**Individual studies (not reported in Cochrane reviews)**

| Study | Allen 2009[6] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=380) |
| Countries and setting | Conducted in USA; Setting: Summa Health System, a 963-bed community teaching hospital in Akron, Ohio |
| Line of therapy | Not applicable |
| Duration of study | Intervention time: 6 months |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Diagnosis of ischemic stroke, NIH Stroke Scale score ≥1, discharged to home from the acute care hospital, or discharged to home within 8 weeks from a short-term skilled nursing facility (SNF) or acute rehabilitation facility, live within 25 miles, have no other illness that would dominate post-stroke care, speak English, do not have an endarterectomy planned. |
| Exclusion criteria | Not stated |
| Recruitment/selection of patients | Patients were recruited from the acute stroke unit (SU) at Summa Health System, a 963-bed community teaching hospital in Akron, Ohio. On average, the stroke unit treats 560 stroke patients per year and the unit includes a |

| Study | Allen 2009[6] |
|---|---|
| | separate neurological intensive care unit. Subjects were enrolled in the study upon confirmation of ischemic stroke from August 2002-January 2006 |
| Age, gender and ethnicity | Age - Mean (range): 68-69. Gender (M:F): 1:1. Ethnicity: 16% African-American |
| Further population details | 1. Frail elderly: Not applicable/Not stated/Unclear |
| Extra comments | N/A |
| Indirectness of population | No indirectness |
| Interventions | (n=190) Intervention 1: Community matron or Nurse-led care. Recommendations from the National Stroke Association, the American Heart Association, and the National Clinical Guidelines for Stroke from the Royal College of Physicians into its interventions. For the intervention group an Advanced Practice Nurse provided care management to patients. The (Advanced Practice Nurse care manager) APN-CM performed an in-home assessment within 1 week of discharge. Standard education and intervention protocols for stroke and common post-stroke complications were implemented during the home visit. Results of the home assessment were reviewed by an interdisciplinary post-stroke consultation team (PSC-Team). The core PSC-Team included a geriatrician, community-based general internist, stroke Clinical Nurse Specialist, APN-CM, and physical therapist. Extended team members who were available as-needed included a neurologist, psychologist, pharmacist, physiatrist, social worker, physical therapist, speech therapist, occupational therapist, and dietician. The PSC-Team developed patient care plans specific to each problem identified by the APN-CM.. Duration 6 months. Concurrent medication/care: Organized Stroke Unit (SU) care - the SU provides patient-centred care through an interdisciplinary team approach. Team members evaluate each patient's physical and psychosocial needs using standardized assessment tools. The team then develops an individualized evidence-based care plan. Thus, by discharge, all patients should have had all recommended tests performed, an optimized medication regimen in place, and a thorough discharge plan. Enhanced discharge planning - the patient's primary care physician (PCP) received a written patient summary generated by the research nurse that summarized all inpatient findings, the patient's risk factor profile, discharge plans, discharge medications, and all of the baseline assessment data obtained by the research nurse.<br><br>(n=190) Intervention 2: Usual care. After discharge from the acute stroke unit or short-term rehabilitation, control subjects received usual post-discharge care from their primary care physician. There were no assessments by the research team until after 6-month outcomes were measured. PCPs were sent a problem list, risk factor profile, discharge plan of care, and discharge medication list at the time of their patients' discharge from the acute care hospital to home. Control patients also received mailings every 2 months reminding them of their involvement in the study and providing stroke-related patient educational materials.. Duration 6 months. Concurrent medication/care: g |
| Funding | Academic or government funding (Supported by a grant from the National Institute of Neurological Disorders and |

| Study | Allen 2009[6] |
|---|---|
| | Stroke and Summer Hospitals Foundation) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: NURSE-LED POST DISCHARGE CARE versus USUAL CARE FROM PRIMARY CARE PHYSICIAN<br><br>Protocol outcome 1: Quality of life at during study period<br>- Actual outcome: Quality of life (SSQOL) - Group 1: 196; Group 2: 199 reported at 6 months; Risk of bias: All domain - Very high, Selection - High, Blinding - high, Incomplete outcome data - Low, Outcome reporting - High, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness<br>Protocol outcome 2: Length of hospital stay at during study period<br>- Actual outcome: Hospital days (average) - Group 1: 1.6 days (No SD); Group2: 1.4 days; Risk of bias: All domain - Very high, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - High, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness<br>Protocol outcome 3: Mortality at during study period<br>- Actual outcome: Mortality at 6 months; Group 1: 9/190, Group 2: 7/190; Risk of bias: All domain - Very high, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - High, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness | |
| Protocol outcomes not reported by the study | Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of admissions to hospital at After 28 days of first admission; Number of GP presentations at during study period; Readmission up to 30 days; Avoidable adverse events at during study period |

| Study | Boter 2004[13] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=536) |
| Countries and setting | Conducted in Netherlands; Setting: 12 hospitals in the Netherlands |
| Line of therapy | Not applicable |
| Duration of study | Intervention time: 5 months |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Dutch-speaking patients were eligible if they met the following criteria: (1) ≥18 years of age; (2) first admission for a stroke (transient ischemic attack [TIA] or ischemic stroke, primary intracerebral haemorrhage, or subarachnoid haemorrhage [SAH]); (3) hospitalization within 72 hours after onset of symptoms; (4) life expectancy of >1 year; (5) independent or partly dependent on discharge (Rankin grade 0 to 3); (6) discharged home; and (7) residence within 40 |

| Study | Boter 2004[13] |
|---|---|
| | km of the catchment areas served by the hospitals. |
| Exclusion criteria | Not stated. |
| Recruitment/selection of patients | Patients were recruited in 2 university hospitals and 10 general hospitals (including 2 non-academic teaching hospitals) in the districts of Amsterdam and Utrecht, the Netherlands |
| Age, gender and ethnicity | Age - Median (range): 63-66. Gender (M:F): 1/1. Ethnicity: |
| Further population details | 1. Frail elderly: Not applicable/Not stated/Unclear |
| Extra comments | Type of stroke - Ischemic stroke: Intervention group 71%, Control group 71%; Haemorrhagic stroke: Intervention group 10%, Control group 9%; SAH: Intervention group - 19%, Control group 19%. Median total length of stay in days: 13 days for both groups |
| Indirectness of population | No indirectness |
| Interventions | (n=263) Intervention 1: Community matron or Nurse-led care. Thirteen experienced and comprehensively trained stroke nurses applied the outreach care program that consisted of 3 nurse-initiated telephone contacts (1 to 4; 4 to 8; and 18 to 24 weeks after discharge) and a visit to the patients in their homes (10 to 14 weeks after discharge). During all contacts, the nurses used a standardized checklist on risk factors for stroke, consequences of stroke, and unmet needs for stroke services. We developed for carers a similar checklist, with special attention to the consequences the stroke had on the carers' well-being. Nurses supported patients and carers according to their individual needs (for example, by giving information or reassurance) or, when the presented problem required additional care or exceeded the nurses' expertise, advised patients or carers to contact the general practitioner. . Duration 5 months. Concurrent medication/care: N/A<br><br>(n=273) Intervention 2: Usual care. No details provided for standard care. Duration 5 months. Concurrent medication/care: N/A |
| Funding | Other (Grant from the Netherlands Heart Foundation ) |

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: OUTREACH CARE PROGRAM versus STANDARD CARE ONLY

Protocol outcome 1: Patient and/or carer satisfaction at during study period
- Actual outcome: Dissatisfaction with care (home subscale). Theoretical scores range from 0-33 (11 items); arbitrarily, a score <22 is considered to indicate dissatisfaction with stroke care after discharge. at 6 months; Group 1: 115/223, Group 2: 119/247; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 40, Reason: death, declined follow-up; Group 2 Number missing: 26, Reason: death, declined follow-up

| Study | Boter 2004[13] |
|---|---|
| Protocol outcome 2: Number of GP presentations at during study period<br>- Actual outcome: Use of general practitioner services at 6 months; Group 1: 174/236, Group 2: 181/250; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 27, Reason: death, declined follow-up; Group 2 Number missing: 23, Reason: death, declined follow-up | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Mortality at during study period; Avoidable adverse events at during study period; Number of presentations to Emergency Department at during study period; Number of admissions to hospital at After 28 days of first admission; Readmission up to 30 days; Length of hospital stay at during study period |

| Study | Carroll 2007[23] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=247) |
| Countries and setting | Conducted in USA; Setting: Secondary care |
| Line of therapy | Unclear |
| Duration of study | Intervention + follow up: Intervention 12 weeks + follow up to 1 year |
| Method of assessment of guideline condition | Method of assessment/diagnosis not stated: Myocardial infarction (MI) or coronary artery bypass surgery (CABS) |
| Stratum | Admission avoidance |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Diagnosis of MI or coronary artery bypass surgery (CABS); older than 65 years; un-partnered (single, widowed, divorced); able to speak and read English, access to a telephone |
| Exclusion criteria | Not stated |
| Recruitment/selection of patients | Admitted to the cardiac service of 5 academic medical centres on the east and west coast of America |
| Age, gender and ethnicity | Age - Mean (SD): 76.3 (6.3) years. Gender (M:F): 84:163. Ethnicity: 20/247 (8%) minority |
| Further population details | 1. Frail elderly: Not applicable/Not stated/Unclear |
| Extra comments | Unclear if patients having coronary artery bypass surgery were elective or emergency admissions |
| Indirectness of population | -- |
| Interventions | (n=121) Intervention 1: Community based rehabilitative care. Social support and self-efficacy enhancement |

| Study | Carroll 2007[23] |
|---|---|
| | interventions to improve the physical and mental health of un-partnered older cardiac adults. Community-based collaborative intervention. Advanced practice nurse made a home visit and contacted patients over the telephone at least 3 times during the intervention; peer advisor (recruited from cardiac rehabilitation programmes; older than 60 years; history of MI and/or CABS on average 4 years previously; successful completion of cardiac rehabilitation programme; actively participating in a healthy lifestyle) made weekly calls for 12 weeks. The advanced practice nurse supported subjects and peer advisors. Duration 12 weeks. Concurrent medication/care: In addition to usual care<br><br>(n=126) Intervention 2: Usual Care. No further details. Duration 12 weeks. Concurrent medication/care: Not stated |
| Funding | Academic or government funding (National Institute of Nursing Research) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY BASED REHABILITATIVE CARE versus USUAL CARE<br><br>Protocol outcome 1: Length of hospital stay at during study period<br>- Actual outcome for Admission avoidance: Length of stay at Initial admission; Group 1: mean 9.45 Days (SD 4.5); n=121, Group 2: mean 10.1 Days (SD 5.9); n=126; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of admissions to hospital at After 28 days of first admission; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Mortality at during study period |

| Study | COURTNEY 2009[32] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of participants | Intervention group = 64<br>Control group = 64 (n = 128) |
| Countries and setting | Tertiary metropolitan hospital in Australia. |
| Duration of study | Recruitment August 2004 – December 2006. Follow up for 24 weeks. |
| Stratum | Overall |

| Study | COURTNEY 2009[32] |
|---|---|
| Subgroup analysis within study | Quality of Life measure according to the 4 major admission diagnoses (cardiac, respiratory, gastrointestinal and falls). |
| Inclusion criteria | Inclusion criteria were chosen based on previously published research identifying risk factors for readmission.<br>65 years or older and admitted with a medical condition<br>At least 1 risk factor for readmission (aged >75, multiple admissions in previous 6 months, multiple comorbidities, lived alone, lacked social support, poor self-rated health, moderate to severe functional impairment, and history of depression). |
| Exclusion criteria | Patients' ability to participate in the planned intervention (for example,. patients who were unable to walk independently or suffered a cognitive deficit would not be able to safely manage the intervention exercise programme) |
| Recruitment/selection of patients | A sample of 128 participants was recruited within 72 hours of admission to medical wards at a tertiary hospital in Brisbane, Australia. An information package on the study was provided and explained to potential participants, and signed consent was obtained from all participants. Baseline data were collected before randomisation and were thus blinded. After collection of baseline data, the research nurse at the clinical site contacted the project coordinator, who was blinded to baseline data and randomly allocated participants using a computerised randomisation program to the control or intervention group. |
| Age, gender and ethnicity | Age<br>Mean: 78.8<br>Gender<br>(% of F): 62.3% (76/122)<br>Ethnicity: not stated. |
| Further population details | NR |
| Extra comments | - |
| Indirectness of population | No indirectness |
| Interventions | Intervention Group: In addition to usual care, they received an intervention following the 'Older Hospitalised Patients' Discharge Planning and In-home Follow-up Protocol (OHP-DP)', developed by the authors. The protocol commenced within 72 hours of admission and continued within 72 hours of admission and continued throughout hospitalisation, after transfer to home and in home for 6 months. The intervention was modified to the population of older patients who are at known risk of readmission yet still relatively healthy and potentially able to live independently, because it was felt that this group would particularly benefits from a relatively low resource intensive preventative intervention.<br>Within 72 hours of admission, a registered nurse and physiotherapist undertook a comprehensive patient and developed a goal-directed, individualised care plan in consultation with the patient, health professionals, family and caregivers. The care plan included exercise intervention, nursing intervention while participant in the hospital, intervention after discharge. The latter included a nurse home visit within 48 hours of discharge to assess access availability of support, address transitional concerns, provide advice and support and ensure |

| Study | COURTNEY 2009[32] |
|---|---|
| | that the exercise program could be safely undertaken at home. Extra home visits were provided if required. Weekly follow-up telephone calls were provided for 4 weeks, followed by monthly follow up for a further 5 months. The nurse was also available for contact between 9am and 5pm weekdays.<br>Control Group: Participants in the control received the routine care, discharge planning and rehabilitation advice normally provided. If in-home follow-up was necessary, it was organised in the routine manner (for example,. referral to community health services). |
| Funding | Australian Research Council Discovery Project Grant |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME (PRIMARY CARE) versus INPATIENT HOSPITAL CARE<br>Protocol outcome 1: Length of stay<br>- Actual outcome: Length of stay; Intervention group: Mean (SD): 4.6 (+/-2.7);Control group: Mean (SD): 4.7 (+/-3.3); Risk of bias: All domain - low, Selection - low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br><br>Protocol outcome 2: Readmissions<br>- Actual outcome: Emergency hospital readmissions; Intervention group: 22.0% (21 readmissions);Control group: 46.7% (49 readmissions); Risk of bias: All domain - low, Selection - low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br>Protocol outcome 3: GP presentations<br>- Actual outcome: Emergency GP visits; Intervention group: 25.0% (13 emergency GP visits);Control group: 67.3% (86 emergency GP visits); Risk of bias: All domain - low, Selection - low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br>Protocol outcome 4: Quality of Life<br>- Actual outcome: Health-related Quality of Life: Physical Component and Mental Component summary score; Intervention group: Physical: Mean (SD): 43.8 (+/-9.4); Mental: Mean (SD): 59.4 (+/-5.1); Control group: Physical: Mean (SD): 26.0 (+/-9.9); Mental: Mean (SD): 48.3 (+/-7.7); Risk of bias: All domain - low, Selection - low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br>. | |
| Protocol outcomes not reported by the study | Mortality, avoidable adverse events, patient and/or carer satisfaction, length of stay, number of avoidable admissions |

| Study | Duffy 2010[48] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |

| Study | Duffy 2010[48] |
|---|---|
| Number of studies (number of participants) | 1 (n=32) |
| Countries and setting | Conducted in USA; Setting: Community |
| Line of therapy | Unclear |
| Duration of study | Intervention + follow up: Intervention 6 weeks + follow up to 60 days |
| Method of assessment of guideline condition | Method of assessment/diagnosis not stated |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | - |
| Exclusion criteria | - |
| Recruitment/selection of patients | 3 accredited home health agencies in suburban Maryland |
| Age, gender and ethnicity | Age - Mean (SD): 81.0 (7.2) years. Gender (M:F): Define. Ethnicity: >35% minority groups |
| Further population details | 1. Frail elderly: Frail elderly (>65 referred to home health agencies). |
| Indirectness of population | No indirectness |
| Interventions | (n=15) Intervention 1: Community matron or Nurse-led care. Home health nurses; combination of telephone and in-home visits based on patient's need for nursing services; same nurse assigned during the episode of care (60 days) to cultivate and sustain the caring patient-nurse relationship. Mutually agreeable schedule of telephone interactions established; patient provided with weight scale and symptom log. Nurse used structured telephone script focused on symptom recognition and reporting, education and emotional support to guide telephone interactions. More nursing time spent in first 2 weeks, then gradually decreasing nursing time.. Duration 6 weeks. Concurrent medication/care: Not stated<br><br>(n=17) Intervention 2: Usual Care. Home health nurses providing usual care (no further details). Duration 6 weeks. Concurrent medication/care: Not stated |
| Funding | Academic or government funding (NINR and the Catholic University of America) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Quality of life at during study period<br>- Actual outcome: Quality of life (Living with Heart Failure Questionnaire) at 60 days; Group 1: mean 48 Not stated (SD 30.8); n=15, Group 2: mean 44.3 Not stated (SD 26.8); n=17; Living with Heart Failure Questionnaire Not stated Top=High is poor outcome; Risk of bias: All domain - Very high, Selection - High, Blinding - High, | |

| Study | Duffy 2010[48] |
|---|---|
| Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: ; Group 2 Number missing:<br>Protocol outcome 2: Length of hospital stay at during study period<br>- Actual outcome: Length of stay at 60 days; Group 1: mean 28.6 Days (SD 10.11); n=15, Group 2: mean 26.76 Days (SD 9.58); n=17; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: ; Group 2 Number missing:<br><br>Protocol outcome 3: Patient and/or carer satisfaction at during study period<br>- Actual outcome: Patient satisfaction at 60 days; Group 1: mean 55.27 None (SD 5.55); n=15, Group 2: mean 51.44 None (SD 6.63); n=17; Home Care Client Satisfaction Instrument-Revised Not stated Top=High is good outcome; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ;<br>Protocol outcome 4: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Readmission within 60 days at 60 days; Group 1: 1/15, Group 2: 2/17; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; | |
| Protocol outcomes not reported by the study | Avoidable adverse events at during study period; Number of presentations to Emergency Department at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Mortality at during study period |

| Study | Gagnon 1999[52] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=427) |
| Countries and setting | Conducted in Canada; Setting: Secondary care |
| Line of therapy | Unclear |
| Duration of study | Intervention time: 10 months |
| Method of assessment of guideline condition | Method of assessment/diagnosis not stated |
| Stratum | Admission avoidance |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | ≥70yr, discharged home form hospital ED; living in catchment area of the Cote des Neiges or Rene Cassin community health centres; speaking English or French; passing the Abbreviated Mini-Mental State Exam; requiring assistance with |

| Study | Gagnon 1999[52] |
|---|---|
| | at least 1 activity of daily living or 2 instrumental activities of daily living; probability of 40% or more of admission to hospital defined by Boult assessment tool; frail |
| Exclusion criteria | Admission to ED from long-term care facility or nursing home; participation in other research studies; currently followed by geriatric team of the hospital; unavailable for 2 or more months during the period of the study; having a partner already participating; hospitalisation at time of contact |
| Recruitment/selection of patients | Recruited from June to August 1996 at the Sir Mortimer B. Davis - Jewish General Hospital: Older adults discharged from emergency department in previous 12 months invited. |
| Age, gender and ethnicity | Age - Mean (SD): Intervention: 81.4 (6.2); control 81.8 (6.7) years. Gender (M:F): 179:248. Ethnicity: Not stated |
| Further population details | 1. Frail elderly: Frail elderly (Frail elderly). |
| Extra comments | Boult assessment tool measures self-rated health, admission to hospital in previous 12 months, physician or clinic visit in previous 12 months, ever history of cardiac disease and current availability of caregiver |
| Indirectness of population | No indirectness |
| Interventions | (n=212) Intervention 1: Community matron or Nurse-led care. Nurse case managers expected to integrate care from a health maintenance and promotion perspective; included supporting patient and caregiver during transition related to health status, environmental change and changes in resource needs; coordinated all healthcare providers involved in care; during hospitalisation, patients placed on Promotion of Autonomy Intervention Framework (structured assessments and interventions); baseline data collected during early visits; responding to the strengths and coping abilities of the older person and encouraging maximal autonomy; monthly phone call and home visit every 6 weeks as a minimum; nurses on call to manage issues over the phone and link person with required services. Case managers met with investigative team members in hospital on a weekly basis to discuss complicated cases and ensure uniformity across case managers; medical consultation available from designated hospital geriatrician, geriatricians from community health centres, patient's family physician and staff physicians during hospitalisations. Case managers also members of existing multidisciplinary teams in their respective community health centres, including community-based family physicians, psycho-geriatricians or psychologists, social workers, occupational therapists, physiotherapists and dieticians. Duration 10 months. Concurrent medication/care: Not stated<br><br>(n=215) Intervention 2: Usual Care. Hospital and community services provided separately and varied by different hospital staff involved; whether person known to health centre and varying definitions of "frail" by centre.. Duration 10 months. Concurrent medication/care: Not stated |
| Funding | Funding not stated |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE | |

| Study | Gagnon 1999[52] |
|---|---|
| Protocol outcome 1: Quality of life at during study period<br>- Actual outcome: SF-36 Physical functioning at 10 months; Group 1: mean 46.7 % (SD 29.8); n=153, Group 2: mean 44.1 % (SD 29.9); n=163; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 59; Group 2 Number missing: 52<br>- Actual outcome: SF-36 Role physical at 10 months; Group 1: mean 49 % (SD 44.1); n=151, Group 2: mean 49.1 % (SD 44.3); n=163; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 61; Group 2 Number missing: 52<br>- Actual outcome: SF-36 Bodily pain at 10 months; Group 1: mean 56.2 % (SD 33.1); n=153, Group 2: mean 56.4 % (SD 33.8); n=163; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 59; Group 2 Number missing: 52<br>- Actual outcome: SF-36 General health at 10 months; Group 1: mean 46.2 % (SD 21.6); n=150, Group 2: mean 48.1 % (SD 20); n=161; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 62; Group 2 Number missing: 54<br>- Actual outcome: SF-36 Vitality at 10 months; Group 1: mean 42.9 % (SD 25.7); n=153, Group 2: mean 42.5 % (SD 25); n=162; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 59; Group 2 Number missing: 53<br>- Actual outcome: SF-36 Social functioning at 10 months; Group 1: mean 69.8 % (SD 33.5); n=148, Group 2: mean 68.9 % (SD 34.8); n=159; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 64; Group 2 Number missing: 56<br>- Actual outcome: SF-36 Role emotional at 10 months; Group 1: mean 68.2 % (SD 44); n=153, Group 2: mean 62.1 % (SD 46); n=160; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 59; Group 2 Number missing: 55<br>- Actual outcome: SF-36 Mental health domain at 10 months; Group 1: mean 60 % (SD 24); n=153, Group 2: mean 59.7 % (SD 23.2); n=161; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 59; Group 2 Number missing: 54<br>Protocol outcome 2: Length of hospital stay at during study period<br>- Actual outcome: Hospital length of stay at 10 months; Group 1: mean 13 Days (SD 20.7); n=212, Group 2: mean 11.9 Days (SD 13.1); n=215; Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Protocol outcome 3: Patient and/or carer satisfaction at during study period<br>- Actual outcome: Satisfaction at 10 months; Group 1: mean 25 Not stated (SD 5.2); n=212, Group 2: mean 23.9 Not stated (SD 5.8); n=215; Client Satisfaction Questionnaire (CSQ-8) 8-32 Top=High is good outcome; Risk of bias: All domain - High, Selection - Low, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br>Protocol outcome 4: Number of presentations to Emergency Department at during study period<br>- Actual outcome: Emergency department admissions at 10 months; Group 1: mean 1.2 (SD 2); n=212, Group 2: mean 0.9 (SD 1.2); n=215; Risk of bias: All domain - Low, | |

| Study | Gagnon 1999[52] |
|---|---|
| Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ;<br>Protocol outcome 5: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Hospitalisations at 10 months; Group 1: mean 0.5 (SD 0.8); n=212, Group 2: mean 0.4 (SD 0.7); n=215; Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ;: | |
| Protocol outcomes not reported by the study | Avoidable adverse events at during study period; Number of GP presentations at during study period; up to 30 days; Length of stay in programme at during study period; Mortality at during study period |

| Study | Community nurse follow-up trial: Hansen 1992[58] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=404) |
| Countries and setting | Conducted in Denmark; Setting: Study jointly carried out by personnel of County hospital, community nursing services and the 37 attached general practitioners of Roskilde, Denmark during the period 1st May 1987 to 15th June 1988 |
| Line of therapy | 1st line |
| Duration of study | Intervention + follow up: 1 year follow-up |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Patients aged 75 or more, admitted to the County hospital that are residents within the municipality |
| Exclusion criteria | not mentioned |
| Recruitment/selection of patients | Patients aged 75 or more, admitted to the County hospital that are residents within the municipality were identified through the hospital's ordinary computer system. Patients born on an uneven date were randomised to the intervention, those born on an even date to the control group. Allocation took place on the day of discharge. |
| Age, gender and ethnicity | Age - Other: 45% aged 75-79; 31% aged 80-84; 24% aged 85 or more. Gender (M:F): 2/1. Ethnicity: not mentioned |
| Further population details | 1. Frail elderly: Frail elderly |
| Indirectness of population | No indirectness |
| Interventions | (n=199) Intervention 1: Community matron or Nurse-led care. Patients in the intervention group were visited on the day after the discharge by 1 of the district nurses. 2 weeks later patients were seen by their GP. At her visit the nurse |

| Study | Community nurse follow-up trial: Hansen 1992[58] |
|---|---|
| | evaluated whether the discharge plan had been initiated. She identified and solved problems; altered services if required. The GPs visit was a follow-up of the treatment instituted during hospitalisation. The GP also made socio-medical evaluation of the patient and contacted the hospital or community nursing services if needed.. Duration 1 year follow-up (from day of discharge). Concurrent medication/care: control group received usual care<br><br>(n=205) Intervention 2: Usual Care. After their discharge, the patients were allocated social and medical support according to prevailing criteria. In order to avoid contamination from the intervention group, written information and invitation to participate were not given until after the discharge. . Duration 1 year follow-up (from day of discharge). Concurrent medication/care: not specifically mentioned |
| Funding | Academic or government funding |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Mortality at during study period<br>- Actual outcome: Mortality at 1 year; Group 1: 32/163, Group 2: 43/181; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness; Baseline details: not many details given; Group 1 Number missing: 36, Reason: patients refusing participation, not being visited, or readmission within 14 days; Group 2 Number missing: 24, Reason: patients refusing participation, or readmission within 14 days<br><br>Protocol outcome 2: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Readmissions during the year after first discharge (but admissions according to our definition) at 1 year; Group 1: 75/163, Group 2: 83/181; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: Serious indirectness, Comments: this outcome contains both readmissions and admissions according to our definitions; Baseline details: not many details given; Group 1 Number missing: 36, Reason: patients refusing participation, not being visited, or readmission within 14 days; Group 2 Number missing: 24, Reason: patients refusing participation, or readmission within 14 days | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Length of hospital stay at during study period |

| Study | Harrison 2002[59] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |

| Study | Harrison 2002[59] |
|---|---|
| Number of studies (number of participants) | 1 (n=192) |
| Countries and setting | Conducted in Canada; Setting: Secondary care |
| Line of therapy | Unclear |
| Duration of study | Intervention + follow up: Intervention 2 weeks + follow up to 12 weeks |
| Method of assessment of guideline condition | Method of assessment/diagnosis not stated: Congestive heart failure |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Residing in the regional home care radius (60km); expected to be discharged with home nursing care; English or French speaking; admitted for >24 hours to the nursing units; not cognitively impaired (score <8 on Short Portable Mental Status Exam) |
| Exclusion criteria | Not stated |
| Recruitment/selection of patients | Patients admitted to 2 general medical units of a large urban teaching hospital in Ottawa, Ontario, Canada with a diagnosis of congestive heart failure between June 1996 and January 1998 |
| Age, gender and ethnicity | Age - Mean (range): 76 (33-93) years. Gender (M:F): 105:87. Ethnicity: Not stated |
| Further population details | 1. Frail elderly: Frail elderly (Mean 3.76 comorbidities and 6.36 medications daily). |
| Indirectness of population | No indirectness |
| Interventions | (n=100) Intervention 1: Usual Care. During hospitalisation, staff physicians established the medical regimen; other usual providers included hospital and community primary nurses and home care coordinators. Optimal usual care; timing and number of home nurse visits scheduled to match those received by intervention group (to control for effect of attention alone). Usual care for hospital to home transfer involves completion of medical history, nursing assessment form and, in ideal circumstances within 24 hours of hospital admission, a multidisciplinary discharge plan. Weekly discharge planning meetings identify patient needs. Regional home care coordinator consults with hospital team as required and may meet directly with patients and families. Immediately before discharge, physician completes referral for home care and necessary services and supplies are communicated to the home nursing agency. Usual home nursing care for patients with CHF includes assessment and monitoring, health teaching, provision of direct care (for example,. administration of medication) and managing equipment and treatments. Minimum 2 visits in first 2 weeks after discharge. Duration 2 weeks. Concurrent medication/care: Not stated<br><br>(n=92) Intervention 2: Community matron or Nurse-led care. On admission, patients' chart flagged for primary nurse to follow checklist of activities for Transitional Care (intervention); protocol covered admission to 2 weeks after discharge, after which patient received usual care by community nurses. Standard discharge planning and care + |

| Study | Harrison 2002[59] |
|---|---|
| | comprehensive programme adding supports to improve transfer from hospital to home (outreach from hospital + in reach from community) to address 3 aspects of transition: 1) supportive care for self-management; 2) linkages between hospital and home nurses and patients and 3) balance of care between patient and family and professional providers. Use of a structured, comprehensive, evidence-based protocol for counselling and education for heart failure self-management plus additional and planned linkages to support individuals in taking charge of aspects of their care. Education-counselling protocol entitled Partners in Care for Congestive Heart Failure (PCCHF) developed in response to AHCPR guideline recommendations and comprising 2 clinical components: 1) patient workbook and 2) education map that provided the overall education plan, serving as patient-held documentation tool. . Duration 2 weeks. Concurrent medication/care: Workbook = structured approach for patient education covering the basics of heart function and self-monitoring; what CHF means, management of medications, diet, exercise, stress, support systems, community resources. Pocket for inserting patient-specific information (for example,. medication, dietary handouts). Linkages, additional to usual practice, created among providers and patients including nursing transfer letter to home care nurse detailing clinical status and self-management needs; telephone outreach from hospital nurse within 24 hours of discharge; notification to home care of hospital primary nurse for follow up consul if necessary; patient-held documentation tool. |
| Funding | Academic or government funding (Health Canada, National Health Research and Development Program) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Quality of life at during study period<br>- Actual outcome: Minnesota Living with Heart Failure Questionnaire (MLHFQ) at 12 weeks; Group 1: mean 25.76 Not stated (SD 19.44); n=80, Group 2: mean 38.39 Not stated (SD 18.24); n=77; Minnesota Living with Heart Failure Questionnaire 0-105 Top=High is poor outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: Died/too ill/withdrew/lost to follow up; Group 2 Number missing: 23, Reason: Died/too ill/withdrew/lost to follow up- Actual outcome: SF-36 Physical component at 12 weeks; Group 1: mean 32.05 None (SD 11.81); n=77, Group 2: mean 28.31 None (SD 10); n=74; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 15, Reason: Died/too ill/withdrew/lost to follow up; Group 2 Number missing: 26, Reason: Died/too ill/withdrew/lost to follow up<br>- Actual outcome: SF-36 Mental component at 12 weeks; Group 1: mean 53.94 None (SD 12.32); n=78, Group 2: mean 51.03 None (SD 11.51); n=78; SF-36 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - Low, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 14, Reason: Died/too ill/withdrew/lost to follow up; Group 2 Number missing: 22, Reason: Died/too ill/withdrew/lost to follow up<br>Protocol outcome 2: Length of hospital stay at during study period<br>- Actual outcome: Length of hospital stay at 12 weeks; Group 1: mean 7.59 Days (SD 8.36); n=92, Group 2: mean 7.67 Days (SD 7.99); n=100; Risk of bias: All domain - | |

| Study | Harrison 2002[59] |
|---|---|
| Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br><br>Protocol outcome 3: Number of presentations to Emergency Department at during study period<br>- Actual outcome: At least 1 emergency room visit at 12 weeks; Group 1: 23/80, Group 2: 35/77; Risk of bias: All domain - High, Selection - Low, Blinding - Low, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: Died/too ill/withdrew/lost to follow up; Group 2 Number missing: 23, Reason: Died/too ill/withdrew/lost to follow up<br><br>Protocol outcome 4: Readmission up to 30 days<br>- Actual outcome: Admitted to hospital at 12 weeks; Group 1: 18/80, Group 2: 24/77; Risk of bias: All domain - High, Selection - Low, Blinding - Low, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: Died/too ill/withdrew/lost to follow up; Group 2 Number missing: 23, Reason: Died/too ill/withdrew/lost to follow up | |
| Protocol outcomes not reported by the study | Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of admissions to hospital at After 28 days of first admission; Number of GP presentations at during study period; Length of stay in programme at during study period; Mortality at during study period |

| Study | Hermiz 2002[60] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of participants | 177 |
| Countries and setting | Liverpool Health Service and Macarthur Health Service in outer metropolitan Sydney, Australia |
| Duration of study | 3 months |
| Stratum | |
| Subgroup analysis within study | None |
| Inclusion criteria | Patients aged 30-80 years who attended the hospital emergency department or were admitted to the hospitals with chronic obstructive pulmonary disease between September 1999 and July 2000 |
| Exclusion criteria | Resided outside the region, had insufficient English speaking skills, resident in a nursing home or confused or demented |
| Recruitment/selection of patients | All patients aged 30-80 years who attended the hospital emergency department or were admitted to the hospitals with chronic obstructive pulmonary disease between September 1999 and July 2000 identified from records |
| Age, gender and ethnicity | Mean age: intervention: 67.1, control: 66.7 years; men/women: intervention: 41 (48.8%)/43 (51.2%), control:43 (46.2%)/50 (53.8%); |

| Study | Hermiz 2002[60] |
|---|---|
| | ethnicity not stated |
| Further population details | - |
| Extra comments | - |
| Indirectness of population | No indirectness |
| Interventions | (n=84) Intervention group: 2 home visits by a community nurse. The first, within a week of discharge, included a detailed assessment of the patient's health status and respiratory function. Nurses provided verbal and written education on the disease and advised on stopping smoking (if applicable), management of activities of daily living and energy conservation, exercise, understanding and use of drugs, health maintenance, and early recognition of signs that require medical intervention. The nurses also identified problem areas and, if indicated, referred patients to other services such as home care. After the visit, a care plan documenting problem areas, education provided, and referral to other services was posted to the GP, and if appropriate the GP was contacted by phone. At the second home visit, 1 month later (at 4 weeks after discharge), the nurses reviewed the patient's progress and need for further follow up. Patients were encouraged to continue to refer to the education booklet for guidance and to keep in contact with their GP.<br>Concurrent medication/care: Not stated<br>Duration: 4 weeks<br>(n=93) Usual care: discharge to GP care with or without specialist follow up; did not include routine nurse or other community follow up.<br>Concurrent medication/care: Not stated<br>Duration: Not stated |
| Funding | Academic or government funding (General Practice Evaluation Program, Commonwealth Department of Health and Aged Care) |

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: Nurse visits versus usual care

Protocol outcome 1: Mortality at End of follow-up
- Actual outcome for Adults: Mortality at 3 months; Intervention: 9/84 (11%), usual care: 10/93 (11%); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - high, other-low

Protocol outcome 2: Quality of life at End of follow up
- Actual outcome for Adults: St George's respiratory questionnaire (disease-specific quality of life; range 0-100; higher score = worse quality of life) change from baseline (95% CI) in total score at 3 months; Intervention: 4.33 (1.05 to 7.61) (n=67), usual care: 3.00 (0.24 to 5.77) (n=80); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - high, other-low

Protocol outcome 3: Length of stay at index admission
- Actual outcome for Adults: Length of stay (days) at index admission; Intervention: 7.1 (6.2) (n=84), usual care: 6.2 (5.3) (n=93); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - high, other-low

| Study | Hermiz 2002[60] |
|---|---|
| Protocol outcome 4: Presentations to ED at End of follow-up<br>- Actual outcome for Adults: Presentations to ED at 3 months; Intervention: 2/67 (3%), usual care: 8/80 (10%); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - high, other-low<br><br>Protocol outcome 5: Admissions to hospital at End of follow-up<br>- Actual outcome for Adults: Admissions to hospital at 3 months; Intervention: 16/67 (24%), usual care: 14/80 (18%); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - high, other-low<br>Protocol outcome 6: GP presentations at End of follow-up<br>- Actual outcome for Adults: GP presentation at 3 months; Intervention: 6.06 (n=60), usual care: 5.54 (n=74); Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - high, other-low | |

| Study | Hunger 2015[64] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=329) |
| Countries and setting | Conducted in Germany; Setting: The Augsburg Hospital is the largest hospital in the region of Augsburg - offering a coronary care unit as well as coronary angiography and angioplasty facilities 24 hours a day. |
| Line of therapy | Not applicable |
| Duration of study | Intervention time: 1 year |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Eligible participants were all patients aged 65 years and older with a first or recurrent myocardial infarction (MI) during the recruitment period. |
| Exclusion criteria | Patients who already lived in institutionalised care or already planned to move to it were excluded. Also, patients with dementia, insufficient German language skills or with severe comorbidity (that is, associated with a life expectancy of less than 1 year, for example,. terminal cancer) were excluded. (Limitations in vision and hearing were no exclusion criterion) |
| Recruitment/selection of patients | Recruitment period from September 2008 to May 2010. Patients were treated in the Augsburg Hospital in southern Germany. |

| Study | Hunger 2015[64] |
|---|---|
| Age, gender and ethnicity | Age - Mean (range): 75.2-75.6 years. Gender (M:F): 1.63/1. Ethnicity: Not reported |
| Further population details | 1. Frail elderly: Frail elderly (All patients aged 65-92). |
| Extra comments | Baseline: HAQ-DI score - Intervention group 0.762±0.808, Control group 0.752±0.752; Barthel Index - Intervention group 90.8±17.1, Control group 90.8±17.5 |
| Indirectness of population | No indirectness |
| Interventions | (n=161) Intervention 1: Community matron or Nurse-led care. Nurse-led individualised home-follow up programme. The programme started with an initial session of 1 hour, taking place shortly before hospital discharge, where patients were provided with information about disease, comorbidities, and medication. Information was given orally and in written form of a so-called 'heart book'. A first home visit is arranged, if accepted by the patient, otherwise an appointment for a telephone call is made. Home visits (0 to 4) and telephone calls (at least every 3 months) are carried out according to patient need and patient risk level. At the first home visit the specific problems of the patient are identified and documented. An individual plan for each patient is set up. The risk level is assessed by the study nurse during the first home visit based on compliance, the social network, and the comorbidities. The higher the risk level the more contact (telephone and home visits) are arranged by the study nurse. First home visit is scheduled to take place 7 to 14 days after discharge. At the home visit patients are instructed how the prescribed drugs have to be taken and what happen in the case of non-compliance with medication. Key elements of the intervention were to detect problems and risks (for example,. regarding intake of medication, decompensated heart failure), to give advice regarding different aspects of disease management (for example,. nutrition and health behaviour), and to refer to the general practitioner, if necessary. During the visits, blood pressure and weight were measured. In individuals with diabetes, additional measurement of blood glucose were performed. Duration 1 year. Concurrent medication/care: N/A<br><br>(n=172) Intervention 2: Usual care. Not details reported.. Duration 1 year. Concurrent medication/care: Patients could receive in-hospital cardiac rehabilitation or could be enrolled in a long-term disease management programme by their treating physician. |
| Funding | -- (Grant from the German Federal Ministry of Education and Research. The KORA (Cooperative Health research platform) is financed by the Helmholtz Zentrum München (German Research Center for Environmental Health) which is funded by the German Federal Ministry of Education and Research by the State of Bavaria. ) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: NURSE-LED FOLLOW-UP PROGRAMME versus USUAL CARE<br><br>Protocol outcome 1: Quality of life at during study period<br>- Actual outcome: Health Assessment Questionnaire Disability Index (HAQ-DI) score at 1 year; Group 1: mean 0.53 (SD 0.66); n=116, Group 2: mean 0.77 (SD 0.81); | |

| Study | Hunger 2015[64] |
|---|---|
| n=136; HAQ-DI score 0-3 Top=High is poor outcome; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 45, Reason: Death, withdrew consent, refused participation, lost to follow up; Group 2 Number missing: 36, Reason: Death, withdrew consent, refused participation<br>- Actual outcome: Barthel Index at 1 year; Group 1: mean 97.63 (SD 8.33); n=116, Group 2: mean 93.64 (SD 15.47); n=135; Barthel Index 0-100 Top=High is good outcome; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 45, Reason: Death, withdrew consent, refused participation, lost to follow up; Group 2 Number missing: 37, Reason: Death, withdrew consent, refused participation | |
| Protocol outcomes not reported by the study | Mortality at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of admissions to hospital at After 28 days of first admission; Number of GP presentations at during study period; Readmission up to 30 days; Length of hospital stay at during study period |

| Study | Follow-up care in general practice by specialist liaison nurses trial: Jolly 1998[71] |
|---|---|
| Study type | RCT ( randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=597) |
| Countries and setting | Conducted in United Kingdom; Setting: 2 hospitals and 67 practices in Southampton and South-West Hampshire, UK |
| Line of therapy | Adjunctive to current care |
| Duration of study | Intervention + follow up: |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall: present results overall as well as split by MI and angina |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | patients who had been admitted to hospital with a first or subsequent myocardial infarction or who have a history of recent-onset angina (<3months before recruitment) willing to consent to follow-up for 1 year |
| Exclusion criteria | if unable to complete the recruitment questionnaire |
| Recruitment/selection of patients | between April 1995 and September 1996 all patients admitted to hospital with a first or subsequent myocardial infarction were identified by 1 of 3 cardiac liaison nurses. Patients with recent onset angina (<3 months) were identified from wards or through direct-access chest-pain clinics. |
| Age, gender and ethnicity | Age - Mean (SD): intervention 63.2 (10.1); control 64.0 (10.3). Gender (M:F): 2/1. Ethnicity: Caucasian: intervention (98%), control (96%) |

| Study | Follow-up care in general practice by specialist liaison nurses trial: Jolly 1998[71] |
|---|---|
| Further population details | 1. Frail elderly |
| Extra comments | Randomisation per practice not individual patient (cluster-randomisation) |
| Indirectness of population | No indirectness |
| Interventions | (n=277) Intervention 1: Community matron or Nurse-led care. Aim of intervention: to bridge the gap between 1st and 2nd care; take account of current models of behaviour change; provide structured programme of follow-up care for each individual; promote adherence to therapies of proven effectiveness delivered by cardiac liaison nurses. Nurses met assigned patients while in hospital; patient-held record was developed to facilitate structured follow-up; fortnightly visits prior to attendance at cardiac rehabilitation at 2 months, then 3 monthly follow-up; coordinated care; provided advice and info on medication, lifestyle issues and cardiac rehabilitation.. Duration 4 months follow-up. Concurrent medication/care: Control group not specifically mentioned. Assume it is usual care as outpatients.<br><br>(n=320) Intervention 2: Usual Care. Not mentioned what care the control group received. Assume it is usual follow-up care as outpatients. Duration 4 months follow-up. Concurrent medication/care: usual care |
| Funding | Academic or government funding |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: FOLLOW-UP CARE IN GENERAL PRACTICE versus USUAL CARE<br><br>Protocol outcome 1: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Patients admitted to hospital at within 4 months; Group 1: 55/219, Group 2: 75/242; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: Serious indirectness, Comments: data contains both admissions and readmissions as per our definitions (readmissions = 28 days); Group 1 Number missing: 58, Reason: due to low response rates for questionnaires and death rates (n=24 overall); Group 2 Number missing: 78, Reason: due to low response rates for questionnaires and death rates (n=24 overall) | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Mortality at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Length of hospital stay at during study period |

| Study | Feasibility trial for early nurse-led discharge for coronary patients trial: Kotowycz 2010[80] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=54) |

| Study | Feasibility trial for early nurse-led discharge for coronary patients trial: Kotowycz 2010[80] |
|---|---|
| Countries and setting | Conducted in Canada; Setting: Hamilton General Hospital, Canada, between January and October 2007 |
| Line of therapy | Adjunctive to current care |
| Duration of study | Intervention + follow up: 6 week follow-up |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | All patients with ST-segment elevation myocardial infarction (STEMI) presenting to Hamilton General hospital (either directly or via other hospitals) for primary or rescue percutaneous coronary intervention (PCI) with a Zwolle score of 3 or lower (that is, low-risk patients) |
| Exclusion criteria | patients who developed STEMI while in hospital for another reason, patients who had a clear contraindication to early discharge at the time of randomisation, and patients who could not be randomised within 24 hours of having their angioplasty |
| Recruitment/selection of patients | All patients with ST-segment elevation myocardial infarction (STEMI) presenting to Hamilton General hospital (either directly or via other hospitals) for primary or rescue percutaneous coronary intervention (PCI) |
| Age, gender and ethnicity | Age - Mean (SD): intervention 55.6 years (no SDs reported); control 55.0 years. Gender (M:F): 3/1. Ethnicity: not reported |
| Further population details | - |
| Indirectness of population | No indirectness |
| Interventions | (n=27) Intervention 1: Community matron or Nurse-led care. Patients were actively targeted for hospital discharge within 72 hours and received additional follow-up with an advanced practice nurse (APN). Patients were initially seen by the APN in hospital before discharge, had follow-up within 3 days of discharge in an outpatient setting and had 2 or more additional follow-ups within 30 days of discharge (face-to-face or via telephone if appropriate). APN: educate patients about nature and management of their disease, medications, facilitation of discharge planning by making aware of follow-up appointments and outpatient tests.. Duration 6 weeks. Concurrent medication/care: not mentioned; control group: discharge planning and follow-up were left to the treating physician and nursing team; there was no added nursing intervention.<br><br>(n=27) Intervention 2: Usual Care. Discharge planning and follow-up were left to the treating physician and nursing team; there was no added nursing intervention.. Duration 6 weeks. Concurrent medication/care: n/a |

| Study | Feasibility trial for early nurse-led discharge for coronary patients trial: Kotowycz 2010[80] |
|---|---|
| Funding | Academic or government funding |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Length of hospital stay at during study period<br>- Actual outcome: length of initial inpatient stay (hours) at 6 weeks; Group 1: mean 2.51 days (calculated based on the hours and minutes provided in the paper); SD was not reported so I calculated it (SD 0.854371); n=27, Group 2: mean 2.57 days (calculated based on the hours and minutes provided in the paper); SD was not reported so I calculated it (SD 0.854371); n=27; Risk of bias: All domain - Low, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness; Group 1 Number missing: 0; Group 2 Number missing: 0<br><br>Protocol outcome 2: Number of presentations to Emergency Department at during study period<br>- Actual outcome: Mortality at 6 weeks; Group 1: 0/27, Group 2: 0/27; Risk of bias: All domain - Low, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 0; Group 2 Number missing: 0<br>- Actual outcome: ED presentations (cardiac) at 6 weeks; Group 1: 3/27, Group 2: 4/27; Risk of bias: All domain - Low, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 0; Group 2 Number missing: 0<br><br>Protocol outcome 3: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: admissions at 6 weeks; Group 1: 2/27, Group 2: 1/27; Risk of bias: All domain - Low, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: Serious indirectness, Comments: includes readmisisons and admissions in the first 6 weeks post-discharge; Group 1 Number missing: 0; Group 2 Number missing: 0 | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Mortality at during study period |

| Study | Kwok 2008[83] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=105) |
| Countries and setting | Conducted in Hong Kong (China); Setting: Secondary care. Prince of Wales Hospital, a major teaching hospital in Hong Kong. |
| Line of therapy | Unclear |
| Duration of study | Recruitment September 1999 – February 2001. Intervention time: 6 months |

| Study | Kwok 2008[83] |
|---|---|
| Method of assessment of guideline condition | Method of assessment/diagnosis not stated: Chronic heart failure |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Age 60 or older; resident within the region; at least 1 hospital admission for chronic heart failure in last 12 months prior to the index admission |
| Exclusion criteria | Communication problems, without family caregivers; residing in a nursing home; terminal disease with life expectancy <6 months |
| Recruitment/selection of patients | Recruited from medical wards of Prince of Wales Hospital (major teaching hospital) and another acute district general hospital (Alice Ho Miu Ling Methersole Hospital).<br>Eligible subjects were identified and recruited by a research nurse on the day or the day before hospital discharge. After obtaining written consent from the subjects, the research nurse recorded demographic data, functional status, cognitive function, psychological state and a general health questionnaire. The ward nurses then phoned a second research assistant who assigned trial grouping according to a random number table. The group assignment was made known to patients.<br>One intervention and 2 control group subjects dropped out because of moving out of Hong Kong and the development of symptomatic cancer. |
| Age, gender and ethnicity | Age - Mean (SD): Intervention 79.5 (6.6); control 76.8 (7.0) years. Gender (M:F): 47:58. Ethnicity: Not stated |
| Further population details | 1. Frail elderly: Frail elderly (Multiple comorbidities). The intervention group subjects were more likely to be recipients of 'comprehensive social security allowance' and had greater economical handicap. |
| Indirectness of population | No indirectness |
| Interventions | (n=49) Intervention 1: Community matron or Nurse-led care. Community nurse (CN) visited patient before discharge to provide health counselling (for example,. drug compliance, dietary advice) and encourage patient to contact CN via telephone hotline when they developed symptoms. Visited at home within 7 days of discharge to review condition; medications checked and compliance encouraged; healthy diet and exercise promoted; arrange home and day care services when required. Weekly home visits for 4 weeks and monthly to 6 months. CN liaised closely with geriatrician or cardiologist in hospital; could alter medications and arrange urgent outpatient appointments or admissions. If readmitted, CNs visited and provided information to attending doctors. Duration 6 months. Concurrent medication/care: Not stated<br><br>(n=56) Intervention 2: Usual Care. Usual medical and social care. The same group of geriatricians/cardiologists followed patients up as outpatients. . Duration 6 months. Concurrent medication/care: Not stated |

| Study | Kwok 2008[83] |
|---|---|
| | |
| Funding | Academic or government funding (Health Services Research Committee/Health Care and Promotion Fund of Hong Kong) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Mortality at during study period<br>- Actual outcome: Died at 6 months; Group 1: 4/49, Group 2: 8/56; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Baseline details: More in intervention group received comprehensive social security assistance (CSSA): 23/49 (47%) vs. 14/56 (25%) and had greater economic handicap;<br>Protocol outcome 2: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Readmission at 6 months; Group 1: 19/44, Group 2: 24/46; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Baseline details: More in intervention group received comprehensive social security assistance (CSSA): 23/49 (47%) vs. 14/56 (25%) and had greater economic handicap; Group 1 Number missing: 5, Reason: 4 died, 1 moved away; Group 2 Number missing: 10, Reason: 8 died, 1 moved away, 1 had cancer | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Length of hospital stay at during study period |

| Study | Kwok 2004[84] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=157) |
| Countries and setting | Conducted in Hong Kong (China) |
| Line of therapy | Unclear |
| Duration of study | Intervention time: 6 months |
| Method of assessment of guideline condition | Method of assessment/diagnosis not stated: Chronic lung disease |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Age 60 or older; resident locally; at least 1 hospital admission for chronic lung disease in last 6 months |

| Study | Kwok 2004[84] |
|---|---|
| Exclusion criteria | Communication problems (for example,. Abbreviated Mental Test Score <6/10, dialect, deafness, dysphasia); without family caregivers; institutional care; terminal disease with life expectancy <6 months |
| Recruitment/selection of patients | Recruited from medical wards of Prince of Wales Hospital (major teaching hospital) and another acute district general hospital (Alice Ho Miu Ling Methersole Hospital) |
| Age, gender and ethnicity | Age - Mean (SD): Intervention: 75.3 (7.0); control 74.2 (5.7) years. Gender (M:F): 111:46. Ethnicity: Not stated |
| Further population details | 1. Frail elderly: Frail elderly (Mean GHQ score 7.5). |
| Indirectness of population | No indirectness |
| Interventions | (n=77) Intervention 1: Community matron or Nurse-led care. Community nurse (CN) visited patient before discharge to provide health counselling (for example,. drug compliance, inhaler technique, dietary advice for the undernourished) and encourage patient to contact CN via telephone hotline when they developed medical problems. Visited at home within 7 days of discharge to review condition, environmental hazards and support; give health counselling (drug/diet regimen, home modifications, encourage physical exercises prescribed by hospital physio); psychosocial support to patient and caregivers; arrange social and health services when required; encourage use of hotline for example,. for purulent sputum or ankle oedema. Weekly home visits for 4 weeks and monthly to 6 months to monitor health, reinforce health counselling, encourage use of hotline. CN had direct access to geriatrician or respiratory physician in hospital; could alter medications and arrange urgent outpatient appointments or admissions. If readmitted, CNs visited and provided information to attending doctors.. Duration 6 months. Concurrent medication/care: Not stated<br><br>(n=80) Intervention 2: Usual Care. The same group of geriatricians/respiratory physicians followed patients up as outpatients. The attending physicians were free to refer the subjects to CNs for post-discharge home visits but this was not common and seldom involved more than 1 visit. Duration 6 months. Concurrent medication/care: Not stated |
| Funding | Academic or government funding (Health Services Research Committee/Health Care and Promotion Fund) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Length of hospital stay at during study period<br>- Actual outcome: Total hospital days at 6 months; Group 1: mean 20.3 Days (SD 25.3); n=70, Group 2: mean 19.2 Days (SD 25.6); n=79; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Baseline details: Lower handicap in mobility in intervention group (2.7 [0.7] vs. 3.0 [0.6], p=0.026); Group 1 Number missing: 7, Reason: 3 declined CN visits, 2 moved away, 2 had lung cancer; Group 2 Number missing: 1, Reason: 1 had lung cancer<br>Protocol outcome 2: Mortality at during study period<br>- Actual outcome: Died at 6 months; Group 1: 3/77, Group 2: 6/80; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, | |

| Study | Kwok 2004[84] |
|---|---|
| Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Baseline details: Lower handicap in mobility in intervention group (2.7 [0.7] vs. 3.0 [0.6], p=0.026); Group 1 Number missing: ; Group 2 Number missing:<br><br>Protocol outcome 3: Number of presentations to Emergency Department at during study period<br>- Actual outcome: A&E visits at 6 months; Group 1: mean 2.2 (SD 2.4); n=70, Group 2: mean 2.3 (SD 3.1); n=79; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Baseline details: Lower handicap in mobility in intervention group (2.7 [0.7] vs. 3.0 [0.6], p=0.026); Group 1 Number missing: 7, Reason: 3 declined CN visits, 2 moved away, 2 had lung cancer; Group 2 Number missing: 1, Reason: 1 had lung cancer<br>Protocol outcome 4: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Readmission at 6 months; Group 1: 53/70, Group 2: 49/79; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Baseline details: Lower handicap in mobility in intervention group (2.7 [0.7] vs. 3.0 [0.6], p=0.026); Group 1 Number missing: 7, Reason: 3 declined CN visits, 2 moved away, 2 had lung cancer; Group 2 Number missing: 1, Reason: 1 had lung cancer<br>- Actual outcome: Readmission at 6 months; Group 1: mean 1.5 (SD 1.4); n=70, Group 2: mean 1.5 (SD 2.2); n=79; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Baseline details: Lower handicap in mobility in intervention group (2.7 [0.7] vs. 3.0 [0.6], p=0.026); Group 1 Number missing: 7, Reason: 3 declined CN visits, 2 moved away, 2 had lung cancer; Group 2 Number missing: 1, Reason: 1 had lung cancer | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Patient and/or carer satisfaction at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Avoidable adverse events at during study period |

| Study | Leventhal 2011[88] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=42) |
| Countries and setting | Conducted in Switzerland; Setting: University Hospital of Basel, Switzerland |
| Line of therapy | Not applicable |
| Duration of study | Intervention time: 12 months |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |

| Study | Leventhal 2011[88] |
|---|---|
| Inclusion criteria | Adult patients hospitalised with decompensated HF (NYHA II–IV), irrespective of left-ventricular ejection fraction, and a brain natriuretic peptide (BNP) ≥100 pg/ml. Additional inclusion criteria were: a history of dyspnoea, increased fatigue or weakness, the ability to speak German and to comprehend a telephone conversation, and discharge to a home setting. |
| Exclusion criteria | Excluded were those who had had an acute myocardial infarction within 8 weeks prior to inclusion (Creatine Kinase (CK) >2x normal), severe myocardial or valvular obstructive disease or uncontrolled angina pectoris (Canadian Cardiovascular Society Functional Classification of Angina (CCS) >3), those who had co-morbid conditions compromising prognosis (life expectancy of less than 12 months), those who had planned (except heart transplantation) or had had previous cardiac surgery within 3 months, those who were on dialysis, had unstable psychiatric disorders or substance abuse, had cognitive impairment (Mini-Mental State Examination score <24), or those who were enrolled in another study, or refused to sign an informed consent. |
| Recruitment/selection of patients | During the study's 20-month enrolment period (July 2003-February 2005), eligible patients were identified through bi-weekly screening of all patients admitted to the internal medicine departments of a university hospital due to dyspnoea. |
| Age, gender and ethnicity | Age - Mean (SD): 77 (6.5) years. Gender (M: F): Define. Ethnicity: Not reported |
| Further population details | 1. Frail elderly: Frail elderly (Mean years of participants: 77 (6.5)). |
| Indirectness of population | No indirectness |
| Interventions | (n=22) Intervention 1: Community matron or Nurse-led care. Once patients were discharged to home, the intervention began as an ambulatory care programme. Intervention patients received 1 home visit by a specialised HF nurse approximately 1 week after returning home after discharge from either hospitalisation or rehabilitation, followed by 17 telephone calls in decreasing intervals over the next 12 months. The home visit consisted of a physical, psychosocial and environmental assessment, the provision of educational, behavioural, and supportive care to build self-care abilities, and individualised patient goal-setting to increase self-efficacy. All intervention group patients were given a special kit published by the Swiss Heart Foundation that included in-depth explanations of HF and self-care procedures. Following the home visit, an individualised nursing care plan was developed that included the patient-identified goals and the goals that the nurse identified based on the results of the assessments. This plan was then discussed with the primary care physician to elicit his/her support and to coordinate and prioritise goals. Follow up telephone calls included discussions of questions or problems the patients had due to their HF, identification of signs and symptoms signifying possible decompensation of HF, review of current medications, reinforcement of self-care activities and setting new goals.. Duration 12 months. Concurrent medication/care: All patients received similar care during hospitalisation. This consisted of the normal medical and nursing care provided by hospital staff. In addition, all study patients were examined by the study HF-cardiologist who recommended lifestyle modifications to the patients and made suggestions for optimal medical management to the patient's primary care physician. All patients were |

| Study | Leventhal 2011[88] |
|---|---|
| | given a HF education booklet published by the Swiss Heart Foundation.<br><br>(n=20) Intervention 2: Usual care. Following hospitalisation, medical care was provided by the primary care physician. . Duration 12 months. Concurrent medication/care: All patients received similar care during hospitalisation. This consisted of the normal medical and nursing care provided by hospital staff. In addition, all study patients were examined by the study HF-cardiologist who recommended lifestyle modifications to the patients and made suggestions for optimal medical management to the patient's primary care physician. All patients were given a HF education booklet published by the Swiss Heart Foundation. |
| Funding | Academic or government funding (Funding from the Swiss National Foundation and the Swiss Heart Foundation) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: NURSE-LED INTERDISCIPLINARY MANAGEMENT PROGRAMME versus USUAL CARE<br><br>Protocol outcome 1: Mortality at during study period<br>- Actual outcome: Mortality at 12 months; Group 1: 2/22, Group 2: 4/20; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of admissions to hospital at After 28 days of first admission; Number of GP presentations at during study period; Readmission up to 30 days; Length of hospital stay at during study period |

| Study | District nurse-led high support hospital discharge team trial: Martin 1994[93] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=54) |
| Countries and setting | Conducted in United Kingdom; Setting: Recruitment from June 1989 to February 1990. It says 'our unit' but does not mention where that unit is. Authors address: Elderly Care Unit, St. Thomas Hospital London |
| Line of therapy | 1st line |
| Duration of study | Intervention + follow up: 1 year but main outcomes reported at 6 and 12 weeks |
| Method of assessment of guideline condition | Unclear method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |

| Study | District nurse-led high support hospital discharge team trial: Martin 1994[93] |
|---|---|
| Inclusion criteria | Not specified. But deduced from description of intervention group: patients who, after acute medical treatment and rehabilitation, were thought still to be at risk of failing to manage at home with the usual community services, but likely to manage with these services after recovery within 6 weeks |
| Exclusion criteria | Patients who needed 2 people to assist in transferring to or from bed, chair or commode |
| Recruitment/selection of patients | Not specified. patients who, after acute medical treatment and rehabilitation, were thought still to be at risk of failing to manage at home with the usual community services, but likely to manage with these services after recovery within 6 weeks |
| Age, gender and ethnicity | Age - Mean (SD): 81.7 (9.0). Gender (M:F): 4/1. Ethnicity: not reported |
| Further population details | - |
| Extra comments | all participants are frail elderly so did not select this option for subgroups |
| Indirectness of population | No indirectness |
| Interventions | (n=29) Intervention 1: Community matron or Nurse-led care. The home treatment team (HTT) comprised a Nurse Manager (a qualified district nurse) and ten unqualified health care assistants, trained to perform the tasks usually associated with the roles of auxiliary nurse, home help, and therapy aide. The Ward teams and HTT nurse manager prepared a care plan for each patient, frequently using a home visit to identify the objectives for rehabilitation at home. Discharge generally took place within 1 week of referral. The HTT worker visited the patient up to 3x/day for up to 6 weeks (for example,. personal care, domestic assistance). No night service. Weekly review of progress. Team withdrew at 6 weeks or earlier if patient could manage with conventional community services such as home care, district nursing, day care etc. Patients with medical problems turned to their GP, but team had also access to the hospital Elderly Care Unit. Duration intervention for 6 weeks; trial 12 months; clinical assessments at 6 (only half sample) and 12 weeks (full sample). Concurrent medication/care: not mentioned<br><br>(n=25) Intervention 2: Usual Care. no information given other than 'appropriate conventional community services'. Duration not mentioned how long they received usual care; 12 month trial; clinical assessments at 6 (half sample) and 12 weeks (full sample). Concurrent medication/care: not reported |
| Funding | Funding not stated |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Mortality at during study period<br>- Actual outcome: Mortality at 12 weeks; Group 1: 3/29, Group 2: 3/25; Risk of bias: All domain - Low, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: no indirectness; Baseline details: intervention group somewhat more | |

| Study | District nurse-led high support hospital discharge team trial: Martin 1994[93] |
|---|---|
| independent. Does not mention how the 'randomly numbered sealed envelopes' were distributed; Group 1 Number missing: 0; Group 2 Number missing: 0<br><br>Protocol outcome 2: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Readmissions (but mix of admissions and readmissions as per our definition=admissions) at 12 weeks; Group 1: 5/29, Group 2: 5/25; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - High, Crossover - Low; Indirectness of outcome: Serious indirectness, Comments: mix of admissions and readmissions as per our definition of admissions; Baseline details: intervention group somewhat more independent. Does not mention how the 'randomly numbered sealed envelopes' were distributed; Group 1 Number missing: 0; Group 2 Number missing: 0 | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Length of hospital stay at during study period |

| Study | Rea 2004[115] |
|---|---|
| Study type | RCT ( randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=135) |
| Countries and setting | Conducted in New Zealand; Setting: Primary care |
| Line of therapy | Unclear |
| Duration of study | Intervention time: 12 months |
| Method of assessment of guideline condition | Method of assessment/diagnosis not stated: COPD |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Moderate to severe COPD |
| Exclusion criteria | Patient exclusion criteria: Chronic asthma, bronchiectasis, comorbidity more significant than COPD, unable to give informed consent, prognosis <12 months, long-term oxygen therapy or too unwell, deceased. GP practice exclusion criteria: no longer enrolled with participating GP or moved out of area, unable to contact patient, insufficient practice nurse resource. |
| Recruitment/selection of patients | Hospital admission records searched for diagnosis of COPD by ICD-9-CM codes and GP records for a clinical diagnosis of moderate to severe COPD. |
| Age, gender and ethnicity | Age - Mean (range): 68 (44-84) years. Gender (M:F): 56:79. Ethnicity: Not stated |

| Study | Rea 2004[115] |
|---|---|
| Further population details | 1. Frail elderly: Frail elderly (80% eligible for subsidised health care because of low household income; mean 2.3 comorbidities). |
| Extra comments | GP practices randomised rather than individual patients. |
| Indirectness of population | No indirectness |
| Interventions | (n=83) Intervention 1: Community matron or Nurse-led care. Chronic disease management programme implemented by patient's usual GP and practice nurse. Respiratory physician and respiratory nurse specialist saw patients during assessment and patient-specific care plan negotiated with each patient by GP and practice nurse, comprising a timetable for regular maintenance checks and achievable goals for lifestyle changes; action plan with advice on managing worsening symptoms; when to call GP and self-management options; education about smoking cessation, medication and use of inhalers; annual flu vaccination and attendance at pulmonary rehabilitation programme were recommended. Patients visited practice nurse monthly to review progress and visited GP 3-monthly and if symptoms worsened. Respiratory nurse specialist provided professional support for practice nurse and links into specialist and other secondary care resources. At least 1 home visit by respiratory nurse specialist and 1 following hospital admission (most practice nurses unable to visit patients at home). When patients presented to hospital, a locator alert system advised the project respiratory nurse specialist who visited the patient. Practice notified of admissions and involved in discharge planning. . Duration 12 months. Concurrent medication/care: Not stated<br><br>(n=52) Intervention 2: Usual Care. Patients had same assessment but did not have a care plan, were not seen by respiratory physician during assessment and did not have access to project respiratory nurse specialist. GPs had access to COPD management guidelines and pulmonary rehabilitation programme.. Duration 12 months. Concurrent medication/care: Not stated |
| Funding | Academic or government funding (Health Funding Authority, South Auckland Health, South-Med Ltd, ProCare Health Lts and First Health Ltd) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Quality of life at during study period<br>- Actual outcome: SF-36 Physical functioning at 12 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: 2 died, 5 withdrew, 3 disqualified (lung cancer), 2 moved away; Group 2 Number missing: 6, Reason: 4 died, 1 withdrew, 1 disqualified (lung cancer)<br>- Actual outcome: SF-36 Role physical at 12 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: 2 died, 5 withdrew, 3 disqualified (lung cancer), 2 moved away; Group 2 Number missing: 6, Reason: 4 died, 1 withdrew, 1 disqualified (lung cancer) | |

| Study | Rea 2004[115] |
|---|---|
| | - Actual outcome: SF-36 Bodily pain at 12 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: 2 died, 5 withdrew, 3 disqualified (lung cancer), 2 moved away; Group 2 Number missing: 6, Reason: 4 died, 1 withdrew, 1 disqualified (lung cancer)<br>- Actual outcome: SF-36 Social limitations at 12 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: 2 died, 5 withdrew, 3 disqualified (lung cancer), 2 moved away; Group 2 Number missing: 6, Reason: 4 died, 1 withdrew, 1 disqualified (lung cancer)<br>- Actual outcome: SF-36 Mental health domain at 12 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: 2 died, 5 withdrew, 3 disqualified (lung cancer), 2 moved away; Group 2 Number missing: 6, Reason: 4 died, 1 withdrew, 1 disqualified (lung cancer)- Actual outcome: SF-36 Role emotional at 12 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: 2 died, 5 withdrew, 3 disqualified (lung cancer), 2 moved away; Group 2 Number missing: 6, Reason: 4 died, 1 withdrew, 1 disqualified (lung cancer)<br><br>- Actual outcome: SF-36 Vitality at 12 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: 2 died, 5 withdrew, 3 disqualified (lung cancer), 2 moved away; Group 2 Number missing: 6, Reason: 4 died, 1 withdrew, 1 disqualified (lung cancer)<br>- Actual outcome: SF-36 General health at 12 months; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 12, Reason: 2 died, 5 withdrew, 3 disqualified (lung cancer), 2 moved away; Group 2 Number missing: 6, Reason: 4 died, 1 withdrew, 1 disqualified (lung cancer)<br><br>Protocol outcome 2: Mortality at during study period<br>- Actual outcome: Died at 12 months; Group 1: 2/83, Group 2: 4/52; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br>Protocol outcome 3: Number of presentations to Emergency Department at during study period<br>- Actual outcome: Presentations to ED at 12 months; Group 1: 5/83, Group 2: 7/52; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br><br>Protocol outcome 4: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Readmitted at 12 months; Group 1: 29/83, Group 2: 26/52; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness |
| Protocol outcomes not reported by the study | Patient and/or carer satisfaction at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Avoidable adverse events at during study period |

| **Study** | **Sinclair 2005[120]** |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=324) |
| Countries and setting | Conducted in United Kingdom; Setting: Three district general hospitals in the Birmingham area. |
| Line of therapy | Not applicable |
| Duration of study | Intervention time: 1-2 and 6-8 weeks |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Patients aged 65 years or over admitted to coronary care units, general or geriatric medical wards with a suspected myocardial infarction (MI) were eligible to participate if ward staff judged them likely to be discharged home soon |
| Exclusion criteria | A discharge address outside the hospital catchment area, discharge home before baseline assessments and randomisation could be completed, or failure to obtain written consent. |
| Recruitment/selection of patients | Patients aged 65 years or over admitted to coronary care units, general or geriatric medical wards with suspected MI. |
| Age, gender and ethnicity | Age - --: Patients aged over 65 years (no further details reported). Gender (M:F): No details reported. Ethnicity: Not reported |
| Further population details | 1. Frail elderly: Frail elderly (People aged 65 years and over). |

| | |
|---|---|
| Indirectness of population | No indirectness |
| Interventions | (n=163) Intervention 1: Community matron or Nurse-led care. In addition to usual post-discharge care, patients allocated to the home-based intervention group received at least two home visits after hospital discharge by a cardiac support nurse. Extra visits and telephone contacts were permissible if the nurse identified a specific need and purpose. The support nurse was trained in cardiac support. Her remit was broad but specifically she (1) encouraged patients to comply with and have knowledge of their treatment regimen; (2) offered information, support and guidance about risk factor reduction; (3) advised about appropriate exercise and stress management; (4) gave advice on smoking cessation, alcohol intake and diet; (5) encouraged resumption of everyday activities and social interaction.<br><br>. Duration 1-2 and 6-8 weeks. Concurrent medication/care: Usual post-discharge care - general advice from ward-based staff, outpatient clinic follow-up as necessary and access to the local cardiac rehabilitation programme offered as per usual practice.<br><br>(n=161) Intervention 2: Usual care. Usual post-discharge care - general advice from ward-based staff, outpatient clinic followw-up as necessary and access to the local rehabilitation programme offered as per usual practice. Duration 1-2 and 6-8 weeks. Concurrent medication/care: N/A |
| Funding | Study funded by industry (West Midlands Research and Development Programme 1995/1996) |

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE

Protocol outcome 1: Quality of life at during study period
- Actual outcome: Quality of Life after Myocardial Infarction at 100 days; Group 1: mean 130.1 (SD 34.6); n=134, Group 2: mean 121.7 (SD 36.1); n=133; Quality of Life after Myocardial Infarction Questionnaire 27-189 Top=High is good outcome
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 ; Group 1 Number missing: 29; Group 2 Number missing: 28

Protocol outcome 2: Length of hospital stay at during study period
- Actual outcome: Length of stay in hospital at Discharge to 100 days; Group 1: mean 2.9 (SD 1.2); n=163, Group 2: mean 4.6 (SD 2.2); n=161
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 ; Group 1 Number missing: 0; Group 2 Number missing: 0

| | |
|---|---|
| Protocol outcome 3: Mortality at during study period<br>- Actual outcome: Mortality (from supplementary data online) at 100 days; Group 1: 14/163, Group 2: 15/161<br>Risk of bias: All domain - High, Selection - Low, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low;<br>Indirectness of outcome: No indirectness ; Group 1 Number missing: 0; Group 2 Number missing: 0 | |
| Protocol outcomes not reported by the study | Patient and/ or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of admissions to hospital at After 28 days of first admission; Number of GP presentations at during study period; Readmission at 7 and 28 days; Avoidable adverse events at during study period |

| **Study** | **Sridhar 2008[124]** |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=122) |
| Countries and setting | Conducted in United Kingdom; Setting: Charing Cross and Hammersmith Hospitals, London |
| Line of therapy | Not applicable |
| Duration of study | Intervention time: 2 years |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Patients with acute exacerbation of COPD. The clinical notes of these patients were reviewed by the investigators using a proforma. If thought to represent a suitable patient, the case notes were discussed and, where necessary, further information obtained. |
| Exclusion criteria | Exclusion criteria included significant comorbidity such as severe heart disease or cancer, or any condition that would preclude participation in the physical therapy component of a pulmonary rehabilitation programme. |
| Recruitment/selection of patients | People who had been admitted to Charing Cross and Hammersmith Hospitals, London, UK, between 1 January 2000 |

| Study | Sridhar 2008[124] |
|---|---|
| | and 31 August 2004 with the main reason for admission being coded on discharge as having been due to an acute exacerbation of COPD was obtained from the hospital database |
| Age, gender and ethnicity | Age - Mean (range): 69.68-69.9. Gender (M:F): 1/1. Ethnicity: Not reported |
| Further population details | - |
| Indirectness of population | No indirectness |
| Interventions | (n=61) Intervention 1: Community matron or Nurse-led care. Those in the intervention group had monthly telephone calls from the respiratory nurses and a home visit every 3 months. During each interview and visit, the nurses undertook a structured approach to history taking and during home visits measured pulse and respiratory rate, oxygen saturation and end-tidal carbon monoxide. Spirometry was performed at baseline and after 12 and 24 months. During both telephone and home visits, they reinforced advice regarding treatments, smoking cessation if relevant, the need to continue their exercise therapy and discussed and reinforced the self-management education which had been given and offered encouragement for successful self-treatment. The patients were also given written advice about the treatment of COPD which they were asked to show to their doctor if they underwent any unscheduled healthcare. Duration 2 years. Concurrent medication/care: The study intervention involved all patients initially participating in a hospital based pulmonary rehabilitation programme consisting of 2 attendances per week for 4 weeks. During this visit, the patients received general education about their disease and its treatment (1 h per session) and underwent an individualised physical training programme (1 h per session). Following completion of the pulmonary rehabilitation programme, the patients received a baseline home visit by a specialist respiratory nurse, and during this first visit, the patients were given a personalised written COPD action plan. This contained both lifestyle advice and advice about their usual medication, and gave specific advice about when the patient should start a course of antibiotics and when they should start a course of steroid tablets. The general practitioners of these patients were requested to provide for the patient reserve supplies of these medications.<br>Patients in both the control and intervention groups had their use of healthcare monitored by monthly telephone self-report verified by confirmation of the general practice and hospital records.<br><br>(n=61) Intervention 2: Usual care. Patients in the control group received usual care from their primary care physician, or secondary care and/or the respiratory nursing service as appropriate. Duration 2 years. Concurrent medication/care: Patients in both the control and intervention groups had their use of healthcare monitored by monthly telephone self-report verified by confirmation of the general practice and hospital records. |
| Funding | Academic or government funding (The Health Foundation) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE | |

| Study | Sridhar 2008[124] |
|---|---|
| Protocol outcome 1: Number of GP presentations at during study period<br>- Actual outcome: Care received from primary care doctors at 2 years; Group 1: 31/61, Group 2: 36/61; Risk of bias: All domain - Very high, Selection - High, 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 | Quality of life at during study period; Mortality at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of admissions to hospital at After 28 days of first admission; Readmission up to 30 days; Length of hospital stay at during study period |

| Study | STEWART 1998[128] STEWART 1999[127] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of participants | Home based intervention = 49<br>Usual care = 48 (n = 97) |
| Countries and setting | Cardiology Unit of the Queen Elizabeth Hospital/University of Adelaide, Woodville, South Australia. |
| Duration of study | 6 month follow up |
| Stratum | Overall |
| Subgroup analysis within study | |
| Inclusion criteria | Presence of CHF (defined on the basis of a formal demonstration, impaired systolic function and persistent functional impairment indicative of New York Heart Association class 2, 3 or 4 statuses.<br>Acute ischemia or infarction with previously documented CHF were included<br>Being discharged home and requiring continuous pharmaco therapeutic intervention for a chronic condition<br>Patients with CHF who were determined to be at high risk for unplanned readmission were identified on the basis of 1 or more unplanned admissions for acute heart failure before study entry |
| Exclusion criteria | Acute MI or unstable angina pectoris<br>Presence of terminal malignancy requiring palliative care<br>Home address outside catchment area |
| Recruitment/selection of patients | - |
| Age, gender and ethnicity | Age |

| Study | STEWART 1998[128] STEWART 1999[127] |
|---|---|
| | Years (SD); Intervention: 76 years (+/-11). Control: 74 years (+/-10)<br>Gender<br>M:F; Intervention: 22:27. Control: 25:23<br>Ethnicity (Non-English speaking background)<br>Intervention: 10/49. Control: 9/48 |
| Further population details | - |
| Extra comments | - |
| Indirectness of population | No indirectness |
| Interventions | Home Based Intervention: Before discharge, patients assigned to an HBI (n=49) were visited by the study nurse (S.P.) and counselled in relation to complying with the treatment regimen and reporting any sign of clinical deterioration or acute worsening of their heart failure. One week after discharge, these patients were visited at home by the study nurse and pharmacist. On arrival, the study pharmacist performed an assessment of the patient's knowledge of the prescribed medications (via questionnaire) and the extent of compliance (via pill count). Patients who demonstrated poor medication knowledge (<75% composite knowledge score of dosage, intended effect, potential adverse effects, and special instructions) or malcompliance (≥15% deviation from prescribed dosage at discharge) received a combination of the following: (1) remedial counselling, (2) initiation of a daily reminder routine to enhance timely administration of medications, (3) introduction of a weekly medication container enabling pre-distribution of dosages, (4) incremental monitoring by caregivers, (5) provision of a medication information and reminder card, and (6) referral to a community pharmacist for more regular review thereafter.<br>Patients were further evaluated by the study nurse to detect any clinical deterioration or adverse effects of prescribed medication since discharge; those requiring medical review were immediately referred to their primary care physician. After the home visit, all patients' primary care physicians were contacted by the study nurse to inform them of the home visit and to discuss the need (if any) for further remedial action or more intensive follow-up thereafter.<br>Usual Care: Patients assigned to the UC group (n=48) received the pre-existing levels of post discharge care: all patients in the UC group had appointments to be reviewed by their primary care physician or cardiologist (in the hospital's outpatient department) within 2 weeks of discharge. Furthermore, 13 patients (27%) were receiving regular home support (for example, domiciliary care or community nurse visits) after discharge. |
| Funding | Commonwealth Department of Health and Family Services, Canberra, Australia, through the Pharmaceutical Education Program |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME (PRIMARY CARE) versus INPATIENT HOSPITAL CARE<br>Protocol outcome 1: Readmission<br>- Actual outcome: Unplanned Readmission rates; Intervention group: 24/49 readmissions; Control group: 31/48 readmissions; . Risk of bias : Selection - Low, Outcome reporting - high, other-unclear risk | |

| Study | STEWART 1998[128] STEWART 1999[127] |
|---|---|
| Protocol outcome 2: Mortality<br>- Actual outcome: Out of hospital deaths; Intervention group: 6/49; Control group: 12/48; . Risk of bias : Selection - Low, Outcome reporting - high, other-unclear risk | |
| Protocol outcomes not reported by the study | Avoidable adverse events, quality of life, patient and or carer satisfaction. Length of stay, number of presentations of ED, number of avoidable admissions, reduced GP presentations |

| Study | Tsuchihashi-makaya 2013[135] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=168) |
| Countries and setting | Conducted in Japan; Setting: 3 cardiology hospitals in Hokkaido, Japan |
| Line of therapy | Not applicable |
| Duration of study | Intervention time: 2 months |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Define |
| Exclusion criteria | Define |
| Recruitment/selection of patients | Patients were enrolled from December 2007 to March 2010 at 3 cardiology hospitals in Hokkaido, Japan. Hospitals were selected on the basis of their organizational capability and enthusiasm for participating in the study. |
| Age, gender and ethnicity | Age - Mean (range): 75.8-76.9 years. Gender (M:F): Define. Ethnicity: Not reported |
| Further population details | - |
| Extra comments | Etiology of HF: Ischemic 27.4%, hypertensive 30.5%, valvular 28.6%, cardiomyopathic 27.3%, unknown 4.4%, other 16.2% |
| Indirectness of population | No indirectness |
| Interventions | (n=84) Intervention 1: Community matron or Nurse-led care. A home-based disease management program consisted of home visit by nurses to provide symptom monitoring, education, and counselling, and telephone follow-up by nurses in addition to routine follow-up by cardiologists. A home visit was made within 14 days after discharge from hospital. Nurses visited each patient's home to assess how the patient was coping in the home environment, HF |

| Study | Tsuchihashi-makaya 2013[135] |
|---|---|
| | status, general health status, adherence to medication, lifestyle modification, daily activity, and social support needs. Home visits were made once every 2 weeks until 2 months after discharge. Nurses monitored HF symptoms, patient's general health status, and requirement for other health and social support. Nurses consulted a multidisciplinary team during the intervention period to optimize the advice given to each patient.<br><br>. Duration 2 months. Concurrent medication/care: All enrolled patients received comprehensive discharge education by cardiologist, nurse, dietitian, and pharmacist using a booklet that provided information on pathophysiology, medical treatment, diet, physical activity, lifestyle modification, self-measurement of body weight, self-monitoring of worsening HF, and emergency contact methods. Follow-up assessments were performed 2, 6, and 12 months after discharge. After 2 months of home visits, nurses the conducted telephone follow-up until 6 months after discharge.<br><br>(n=84) Intervention 2: Usual care. Patients in the usual-care group received usual care and follow-up. After hospital discharge, patients assigned to the usual-care group continued to receive routine management by the cardiologist. No extra follow-up by a HF nurse or multidisciplinary team was provided.<br><br>. Duration 2 months. Concurrent medication/care: All enrolled patients received comprehensive discharge education by cardiologist, nurse, dietitian, and pharmacist using a booklet that provided information on pathophysiology, medical treatment, diet, physical activity, lifestyle modification, self-measurement of body weight, self-monitoring of worsening HF, and emergency contact methods. Follow-up assessments were performed 2, 6, and 12 months after discharge. |
| Funding | Academic or government funding (Grants from the Japanese Ministry of Health, Labour and Welfare, the Japan Heart Foundation, and Pfizer Health Research Foundation) |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Mortality at during study period<br>- Actual outcome: Mortality at 2 months; Group 1: 8/79, Group 2: 8/82; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 5, Reason: Lost to follow-up, discontinued due to cognitive impairment, died before hospital discharge; Group 2 Number missing: 2, Reason: Lost to follow-up, died before hospital discharge<br><br>Protocol outcome 2: Number of admissions to hospital at After 28 days of first admission<br>- Actual outcome: Hospitalisation for heart failure at 2 months; Group 1: 16/79, Group 2: 28/82; Risk of bias: All domain - Very high, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Group 1 Number missing: 5, Reason: Lost to follow-up, discontinued due to cognitive impairment, died before hospital discharge; Group 2 Number missing: 2, Reason: Lost to follow-up, died before hospital discharge | |

| Study | Tsuchihashi-makaya 2013[135] |
|---|---|
| Protocol outcomes not reported by the study | Quality of life at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of presentations to Emergency Department at during study period; Number of GP presentations at during study period; Readmission up to 30 days; Length of hospital stay at during study period |

| Study | Can home visits by community nurse reduce readmissions? trial: Wong 2008[144] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=354) |
| Countries and setting | Conducted in Hong Kong (China); Setting: Medical departments of 3 regional hospitals in Hong Kong between January 2003 to December 2005, with an interruption during the Severe Acute Respiratory Syndrome (SARS) epidemic from March to December 2003. |
| Line of therapy | 1st line |
| Duration of study | Intervention + follow up: 30 days after discharge |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Patients admitted more than once during the last 28 days to the same hospital; a discharge diagnostic coding in defined categories related to respiratory, cardiac, renal conditions and general symptoms; able to speak Cantonese; living within the hospital service area |
| Exclusion criteria | discharged to another hospital setting; dying |
| Recruitment/selection of patients | Patients readmitted to the medical departments of 3 regional hospitals in Hong Kong. Selection criteria followed the definition of 'unplanned readmission' (readmission to the same hospital within 28 days of discharge). |
| Age, gender and ethnicity | Age - Mean (SD): intervention 72.5 years (10.0); control 68.4 years (13.8). Gender (M:F): 1/1. Ethnicity: not specifically mentioned but assume Chinese/Hong Kong as inclusion criteria was to be able to speak Cantonese |
| Further population details | - |
| Extra comments | Data on age, gender and disease category were collected from hospital records. Other data were obtained from initial interview with the patient. |
| Indirectness of population | No indirectness |

| Study | Can home visits by community nurse reduce readmissions? trial: Wong 2008[144] |
|---|---|
| Interventions | (n=173) Intervention 1: Community matron or Nurse-led care. Patients in intervention group received routine discharge care as well as the post-discharge home visit intervention. The intervention was protocol-driven. Before discharge, the community nurses conducted an initial assessment and explained the home visits. The first home visit occurred within 7 days of discharge from the hospital, following through the health concerns identified in the initial assessment. Both assessment and intervention scheme were based on the Omaha system which has 4 dimensions: environmental, psychosocial, physiological and health-related behaviours. It involved: health teaching and counselling, treatment, and procedures, case management and surveillance. The community nurse identified health problems and then intervened. The case would be closed if the health problems were resolved, and a maximum of 4 home visits could be arranged within 28 days after discharge. Patients were referred back to hospital for follow-up if health problems did not resolve. All nurses were experienced and registered community nurses.. Duration 28 days after discharge. Concurrent medication/care: Patients in intervention group also received routine discharge care which included instructions about medications, basic health advice related to patient's conditions and arrangements for outpatients follow-up.<br><br>(n=181) Intervention 2: Usual Care. Routine discharge care which included instructions about medications, basic health advice related to patient's conditions and arrangements for outpatients follow-up. . Duration not specified but study follow-up was 30 days post-discharge. Concurrent medication/care: n/a |
| Funding | Academic or government funding |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Patient and/or carer satisfaction at during study period<br>- Actual outcome: Satisfaction with care (5 point-likert scale; 1 very satisfied, 5 very unsatisfied) at 30 days post-discharge; Group 1: mean 1.7 Likert Scale 1= very satisfied, 5 very unsatisfied (SD 0.6); n=166, Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: 'computer-generated random numbers'; intervention group contained statistically significant older patients and retirees; Group 1 Number missing: 7, Reason: n=5 lost to follow-up (unable to be reached by research assistant); n=2 declined follow-up; Group 2 Number missing: 15, Reason: n=15 lost to follow-up (unable to be reached by research assistant)<br><br>Protocol outcome 2: Readmission up to 30 days<br>- Actual outcome: Readmission within 28 days at 28 days; Group 1: 58/166, Group 2: 62/166; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - High, Outcome reporting - Low, Measurement - Low, Crossover - Low; Indirectness of outcome: No indirectness ; Baseline details: 'computer-generated random numbers'; intervention group contained statistically significant older patients and retirees; Group 1 Number missing: 7, Reason: n=5 lost to follow-up (unable to be reached by research assistant); n=2 declined follow-up; Group 2 Number missing: 15, Reason: n=15 lost to follow-up (unable to be reached by research assistant) | |

| Study | Can home visits by community nurse reduce readmissions? trial: Wong 2008[144] |
|---|---|
| Protocol outcomes not reported by the study | Quality of life at during study period; Mortality at during study period; Avoidable adverse events at during study period; Number of presentations to Emergency Department at during study period; Number of admissions to hospital at After 28 days of first admission; Number of GP presentations at during study period; Length of stay in programme at during study period; Length of hospital stay at during study period |

| Study | Yeung 2012[147] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=108) |
| Countries and setting | Conducted in Hong Kong (China); Setting: Secondary care |
| Line of therapy | Unclear |
| Duration of study | Intervention time: 4 weeks |
| Method of assessment of guideline condition | Method of assessment/diagnosis not stated: Stroke |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Stroke survivors |
| Exclusion criteria | Not stated |
| Recruitment/selection of patients | Recruited in hospitals within a cluster of the Hong Kong Hospital Authority system from August 2010 to September 2011 |
| Age, gender and ethnicity | Age - --: Not stated. Gender (M:F): Not stated. Ethnicity: Chinese |
| Further population details | 1. Frail elderly: Not applicable/Not stated/Unclear |
| Extra comments | Abstract only |
| Indirectness of population | No indirectness |
| Interventions | (n=54) Intervention 1: Community matron or Nurse-led care. Transitional care programme including standardised protocols for holistic case manager training; Omaha system for nursing documentation; family meeting guided by motivational interviewing; home visit; telephone follow up; health and community care referral system; holistic care patient self-management log book to provide information and empower health adherence behaviours. Programme commenced 1 week before discharge and went on until 4 weeks after discharge. Duration 4 weeks after discharge. Concurrent medication/care: Not stated |

| Study | Yeung 2012[147] |
|---|---|
| | (n=54) Intervention 2: Usual Care. Usual post-stroke care. Duration 4 weeks. Concurrent medication/care: Not stated |
| Funding | Funding not stated |
| RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE<br><br>Protocol outcome 1: Number of presentations to Emergency Department at during study period<br>- Actual outcome: ED visits at 4 weeks; Group 1: 2/54, Group 2: 10/54; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness<br>Protocol outcome 2: Readmission up to 30 days<br>- Actual outcome: Readmission at 4 weeks; Group 1: 4/54, Group 2: 8/54; Risk of bias: All domain - High, Selection - High, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Mortality at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Number of admissions to hospital at After 28 days of first admission; Number of GP presentations at during study period; Length of stay in programme at during study period; Length of hospital stay at during study period |

| Study | Young 2003[148] |
|---|---|
| Study type | RCT (Patient randomised; Parallel) |
| Number of studies (number of participants) | 1 (n=146) |
| Countries and setting | Conducted in Canada; Setting: Secondary care |
| Line of therapy | Unclear |
| Duration of study | Intervention + follow up: Intervention duration unclear; follow up mean around 444 days |
| Method of assessment of guideline condition | Adequate method of assessment/diagnosis: Confirmed diagnosis of MI |
| Stratum | Overall |
| Subgroup analysis within study | Not applicable |
| Inclusion criteria | Admitted to TEGH between August 1999 and August 2000 with a confirmed diagnosis of MI, resident in the catchment area, assessed by a care coordinator as eligible for a visit form a home health nurse at no cost to the patient and continued to meet these criteria at discharge. Eligibility generally implied that the services were necessary to enable the patient to remain at home. |

| Study | Young 2003[148] |
|---|---|
| Exclusion criteria | Patients transferred to an acute care or long-term care institution, who moved out of the catchment area after discharge or withdrew consent before discharge. |
| Recruitment/selection of patients | Enrolled at The Toronto East General and Orthopaedic Hospital (TEGH) |
| Age, gender and ethnicity | Age - Mean (SD): Intervention 67.8 (13.1); control 70.1 (13.4) years. Gender (M:F): 87:59. Ethnicity: Not stated |
| Further population details | 1. Frail elderly: Frail elderly (Multiple comorbidities). |
| Indirectness of population | No indirectness |
| Interventions | (n=71) Intervention 1: Community matron or Nurse-led care. Disease management programme: standardised pathway labelled "the nursing checklist"; referral criteria for speciality care management; communication systems including discharge summary and nurses' visit report; and patient education. Eligible to receive a minimum of 6 home care visits from a cardiac-trained nurse.. Duration Unclear. Concurrent medication/care: Not stated<br><br>(n=75) Intervention 2: Usual Care. Referred to a non-invasive cardiac laboratory for diagnostic testing, followed up by cardiologist, given information on TEGH's cardiac teaching class as well as cardiac rehabilitation at Toronto Rehabilitation Centre. If referred to home care, received currently practised home care.. Duration Unclear. Concurrent medication/care: Not stated |
| Funding | Academic or government funding (The Change Foundation; University of Toronto Home and Community Care Evaluation and Research Centre; East York Access Centre and Partners for Health) |

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: COMMUNITY MATRON OR NURSE-LED CARE versus USUAL CARE

Protocol outcome 1: Mortality at during study period
- Actual outcome: Died at Mean around 444 days; Group 1: 8/71, Group 2: 8/75; Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness

Protocol outcome 2: Number of presentations to Emergency Department at during study period
- Actual outcome: ED visits at Within 225 days; Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness

Protocol outcome 3: Number of admissions to hospital at After 28 days of first admission
- Actual outcome: Hospital readmissions at Within 225 days; Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness

Protocol outcome 4: Number of GP presentations at during study period

| Study | Young 2003[148] |
|---|---|
| - Actual outcome: Office visits at Within 225 days; Risk of bias: All domain - Low, Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness | |
| Protocol outcomes not reported by the study | Quality of life at during study period; Avoidable adverse events at during study period; Patient and/or carer satisfaction at during study period; Readmission up to 30 days; Length of stay in programme at during study period; Length of hospital stay at during study period |