number of  | using existing tools has                                   |
|  |  |  |   | participants:  | serious limitations. None                                  |
|  |  |  |   | 49-867   | of the nutrition screening or assessment tools             |
|  |  |  |   | Country of origin:   | included in the studies in                                 |
|  |  |  |   | Not stated.  | this review performed<br>consistently well in              |
|  |  |  |   | Setting:   | assessing the nutritional                                  |
|  |  |  |   | Nursing home.  | status of the residents,                                   |
|  |  |  |   |  | not even the tools that                                    |
|  |  |  |   | Outcomes:  | were originally designed                                   |
|  |  |  |   | Nutritional status.  | for assessing the  |
|  |  |  |   |  | nutritional status of older                                |
|  |  |  |   | Number of tools:   | persons. Existing  |
|  |  |  |   | 20.  | screening tools, even                                      |
|  |  |  |   | Of 20 tools applied in   | those developed for the                                    |
|  |  |  |   | the nursing home   | nursing home setting, are                                  |
|  |  |  |   | population, 4 were   | only fairly able of  |
|  |  |  |   | originally developed for   | assessing the nutritional                                  |
|  |  |  |   | use in this specific setting (CNS, MDS,                                | status of nursing home residents, or of predicting         |
|  |  |  |   | SNAQ [US tool] and   | poor nutrition-related                                     |
|  |  |  |   | SNAQ-RC [without, and  | outcomes. The ideal tool                                   |
|  |  |  |   | with BMI]), 8 were   | for the nursing home                                       |
|  |  |  |   | originally developed for   | population should  |
|  |  |  |   | use among elderly  | perhaps contain more                                       |
|  |  |  |   | (DETERMINE, GNRI,  | items referring to the                                     |
|  |  |  |   | MNA, MNA-SF [and its   | multi-factorial back-                                      |
|  |  |  |   | revised form], NRI,  | ground of malnutrition in                                  |
|  |  |  |   | NUFFE, Rapid Screen), 5  | this specific population.                                  |
|  |  |  |   | for use among adult  | The present tools could                                    |
|  |  |  |   | persons (MST, NRS,   | be used as a first step in                                 |
|  |  |  |   | SGA, SNAQ (Dutch   | identifying residents at                                   |

| Author<br>Year<br>Country<br>Reference                 | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|--|---|---|---|
|  |   |  |   | tool), NRS-2002), and 3<br>(MUST, and the Simple<br>Screenings Tools #1 and<br>#2) for use in both adult<br>and older persons.<br>Follow-up time:<br>Unclear  | risk of malnutrition,<br>preferably in combination<br>with a comprehensive<br>geriatric assessment<br>investigating possible<br>causes of malnutrition.   |
| Vandemeulebrou<br>cke et al<br>2018<br>Belgium<br>[97] | Moderate<br>SBU Domain(s):<br>Effekten av vissa<br>hjälpmedel inom<br>kommunikation och<br>kognitiv förmåga.<br>(Effects from<br>communication and<br>cognitive devices)<br>Qualitative | To gain a better<br>understanding of how<br>older adults experience,<br>perceive, think, and feel<br>about the use of socially<br>assistive robots (SARs) in<br>aged care settings | Inclusion criteria:<br>reporting on primary,<br>empirical research using a<br>qualitative or mixed<br>method approach.<br>Older adults who were<br>aged 60 years and older or<br>participant groups that had<br>a mean age of 65 years or<br>above.<br>Socially assisted robots<br>studied had a certain<br>degree of autonomy, or for<br>which the illusion of an<br>autonomous SAR was<br>created.<br>Literature search:<br>31 Jan 2016 | Number of studies:         17 studies, 23 articles.         Study design:         7 used a qualitative         approach and 10 used a         mixed-method         approach.         Number of         participants:         3-123         Characteristics of         participants:         50-95 years         Setting:         Aged care; institutional         care and community         care.         Country of origin         France, USA, UK,         Canada,         Japan, Sweden, New         Zealand, Finland,         Belgium, Netherlands,         Singapore. | Older adults have clear<br>positive and negative<br>opinions about different<br>aspects of SARs in aged<br>care. Nonetheless, some<br>opinions can be<br>ambiguous and need<br>more attention if SARs<br>are to be considered for<br>use in aged care.<br>Understanding older<br>adults' lived experiences<br>with SARs creates the<br>possibility of using an<br>approach that embeds<br>technological innovation<br>into the care practice<br>itself. |

| Author<br>Year<br>Country<br>Reference           | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|---|--|---|---|
| Van Malderen et<br>al<br>2013<br>Belgium<br>[98] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods - | To review systematically<br>the literature, focusing on<br>the identification of<br>interventions that<br>attempt to enhance the<br>QoL of residents of LTC-<br>facilities. | Inclusion criteria:<br>When screening for<br>relevance, English articles<br>were included when they<br>reported an intervention<br>study in the LTC, directed<br>towards residents in<br>general, with QoL as (one<br>of the) outcome<br>measure(s). Articles were | Interventions:<br>Socially assisted robot.<br>Outcomes:<br>(1) roles of a SAR.<br>(2) interaction between<br>the older adult and the<br>SAR, which could be<br>further subdivided into<br>(a) the technical aspect<br>of the interaction and<br>(b) the human aspect of<br>the interaction; (3)<br>appearance of the SAR;<br>and (4) normative/<br>ethical issues regarding<br>the use of SARs in aged<br>care.<br>Follow-up time:<br>Not applicable.<br>Number of studies:<br>36<br>Study design:<br>18 RCT, 13 controlled<br>trials without<br>randomization, 4<br>Pretest-posttest trials<br>Population: | QoL is currently a much<br>discussed topic in<br>gerontology. Despite the<br>omnipresence of the<br>concept, our systematic<br>review indicates that only<br>few studies draw<br>conclusions on evidence<br>based practice to improve<br>the QoL within the |
|  | institutional settings)<br>Quantitative  |   | excluded when these were<br>not original articles<br>presenting an intervention<br>study, when the studies   | Persons 65 years or<br>older living in LTC.   | residential care. We<br>identified studies for all<br>the determinants of AA in<br>LTC. 'Behavioral<br>determinants' and  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|-------------------------------------|--|--|---|
|  |  |                                     | concerned were not<br>directed at the residents of<br>LTC-facilities or directed<br>only at residents with<br>specific conditions or<br>diseases (e.g. dementia,<br>CVA, epilepsy, deafness).<br>Only papers published from<br>1990 onwards were<br>included in order to avoid<br>possible generation<br>related biases.<br>Literature search:<br>Not stated | Number of<br>participants:<br>3 910<br>Country of origin:<br>Asia: n = 11;<br>Australasia: n = 3;<br>Europe: n = 14; North-<br>America: n = 7<br>Setting:<br>Long term care facilities<br>Interventions:<br>Active ageing<br>determinants:<br>Culture and gender<br>Determinants related to<br>health and social<br>services. Behavioral<br>determinants related to<br>health and social<br>services. Behavioral<br>determinants related to<br>personal factors.<br>Determinants related to<br>the physical<br>environment.<br>Determinants related to<br>the social environment.<br>Economic<br>determinants. | 'Psychological factors',<br>were more studied than<br>other determinants.<br>Referring to Table 1,<br>several aspects of the<br>different AA-<br>determinants were not<br>addressed in any study.<br>To give only one example,<br>interventions on the<br>behavioral determinant<br>(and thus enhancing a<br>healthy lifestyle) can be<br>considered as broader<br>than merely working on<br>the physical activity level<br>or on the oral health. This<br>existing gap in insight on<br>all aspects of the<br>different AA-<br>determinants indicates<br>that a lot of work still<br>remains to be done and<br>there is a strong need for<br>further research on<br>interventions in LTC to<br>promote residents' QoL.<br>Furthermore, this review<br>identified a significant<br>lack of methodological<br>quality in studies on QoL<br>thus far and noted the<br>vastly diverse ways of<br>interpreting QoL.<br>Intervention effects on<br>QoL were present in |
|  |  |                                     |  |  | some studies, but not in  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   |  | other ones. This lack of                                   |
|  |  |  |   |  | systematic effect on QoL                                   |
|  |  |  |   |  | can probably be related                                    |
|  |  |  |   |  | to the fact that   |
|  |  |  |   |  | interventions are often                                    |
|  |  |  |   |  | only aimed at modifying                                    |
|  |  |  |   |  | one determinant, while                                     |
|  |  |  |   |  | QoL is a multidimensional                                  |
|  |  |  |   |  | concept and should   |
|  |  |  |   |  | preferably be enhanced                                     |
|  |  |  |   |  | across its different                                       |
|  |  |  |   |  | dimensions. Several  |
|  |  |  |   |  | studies examining the                                      |
|  |  |  |   |  | perspectives and the                                       |
|  |  |  |   |  | definitions for QoL of                                     |
|  |  |  |   |  | older people show that                                     |
|  |  |  |   |  | the different aspects/                                     |
|  |  |  |   |  | dimensions of QoL of                                       |
|  |  |  |   |  | older people are   |
|  |  |  |   |  | interrelated and influence                                 |
|  |  |  |   |  | each other. QoL has to be                                  |
|  |  |  |   |  | seen from a holistic                                       |
|  |  |  |   |  | perspective and  |
|  |  |  |   |  | interventions may not be                                   |
|  |  |  |   |  | limited to one facet, as                                   |
|  |  |  |   |  | Kelley-Gillespie (2009)                                    |
|  |  |  |   |  | concludes when   |
|  |  |  |   |  | developing an integrated                                   |
|  |  |  |   |  | conceptual model of QoL                                    |
|  |  |  |   |  | for older adults. This                                     |
|  |  |  |   |  | review invites future                                      |
|  |  |  |   |  | research to make the                                       |
|  |  |  |   |  | following considerations:                                  |
|  |  |  |   |  | (1) more consensus is                                      |
|  |  |  |   |  | needed regarding the                                       |
|  |  |  |   |  | number of dimensions                                       |
|  |  |  |   |  | that QoL encompasses;                                      |

|  | qualitative   |   | systematic review<br>Literature search (date)   | studies included in the<br>systematic review  | systematic review's<br>author(s)   |
|--|---|---|---|---|--|
|  |   |   |   |   | (2) the best way to<br>measure or explore QoL<br>should be determined; (3)<br>multidimensional<br>intervention studies are<br>needed to give insight in<br>the best evidence based<br>practice to improve QoL<br>in the LTC.   |
| Van't Leven et al<br>2013<br>The Netherlands<br>[99] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – ordinärt<br>boende. (Maintaining<br>and stimulating work<br>methods - community<br>settings)<br>Quantitative | To study the effects of<br>dyadic psychosocial<br>interventions focused on<br>community dwelling<br>people with dementia<br>and their family<br>caregivers, and the<br>relationship of the effects<br>with intervention<br>components of programs | Inclusion criteria:<br>People with dementia 65<br>years old or more. People<br>with dementia and their<br>informal caregivers living in<br>the community, not a<br>nursing home.<br>Effect study: randomized<br>controlled trial.<br>Intervention aimed at<br>reducing or preventing the<br>mental health decline of<br>one or both members of<br>the dyad, including the<br>areas of cognition,<br>activities, daily living skills,<br>competence, and<br>interpersonal relationships.<br>Face-to-face contact<br>between care professional<br>and person with dementia,<br>and between the same care<br>professional and the<br>caregiver. English, Dutch,<br>German, and French.<br>Literature search: | Number of studies:<br>20 dyadic psychosocial<br>programs studied in 23<br>RCTs<br>Study design:<br>RCT, Meta-analysis<br>Number of<br>participants:<br>Program = 9 713<br>Control = 5 337<br>Tot = 15 050<br>Characteristics of<br>participants:<br>People with dementia<br>and caregivers<br>Setting:<br>Community dwelling<br>people with dementia<br>Country of origin:<br>Not summarised for all<br>studies | Dyadic psychosocial<br>programs are effective,<br>but the outcomes for the<br>person with dementia<br>and the caregiver vary.<br>More attention is needed<br>for matching the targeted<br>functional domains,<br>intervention<br>components, and delivery<br>characteristics of a<br>program with the needs<br>of the person with<br>dementia and the family<br>caregiver. |

| Author    | Study quality | Objectives of the | Inclusion criteria for the | Characteristics of the   | The conclusions of the |
|-----------|---------------|-------------------|----------------------------|--------------------------|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review          | studies included in the  | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)   | systematic review        | author(s)              |
| Reference | qualitative   |                   |                            |                          |                        |
|           |               |                   |                            | Interventions:           |                        |
|           |               |                   |                            | -Dementia Family Care    |                        |
|           |               |                   |                            | Program for              |                        |
|           |               |                   |                            | home-residing persons    |                        |
|           |               |                   |                            | with dementia.           |                        |
|           |               |                   |                            | -Night-time Insomnia     |                        |
|           |               |                   |                            | Treatment and            |                        |
|           |               |                   |                            | Education in             |                        |
|           |               |                   |                            | Alzheimer's Disease.     |                        |
|           |               |                   |                            | -Early-Stage Memory      |                        |
|           |               |                   |                            | Loss Support groups      |                        |
|           |               |                   |                            | -Advanced Caregiver      |                        |
|           |               |                   |                            | Training                 |                        |
|           |               |                   |                            | - Care of Persons with   |                        |
|           |               |                   |                            | Dementia in their        |                        |
|           |               |                   |                            | Environments             |                        |
|           |               |                   |                            | -Tailored Activity       |                        |
|           |               |                   |                            | Program                  |                        |
|           |               |                   |                            | -Community               |                        |
|           |               |                   |                            | Occupational Therapy     |                        |
|           |               |                   |                            | in Dementia              |                        |
|           |               |                   |                            | -Partners in Caregiving: |                        |
|           |               |                   |                            |                          |                        |
|           |               |                   |                            | Psychoeducation          |                        |
|           |               |                   |                            | Program                  |                        |
|           |               |                   |                            | -Environmental Skill-    |                        |
|           |               |                   |                            | building Program         |                        |
|           |               |                   |                            | -Environmental Skill-    |                        |
|           |               |                   |                            | building Program         |                        |
|           |               |                   |                            | -Reducing Disability in  |                        |
|           |               |                   |                            | Alzheimer                |                        |
|           |               |                   |                            | Disease                  |                        |
|           |               |                   |                            | -Minnesota Family        |                        |
|           |               |                   |                            | Workshop                 |                        |
|           |               |                   |                            | -Case management         |                        |
|           |               |                   |                            | -Multicomponent          |                        |
|           |               |                   |                            | support program          |                        |

| Author          | Study quality        | Objectives of the        | Inclusion criteria for the | Characteristics of the         | The conclusions of the      |
|-----------------|----------------------|--------------------------|----------------------------|--------------------------------|-----------------------------|
| Year            | SBU Domain(s)        | systematic review        | systematic review          | studies included in the        | systematic review's         |
| Country         | Quantitative/        |                          | Literature search (date)   | systematic review              | author(s)                   |
| Reference       | qualitative          |                          |                            |                                |                             |
|                 |                      |                          |                            | -Home Care Program             |                             |
|                 |                      |                          |                            | Goa, India                     |                             |
|                 |                      |                          |                            | -Collaborative care for        |                             |
|                 |                      |                          |                            | Older Adults                   |                             |
|                 |                      |                          |                            | with Alzheimer Disease         |                             |
|                 |                      |                          |                            | -Reality Orientation           |                             |
|                 |                      |                          |                            | with cholinesterase inhibitors |                             |
|                 |                      |                          |                            | -Early Home Care               |                             |
|                 |                      |                          |                            | Program                        |                             |
|                 |                      |                          |                            | -Medicare Alzheimer's          |                             |
|                 |                      |                          |                            | Disease                        |                             |
|                 |                      |                          |                            | Demonstration                  |                             |
|                 |                      |                          |                            | Evaluation                     |                             |
|                 |                      |                          |                            | -Integrative                   |                             |
|                 |                      |                          |                            | Reactivation and               |                             |
|                 |                      |                          |                            | Rehabilitation Program         |                             |
|                 |                      |                          |                            | -Supporting program            |                             |
|                 |                      |                          |                            | -Training program              |                             |
|                 |                      |                          |                            | Outcomes:                      |                             |
|                 |                      |                          |                            | Behavioral problem,            |                             |
|                 |                      |                          |                            | mood, daily activities,        |                             |
|                 |                      |                          |                            | quality of life,               |                             |
|                 |                      |                          |                            | institutionalization           |                             |
|                 |                      |                          |                            | Follow-up time:                |                             |
|                 |                      |                          |                            | 2 months up to 8 years         |                             |
| Vasse et al     | Moderate             | To appraise              | Inclusion criteria:        | Number of studies:             | This review indicates that  |
| 2010            |                      | (1) the effectiveness of | Randomized or              | 19                             | care staff can improve      |
| The Netherlands | SBU Domain(s):       | communication-enhancin   | nonrandomized controlled   |                                | their communication with    |
| [100]           | Upprätthållande och  | g interventions for the  | trial with the full text   | Study design:                  | residents with dementia     |
|                 | stimulerande         | care staff and/or        | obtainable in English or   | RCT (n=9), controlled          | when strategies are         |
|                 | arbetssätt och       | residents with dementia  | Dutch.                     | trials (n=6), Quasi-           | embedded in daily care      |
|                 | metoder – särskilt   | in institutional care    |                            | experimental controlled        | activities or interventions |
|                 | boende. (Maintaining | settings, and            | Literature search:         | trials (n=4)                   | are single-task sessions at |
|                 | and stimulating work |                          | February 2007              |                                | set times. Staff training   |

| Author    | Study quality           | Objectives of the        | Inclusion criteria for the | Characteristics of the                            | The conclusions of the                         |
|-----------|-------------------------|--------------------------|----------------------------|---|--|
| Year      | SBU Domain(s)           | systematic review        | systematic review          | studies included in the                           | systematic review's                            |
| Country   | Quantitative/           |                          | Literature search (date)   | systematic review                                 | author(s)                                      |
| Reference | qualitative             |                          |                            |   |  |
|           | methods -               |                          |                            | Population:                                       | should include time for                        |
|           | institutional settings) | (2) the effects of these |                            | People with dementia                              | personal feedback,                             |
|           |                         | interventions on         |                            | living in residential care                        | interactive learning and                       |
|           | Quantitative            | neuropsychiatric         |                            | homes or in nursing                               | refresher sessions. These                      |
|           |                         | symptoms.                |                            | homes and/or                                      | results offer the                              |
|           |                         |                          |                            | professional caregivers                           | possibility of improving                       |
|           |                         |                          |                            | working in long-term                              | the quality of care, but                       |
|           |                         |                          |                            | care facilities with                              | not directly of reducing                       |
|           |                         |                          |                            | people with dementia.                             | neuropsychiatric                               |
|           |                         |                          |                            | The inclusion criteria                            | symptoms.                                      |
|           |                         |                          |                            | for the trial required a                          |  |
|           |                         |                          |                            | diagnosis of dementia                             | More research is needed to study the effect of |
|           |                         |                          |                            | or screening for                                  | communication                                  |
|           |                         |                          |                            | cognitive impairment of resident participants. If | interventions on                               |
|           |                         |                          |                            |   |  |
|           |                         |                          |                            | groups of residents<br>were mixed with            | neuropsychiatric                               |
|           |                         |                          |                            | nonresidents, at least                            | symptoms.                                      |
|           |                         |                          |                            | 80% of the participants                           |  |
|           |                         |                          |                            | had to be residents or                            |  |
|           |                         |                          |                            | else their separate                               |  |
|           |                         |                          |                            | results needed to be                              |  |
|           |                         |                          |                            | available.  |  |
|           |                         |                          |                            |   |  |
|           |                         |                          |                            | Number of   |  |
|           |                         |                          |                            | participants:                                     |  |
|           |                         |                          |                            | 22-194  |  |
|           |                         |                          |                            |   |  |
|           |                         |                          |                            | Country of origin:                                |  |
|           |                         |                          |                            | Not stated.                                       |  |
|           |                         |                          |                            |   |  |
|           |                         |                          |                            | Setting:  |  |
|           |                         |                          |                            | Residential care.                                 |  |
|           |                         |                          |                            |   |  |
|           |                         |                          |                            | Interventions:                                    |  |
|           |                         |                          |                            | an intervention aimed                             |  |
|           |                         |                          |                            | at improving the                                  |  |

| Author        | Study quality        | Objectives of the        | Inclusion criteria for the  | Characteristics of the  | The conclusions of the   |
|---------------|----------------------|--------------------------|-----------------------------|-------------------------|--------------------------|
| Year          | SBU Domain(s)        | systematic review        | systematic review           | studies included in the | systematic review's      |
| Country       | Quantitative/        |                          | Literature search (date)    | systematic review       | author(s)                |
| Reference     | qualitative          |                          |                             |                         |                          |
|               |                      |                          |                             | communication of        |                          |
|               |                      |                          |                             | participants. Multi-    |                          |
|               |                      |                          |                             | component               |                          |
|               |                      |                          |                             | interventions had to    |                          |
|               |                      |                          |                             | include a               |                          |
|               |                      |                          |                             | communicative           |                          |
|               |                      |                          |                             | component.              |                          |
|               |                      |                          |                             | Communication was       |                          |
|               |                      |                          |                             | defined as sharing      |                          |
|               |                      |                          |                             | information by          |                          |
|               |                      |                          |                             | speaking, writing, body |                          |
|               |                      |                          |                             | movements, or other     |                          |
|               |                      |                          |                             | signaling behavior.     |                          |
|               |                      |                          |                             | Outcomes:               |                          |
|               |                      |                          |                             | at least one outcome    |                          |
|               |                      |                          |                             | measure was required    |                          |
|               |                      |                          |                             | to address the quantity |                          |
|               |                      |                          |                             | and/or quality of       |                          |
|               |                      |                          |                             | communication           |                          |
|               |                      |                          |                             | performance or else no  |                          |
|               |                      |                          |                             | productive              |                          |
|               |                      |                          |                             | communication (e.g.     |                          |
|               |                      |                          |                             | apathy or               |                          |
|               |                      |                          |                             | noncompliance) of the   |                          |
|               |                      |                          |                             | participants.           |                          |
|               |                      |                          |                             | Follow-up time:         |                          |
|               |                      |                          |                             | Unclear                 |                          |
| Watkins et al | Moderate             | To better understand     | Inclusion criteria:         | Number of studies:      | Four main themes were    |
| 2016          |                      | factors that may         | All qualitative studies, or | 15                      | identified: (1)          |
| UK            | SBU Domain(s):       | contribute to            | mixed-method studies with   |                         | organizational and staff |
| [101]         | Upprätthållande och  | malnutrition by          | a qualitative component,    | Study design            | support, (2) resident    |
|               | stimulerande         | examining the attitudes, | which used a recognized     | Observational studies,  | agency, (3) mealtime     |
|               | arbetssätt och       | perceptions and          | method of data collection   | interview, focus groups | culture, and (4) meal    |
|               | metoder – särskilt   | experiences of mealtimes | (e.g., focus groups,        |                         | quality and enjoyment.   |
|               | boende. (Maintaining |                          | interviews) and analysis    | Population:             | Organizational and staff |

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| Author    | Study quality           | Objectives of the    | Inclusion criteria for the  | Characteristics of the  | The conclusions of the     |
|-----------|-------------------------|----------------------|-----------------------------|-------------------------|----------------------------|
| Year      | SBU Domain(s)           | systematic review    | systematic review           | studies included in the | systematic review's        |
| Country   | Quantitative/           |                      | Literature search (date)    | systematic review       | author(s)                  |
| Reference | qualitative             |                      |                             |                         |                            |
|           | and stimulating work    | among care home      | (e.g., thematic analysis,   | Residents, staff.       | support was an over-       |
|           | methods -               | residents and staff. | grounded theory,            |                         | arching theme, impacting   |
|           | institutional settings) |                      | framework analysis), and    | Number of               | all aspects of the         |
|           |                         |                      | explored the attitudes,     | participants:           | mealtime experience.       |
|           | Qualitative             |                      | perceptions and             | Ca 300 elderly and 250  | Mealtimes are a pivotal    |
|           |                         |                      | experiences of mealtimes in | staff etc.              | part of care home life,    |
|           |                         |                      | care homes for older adults |                         | providing structure to the |
|           |                         |                      | were included.              | Setting:                | day and generating         |
|           |                         |                      |                             | Residential aged care   | opportunities              |
|           |                         |                      |                             | facilities (nursing     | for conversation and       |
|           |                         |                      | Literature search:          | homes, care homes       | companionship.             |
|           |                         |                      | November 2015.              | etc.)                   | Enhancing the mealtime     |
|           |                         |                      |                             |                         | experience for care home   |
|           |                         |                      |                             | Country of origin:      | residents needs to take    |
|           |                         |                      |                             | Nine countries (USA,    | account of the complex     |
|           |                         |                      |                             | Canada, Australia,      | needs of residents while   |
|           |                         |                      |                             | Guyana, Sweden,         | also creating an           |
|           |                         |                      |                             | Denmark, UK, Spain,     | environment in which       |
|           |                         |                      |                             | Netherlands)            | individual care can be     |
|           |                         |                      |                             |                         | provided in a communal     |
|           |                         |                      |                             | Interventions:          | setting. Despite           |
|           |                         |                      |                             | Dining environment,     | care home residents        |
|           |                         |                      |                             | restaurant-style meal   | being the central focus of |
|           |                         |                      |                             | provision, feeding      | mealtime interventions,    |
|           |                         |                      |                             | assistance.             | only eight studies         |
|           |                         |                      |                             |                         | included in this review    |
|           |                         |                      |                             | Outcomes:               | sought the views and       |
|           |                         |                      |                             | Attitudes, perceptions  | opinions of residents      |
|           |                         |                      |                             | and experiences of      | themselves. Gaining        |
|           |                         |                      |                             | mealtimes among care    | greater insight into the   |
|           |                         |                      |                             | home residents and      | resident experience is     |
|           |                         |                      |                             | staff.                  | essential to identifying   |
|           |                         |                      |                             |                         | ways of improving care     |
|           |                         |                      |                             | Follow-up time:         | provision and can          |
|           |                         |                      |                             | Unclear                 | highlight the potential    |

| Author<br>Year<br>Country<br>Reference     | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|---|--|
|  |  | <b>T</b>   |   |   | barriers and facilitators to<br>the implementation of<br>future interventions  |
| Watson et al<br>2012<br>Australia<br>[102] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative | To identify the efficacy of<br>Complementary<br>Therapies (CT)<br>interventions in reducing<br>the frequency and<br>severity of agitated<br>behavior among older<br>people in RACF. Specific<br>questions addressed<br>include:<br>- What types of CT are<br>being implemented for<br>the management of<br>agitation for older people<br>in RACFs?<br>Which Complementary<br>Therapies are identified<br>as being effective in<br>reducing the frequency<br>and severity of agitation<br>in older people in RACFs? | Inclusion criteria:<br>Randomized controlled<br>trials of Complementary<br>Therapies interventions<br>that could be initiated by a<br>nurse<br>Literature search:<br>September 2010 | Number of studies:<br>10<br>Study design:<br>Randomised controlled<br>trials<br>Population:<br>Over the age of 65<br>years of age.<br>Number of<br>participants:<br>584<br>Country of origin:<br>Japan, Canada, Taiwan,<br>Netherlands, Canada,<br>France, Iceland and<br>Italy.<br>Setting:<br>Residential Aged Care<br>Facilities (RACFs).<br>Interventions:<br>complementary<br>therapies (CT) such as<br>aromatherapy,<br>exercise, massage,<br>music therapy and<br>therapeutic touch. | Positive findings of this<br>review support the<br>growing body of evidence<br>that Complementary<br>Therapies are effective in<br>agitation management<br>for older people in RACFs.<br>CT appear to be<br>successful in the<br>management of physical<br>non aggressive and verbal<br>agitation in the areas of<br>aromatherapy, exercise,<br>massage, music therapy<br>and therapeutic touch.<br>RCTs on aromatherapy<br>and therapeutic touch.<br>RCTs on aromatherapy<br>and music therapy<br>interventions both<br>showed success in<br>managing physical<br>aggressive agitation. The<br>gentle nature and low<br>side effects of CT<br>supports these<br>interventions being<br>implemented in older<br>people as a first line<br>management for<br>agitation. CT as a first line<br>intervention for agitation<br>management in RACFs<br>has the potential to<br>alleviate problematic side |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|---|---|
|  |  |  |   | Outcomes:<br>frequency and/or<br>severity of verbal, non-<br>physical aggressive and<br>physical aggressive<br>agitation.<br>Follow-up time:<br>Not clear | deterioration associated<br>with restraints currently<br>used in the management<br>of agitation. Present<br>treatments for agitation<br>in RACFs are detrimental<br>to the older persons<br>physical and emotional<br>wellbeing. Restraints are<br>implemented as a quick<br>fix management strategy<br>to agitation which is short<br>sighted and fails to<br>address the causative<br>nature of the agitation.<br>Restraint often increases<br>frequency and severity of<br>the agitation due to their<br>invasive restrictive<br>nature, adds to confusion<br>in the older person and is<br>often perceived as<br>punishment. Escalations<br>in agitation lead to high<br>demands on staff time,<br>workplace stress,<br>decreased job satisfaction<br>and unmet care needs<br>among residents.1,22,86<br>RACF management must<br>exhaust all possible<br>avenues of agitation<br>management before<br>resorting to restraint.<br>RCTs included in this<br>review have shown<br>innovative approaches to |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|--|
| Keterence                              |  |  |   |  | the management of<br>agitation with CT and<br>acknowledge that current<br>agitation management<br>with restraint is not<br>working. Agitation<br>management currently<br>places high fiscal cost on<br>RACFs and older people,<br>with high cost of<br>pharmacology,<br>equipment, adequate<br>staffing and education<br>necessary. Low et al<br>estimate that dementia<br>related costs in Australia<br>would by 2022-2023 be<br>8.2 billion dollars.<br>According to Access<br>Economics79 these costs<br>will encompass 3.3% of<br>Australian Gross<br>Domestic Profit (GDP) by<br>2051. CT are an<br>alternative first line<br>management for<br>agitation that is in<br>comparison relatively<br>inexpensive. Intervention<br>equipment found in this<br>systematic review<br>includes essential oils, oil<br>burners, massage oil,<br>tape recorders and |
|  |  |  |   |  | music69.88Resources can<br>be reused over a<br>numerous number of  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|---|--|---|
| •                                      | -  |  | Literature search (date)  | systematic review  | author(s)<br>therapy sessions and may<br>break monotony of<br>routine institutional life<br>for older people<br>therefore increasing<br>quality of life. Introducing<br>CT into the management<br>of agitation could<br>ultimately change the<br>way we care for our older<br>population in RACFs.<br>Nurse intervention of CT<br>would ensure the timely<br>administration of<br>treatment by trained<br>professionals who best<br>know the residents care<br>needs, enabling them to<br>assess and rectify<br>agitation effectively when<br>necessary. Included RCTs<br>show adherence to<br>methodological quality<br>that has previously not<br>been present in previous<br>studies as evidenced in<br>the literature reviewed.<br>However limitations of |
|  |  |  |   |  | methodology of included<br>trials in this review still do<br>not meet the necessary<br>evidence required for<br>efficacy. There remains<br>insufficient evidence that<br>Complementary<br>Therapies are effective in<br>the agitation   |

| Author<br>Year<br>Country<br>Reference                       | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|---|--|---|--|
|  |  |   |  |   | management of older<br>people in RACFs. While<br>improvement in CT<br>research is noted among<br>the included RCTs, further<br>research with strict<br>adherence to quality<br>methodology is required<br>to deem CT effective.  |
| Weening-Verbree<br>et al<br>2013<br>The Netherlands<br>[103] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Quantitative | To review<br>implementation<br>strategies used to<br>promote or improve oral<br>health care for cider<br>people in long term care<br>facilities from the<br>perspective of behavior<br>change, to code strategy<br>content at the level of<br>determinants, and to<br>explore their<br>effectiveness. | Inclusion criteria:<br>Studies had to include an<br>outcome comparison with a<br>randomized or non-<br>randomized comparison<br>group, or a comparison<br>with baseline data in the<br>case of a single group<br>before-after design.<br>Population:<br>Health care personnel (e.g.<br>nurses or nurse assistants)<br>in nursing homes who were<br>involved in the<br>implementation and/or<br>older people in nursing<br>homes or residential care<br>facilities.<br>Outcomes:<br>Oral health (plaque,<br>gingivitis or candidoses), or<br>knowledge and beliefs of<br>health care personnel.<br>Literature search: | Number of studies:<br>20<br>Study design:<br>Uncontrolled before<br>and after design (n=10),<br>controlled before and<br>after design (n=5), RCT<br>(n=4), CCT (n=1).<br>Population:<br>Staff or residents in<br>long term care.<br>Number of<br>participants:<br>Ranged from 41 to<br>almost 2000 in the<br>included studies.<br>Country of origin:<br>USA, Canada, Australia,<br>Europe.<br>Setting:<br>Long term care. | Knowledge, self-efficacy<br>and facilitation of<br>behaviour are<br>determinants that are<br>often addressed in<br>implementation<br>strategies for successful<br>improvement of oral<br>health care in older<br>patients. Strategies<br>addressing increasing<br>memory, feedback of<br>clinical outcomes, and<br>mobilizing social norm<br>are promising and should<br>be studied in the future.<br>However, as the quality<br>and heterogeneity of<br>studies is a reason for<br>concern, it is not possible<br>to unequivocally<br>recommend strategies or<br>combinations of<br>strategies for improving<br>oral health in the older<br>population. This calls for<br>a more robust design of |
|  |  |   | September 2011   | Interventions:  | studies.   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|--|--|
|  |  |  |   | Knowledge was<br>addressed in all studies.<br>This was typically<br>operationalized as the<br>transfer of information<br>in (interactive) lectures<br>with slides and<br>sometimes videos. Self-<br>efficacy in combination<br>with knowledge such as<br>showing how to<br>correctly brush the<br>teeth of care<br>dependent residents<br>(modelling) and/or<br>practice brushing teeth<br>on manikin heads or<br>modets (guided<br>practice). Facilitating<br>the behavior by offering<br>toothbrushes (provide<br>materials) or<br>continuous professional<br>support. In most<br>studies the educational<br>programme consisted<br>of one session lasting<br>45-90 min.<br><b>Outcomes:</b><br>The most successful<br>strategies for improving<br>oral health were the<br>ones addressing | When choosing strategies<br>to improve oral health<br>care, care professionals<br>should thoroughly<br>examine the setting and<br>target group, identify<br>barriers to change and<br>tailor their<br>implementation<br>strategies to these<br>barriers for oral health<br>care. This should lead to a<br>reduction of unnecessary<br>strategies, that aim to<br>influence issues which are<br>not causing the problem,<br>and will contribute to the<br>evidence base in this field<br>while increasing quality of<br>care. |
|  |  |  |   | knowledge (providing<br>general information),<br>self-efficacy (modelling)   |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|--|--|--|
|  |  |  |  | and facilitation of<br>behavior (providing<br>materials to facilitate<br>behavior).  |  |
|  |  |  |  | Follow-up time:<br>Post intervention to 6<br>years   |  |
| Whear et al<br>2014<br>UK<br>[104]     | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings)<br>Mixed | What is the impact of<br>gardens and outdoor<br>spaces on the mental and<br>physical well-being of<br>people with dementia<br>who are resident in care<br>homes?<br>What are the views of<br>people with dementia,<br>their carers, and care<br>home staff on the value<br>of gardens and outdoor<br>spaces? | Inclusion criteria:<br>All comparative,<br>quantitative studies of the<br>use of an outside space or<br>garden in a care home for<br>people with dementia<br>reporting at least one of<br>the following outcomes,<br>agitation, number of falls,<br>aggression, physical<br>activity, cognitive<br>functioning, or quality of<br>life, were included.<br>Qualitative studies that<br>used a recognized method<br>of data<br>collection (eg, focus groups,<br>interviews) and analysis<br>(eg, thematic analysis,<br>grounded theory,<br>framework analysis), and<br>explored the views of<br>people with dementia who<br>were resident in care<br>homes, care home staff,<br>carers and families on the<br>use of gardens and outdoor<br>spaces were included. | Number of studies:<br>17 (quantitative = 9,<br>qualitative<br>= 7, mixed = 1)<br>Study design:<br>9 quantitative, 7<br>qualitative, 1 mixed<br>methods<br>Population:<br>Persons with dementia<br>Number of<br>participants:<br>10-50 persons<br>Country of origin:<br>USA, China, Canada,<br>Sweden, Finland,<br>Austria, Scotland<br>Setting:<br>Specialized dementia<br>care units, nursing<br>home | This systematic review<br>explores both<br>quantitative and<br>qualitative evidence on<br>the impact of gardens for<br>people with dementia in<br>residential care. There is<br>quantitative evidence,<br>albeit from poor-quality<br>studies, of decreased<br>agitation associated with<br>garden use. There was<br>insufficient evidence from<br>quantitative studies to<br>allow generalizability of<br>the findings on other<br>aspects of physical and<br>mental wellbeing. The<br>evidence for Horticulture<br>Therapy was also<br>inconclusive.<br>There are promising<br>impacts on levels of<br>agitation in care home<br>residents with dementia<br>to spend time in a<br>garden, although the<br>topic is currently |

| Author<br>Year                     | Study quality<br>SBU Domain(s)  | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review  | Characteristics of the studies included in the  | The conclusions of the<br>systematic review's  |
|------------------------------------|---|--|--|---|--|
| Country<br>Reference               | Quantitative/<br>qualitative  |  | Literature search (date)   | systematic review   | author(s)  |
|                                    |   |  | Literature search:<br>February 2013  | Interventions:<br>Horticulture Therapy<br>(sessions involved<br>activities such as<br>seeding, planting and<br>flower arranging,<br>singing, and making<br>jam) or garden visit.<br>Outcomes:<br>Dementia related<br>behaviors, physical<br>outcomes, emotional<br>outcomes, medication<br>Follow-up time:<br>2 to 78 weeks | understudied and<br>undervalued.<br>Interpretation of the<br>findings further suggest<br>that gardens need to<br>offer a range of ways of<br>interacting, to suit<br>different people's<br>preferences and needs.<br>Future research also<br>would benefit from a<br>focus on key outcomes<br>measured in comparable<br>ways with a separate<br>focus on what lies behind<br>limited accessibility to<br>gardens within the<br>residential care setting.<br>Developing knowledge<br>and understanding in<br>these areas will help to<br>further improve<br>appropriate care<br>experiences and inform<br>policy more accurately. |
| Whear et al<br>2014<br>UK<br>[105] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder – särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods -<br>institutional settings) | To examine the<br>effectiveness of mealtime<br>interventions aimed at<br>improving behavioral<br>symptoms in elderly<br>people living with<br>dementia in residential<br>care. | Inclusion criteria:<br>All comparative studies<br>were included. Music,<br>group conversation, dining<br>environment, and food<br>service.<br>Literature search:<br>November 2012. | Number of studies:<br>11<br>Study design:<br>Systematic review<br>Included articles:<br>Controlled trial (n=1),<br>before-and-after<br>studies (n=3), repeated<br>measure time series<br>studies (=7).  | There is some evidence to<br>suggest that mealtime<br>interventions improve<br>behavioral symptoms in<br>elderly people with<br>dementia living in<br>residential care, although<br>weak study designs limit<br>the generalizability of the<br>findings. Well designed,<br>controlled trials are   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)                                      |
|--|--|--|---|---|---|
|  | Quantitative   |  |   | Number of<br>participants:<br>Tot n=261Characteristics of<br>participants:<br>Residents aged 65 years<br>and older with<br>dementia. Studies were<br>small: sample sizes<br>ranged from 5 to 41<br>participants. 3 studies<br>had fewer than 20<br>participants. Residents'<br>mean age ranged from<br>74.8 years to 87.0<br>years, with generally<br>more women than men<br>involved.Setting:<br>Residential nursing<br>homes (n=4),<br>another facility (n=2),<br>or standing<br>independently (n=4).Country of origin:<br>US n=6, Taiwan n=2,<br>Canada n=1, Sweden<br>n=1, Belgium n=1Interventions:<br>-Music interventions<br>during the mealtime<br>n=7. | needed to further<br>understand the<br>utility of mealtime<br>interventions in this<br>setting. |

| Author<br>Year | Study quality<br>SBU Domain(s) | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review | Characteristics of the studies included in the  | The conclusions of the<br>systematic review's |
|----------------|--------------------------------|--|---|---|---|
| Country        | Quantitative/                  |  | Literature search (date)                        | systematic review   | author(s)                                     |
| Reference      | qualitative                    |  |   | <ul> <li>-Changes to the dining<br/>environment, such as<br/>lighting and table<br/>setting n=2Food<br/>service intervention<br/>n=1.</li> <li>Group conversation<br/>intervention n=1.</li> <li>Mealtime interventions<br/>were categorised into 4<br/>types: music, changes<br/>to food service, dining<br/>environment alteration,<br/>and group<br/>conversation.</li> <li>Nutrition education or<br/>training interventions<br/>that were specific to<br/>mealtime care for<br/>residential elderly were<br/>also included.</li> </ul> |   |
|                |                                |  |   | Outcomes:<br>Behavioral and<br>psychological<br>symptoms of dementia<br>were primarily of<br>interest. Aggressive and<br>agitated behaviors,<br>communication,<br>functional<br>independence, and<br>psychological<br>outcomes. Improving<br>the mealtime routine,  |   |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|--|--|---|
| •                                      |  | To identify interventions<br>that aim to reduce<br>dependency in activities<br>of daily living (ADL) in<br>homecare service users.<br>To determine: content;<br>effectiveness in<br>improving ability to<br>perform ADL; and<br>whether delivery by<br>qualified occupational<br>therapists influences<br>effectiveness. | Inclusion criteria:<br>Randomised controlled<br>trials (RCTs), non-<br>randomised controlled<br>trials, controlled before and<br>after studies and<br>interrupted time series<br>were all eligible.<br>Participants: individuals,<br>aged 18 years or older,<br>living at borne in the<br>community (i.e. not in<br>residential or nursing<br>homes), and in receipt of<br>homecare.<br>Studies were eligible for<br>inclusion if a mixture of<br>assistance with personal<br>(such as washing and<br>dressing) and domestic<br>(such as cleaning) ADL was | experience, or<br>environment.<br>Follow-up time:<br>Time series repeated<br>measures 8 weeks, 4<br>weeks, 1 week, 7–10<br>days, 25 days.<br>Number of studies:<br>13<br>Study design:<br>Six RCTs and seven<br>controlled before and<br>after studies<br>Number of<br>participants:<br>4 975 participants were<br>included. Sample size<br>ranged from 74 to<br>1 382, mean 383.<br>Characteristics of<br>participants:<br>74-75. Gender not<br>stated.<br>Setting: | There is limited evidence<br>that interventions<br>targeted at personal ADL<br>can reduce homecare<br>service users'<br>dependency with<br>activities, the content of<br>evaluated interventions<br>varies greatly, further<br>research is needed |
|  |  |  | provided but studies were<br>excluded if all par-ticipants<br>received help only with<br>domestic ADL. Studies of<br>participants receiving<br>palliative care were<br>excluded because of the<br>likelihood of physi-cal  | Community care.<br>Country of origin:<br>USA, Canada, Australia,<br>New Zealand, England,<br>Sweden.   |   |

| Author    | Study quality | Objectives of the | Inclusion criteria for the   | Characteristics of the  | The conclusions of the |
|-----------|---------------|-------------------|------------------------------|-------------------------|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review            | studies included in the | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)     | systematic review       | author(s)              |
| Reference | qualitative   |                   |                              |                         |                        |
|           |               |                   | deterioration and different  | Interventions:          |                        |
|           |               |                   | outcomes.                    | Restorative homecare,   |                        |
|           |               |                   | Any intervention delivered   | Nurse-led health        |                        |
|           |               |                   | in or from the participant's | promotion/care          |                        |
|           |               |                   | home and designed to         | coordination, Cluster   |                        |
|           |               |                   | reduce dependency in         | care, Specialist        |                        |
|           |               |                   | personal ADL and to reduce   | inter-professional      |                        |
|           |               |                   | the need for paid care. We   | stroke care,            |                        |
|           |               |                   | included single component    | Occupational therapy    |                        |
|           |               |                   | interventions (for example,  | bathing intervention,   |                        |
|           |               |                   | mono-professional or one-    | goal setting, assistive |                        |
|           |               |                   | off visits) or multiple      | technology              |                        |
|           |               |                   | components (for example a    |                         |                        |
|           |               |                   | package provided by a        | Outcomes:               |                        |
|           |               |                   | multidisciplinary team). The | Health Related Quality  |                        |
|           |               |                   | comparator was defined as    | of Life Remaining at    |                        |
|           |               |                   | a routine homecare service   | home, functional        |                        |
|           |               |                   | in which assistance with     | status, duration and    |                        |
|           |               |                   | personal ADL was provided    | intensity of home care  |                        |
|           |               |                   | but where there was no       | episode.                |                        |
|           |               |                   | intention to improve         | Ability to perform ADL  |                        |
|           |               |                   | individuals' performance in  |                         |                        |
|           |               |                   | this.                        | Follow-up time:         |                        |
|           |               |                   | The main outcome of          | 1-16 months.            |                        |
|           |               |                   | interest was performance     |                         |                        |
|           |               |                   | in personal ADL. Other       |                         |                        |
|           |               |                   | outcomes included: death;    |                         |                        |
|           |               |                   | performance in extended      |                         |                        |
|           |               |                   | ADL (for example,            |                         |                        |
|           |               |                   | shopping, outdoor            |                         |                        |
|           |               |                   | mobility); admission to      |                         |                        |
|           |               |                   | hospital, residential or     |                         |                        |
|           |               |                   | nursing care homes; falls;   |                         |                        |
|           |               |                   | mood/morale; health or       |                         |                        |
|           |               |                   | social care related quality  |                         |                        |
|           |               |                   | of life; caregiver           |                         |                        |
|           | 1             | 1                 | strain/burden; health        |                         |                        |

| Author           | Study quality           | Objectives of the         | Inclusion criteria for the                     | Characteristics of the  | The conclusions of the        |
|------------------|-------------------------|---------------------------|--|-------------------------|-------------------------------|
| Year             | SBU Domain(s)           | systematic review         | systematic review                              | studies included in the | systematic review's           |
| Country          | Quantitative/           |                           | Literature search (date)                       | systematic review       | author(s)                     |
| Reference        | qualitative             |                           |  |                         |                               |
|                  |                         |                           | economic outcomes; use of health and community |                         |                               |
|                  |                         |                           | services; participant and                      |                         |                               |
|                  |                         |                           | carer satisfaction with                        |                         |                               |
|                  |                         |                           | services; and healthcare                       |                         |                               |
|                  |                         |                           | provider satisfaction with                     |                         |                               |
|                  |                         |                           | the service. Outcomes were                     |                         |                               |
|                  |                         |                           | grouped into short term (<6                    |                         |                               |
|                  |                         |                           | months), medium term (6                        |                         |                               |
|                  |                         |                           | to 12 months) and long                         |                         |                               |
|                  |                         |                           | term (> 12 months).                            |                         |                               |
|                  |                         |                           | Literature search:                             |                         |                               |
|                  |                         |                           | November 2014                                  |                         |                               |
| Virués-Ortega et | Moderate                | To assess if animal-      | Study design:                                  | Number of studies:      | Effects on social             |
| al               |                         | assisted therapy (AAT)    | Matched or controlled trials                   | 21                      | functioning and               |
| 2012             | SBU Domain(s):          | may affect health via an  | incorporating pre- and                         |                         | depression were larger in     |
| Canada & Spain   | Upprätthållande och     | increase in perceived     | post-test outcome                              | Study design:           | individuals with              |
| [107]            | stimulerande            | social support and social | measures and with at least                     | 11 studies were         | psychiatric conditions        |
|                  | arbetssätt och          | interaction on selected   | five participants subjected                    | controlled trials - of  | while behavioral              |
|                  | metoder - ordinärt      | populations with poor     | to a multiple-day AAT                          | which 7 were RCTs. 10   | disturbances were             |
|                  | boende.                 | social functioning.       | intervention                                   | were matched studies.   | reduced in patients with      |
|                  | Upprätthållande och     |                           | Participants:                                  | Number of participants  | dementia. The<br>inconsistent |
|                  | stimulerande            |                           | Elderly participants and                       | From 7 to 144           | methodological                |
|                  | arbetssätt och          |                           | those with depression and                      | participants; social    | characteristics of the        |
|                  | metoder - särskilt      |                           | schizophrenia                                  | functioning n = 275;    | studies meta-analysed         |
|                  | boende.                 |                           |  | depression n =447;      | suggest a conservative        |
|                  | (Maintaining and        |                           | Setting:                                       | anxiety n =291;         | interpretation of these       |
|                  | stimulating work        |                           | No limitations                                 | behavioural             | findings.                     |
|                  | methods – both          |                           |  | disturbances n = 367    |                               |
|                  | community and           |                           | Intervention:                                  |                         |                               |
|                  | institutional settings) |                           | Animal-assisted therapy                        | Characteristics of      |                               |
|                  |                         |                           |  | participants:           |                               |
|                  | Quantitative            |                           | Outcomes:                                      | About 10 studies        |                               |
|                  |                         |                           | Social functioning,                            | targeted cognitively    |                               |
|                  |                         |                           | depression, anxiety,                           | unimpaired elderly      |                               |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|--|---|--|
|  |  |  | behavioural disturbances,<br>loneliness, daily living skills<br>and cognitive status<br>Literature search:<br>January 2009 | populations, 5 studies<br>targeted elderly<br>individuals with<br>dementia and 6 studies<br>involved psychiatric<br>patients. All but two<br>studies involved both<br>men and women.  |  |
|  |  |  |  | Setting:<br>The interventions were<br>based on natural or<br>spontaneous human-<br>animal interactions in<br>11 studies. Prompted or<br>guided interactions in<br>the remaining 10<br>studies. Most studies<br>delivered AAT in a<br>group format used dogs<br>as therapy animals. All<br>but four studies used<br>periodic AAT sessions<br>with a median intensity<br>of 2 hours per week,<br>while the others<br>involved permanent<br>animal adoptions.<br>Country of origin:<br>(USA n=11, Italy n=2,<br>Japan n=3, Israel n=2, |  |
|  |  |  |  | Hungary n=1, Honduras<br>n=1, Australia n=1)  |  |

| Author    | Study quality | Objectives of the | Inclusion criteria for the | Characteristics of the    | The conclusions of the |
|-----------|---------------|-------------------|----------------------------|---------------------------|------------------------|
| Year      | SBU Domain(s) | systematic review | systematic review          | studies included in the   | systematic review's    |
| Country   | Quantitative/ |                   | Literature search (date)   | systematic review         | author(s)              |
| Reference | qualitative   |                   |                            |                           |                        |
|           |               |                   |                            | Interventions:            |                        |
|           |               |                   |                            | Animal-assisted therapy   |                        |
|           |               |                   |                            | (dog, cat, rabbit, bird,  |                        |
|           |               |                   |                            | ferret, dolphin,          |                        |
|           |               |                   |                            | aquarium and robotic      |                        |
|           |               |                   |                            | dog)                      |                        |
|           |               |                   |                            |                           |                        |
|           |               |                   |                            | Number of studies:        |                        |
|           |               |                   |                            | outcomes: depression      |                        |
|           |               |                   |                            | (n=9); anxiety (n=4);     |                        |
|           |               |                   |                            | behavioural               |                        |
|           |               |                   |                            | disturbances including    |                        |
|           |               |                   |                            | bizarre vocalisations;    |                        |
|           |               |                   |                            | disruptive, aggressive    |                        |
|           |               |                   |                            | and self-injurious        |                        |
|           |               |                   |                            | behaviour (n=7);          |                        |
|           |               |                   |                            | loneliness (n=4); social  |                        |
|           |               |                   |                            | functioning including     |                        |
|           |               |                   |                            | basic (e.g., visual       |                        |
|           |               |                   |                            | contact) and advanced     |                        |
|           |               |                   |                            | (e.g., conversational     |                        |
|           |               |                   |                            | skills) forms of social   |                        |
|           |               |                   |                            | interaction either        |                        |
|           |               |                   |                            | observed directly or      |                        |
|           |               |                   |                            | measured through a        |                        |
|           |               |                   |                            | rating scale (n=7); daily |                        |
|           |               |                   |                            | living skills (n=6); and  |                        |
|           |               |                   |                            | cognitive ability (n=5).  |                        |
|           |               |                   |                            | _ ,, ,                    |                        |
|           |               |                   |                            | Outcomes:                 |                        |
|           |               |                   |                            | AAT improved social       |                        |
|           |               |                   |                            | functioning (pooled       |                        |
|           |               |                   |                            | effect size = 1.06, n =   |                        |
|           |               |                   |                            | 275). Moderate effects    |                        |
|           |               |                   |                            | were found for            |                        |
|           |               |                   |                            | depression (-0.34, n      |                        |
|           |               |                   |                            | =447), anxiety (-0.29, n  |                        |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative   | Objectives of the<br>systematic review   | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|--|--|--|---|---|
|  |  |  |  | =291) and behavioural<br>disturbances (-0.32, n =<br>367).<br><b>Follow-up time:</b><br>The length of<br>interventions ranged<br>from 1 to 69 weeks,<br>with a median AAT<br>duration of 7 weeks.   |   |
| Wysocki et al<br>2012<br>USA<br>[108]  | Moderate SBU Domain(s): Särskilda boendeformer som insats. (Institutional care as an intervention) Hemtjänst som insats. (Home help as an intervention) Quantitative | To compare long-term<br>care (LTC) for older adults<br>delivered through Home<br>and Community-Based<br>Services (HCBS) with care<br>provided in nursing<br>homes (NHs) by<br>evaluating<br>(1) the characteristics of<br>older adults served<br>through HCBS and in NHs;<br>(2) the impact of HCBS<br>and NH care on outcome<br>trajectories of older<br>adults; and<br>(3) the per person costs<br>of HCBS and NH care,<br>costs for other services<br>such as acute care, and<br>family burden. | <ul> <li>Inclusion criteria:<br/>Randomized controlled<br/>trials (RCTs) and<br/>observational studies that<br/>directly compared LTC for<br/>older adults (age ≥60)<br/>served through HCBS and in<br/>NHs. Studies were limited<br/>by date (1995–March<br/>2012), language (English),<br/>and geographical location<br/>(United States and other<br/>economically developed<br/>countries with well-<br/>established health and LTC<br/>systems).</li> <li>Literature search:<br/>March 2012</li> </ul> | Depending on outcome.Number of studies:42Study design:<br>Cross sectional and<br>longitudinal studies.Number of<br>participants:<br>Not stated.Characteristics of<br>participants:<br>At least 60 years.Setting:<br>Residential care and<br>home-based care.Country of origin:<br>United States, Canada,<br>United Kingdom,<br>Australia, and New<br>Zealand, Norway,<br>Sweden, and other<br>European countries. | Determining whether and<br>how the delivery of LTC<br>through HCBS versus NHs<br>affects outcome<br>trajectories of older<br>adults is difficult due to<br>scant evidence and the<br>methodological<br>limitations of studies<br>reviewed.<br>More and better research<br>is needed to draw robust<br>conclusions about how<br>the setting of care<br>delivery influences the<br>outcomes and costs of<br>LTC for older adults. |

| Author    | Study quality       | Objectives of the          | Inclusion criteria for the  | Characteristics of the     | The conclusions of the |
|-----------|---------------------|----------------------------|-----------------------------|----------------------------|------------------------|
| Year      | SBU Domain(s)       | systematic review          | systematic review           | studies included in the    | systematic review's    |
| Country   | Quantitative/       |                            | Literature search (date)    | systematic review          | author(s)              |
| Reference | qualitative         |                            |                             |                            |                        |
|           |                     |                            |                             | Interventions:             |                        |
|           |                     |                            |                             | Residential care and       |                        |
|           |                     |                            |                             | home-based care.           |                        |
|           |                     |                            |                             | Outcomes:                  |                        |
|           |                     |                            |                             | Physical function,         |                        |
|           |                     |                            |                             | mental health              |                        |
|           |                     |                            |                             | outcomes (e.g.,            |                        |
|           |                     |                            |                             | depression and             |                        |
|           |                     |                            |                             | anxiety), quality of life, |                        |
|           |                     |                            |                             | social function,           |                        |
|           |                     |                            |                             | satisfaction, outcomes     |                        |
|           |                     |                            |                             | related to family          |                        |
|           |                     |                            |                             | caregivers, death, place   |                        |
|           |                     |                            |                             | of death, use of acute     |                        |
|           |                     |                            |                             | care services (e.g.,       |                        |
|           |                     |                            |                             | hospitals, emergency)      |                        |
|           |                     |                            |                             | and costs                  |                        |
|           |                     |                            |                             | departments), and          |                        |
|           |                     |                            |                             | harms (e.g., accidents,    |                        |
|           |                     |                            |                             | injuries, pain, abuse,     |                        |
|           |                     |                            |                             | and neglect).              |                        |
|           |                     |                            |                             | Follow-up time:            |                        |
|           |                     |                            |                             | 6 months up to many        |                        |
|           |                     |                            |                             | years                      |                        |
| Xu et al  | Moderate            | To determine whether       | Inclusion criteria:         | Number of studies:         | There was positive     |
| 2017      |                     | there is an association    | Clinical trials were in any | 10                         | evidence               |
| China     | SBU Domain(s):      | between music              | language and included       |                            | to support the use of  |
| [109]     | Upprätthållande och | intervention and           | older adults (aged 65 or    | Study design:              | music intervention on  |
|           | stimulerande        | cognitive dysfunction      | over) experiencing          | RCT and CCT.               | treatment of           |
|           | arbetssätt och      | therapy in healthy older   | cognitive                   |                            | cognitive function.    |
|           | metoder – ordinärt  | adults, and if so, whether | dysfunction, regardless of  | Number of                  |                        |
|           | boende.             | music intervention can be  | study design.               | participants:              |                        |
|           |                     | used as firstline          |                             | Intervention=470           |                        |
|           | Upprätthållande och | non-pharmacological        | Studies that compared any   | Control=496                |                        |
|           | stimulerande        | treatment.                 | form and intervention       |                            |                        |

| Author    | Study quality          | Objectives of the | Inclusion criteria for the | Characteristics of the              | The conclusions of the |
|-----------|------------------------|-------------------|----------------------------|-------------------------------------|------------------------|
| Year      | SBU Domain(s)          | systematic review | systematic review          | studies included in the             | systematic review's    |
| Country   | Quantitative/          |                   | Literature search (date)   | systematic review                   | author(s)              |
| Reference | qualitative            |                   |                            |                                     |                        |
|           | arbetssätt och         |                   | method of music            | Characteristics of                  |                        |
|           | metoder – särskilt     |                   | intervention with no music | participants:                       |                        |
|           | boende. (Maintaining   |                   | care.                      | Older adults, healthy               |                        |
|           | and stimulating work   |                   |                            | older adults, older                 |                        |
|           | methods – both         |                   | Literature search:         | elderly, between 69–88              |                        |
|           | community and          |                   | September 2016.            | years,                              |                        |
|           | institutional settings |                   |                            | 3–46% men.                          |                        |
|           | Quantitative           |                   |                            | Setting:                            |                        |
|           |                        |                   |                            | Nursing home, nutrition             |                        |
|           |                        |                   |                            | sites, hospital, home.              |                        |
|           |                        |                   |                            | Country of origin                   |                        |
|           |                        |                   |                            | USA, Italy, UK, Korea,              |                        |
|           |                        |                   |                            | Canada.                             |                        |
|           |                        |                   |                            | Interventions:                      |                        |
|           |                        |                   |                            | Interactive (singing):              |                        |
|           |                        |                   |                            | nutrition-focused song,             |                        |
|           |                        |                   |                            | n=1 study.                          |                        |
|           |                        |                   |                            | Interactive (face-to-face           |                        |
|           |                        |                   |                            | training sessions);                 |                        |
|           |                        |                   |                            | musical backgrounds,                |                        |
|           |                        |                   |                            | n=1 study.                          |                        |
|           |                        |                   |                            | Interactive music from              |                        |
|           |                        |                   |                            | the 1920s, 1930s,                   |                        |
|           |                        |                   |                            | 1940s, n=1 study.                   |                        |
|           |                        |                   |                            | Interactive (playing of             |                        |
|           |                        |                   |                            | rhytm instruments),<br>n=2 studies. |                        |
|           |                        |                   |                            | Passive, a) secular song,           |                        |
|           |                        |                   |                            | b) religious song, n=1              |                        |
|           |                        |                   |                            | study.                              |                        |
|           |                        |                   |                            | Interactive (following              |                        |
|           |                        |                   |                            |                                     |                        |
|           |                        |                   |                            |                                     |                        |
|           |                        |                   |                            | the piano music), n=2<br>studies.   |                        |

| SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the<br>studies included in the<br>systematic review   | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|--|--|---|
|  |   |  | Passive (2/4 rhythm),<br>n=1 study.<br>Interactive<br>(individualized piano<br>playing), n=1 study.  |   |
|  |   |  | Outcomes:<br>Primary outcome was<br>cognitive function. The<br>secondary outcomes<br>included disruptive<br>behavior, depressive<br>score, anxiety score and<br>quality of life. 2 types of<br>outcome measures<br>were extracted from<br>the older adults with<br>dementia. |   |
|  |   |  | Follow-up time:<br>3 months – 2 years  |   |
| Moderate<br>SBU Domain(s):<br>Insatser för att stödja<br>kvarboende.<br>(Interventions to<br>support ageing in<br>place)<br>Quantitative | To assess the effects of<br>long-term home or foster<br>home care versus<br>institutional care for<br>functionally dependent<br>older people, with<br>a particular focus on<br>mortality, physical<br>function, quality of life,<br>and caregiver outcomes. | Inclusion criteria:<br>We included randomized<br>and non-randomized trials,<br>controlled before-after<br>studies and interrupted<br>time series studies<br>complying with<br>the EPOC study design<br>criteria and comparing the<br>effects of long-term home<br>care versus institutional<br>care for functionally<br>dependent<br>older people.   | Number of studies:<br>10<br>Study design:<br>1 randomised trial, 4<br>non-randomised trials,<br>4 observational cohort<br>studies<br>1 nested case-control<br>study<br>Population:<br>Persons aged 65 years<br>or older with long term<br>functional dependency              | There are insufficient<br>high-quality published<br>data to support any<br>particular model of care<br>for functionally<br>dependent older people.<br>Community-based care<br>was not consistently<br>beneficial across all the<br>included studies; there<br>were some data<br>suggesting that<br>community-based care<br>may be associated with<br>improved quality of life   |
|  | qualitative         qualitative         gualitative         Moderate         SBU Domain(s):         Insatser för att stödja         kvarboende.         (Interventions to         support ageing in         place)  | qualitative       Image: constraint of the second sec | qualitativeQualitativeModerateSBU Domain(s):Insatser för att stödja<br>kvarboende.Insatser för att stödja<br>kvarboende.(Interventions to<br>support ageing in<br>place)QuantitativeQuantitative   | qualitativeImage: construction of the second se |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review                  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|-------------------------------------|---|---|--|
|  |  |                                     | November 2015   | as potentially requiring<br>care home placement<br>(from hospital or the<br>community). | compared to institutional<br>care. However,<br>community alternatives<br>to institutional care may |
|  |  |                                     |   | We defined functional dependence as the need for assistance in                          | be associated with<br>increased risk of<br>hospitalization. Future<br>studies should assess        |
|  |  |                                     |   | one or more activities<br>of daily living (ADLs).                                       | healthcare utilization,<br>perform economic<br>analysis, and consider                              |
|  |  |                                     |   | Number of<br>participants:<br>16 377  | caregiver burden.<br>It is uncertain whether   |
|  |  |                                     |   | <b>Country of origin:</b><br>USA, Taiwan, Sweden,                                       | long-term home care<br>compared to nursing<br>home care decreases                                  |
|  |  |                                     |   | the UK, and Canada. Setting:  | mortality risk (2 studies,<br>N = 314, very-low<br>certainty evidence).                            |
|  |  |                                     |   | community-based care<br>compared with<br>institutional care (care                       | Estimates ranged from a<br>nearly three-fold<br>increased risk of mortality                        |
|  |  |                                     |   | homes).   | in the homecare group<br>(risk ratio (RR) 2.89, 95%<br>confidence interval (CI)                    |
|  |  |                                     |   | Enhanced long-term<br>home care services can<br>include a number                        | 1.57 to 5.32) to a 62%<br>relative reduction (RR<br>0.38, 95% Cl 0.17 to                           |
|  |  |                                     |   | of different elements,<br>such as formal personal                                       | 0.61). We did not pool data due to the high  |
|  |  |                                     |   | care (including<br>bathing, toileting,<br>feeding, dressing,                            | degree of heterogeneity<br>(I2 = 94%). It is uncertain<br>whether the intervention                 |
|  |  |                                     |   | transfers, meal<br>preparation, shopping),<br>adapted environments                      | has a beneficial effect on<br>physical function, as the<br>certainty of evidence is                |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s)   |
|--|--|--|---|---|--|
| Reference                              | qualitative  |  |   | <ul> <li>(including within the older person's own home, or in a specifically adapted residence), day care (planned regular care given in day care centres to patients otherwise living at home), or respite care (care given primarily at home, but where patients receive planned regular respite within an institution).</li> <li>Outcomes:<br/>Primary outcomes:<br/>Mortality at the end of scheduled follow-up Physical function (activities of daily living scales)<br/>Quality of life measures</li> <li>Secondary outcomes:<br/>Participant outcomes</li> <li>Satisfaction with care</li> <li>Number of adverse health outcomes, including incidence of infection (chest and urinary) over the period of the study</li> </ul> | very low (5 studies, N =<br>1295). Two studies<br>reported that participants<br>who received long-term<br>home care had improved<br>activities of daily living<br>compared to those in a<br>nursing home, whereas a<br>third study reported that<br>all participants performed<br>equally on physical<br>function. It is uncertain<br>whether long-term home<br>care improves happiness<br>compared to nursing<br>home care (RR 1.97, 95%<br>CI 1.27 to 3.04) or general<br>satisfaction because the<br>certainty of evidence was<br>very low (2 studies, N =<br>114).<br>The extent to which long-<br>term home care was<br>associated to more or<br>fewer adverse health<br>outcomes than nursing<br>home care was not<br>reported. It is uncertain<br>whether long-term home<br>care compared to nursing<br>home care decreases the<br>risk of hospital admission<br>(very low-certainty<br>evidence, N = 14,853). RR |
|  |  |  |   | Hospital admissions   | estimates ranged from<br>2.75 (95% CI 2.59 to<br>2.92), showing an   |

| Author<br>Year<br>Country<br>Reference     | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative  | Objectives of the<br>systematic review  | Inclusion criteria for the<br>systematic review<br>Literature search (date)  | Characteristics of the studies included in the systematic review  | The conclusions of the<br>systematic review's<br>author(s)  |
|--|---|---|--|---|---|
|  |   |   |  | Informal caregivers of<br>functionally dependent<br>older people<br>• Satisfaction with care<br>(of the caregiver)<br>• Perceived stress<br>• Perceived burden<br>Follow-up time:<br>Unclear  | increased risk for those<br>receiving care at home, to<br>0.82 (95% CI 0.72 to<br>0.93), showing a slightly<br>reduced risk for the same<br>group. We did not pool<br>data due to the high<br>degree of heterogeneity<br>(I2 = 99%).                              |
| Zhao et al<br>2016<br>China & USA<br>[111] | Moderate<br>SBU Domain(s):<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder - ordinärt<br>boende.<br>Upprätthållande och<br>stimulerande<br>arbetssätt och<br>metoder - särskilt<br>boende. (Maintaining<br>and stimulating work<br>methods – both<br>community and<br>institutional settings)<br>Quantitative | To determine the efficacy<br>of music therapy in the<br>management of<br>depression in the elderly. | Study design:<br>Randomized controlled<br>trials.<br>Participants:<br>Men and women aged 60<br>or older with clinical<br>diagnosis of depression<br>using any diagnostic<br>criteria, such as JCD-10 or<br>DSM-5 (American<br>Psychiatric Association,<br>2013) research diagnostic<br>criteria, or obvious<br>depressive mood coupled<br>with some disease, such as<br>hypertension, cerebral<br>apoplexy, Alzheimer's<br>disease, sleep disorder, etc.<br>Participants who scored<br>above a cutoff score on a<br>self-rating depression<br>questionnaire. Included<br>studies that used healthy<br>people to detect the<br>efficacy of music therapy in | Number of studies:         n=19         Study design:         Randomized controlled         trials.         Number of         participants:         Music therapy plus         standard therapies         versus standard         therapies. 10 studies         with 909 participants.         (Sample sizes ranging         from 30 to 268)         Characteristics of         participants:         Age 60 or older.         One study had two         intervention groups         that tested the efficacy         of different types of         music therapy. Five         studies involved         diagnoses of varying | This systematic review<br>and meta-analysis<br>suggest that music<br>therapy has an effect on<br>reducing depressive<br>symptoms to some<br>extent. However, high-<br>quality trials evaluating<br>the effects of music<br>therapy on depression<br>are required. |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date)   | Characteristics of the<br>studies included in the<br>systematic review  | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|---|--|
|  |  |  | reducing depressive<br>symptoms<br>Setting:   | degrees of dementia,<br>six studies involved<br>diagnoses of<br>depression. Two studies   |  |
|  |  |  | Any ( a bit unclear).   | involved healthy<br>volunteers. Ten studies   |  |
|  |  |  | Intervention:<br>Any type of music therapies<br>for example, individual or<br>group therapy, active or<br>re-ceptive-was included | used music therapy plus<br>standard therapies (i.e.,<br>standard drug<br>treatment,<br>rehabilitation, and<br>exercise) to make |  |
|  |  |  | Outcomes:<br>Change in depressive<br>symptoms. The  | comparisons with a control group.   |  |
|  |  |  | measurements included the<br>Hamilton Rating Scales for<br>Depression, Geriatric  | Setting:<br>Any -unclear.   |  |
|  |  |  | Depression Scale, Self-<br>Rating Depression Scale,<br>Hospital Anxiety and<br>Depression Scale,                                  | Country of origin:<br>Australia (n = 1), Italy (n<br>= 2), USA (n = 1), France<br>(n= 1), Switzerland (n=                       |  |
|  |  |  | Narcissism Personality<br>Inventory, and Cornell Scale<br>for Depression in Dementia  | 1), mainland China (n =<br>11), Hong Kong (n = 1),<br>and Taiwan (n= 1).  |  |
|  |  |  | Literature search:<br>13 September 2014   | Interventions:<br>Any type of music<br>therapies  |  |
|  |  |  |   | Outcomes:<br>The combined<br>standardized mean<br>difference (SMD) for<br>the experimental and                                  |  |
|  |  |  |   | control groups was 1.02<br>(95% CI=0.87, 1.17)  |  |

| Author<br>Year<br>Country<br>Reference | Study quality<br>SBU Domain(s)<br>Quantitative/<br>qualitative | Objectives of the<br>systematic review | Inclusion criteria for the<br>systematic review<br>Literature search (date) | Characteristics of the<br>studies included in the<br>systematic review | The conclusions of the<br>systematic review's<br>author(s) |
|--|--|--|---|--|--|
|  |  |  |   | Follow-up time:<br>4 weeks to one year<br>depending on outcome         |  |

Note: Follow-up time is sometimes difficult to record as multiple outcomes and timepoints have been assessed. Additionally, follow-up time was not always specifically mentioned.

Some data can be hard to find, and, in those cases, we marked it with unclear.

n = Number of participants, RCT = Randomised Controlled Trial, CCT=controlled clinical trial

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