Appendix D: Clinical evidence tables

Study	Bajwah 2015[18]
Study type	RCT (Patient randomised; parallel).
Number of studies (number of participants)	1 (n=53).
Countries and setting	Conducted in United Kingdom; setting: patients recruited from inpatient and outpatient settings in a specialist ILD centre (Royal Brompton Hospital, London).
Line of therapy	Not applicable.
Duration of study	Intervention time.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall: n/a.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Clinical diagnosis of advanced idiopathic fibrotic lung disease, end stage disease as judged by either high resolution CT, composite physiologic index scores or based on clinical signs, oxygen requirements and presence of severe pulmonary hypertension if too unwell to complete pulmonary function tests, >18 years old, sufficient mental capacity, able to complete questionnaires in English.
Exclusion criteria	Not reported.
Recruitment/selection of patients	Not reported.
Age, gender and ethnicity	Age - Mean (SD): Intervention: 67.1 (10.9), Control: 70.6 (10.3). Gender (M:F): 38:15. Ethnicity: 77% white UK, 6% black or black British, 17% Asian or Asian British.
Further population details	1. Frail elderly: Not applicable/Not stated/Unclear.
Indirectness of population	No indirectness: n/a.
Interventions	(n=26) Intervention 1: Community based palliative care - enhanced palliative care in community. Hospital2Home intervention 1 week after randomisation - delivered by palliative care specialist nurses; case conferences conducted in patients' homes attended by patient, carer, H2H nurse, GP, community matron/district nurse, respiratory nurse and community palliative care nurse, care concerns and action plans discussed, follow up phone calls to ensure action points had been met by health care professionals. Duration: 8 weeks. Concurrent medication/care: best standard care. (n=27) Intervention 2: Community based palliative care - standard palliative care in community. Hospital2Home

Study	Bajwah 2015[18]
	intervention 4 weeks after randomisation. All patients received best standard care including input from interstitial lung disease physicians, ILD clinical nurse specialist, occupational therapist, physiotherapist and oxygen assessment and ILD treatment as needed and referrals to community health professionals continued. Duration 8 weeks. Concurrent medication/care: n/a.
Funding	Other (Marie Curie and Royal Marsden and Royal Brompton Palliative Care Research Fund).
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: ENHANCED PALLIATIVE CARE IN COMMUNITY versus STANDARD PALLIATIVE CARE IN COMMUNITY. Protocol outcome 1: Place of death during study period. - Actual outcome: preferred place of death achieved at study completion; Group 1: 7/8, Group 2: 10/13; Risk of bias: All domain - High, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - High, Measurement - High, Crossover - Low; Indirectness of outcome	
Protocol outcomes not reported by the study	Quality of life during study period; Avoidable adverse events during study period; Patient and/or carer satisfaction during study period; Number of presentations to Emergency Department during study period; Number of admissions to hospital after 28 days of first admission; Number of GP presentations during study period; Readmission up to 30 days; Length of stay in programme during study period; Length of hospital stay during study period.

Study	ENABLE III trial: Bakitas 2015[20]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	1 (n=207).
Countries and setting	Conducted in United Kingdom; setting: patients recruited from a National Cancer Institute cancer centre, a Veterans Affairs Medical Centre and community outreach clinics, USA.
Line of therapy	Not applicable.
Duration of study	Intervention + follow up.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall: n/a
Subgroup analysis within study	Not applicable.
Inclusion criteria	English speaking, age at least 18 years, advanced stage solid tumour or hematologic malignancy, oncologist-determined prognosis of 6 to 24 months, able to complete baseline questionnaires.
Exclusion criteria	Impaired cognition (Callahan score no greater than 4), active axis 1 psychiatric (schizophrenia, bipolar disorder) or

Study	ENABLE III trial: Bakitas 2015[20]
	substance use disorder, un-correctable hearing disorder, unreliable telephone service.
Recruitment/selection of patients	Consecutive patients meeting the inclusion criteria.
Age, gender and ethnicity	Age - Other: Intervention: mean(SD) 64.03(10.28) Control: mean(SD) 64.6(9.59). Gender (M:F): 109:98. Ethnicity: 200 white, 1 black, 5 other, 1 missing.
Further population details	1. Frail elderly: Not applicable/Not stated/Unclear.
Indirectness of population	No indirectness: n/a.
Interventions	(n=104) Intervention 1: Community based palliative care - Standard palliative care in community. ENABLE intervention after enrolment (within 30 to 60 days of advanced cancer diagnosis, cancer recurrence or progression) - in person standardised outpatient palliative care consultation by palliative care clinician, 6 structured weekly telephone coaching sessions by an advanced practice nurse and monthly follow up calls. Duration: until death or study completion. Concurrent medication/care: not reported. (n=103) Intervention 2: Usual Care. ENABLE intervention 3 months after advanced cancer diagnosis, cancer recurrence or progression. Usual oncology care directed by a medical oncologist, consisted of anticancer and symptom control treatments and consultation with oncology and supportive care specialists, including a clinical palliative care team whenever requested. Duration: until death or study completion. Concurrent medication/care: not reported.
Funding	Academic or government funding (National Institute for Nursing Research, University of Alabama, American Cancer Society).

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STANDARD PALLIATIVE CARE IN COMMUNITY versus USUAL CARE.

Protocol outcome 1: Quality of life during study period.
- Actual outcome: Quality of Life at End of Life at 3 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness; Baseline details: intervention group had less education, higher weekly alcohol use and higher clinical trial enrollment; Group 1 Number missing: 32; Group 2 Number missing: 20

Protocol outcome 2: Length of hospital stay during study period.
- Actual outcome: rate of hospital days until death; Other: relative rate 0.73 (95%CI 0.41 to 1.27); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness, Comments: NA; Baseline details: intervention group had less education, higher weekly alcohol use and higher clinical trial enrollment

Protocol outcome 3: Place of death at during study period.
- Actual outcome: Location of death at home at study completion; Group 1: 27/50, Group 2: 28/59; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness, Comments: NA; Baseline

Study	ENABLE III trial: Bakitas 2015[20]
details: intervention group had less education, higher weekly alcohol use and higher clinical trial enrollment Protocol outcome 4: Number of presentations to Emergency Department during study period. - Actual outcome: rate of ED visits until death; Other: relative rate 0.73 (95%CI 0.45 to 1.19); Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness, Comments: NA; Baseline details: intervention group had less education, higher weekly alcohol use and higher clinical trial enrollment	
Protocol outcomes not reported by the study	Patient and/or carer satisfaction during study period; Number of admissions to hospital after 28 days of first admission; Number of GP presentations during study period; Readmission up to 30 days; Length of stay in programme during study period; Avoidable adverse events during study period.

Study	BRANNSTROM 2014[35]
Study type	RCT (open non-blinded design).
Number of participants	Intervention group= 36. Control group= 36 (n=72).
Countries and setting	Umea University, Sweden.
Duration of study	January 2011 – October 2012.
Stratum	Overall.
Subgroup analysis within study	None.
Inclusion criteria	Inhabitants who had their primary healthcare centre within 30km of the hospital. Patients with a confirmed diagnosis of chronic heart failure and cared for at the Department of Medicine-geriatrics or primary healthcare centres and who met the criteria of the European Society of Cardiology. NYHA functional classes III – IV symptoms and at least one of the following: At least 1 hospitalised episode of worsening heart failure that resolved with the injection/infusion of diuretics or the addition of other heart failure treatment in the preceding 6 months and regarded as being 'optimally treated' according to the responsible physician Need for frequent or continual IV support. Poor quality of life based on a visual analogue scale score <50. Signs of cardiac cachexia, defined as involuntary non-oedematous weight loss >6% of total body weight within the preceding 6-12 months Life expectancy of < 1year.

Study	BRANNSTROM 2014[35]
Exclusion criteria	Patients who did not want to participate in the study. Has severe communication problems. Had severe dementia or other serious diseases in which heart failure was of secondary importance. With other life-threatening illnesses as their primary diagnoses and an expected short survival time. Whose primary care centre responsible for their care was located >30km from the hospital. Who were already participating in another trial.
Recruitment/selection of patients	Identified 517 patients eligible for study of whom 72 were finally randomised.
Age, gender and ethnicity	Age. Mean: 81.9 years. Gender. Females: 10/36. Ethnicity. Not stated.
Further population details	-
Extra comments	-
Indirectness of population	No indirectness.
Interventions	Intervention Group: The research context was an advanced home care unit providing services Monday-Friday during the day and based in a county hospital located in northern Sweden. The home visits and phone calls varied substantially from several times per day to every other week. Patients in the intervention group were offered a multidisciplinary approach involving collaboration between specialists in palliative and heart failure care, that is, specialised nurses, palliative care nurses, cardiologists, palliative care physicians, physiotherapists and occupational therapists. The patients were also offered structured, person-centred care (PCC) at home. PCC is one of the key components and cornerstones in the **P**alliative advanced home ca**RE** and heart **F**ailur**E** ca**R**e (PREFER) model. PCC is described as a partnership between patients/carers and professional caregivers, and includes initiating, working on and documenting partnership. The starting point is the patient's narrative, which is recorded in a structured manner and from which mutual care plan is created that incorporates goals and strategies for implementation and follow up. The intervention was carried out as follows: After identifying a patient who fulfilled the inclusion criteria and had no exclusion criteria, a responsible physician and nurse were identified for each patient.

Study	BRANNSTROM 2014[35]
	The patient was then called for a thorough medical examination by the responsible physician with identification of co-morbidities and assessment of physiological, social and spiritual needs; followed by: Meeting with nurses who used a model for person-centred palliative care. The model is called the six S's and consists of the six S key words; self-image, self-determination, social relationships, symptom control, synthesis and surrender and continued through Regular meetings about the patients' conditions within the team twice a month; and finally: Between the meetings brief discussions took place out between team members at the unit and information was shared by the documentation in medical records and phone calls. Control Group: Usual care was provided mainly by general practitioners or doctors and/or the nurse-led heart failure clinic at the Medicine-Geriatrics department.
Funding	Swedish Association of Local Authorities and regions, the Swedish Heart and Lung Association, and the Ronnbaret Foundation Skelleftea Municipality.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY PALLIATIVE CARE versus STANDARD PALLAITIVE CARE. Protocol outcome 1: Quality of Life. - Actual outcome: Euro QoL-5D: health-related quality of life at 6 months (p=0.10). Intervention group: 60.4 +/- 20.6. Control group: 52.3 +/- 23.2. Risk of bias: All domain - high, Selection - High, Blinding - High, Incomplete outcome data - low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness Protocol outcome 2: Admissions. - Actual outcome: Mean number of hospitalisations (p=0.009). Intervention group: 0.42 +/- 0.60 (total number 15). Control group: 1.47 +/- 1.81 (total number 53). Risk of bias: All domain - high, Selection - High, Blinding - High, Incomplete outcome data - low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness Protocol outcome 3: Length of stay. - Actual outcome: Mean number of hospital days (p=0.011). Intervention group: 2.9 +/- 8.3. Control group: 8.5 +/-12.4. Risk of bias: All domain - high, Selection - High, Blinding - High, Incomplete outcome data - low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not	Mortality, Emergency department visits, readmissions, GP presentations, avoidable adverse events, patient and/or carer satisfaction.

Study	BRANNSTROM 2014[35]
reported by the study	

Study	Holdsworth 2015[132]
Study type	Quasi-RCT.
Number of studies (number of participants)	1 (n=953).
Countries and setting	Conducted in United Kingdom; setting: region covered by one hospice organisation encompassing 3 contiguous areas each served by a hospice (each hospice had an inpatient ward with 16 beds, an outreach service and a day hospice).
Line of therapy	Not applicable.
Duration of study	Intervention time: 18 months.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall: n/a.
Subgroup analysis within study	Not applicable: n/a.
Inclusion criteria	All patients referred to the hospice who died and had a recorded preferred place of death.
Exclusion criteria	Not reported.
Recruitment/selection of patients	Consecutive patients referred to the hospice during the study period meeting the inclusion criteria.
Age, gender and ethnicity	Age - Mean (SD): intervention: 75.09(11.52), control: 74.06(11.96). Gender (M:F): 548:405. Ethnicity: not reported.
Further population details	1. Frail elderly: Not applicable/Not stated/Unclear.
Indirectness of population	No indirectness: n/a.
Interventions	(n=688) Intervention 1: Community based palliative care - enhanced palliative care in community. rapid response service staffed by health care assistants who were available by referral day and night at 4 hour notice to support patients dying at home or in crisis and wanting to avoid hospital admission, service supported by hospice multidisciplinary team. Duration: 18 months, 12 months, 6 months. Concurrent medication/care: not reported. (n=265) Intervention 2: Community based palliative care - standard palliative care in community. Each hospice had an inpatient ward with 16 beds, an outreach service and a day hospice. Duration: 6 months, 12 months. Concurrent medication/care: not reported.
Funding	Academic or government funding (commissioned by the National Institute for Health Research, sponsored by East Kent Hospitals University NHS Foundation Trust, service funded by NHS Kent and Medway).

Study	Holdsworth 2015[132]
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: ENHANCED PALLIATIVE CARE IN COMMUNITY versus STANDARD PALLIATIVE CARE IN COMMUNITY. Protocol outcome 1: Place of death during study period. - Actual outcome: achieving preferred place of death during study period; OR 0.949 (95%CI 0.78 to 1.142) Comments: adjusted for preferred place of death, occupance status and time in the study; ; Risk of bias: All domain - High, Selection - Low, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Quality of life during study period; Avoidable adverse events during study period; Patient and/or carer satisfaction during study period; Number of presentations to Emergency Department during study period; Number of admissions to hospital after 28 days of first admission; Number of GP presentations during study period; Readmission up to 30 days; Length of stay in programme during study period; Length of hospital stay during study period.

Study	Gomes 2013 [106]
Study type	Systematic review – Effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers
Number of studies (number of participants)	23 studies, 16 RCTs (n=37,561) included in the Cochrane review. [8 RCTs from this Cochrane review included in our review]
Countries and setting	US, UK, Sweden, Norway, Australia, Canada, Spain. Setting: hospital and home
Duration of study	As reported in the studies
Stratum	Overall
Subgroup analysis within study	-
Inclusion criteria	Participants aged 18 years or older in receipt of a home palliative care service, their family caregivers, or both. For a study to be included, the majority of patients had to have a severe or advanced disease (malignant or non-malignant), no longer responding to curative/maintenance treatment or symptomatic, or both (e.g. lung/brain tumours or metastatic cancers, chronic obstructive pulmonary disease (COPD)).

Study	**Gomes 2013** [106]			
Exclusion criteria	Interventions that did not directly deliver care to patients or caregivers were excluded. Services delivered in skilled nursing facilities, day care centres, residential homes or prisons were excluded. Evaluations of interventions delivering only one component of palliative care (e.g. pain medication, home parenteral nutrition, home oxygen, home yoga, psychotherapy, social work, bereavement support, respite care, physical exercise, assistance with living wills) were excluded as they do not encompass the holistic nature of palliative care. Studies that compared forms of home palliative care differing in only one component of care (e.g. medication regimen) were also excluded.			
Recruitment/selection of patients	As reported in the included studies			
Age, gender and ethnicity	Approximately equal numbers of male and female patients were included, except in four studies where between 60% and 69% were women and in four studies where more than 60% were men (Gómez-Batiste 2010 with 61% male patients, McCorkle 1989 with 63% male patients, Tramarin 1992 with 79% male patients and Hughes 1992 with largely male veterans). Median/mean age ranged from 53 to 77 years, except in Tramarin 1992 (approximate median was 30 years old).			
Further population details	Fourteen studies were exclusively conducted with patients with advanced cancer or their caregivers, or both. Six studies included both cancer and non-cancer conditions (in three studies the majority of patients had cancer). Three studies included only non-cancer conditions: multiple sclerosis (MS) in one study (Higginson 2009), congestive heart failure (CHF) and COPD in one study (Rabow 2004) and AIDS in one study (Tramarin 1992).			
Extra comments	-			
Indirectness of population	No indirectness			
Interventions	Intervention- Home palliative care-Intervention services were mostly based in hospices, palliative care departments within hospitals or in other hospital departments; seven were attached to units with beds and four provided bed access to intervention patients when needed., Reinforced home palliative care- Control: usual care – varied across studies.			
Funding	Not stated			
Study	Intervention and comparison	Population	Outcomes	Comments
Bakitas 2009[19] US RCT	Home palliative care vs. usual care “Project ENABLE II” Type: specialist palliative care	Number of patients (randomised): 322 (161 intervention and 161 control)	Quality of life Risk of bias (assessed in Cochrane review): selection	

Study	Gomes 2013 [106]			
	Service base: palliative care programme, Dartmouth-Hitchcock Medical Center Team: certified palliative care physician, advanced practice nurses with high speciality training in palliative care (acting as case managers with caseload balanced by diagnosis and gender); staff training (12-20 hours on problem solving and group medical appointments provided by study psychologist; methods included didactic presentations, written treatment manuals, role-playing with feedback - training materials available from authors); biweekly reviews of audio-taped educational sessions and feedback on difficult patient management issues	Diseases (outcome sample): cancer (279): gastrointestinal (119), lung (93), genitourinary (37), breast (30) Patient characteristics (outcome sample): mean age 65.4 years intervention, 65.2 years. control; 39.8% female	bias- unclear risk; blinding-high risk; outcome measurement- low risk; protection against contamination- high risk	
Brumley 2007[39] US RCT	Home palliative care vs. usual care "In-Home Palliative Care - IHPC" Type: intermediate palliative care Service base: 2 non-profit Kaiser Permanente Group HMOs - 1) Hawaii: 18 medical offices of 317 medical group physicians providing all outpatient care and most inpatient care (with internal home health agency, contracts with	Number of patients (randomised): 310 (155 intervention and 155 control) Diseases: cancer (138), CHF (97), COPD (62) Patient characteristics: mean age 73.8 years; 49% female	Death at home, Patient satisfaction with care Risk of bias (assessed in Cochrane review): selection bias- low risk; blinding-unclear risk; outcome measurement- unclear risk; protection against contamination- high risk	

Study	Gomes 2013 [106]			
	external providers for hospice care only); 2) Colorado: 16 ambulatory medical offices of more than 500 physicians representing all medical specialities and sub-specialities (contracts with external providers for ED, hospital, home health and hospice care) Team: physician, nurse, social worker with support from others (spiritual counsellor/ chaplain, bereavement co-ordinator, home health aide, pharmacist, dietician, volunteer, physiotherapist, occupational therapist, speech therapist)			
Jordhoy 2000[147] Cluster RCT Norway	Home palliative care vs. usual care Type: specialist palliative care Service base: palliative medicine unit at University Hospital of Trondheim (12 beds, outpatient clinic and consultant team in and out of hospital) Team: 1 full-time physician; 2 palliative care nurses, social worker, priest, nutritionist, part-time physiotherapist; staff worked daytime hours only; weekly meetings	Number of patients (randomised): 434 (235 intervention and 199 control) Diseases: cancer (434): gastrointestinal (181), lung (52), breast and female genitals (67), prostate and male genitals (41), kidney or vesica (29), lymphomas (13), skin (12), others (39) Patient characteristics: median age 70 years intervention, 69 years control; 47%female	Quality of life, Death at home, Death in hospital, mortality, Caregiver satisfaction with care Risk of bias (assessed in Cochrane review): selection bias- unclear risk; blinding- unclear risk; outcome measurement- unclear risk; protection against contamination- low risk	

Study	Gomes 2013 [106]			
	Responsibility: consultant nurse was the care co-ordinator; primary family physician and community nurse maintained as main professional carers			
Zimmer1985[290] RCT USA	Home palliative care vs. usual care "Home Health Care Team" Type: intermediate palliative care Service base: ambulatory care unit at University of Rochester Medical Center Team: physician-led multi-professional team with geriatric nurse practitioner (Masters' medical nurse practitioner) and social worker; weekly team conferences to assure coordination of patient care Responsibility: 1 team member designated as primary provider in care plan following initial interdisciplinary assessment	Number of patients (randomised): 167 (85 intervention and 82 control); (baseline): 158 (82 intervention and 76 control) ; Diseases (overall baseline sample): cancer (21%intervention, 17%control), stroke (12% intervention, 17% control), arthritis/rheumatism (9% intervention, 12% control), others, all below 10% (59% intervention, 54% control) Patient characteristics: mean age 76 years, median age 77 years; 68% female	Death at home Risk of bias (assessed in Cochrane review): selection bias- unclear risk; blinding- unclear risk; outcome measurement- unclear risk; protection against contamination- high risk	
McCorkle 1989[177] RCT USA	Home palliative care vs. usual care (2 control groups) "Specialized Oncology Home Care Program - OHC"	Number of patients (randomised): 166; (outcome sample): 78; 24 intervention, 27 control1, 26 control2 (group for 1 patient not stated)	Admissions and length of stay. Risk of bias (assessed in Cochrane review): selection bias- unclear risk; blinding- unclear risk; outcome	

Study	Gomes 2013 [106]			
	Type: intermediate palliative care Service base: not stated Team: nurses with masters' degrees and trained to give personalised clinical care to persons with advanced cancer and their families; advanced training on knowledge of symptom management, cancer treatments, pain management, physical assessment, psychosocial assessment, grief and mourning theory, communications systems, community resources and agencies, systems analysis, self -support, professional role development, pathophysiology of death, and research theory and methodology; specialised services by other disciplines called upon as needed Responsibility: nurse was care co-ordinator (not clear if patient's primary physician remained in charge) **Control**: control1 (HC) consisted of care provided by an interdisciplinary team (RNs, physiotherapists, home health aides, medical social work,	Diseases: cancer (166); all primary site lung Patient characteristics: aged 18-89 years; 37% female	measurement- low risk; protection against contamination- high risk	

Study	Gomes 2013 [106]			
	occupational therapist and a speech pathologist); upon referral, the patient was assigned to team members appropriate to meet the patient's needs as identified on referral and approved by the patient's physician.			
Grande 1999[110] RCT UK	Home palliative care versus usual care "Cambridge Hospital At Home - HAH - for palliative care" Type: intermediate palliative care Service base:MarieCurie nursing service and inpatient hospice, under the same palliative care manager (ran separately with separate funding). Location appeared to ease informal service cooperation and access to specialist medical advice Team: 6 qualified nurses (2 ENs and 4 RGNs), 2 nursing auxiliaries and 1 co-ordinator (RGN); most with Marie Curie Nursing experience (i.e. non-profit nursing service supporting people in their last months of life spending several hours at a time in their home with nursing care and emotional support, often overnight); extra	Number of patients (randomised): 241 Diseases (outcome sample of 229 patients): cancer (198), non-cancer (31) Patient characteristics: mean age 72.1 years intervention, 72.6 years control; 50.2% female;	Mortality Risk of bias (assessed in Cochrane review): selection bias- low risk; blinding-unclear risk; outcome measurement-unclear risk; protection against contamination- high risk	

Study	Gomes 2013 [106]			
	help from agency nurses; service resourced to accommodate 100 people per year			
Aiken2006[5] RCT USA	Home palliative care vs. usual care "Phoenix Care intervention" Type: intermediate palliative care Service base: Hospice of the Valley - largest community-based hospice care provider in the US Team: physician (medical director), 2 or 3 nurses (RN case managers with 30-35 patient caseload), half-time social worker, half-time pastoral counsellor; staff training (2 weeks on FairCare communication model and other monthly training) Responsibility: team's nurse (with primary care physician and HMO case manager); nurse went with patient to physician visits to discuss progress and care options	Number of patients (randomised): 192 (101 intervention and 91 control) Diseases: CHF (130), COPD (62) Patient characteristics: "average" age 68.5 years; 64% female	Quality of life Risk of bias (assessed in Cochrane review): selection bias- low risk; blinding-unclear risk; outcome measurement-unclear risk; protection against contamination- high risk	
Hughes1992[135] RCT USA	Home palliative care vs. usual care "Hospital based home care (HBHC)" Type: intermediate palliative care Service base: Edward Hines Jr. VA Hospital (department not stated)	Number of patients (randomised): 175 (87 intervention and 88 control) Diseases (baseline sample): cancer (80%of intervention, 73%of control), genitourinary system (5% of intervention, 4%	Survival, patient and carer satisfaction Risk of bias (assessed in Cochrane review): selection bias- low risk; blinding-unclear risk; outcome measurement-unclear risk; protection against	

Study	Gomes 2013 [106]			
	Team: physician-led interdisciplinary team including nurses, social worker, physiotherapist, dietician, health technicians (physician also managed hospital's inpatient intermediate care unit thus maximised potential for continuity of care between home and hospital); team meetings	of control), other respiratory (3% of intervention, 4% of control), other (12% of intervention, 19% of control) Patient characteristics: mean age 65.73 years intervention, 63.26 years control; gender distribution not given but stated "predominantly male veterans"	contamination- high risk	

Study	RADWANY 2014[210]
Study type	RCT.
Number of participants	Intervention group= 40. Control group= 40 (n=80).
Countries and setting	Ohio, USA.
Duration of study	-
Stratum	Overall.
Subgroup analysis within study	-
Inclusion criteria	All new PASSPORT enrolees >60 years old. Passed a mental status screening (the Mental Status Questionnaire). Had 1 of the following: congestive heart failure; chronic obstructive pulmonary disease and on home oxygen; diabetes with renal disease, neuropathy, visual problems, or coronary artery disease; end stage liver disease or cirrhosis; cancer (active, not history of) except skin cancer; renal disease and actively receiving dialysis; Parkinson's disease stage 3 and 4; or pulmonary hypertension.

Study	RADWANY 2014[210]
	These criteria were established by expert consensus and were chosen so that the intervention was targeted at those whose illness severity made it more likely that they would benefit from geriatrics/palliative care intervention.
Exclusion criteria	Active alcoholics (that is, those who drink >2 drinks per day on average). Illegal substance users were excluded. Clients who have schizophrenia or are psychotic. Consumers already enrolled in hospice. These consumers were excluded because the authors' previous care management trials have shown that these other conditions tend to dominate the person's life and detract from their ability to participate in self-management activities. Consumers who could not pass the Mental Status Questionnaire were excluded because the intervention relies heavily on chronic illness self-management and the ability of an individual to make decisions about advance acre wishes.
Recruitment/selection of patients	-
Age, gender and ethnicity	Age: Mean: 69.5 years. Gender: Females: 29/40. Ethnicity: White: 34/40.
Further population details	-
Extra comments	-
Indirectness of population	No indirectness.
Interventions	Intervention Group: Ohio's community-based, long term care Medicaid waiver programme (known as PASSPORT), based on the Promoting Effective Advance Care for Elders (PEACE); it is an in-home geriatric/palliative care interdisciplinary care management intervention for improving measures of utilisation, quality of care and quality of life. Consumers were randomly assigned to specifically trained PASSPORT care managers or to usual PASSPORT care. Within 3 weeks of enrolment into PASSPORT, consumers in the intervention group received the first of 2 in-home geriatric/palliative care biopsychosocial needs assessment. The primary care physician was informed by letter that his or her patient was in the study and asked whether the patient had few or many treatment options and whether the health care team was aware of the patients' wishes. This helped the team get a more realistic of the patients' medical status from the start. The second visit occurred within approximately 2 weeks of the first and concentrated on consumer goal setting. Within approximately 2 weeks of the second home visit, there was an interdisciplinary team meeting to review the findings of the care

Study	RADWANY 2014[210]
	manager's assessment. The team developed individualise, evidence- based care plans based on standardised protocols that were developed for this study and derived from an extensive literature review. A copy of this care plan was sent to the consumer's primary care physician. Once the care plan was agreed upon by the all, PASSPORT care manager made another home visit to implement the plan and to teach, activate and coach the consumer and or caregiver. This included teaching disease and symptom management, identifying symptom management needs, developing an emergency response plan, addressing functional needs, teaching caregivers about disease/symptom management, assisting with access to community resources, referring to a counsellor as needed for psychological support, assessing/assisting with spiritual needs, addressing unmet medical needs, reviewing medications, facilitating client/primary care physician/family communication and completing legal documents recognised by the State of Ohio (that is, Do Not Resuscitate and living will forms). Consumers were provided with written self-management materials. Caregiver's needs were also assessed, when appropriate, using informal open-ended questions, and community supports were mobilised to meet identified needs. Consumers had access to either the care manager or a hospital-based team member 24 hours per day because acute exacerbations might otherwise prompt consumers to seek help in the emergency department. The PASSPORT care manager followed up with the consumers by phone as needed, but at least monthly, for 12 months to determine whether the goals of care had changed. Control Group: Consumers randomised to the usual care received usual PASSPORT care, which follows more of a psychosocial rather than a biopsychosocial model. A letter was sent to the primary care physician informing him or her that the consumer was enrolled in the study. Consumers also received mailed palliative care educational information every month in an attempt to mask group assignment.
Funding	National Palliative Care Research Centre and the Summa Foundation.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: ENHANCED COMMUNITY PALLIATIVE CARE versus STANDARD COMMUNITY PALLAITIVE CARE Protocol outcome 1: Emergency department visits. - Actual outcome: % with ED visits. Intervention group: 25%. Control group: 25% (p=1.0). Risk of bias: All domain - High, Selection - Low, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - low, Crossover - Low; Indirectness of outcome: No indirectness Protocol outcome 2: Quality of Life. - Actual outcome: Quality at End of Life Scale. 12 month mean difference between groups: -3.889 (95% CI: -10.722, 2.944). Risk of bias: All domain - High, Selection - Low, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - low, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not	Mortality, readmissions, GP presentations, avoidable adverse events, patient and/or carer satisfaction, length of stay, admissions.

Study	RADWANY 2014[210]
reported by the study	

Study	Shepperd 2011[242]
Study type	Systematic review – **Hospital at home: home-based end of life care**
Number of studies (number of participants)	4 RCTs (n=823) included in the Cochrane review.
Countries and setting	USA, Norway and UK. Setting: hospital and home
Duration of study	Duration of care – 6-24 months
Stratum	Overall
Subgroup analysis within study	-
Inclusion criteria	Patients, aged 18 years and over, who are at the end of life and require terminal care. Studies comparing end of life care at home with inpatient hospital or hospice care are included.
Exclusion criteria	Controlled before after studies (CBA) with fewer than two intervention sites and two control sties. We also excluded interrupted time series without a clearly defined point in time when the intervention occurred and at least three data points before and three after the intervention.
Recruitment/selection of patients	As reported in the studies
Age, gender and ethnicity	The mean age of participants ranged from 63 years to 74 years old, with numbers of men versus women being roughly equal
Further population details	The diagnosis of trial participants varied. In one trial, conducted in the US, 21% of participants had a diagnosis of late-stage chronic obstructive pulmonary disease, 33% of heart failure and 47% of cancer, with an estimated life expectancy of 12 months or less (Brumley 2007). The most common diagnosis in the second trial conducted in the US was cancer with 73%in the intervention group and 80%in the control group having this diagnosis (Hughes 1992). In Grande 2000, conducted in the UK, 86% of participants had a diagnosis of cancer and the survival from referral was a median of 11 days. The Jordhoy 2000 trial conducted in Norway recruited participants with incurable malignant diseases, excluding those with haematological malignant disease other than lymphoma.
Extra comments	
Indirectness of population	No indirectness
Interventions	Studies comparing end of life care at home with inpatient hospital or hospice care were included. The intervention in three trials was multidisciplinary care, which included specialist palliative care nurses, family physicians, palliative care consultants, physiotherapists,

Study	**Shepperd 2011[242]**			
	occupational therapists, nutritionists and social care workers. In one trial the focus of the intervention was on nursing care, which was only available for the last two weeks of life. In three trials, nursing care was available for 24 hours if required; in the trial conducted in Norway the smallest urban district did not have access to 24-hour care. Patients received end of life care at home for a maximum of 14 days in the trial by Grande 2000 and for an average of 68 days in the trial by Hughes 1992. Duration of care was not reported in the other two trials (Brumley 2007; Jordhoy 2000).			
Funding	Not stated			
Study	Intervention and comparison	Population	Outcomes	Comments
Brumley 2007[39] RCT USA	Multi-disciplinary team which included a physiotherapist, occupational therapist, speech therapist, dietician, social worker, bereavement co-ordinator, counsellor, chaplain, pharmacist, palliative care physician and a specialist nurse trained in symptom control and bio-psychosocial interventions. The specialist nurse provided education, discussed goals of care and the expected course of the disease and expected outcomes as well as the likelihood of success of various treatment and interventions. 24-hour care was available if required The service was co-ordinated by a core team of physician, specialist nurse and social worker who managed care across settings and provided assessment, evaluation, planning, care delivery, follow up, monitoring and continuous reassessment of care.	Age: Mean age 74 year SD 12.0 Sex: 51% men (n = 151) 49% women (n = 146) Late-stage chronic obstructive pulmonary disease (COPD) (21%); congestive heart failure (CHF) (33%) or cancer with a life-expectancy of 12 months or less (47%); participants visited the emergency department or hospital at least once within the previous year; and scored 70% or less on the Palliative Performance Scale.	number of emergency department visits, hospital days, Risk of bias (assessed in Cochrane review) Selection - Low, Blinding - high, Incomplete outcome data - high, Outcome reporting - Low, other-low	

Study	Shepperd 2011[242]			
	Control care: followed Medicare guidelines, services included home health services, acute care services, primary care services and hospice care			
Grande 2000[111] RCT UK	Referred from primary or secondary care 6 qualified nurses, 2 nursing aides, a co-ordinator (RGN level), agency staff providing 24-hour care if required for a maximum of 2 weeks, most had Marie Curie experience. Intervention patients could also access standard care Control group received standard care: hospital care or hospice care, with input from the GP and district nurses, Marie Curie nursing, Macmillan nursing, social services and private nursing	Requiring terminal care: treatment = 186 (87% with a diagnosis of cancer); control = 43 (86% with a diagnosis of cancer) Mean age: treatment 72 (SD 11); control 73 (SD 14) Male 50%, female 54%	GP visits, place of death and admission to hospital Risk of bias (assessed in Cochrane review) Selection - Low, Blinding - high, Incomplete outcome data - high, Outcome reporting - Low, other-low	
Hughes 1992[135] RCT USA	Hospital at home Type of service: physician-led Skill mix and size of team: nurses; 1 physiotherapist; 1 dietitian; 1 social worker; health technicians Control group: inpatient hospital care	Patients who had an estimated life expectancy of < 6 months were recruited. Patients requiring terminal care (73% in the intervention group had a diagnosis of cancer and 80% in the control group). Number of patients in 3 years: Treatment = 83 Control = 85	Mortality, Patient satisfaction, Readmission Risk of bias (assessed in Cochrane review) Selection – unclear risk, Blinding - high, Incomplete outcome data - high, Outcome reporting - Low, other-low	Follow up: 1 month 6 months

Study	Shepperd 2011[242]			
		Average age: Treatment: = 65.7 years Control = 63.3 years		
Jordhoy 2000[147] RCT Norway	A hospital-based intervention co-ordinated by the Palliative Medicine Unit with community outreach. The intervention had been operational for 2 years and 8 months. The Palliative Medicine Unit provided supervision and advice and joined visits at home. The community nursing office determined the type and amount of home care and nursing home care offered Multidisciplinary, involving palliative care team, community team, patients and families Control group: conventional care is shared among the hospital departments and the Community	Patients with incurable malignant disease, life-expectancy of 2 to 9 months (estimated at referral) and age older than 18 years. Patients with haematological malignant disorders other than lymphomas were excluded from the trial Median age T = 70 years (range 38 to 90) C = 69 years (range 37 to 93) Sex (number male): intervention= 132/235 (56%) control-98/199 (49%)	place of death, admissions to hospital, health-related quality of life, admission to nursing home, survival Risk of bias (assessed in Cochrane review) Selection – high risk, Blinding - high, Incomplete outcome data - high, Outcome reporting - Low, other-low	Follow up of maximum 2 years

Study	Uitdehaag 2014[263]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	1 (n=138).
Countries and setting	Conducted in Netherlands; setting: patients recruited from Departments of oncology, gastroenterology and surgery of a Medical Centre in The Netherlands.
Line of therapy	Not applicable.
Duration of study	Intervention time: 13 months.

Study	Uitdehaag 2014[263]
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall: n/a.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Multidisciplinary panel concluded that a curative modality of disease modifying anti-tumour therapy was not or no longer possible.
Exclusion criteria	Admitted to a nursing home or hospice, could not be followed by a physician at the outpatient clinic, unable to understand Dutch or complete questionnaires.
Recruitment/selection of patients	Consecutive patients meeting the inclusion criteria during the study period.
Age, gender and ethnicity	Age - Mean (SD): intervention: 67(10.4), control: 64(12). Gender (M:F): 40:26. Ethnicity: not reported.
Further population details	1. Frail elderly: Not applicable/Not stated/Unclear.
Indirectness of population	No indirectness: n/a.
Interventions	(n=70) Intervention 1: Community based palliative care - standard palliative care in community. Nurse-led follow up - home visits from a specialist nurse with >10 years' experience in oncology care at 14 days then monthly up to 13 months or death, focusing mainly on relief of suffering and complaints, nurses had regular contact with the attending physician and patients' GP, telephone contact if necessary. Duration: 13 months or death. Concurrent medication/care: in case of symptoms and a subsequent palliative treatment, visits were frequently made to evaluate the effect of this treatment on symptom burden. (n=68) Intervention 2: Usual Care. conventional medical follow up - scheduled appointments at the outpatient clinic at one months and then every two months up to 13 months or death, appointments by telephone if patients unable to attend. Duration: 13 months or death. Concurrent medication/care: in case of symptoms and a subsequent palliative treatment, visits were frequently made to evaluate the effect of this treatment on symptom burden.
Funding	Other (Care Research Erasmus MC, Rotterdam).
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STANDARD PALLIATIVE CARE IN COMMUNITY versus USUAL CARE. Protocol outcome 1: Patient and/or carer satisfaction during study period. - Actual outcome: patient overall satisfaction at 4 months; Group 1: mean 8.5 (SD 1.03); n=21, Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness- Actual outcome: relatives overall satisfaction at 4 months; Group 1: mean 8.5 (SD 0.98); n=21, Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Quality of life during study period; Place of death during study period; Avoidable adverse events during study period;

Study	Uitdehaag 2014[263]
	Number of presentations to Emergency Department during study period; Number of admissions to hospital after 28 days of first admission; Number of GP presentations during study period; Readmission up to 30 days; Length of stay in programme during study period; Length of hospital stay during study period.

Study	Wong 2012B[278]
Study type	Systematic review – Home care by outreach nursing for chronic obstructive pulmonary disease
Number of studies (number of participants)	9 RCTs (n=1498 participants) included in the Cochrane review. Only one study Aiken 2006 [5] from the Cochrane review included in this review
Countries and setting	Conducted in the United Kingdom, Canada, USA and Australia
Duration of study	Databases were searched through to November 2011
Stratum	Overall
Subgroup analysis within study	-
Inclusion criteria	The authors included only randomised controlled trials in which the home visits were provided by a respiratory nurse or similar respiratory health worker to patients with COPD. Only participants with chronic obstructive pulmonary disease, as defined according to pulmonary function test findings, consistent with British Thoracic Society criteria (BTS 1997) were included. Included were interventions that comprised home visits by a respiratory nurse or similar respiratory health worker, to facilitate health care, provide education, provide social support, identify respiratory deteriorations promptly and reinforce correct technique with inhaler therapy. Eligible control groups were patients who received routine care, without respiratory nurse/health worker input. Studies with co-interventions, with subgroup analysis as necessary, were considered. Only trials with at least 3 months of follow-up were included as this was considered an appropriate minimum duration of follow-up to observe any clinically significant benefits of the intervention.
Exclusion criteria	Forty-eight papers were excluded for the following reasons: predominantly concerned with physical rehabilitation or exercise (n=19), not supervised by a nurse at home (n=15), not a RCT (n=11), data previously reported (n=2) and the intervention was of too short a duration (n=1).
Recruitment/selection of patients	The authors included only randomised controlled trials in which the home visits were provided by a respiratory nurse or similar respiratory health worker to patients with COPD. Only participants with chronic obstructive pulmonary disease, as defined according to pulmonary function test findings, consistent with British Thoracic Society criteria (BTS 1997) were included. Included were interventions that comprised home visits by a respiratory nurse or similar respiratory health worker, to facilitate health care, provide education, provide social support, identify respiratory deteriorations promptly and reinforce correct technique with inhaler

Study	Wong 2012B[278]			
	therapy. Eligible control groups were patients who received routine care, without respiratory nurse/health worker input. Studies with co-interventions, with subgroup analysis as necessary, were considered. Only trials with at least 3 months of follow-up were included as this was considered an appropriate minimum duration of follow-up to observe any clinically significant benefits of the intervention.			
Age, gender and ethnicity	Adult patients with COPD.			
Further population details	No specific details provided for sample overall			
Extra comments	-			
Indirectness of population	No indirectness			
Interventions	Included were interventions that comprised home visits by a respiratory nurse or similar respiratory health worker, to facilitate health care, provide education, provide social support, identify respiratory deteriorations promptly and reinforce correct technique with inhaler therapy. Eligible control groups were patients who received routine care, without respiratory nurse/health worker input. Studies with co-interventions, with subgroup analysis as necessary, were considered. Only trials with at least 3 months of follow-up were included as this was considered an appropriate minimum duration of follow-up to observe any clinically significant benefits of the intervention. In brief, all studies investigated the effects of a supervised, home-based intervention in patients with COPD using a parallel group RCT design. The home-based intervention represented a respiratory nurse providing care, education and support in a patient's home. The effects of this was assessed via a variety of outcomes, including patient based outcomes (lung function, exercise testing, HRQL and mortality), health system based outcomes (medical service utilisation), and carer based outcomes (HRQL, satisfaction).			
Funding	Not stated			
Study	Intervention and comparison	Population	Outcomes	Comments
Aiken2006[5] RCT USA	Intervention group (n = 33): Patients in the intervention group received the 'Phoenix Care Program'. This program aimed to increase self-management of illness and knowledge of health-related resources by providing information and education, improve patients' preparedness for end of life by promoting acquisition of appropriate legal documents and discussion of these with significant others, and enhance	N=192 patients with COPD or chronic heart failure who had an estimated two-year life expectancy. Patients with COPD were required to have oxygen saturations of less than 88% on room air, or baseline pO2 less than 55 on room air, and to be on continuous oxygen. Patients were required to exhibit marked limitation of physical functioning, in that any activity resulted in fatigue, palpitation, dyspnoea or	Emergency department visits, hospitalisations and associated length of stay. Risk of bias (assessed in Cochrane review) For subjective outcomes: Risk of bias: Selection - low, Blinding - high, Incomplete outcome data - high, Outcome reporting – unclear risk, other-low	Follow 3 months

Study	Wong 2012B[278]			
	physical and mental functioning by case management and education Control group (n=28): Patients in the control group received usual care provided by managed care organisations, including medication and technical treatment The duration of the intervention period was 9 months.	angina. All patients were required to have exhibited recent exacerbation of their conditions		

Study	Wong 2016[280]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	1 (n=84).
Countries and setting	Conducted in China; setting: 3 hospitals in Hong Kong.
Line of therapy	Not applicable.
Duration of study	Intervention time: 12 weeks.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall: n/a.
Subgroup analysis within study	Not applicable: n/a.
Inclusion criteria	Met 2 indicators identified as end stage heart failure, Cantonese speaking, living within the service area, contactable by phone, referral accepted by palliative care team.
Exclusion criteria	Discharged to institutions, inability to communicate, diagnosed with severe psychiatric disorder, recruited to other programmes.
Recruitment/selection of patients	not reported

Study	Wong 2016[280]
Age, gender and ethnicity	Age - Mean (SD): control 78.4 (10), intervention 78.3 (16.8). Gender (M:F): 43/41. Ethnicity: not reported.
Further population details	1. Frail elderly: Not applicable/Not stated/Unclear.
Indirectness of population	No indirectness.
Interventions	(n=43) Intervention 1: Community based palliative care - standard palliative care in community. Transitional Care Palliative End Stage Heart Failure programme - weekly home visits/telephone calls in the first 4 weeks then monthly follow up provided by nurse case manager supported by multidisciplinary team; assessed patients' environmental, psychosocial, physiological and health behaviour needs and intervened accordingly; goals and agreed care plan. Duration: 12 weeks. Concurrent medication/care: not reported. (n=41) Intervention 2: Usual Care. Control group - 2 placebo calls consisting of light conversation topics unrelated to clinical issues. Duration: 12 weeks. Concurrent medication/care: not related.
Funding	Academic or government funding (Research grants council of the Hong Kong special administrative region)
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STANDARD PALLIATIVE CARE IN COMMUNITY versus USUAL CARE. Protocol outcome 1: Number of admissions to hospital at After 28 days of first admission. - Actual outcome: Readmissions at 84 days; Group 1: 14/43, Group 2: 25/41; Risk of bias: All domain - High, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness Protocol outcome 2: Readmission at 7 and 28 days. - Actual outcome: Readmissions at 28 days; Group 1: 9/43, Group 2: 12/41; Risk of bias: All domain - Low, Selection - Low, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness Protocol outcome 3: Quality of life at 28 days. - Actual outcome: Chronic heart failure questionnaire at 28 days; Group 1: 5.26, Group 2: 4.47; Risk of bias: All domain - Low, Selection - Low, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Place of death during study period; Avoidable adverse events during study period; Patient and/or carer satisfaction during study period; Number of presentations to Emergency Department during study period; Number of GP presentations during study period; Length of stay in programme during study period; Length of hospital stay during study period.

Study	Zimmermann 2014[291]

Study	**Zimmermann 2014[291]**
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	1 (n=461).
Countries and setting	Conducted in Canada; setting: Princess Margaret Cancer Centre, Canada.
Line of therapy	Not applicable.
Duration of study	Intervention time: 4 months.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Overall: n/a.
Subgroup analysis within study	Not applicable.
Inclusion criteria	18 years or older, stage 4 cancer (for breast and prostate cancer refractory to hormonal therapy was an additional criterion; patients with stage 3 cancer and poor clinical prognosis were included at the discretion of the oncologist), estimated survival of 6-24 months (assessed my main oncologist), Eastern Cooperative Oncology Group performance status of 0, 1 or 2 (assessed by main oncologist), completed baseline measures.
Exclusion criteria	Insufficient English literacy to complete baseline questionnaires, inability to pass the cognitive screening test.
Recruitment/selection of patients	Daily screening of participating oncology clinics by research personnel to establish eligibility.
Age, gender and ethnicity	Age - Mean (SD): intervention: 61.2(12), control: 60.2(11.3). Gender (M:F): 200:261. Ethnicity: not reported.
Further population details	1. Frail elderly: Not applicable/Not stated/Unclear.
Indirectness of population	No indirectness: n/a.
Interventions	(n=228) Intervention 1: Community based palliative care - standard palliative care in community. palliative care service - outpatient oncology palliative care clinic, 12 bed palliative care unit, inpatient consultation team, core intervention was outpatient clinic by a palliative care physician and nurse consisting of a comprehensive assessment, routine telephone contact from a palliative care nurse, monthly outpatient palliative care follow up, 24 hour on call service for telephone management of urgent issues, as required arrangement of home nursing, transfer of care to a home palliative care physician and admission to inpatient unit. Duration: 4 months. Concurrent medication/care: not reported. (n=233) Intervention 2: Usual Care. Usual care - no formal intervention, palliative care referral not denied if requested. Duration: 4 months. Concurrent medication/care: not reported.
Funding	Academic or government funding (Canadian Cancer Society and Ontario Ministry of Health and Long Term Care).
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: STANDARD PALLIATIVE CARE IN COMMUNITY versus USUAL CARE.	

Study	Zimmermann 2014[291]
Protocol outcome 1: Quality of life during study period. - Actual outcome: Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being scale at 4 months; MD; 6.44 (95%CI 2.13 to 10.76) 0-156 Top=High is good outcome, Comments: adjusted mean difference between change scores (adjusted for clustering and baseline covariates); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Quality of Life at End of Life scale at 4 months; MD; 3.51 (95%CI 1.33 to 5.68) 21-105 Top=High is good outcome, Comments: adjusted mean difference (adjusted for clustering and baseline covariates); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness Protocol outcome 2: Patient and/or carer satisfaction during study period. - Actual outcome: FAMCARE patient satisfaction with care scale at 4 months; MD; 6 (95%CI 3.94 to 8.05) 16-80 Top=High is good outcome, Comments: adjusted mean difference (adjusted for clustering and baseline covariates); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness - Actual outcome: Cancer Rehabilitation Evaluation System Medical Interaction subscale at 4 months; MD; -0.84 (95%CI -1.91 to 0.22) 0-44 Top=High is poor outcome, Comments: adjusted mean difference (adjusted for clustering and baseline covariates); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness	
Protocol outcomes not reported by the study	Place of death during study period; Avoidable adverse events during study period; Number of presentations to Emergency Department during study period; Number of admissions to hospital after 28 days of first admission; Number of GP presentations during study period; Readmission up to 30 days; Length of stay in programme during study period; Length of hospital stay during study period.