D.1.1 Cochrane Review

Study	Herfjord 2014[140]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	1 (n=400).
Countries and setting	Conducted in Norway.
Line of therapy	Not applicable.
Duration of study	Intervention + follow up: intervention 3 weeks +1 year follow-up.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Early discharge.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Patients admitted acutely from home to medical or orthopaedic departments if they were a resident of the municipality, aged 70 years or older; respiratory and circulatory stable and deemed able to return home within three weeks.
Exclusion criteria	Severe dementia, delirium, any need for surgery or intensive care treatment.
Recruitment/selection of patients	Suitable patients were invited to participate in the trial if attending physician considered intermediate care an appropriate treatment option, and if randomisation could take place within the first 72 hours after admission.
Age, gender and ethnicity	Age - Mean (range): Intervention group- 83.6 (70-96); 84.6 (71-98). Gender (M:F): Females %: intervention group- 73.2%; control group-73.7%. Ethnicity: not stated
Further population details	Not stated.
Indirectness of population	No indirectness.
Interventions	(n=200) Intervention 1: Hospital at home - Hospital at home led by primary care. The intervention included rapid transfer to intermediate care unit in a nursing home. The unit consisted of a single ward with 15 beds. The services were provided by a multi-disciplinary team of physician, nurse, physiotherapist and health care worker. The residing physician would either be a specialist in geriatric medicine and internal medicine or a junior doctor supervised by the geriatrician. Patients were mobilised out of bed and out of the room as soon as possible, and were encouraged to practice and maintain daily self-care activities and to exercise individually indoors and outdoors when possible. They

Study	Herfjord 2014[140]
	were offered individual physiotherapy and group-based exercise. The doctor made a ward round at least twice a week for each patient and other team members participated in the pre-ward round briefing. The multi-disciplinary team met twice weekly, discussed patients systematically and decided further plans for treatment. This included decisions regarding time of discharge within the 3 week maximum and making arrangements for further treatment and care after discharge. Duration: 3 weeks. Concurrent medication/care: not stated. Comments: Hospital at nursing home led by secondary care. (n=200) Intervention 2: Hospital-based care/services. Patients in the control group stayed in hospital and received usual care according to their condition. Some major differences between the intermediate care unit and the hospitals would be presence of physicians at weekends, availability of diagnostic tests, especially radiologic examinations and monitoring equipment like telemetry. In hospitals multi-disciplinary assessment was not applied systematically and patients were not likely to meet a geriatrician. Duration: 3 weeks. Concurrent medication/care: not stated.
Funding	Academic or government funding.

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME LED BY PRIMARY CARE versus HOSPITAL-BASED CARE/SERVICES

Protocol outcome 1: Length of hospital stay at during study period
- Actual outcome: Length of hospital stay at 1 year; Group 1: mean 10.4 (SD 15.8); n=190, Group 2: mean 10.5 (SD 15.2); n=186; 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

Protocol outcome 2: Mortality at during study period
- Actual outcome: Mortality at 1 year; Group 1: 42/190, Group 2: 40/186; 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

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 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	Ince 2014[154]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	1 (n=84).

Study	Ince 2014[154]
Countries and setting	Conducted in Turkey; setting: University School of Medicine and home.
Line of therapy	Not applicable.
Duration of study	Intervention + follow up: follow-up 30 days.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Early discharge.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Patients with mild non-alcoholic acute pancreatitis (NAAP).
Exclusion criteria	Not stated.
Recruitment/selection of patients	Not stated.
Age, gender and ethnicity	Age - Mean (SD): Home group-54.9 (16.4); hospital group- 54.2 (19.6). Gender (M:F): Define. Ethnicity: not stated.
Further population details	Not stated.
Indirectness of population	No indirectness.
Interventions	(n=42) Intervention 1: Hospital at home - Hospital at home led by primary care. Home monitoring group. After a median of 12 hours patients discharged from hospital and visited on 2nd, 3rd and 5th days by staff nurse. Patients discharged with an IV port and basic instructions for the maintenance of the port. All patients were visited in their homes twice a day by an experienced nurse and all information transferred back to the attending physician. During the home visit, the vital signs, symptoms, and general condition of each patient were recorded and transmitted by the nurse back to the attending physician. Patients given phone numbers of two physicians as emergency contacts. On the 7th, 14th and 30th days, the patients were requested to return for a follow-up visit at which time an assessment of their symptoms, physical examination and lab evaluation was conducted. Duration: 30 days. Concurrent medication/care: not stated

(n=42) Intervention 2: Hospital-based care/services. Hospital group – treatment in hospital. Duration: 30 days. Concurrent medication/care: not stated. |
| Funding | No funding. |

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME LED BY PRIMARY CARE versus HOSPITAL-BASED CARE/SERVICES.

Protocol outcome 1: Readmission up to 30 days.
- Actual outcome: Hospital re-admission at 30 days; Group 1: 1/42, Group 2: 2/42; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome

Study	Ince 2014[154]
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 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 hospital stay at during study period.

Study	Jakobsen 2015[159]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	(n=57).
Countries and setting	Conducted in Denmark; Setting: 2 University hospitals and home.
Line of therapy	Not applicable.
Duration of study	Intervention + follow up: follow-up-180 days after discharge.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Early discharge.
Subgroup analysis within study	Not applicable
Inclusion criteria	Patients >45 years of age, with severe or very severe COPD, who had an acute exacerbation of COPD, who were compliant, and who had an expected hospitalisation of more than 2 days.
Exclusion criteria	People with need of non-invasive ventilation (NIV) or manual or mechanical ventilation or of intravenous antibiotics, who had a Ph value of <7.35, who had unstable heart disease, malignancy, or poorly regulated diabetes, who were unable to give informed consent, or who had participated in another trial.
Age, gender and ethnicity	Age - Mean (SD): <60 years: control- 5 (17.9%); intervention- 5 (17.2) >80 years: control-6 (21.4); intervention-6 (20.7). Gender (M:F): female, n(%): control- 17 (60.7); intervention-18 (62.1). Ethnicity: not stated.
Further population details	1. Frail elderly.
Extra comments	Patients admitted with acute exacerbations were treated according to a strict hospital protocol for exacerbations in COPD.
Indirectness of population	No indirectness.
Interventions	(n=29) Intervention 1: Hospital at home - Hospital at home led by primary care. Virtual hospital- home based tele-health hospitalisation Participants were transported home within the first 24 hours of hospital admission. Patients were given the following equipment's – touch screen with webcam, spirometer, thermometer, nebuliser, medicine

Study	Jakobsen 2015[159]
	box containing antibiotics, prednisone, sedative, beta 2 agonists and anticholinergics , and oxygen compressor. Patients were ready for daily ward rounds using the touch screen at appointed hours. Unscheduled and acute contacts could always be effectuated 24/7 by the patient pressing the 'call hospital' button on the touch screen. Hospital personnel were instructed to treat the telehealth participants exactly the same way as they would treat them had they been present at the hospital except from physical contact which was not possible. Duration: 6 months. Concurrent medication/care: not stated. Comments: Patients in both groups were discharged by the attending doctor if they fulfilled the following five criteria: 1) slept >4 hours without awakening from respiratory symptoms, 2) forced expiratory volume in 1s not decreasing, 3) clinically stable, 4) condition improved during admission, 5) oxygen saturation >90% without supplemental oxygen or with regular oxygen supply if they were long term oxygen users. (n=28) Intervention 2: Hospital-based care/services. The patients allocated to the control group were hospitalised as usual, receiving standard hospital treatment for an exacerbation. Duration: 6 months. Concurrent medication/care: not stated.
Funding	No funding.

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME LED BY PRIMARY CARE versus HOSPITAL-BASED CARE/SERVICES.

Protocol outcome 1: Quality of life at during study period.
- Actual outcome: Quality of life (EQ-5D summary index) at 30 days after discharge; 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

Protocol outcome 2: Mortality at during study period.
- Actual outcome: Mortality at 30 days after discharge; Group 1: 0/29, Group 2: 0/28; 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 - Actual outcome: Mortality at 6 months; Group 1: 3/29, Group 2: 4/28; 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; 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	Jeppesen 2012[160]
Study type	Systematic review of RCTs – Hospital at home for acute exacerbations of chronic obstructive pulmonary disease (COPD).
Number of studies (number of participants)	8 RCTs (n=870). (7 RCTs included in our review)
Countries and setting	Conducted in Australia, Denmark, Italy, Spain and the UK (4 trials).
Duration of study	The first search for this review was conducted up to and including August 2003 and the updated search was conducted up to February 2012.
Stratum	Admission avoidance.
Subgroup analysis within study	Sys review – pre-specified in protocol.
Inclusion criteria	The authors considered only randomised trials (RCTs) where patients presented to the emergency department with an exacerbation of their COPD and were randomised to either home support or hospital admission. They included only trials where patients randomised to home support were discharged from hospital within 72 hours of presenting to the emergency department and after an initial assessment by the hospital medical team.
Exclusion criteria	Studies must not have recruited patients for whom treatment at home is not an appropriate option in respiratory guidelines, that is, in the case of patients with an impaired level of consciousness, acute confusion, acute changes on the radiograph or electrocardiogram, arterial pH less than 7.35, concomitant medical conditions or those patients who present at the emergency department for social reasons.
Recruitment/selection of patients	The authors included patients with a diagnosis of COPD with an acute exacerbation presenting to an emergency department for treatment. Studies must not have recruited patients for whom treatment at home is not an appropriate option in respiratory guidelines, that is, in the case of patients with an impaired level of consciousness, acute confusion, acute changes on the radiograph or electrocardiogram, arterial pH less than 7.35, concomitant medical conditions or those patients who present at the emergency department for social reasons.
Age, gender and ethnicity	Overall summary of patient information not provided.
Further population details	Not stated.
Extra comments	-
Indirectness of population	No indirectness.
Interventions	Patients randomised to home support would be under the care of a specialist respiratory nurse (under guidance of the hospital medical team). All patients randomised to home support would be provided with the treatment as deemed appropriate at the time of initial assessment on presentation to the emergency department. All home support patients would have regular scheduled visits by the nurse as well as additional visits as requested by the patient or deemed appropriate by the nurse or the medical team. All home support patients

Study	Jeppesen 2012[160]
	should be visited by the respiratory nurse until discharged from care. Patients randomised to in-hospital care would be treated as usual and at the discretion of the hospital medical team.
Funding	Not stated.
Summary of included studies	

Study	Intervention and comparison	Population	Outcomes	Comments
Aimonino Ricauda 2008[7] RCT Italy	Hospital at home Team: geriatricians, nurses, physiotherapists, social workers, counsellors Versus Control group: routine hospital care.	Adults (n=104) >75 years of age, presenting with acute exacerbation of COPD.	Hospital readmission, mortality at 6 month, quality of life, caregiver satisfaction Risk of bias (assessed in Cochrane review) For objective outcomes: Risk of bias: Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, other-low For subjective outcomes: Risk of bias: Selection - low, Blinding - high, Incomplete outcome data - Low, Outcome reporting - Low, other-low	Included in Cochrane: Randomised controlled trials comparing home versus hospital care treatment for acute exacerbation of COPD. 6 month follow up.
Bowler 2001[38] Nicholson 2001 [215] RCT Australia	Hospital at Home (in-patient status; home visits by nurses, GP and daily contact between these HP and hospital respiratory team) Versus Control: inpatient hospital care	Patients presenting with exacerbation of chronic obstructive pulmonary disease to emergency departments (or respiratory outpatient clinic) of hospital in Brisbane, Australia	Patient satisfaction, carer strain. Risk of bias (assessed in Cochrane review)For subjective outcomes: Risk of bias: Selection – unclear risk, Blinding - high, Incomplete outcome data - Low, Outcome reporting - high, other-high	In Cochrane Review: Randomised controlled trials comparing home versus hospital care treatment for acute exacerbation of COPD.
Cotton 2000[67] RCT	Hospital at home (early discharge) Team: specialist respiratory	Adults (n=81) exacerbation of COPD	Readmission, length of stay, mortality Risk of bias (assessed in Cochrane	Included in Cochrane: Hospital at home early discharge.

Study	Jeppesen 2012[160]			
UK (Scotland)	nurses, GP Versus Control: discharged after usual care.		review) For objective outcomes: Risk of bias: Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, other-low For subjective outcomes: Risk of bias: Selection - low, Blinding - high, Incomplete outcome data - Low, Outcome reporting - Low, other-low	Hospital at home for acute exacerbations of chronic obstructive pulmonary disease (COPD).
Davies 2000[79] RCT UK	Hospital at home. Team: nurse-led but 'clinical responsibility for the patients remained with the hospital respiratory physician' Versus Control group: hospital care as an inpatient.	Adults (n=150) with a mean age of 70 years; experiencing an acute exacerbation of COPD.	Admissions, quality of life, mortality. Risk of bias (assessed in Cochrane review) For objective outcomes: Risk of bias: Selection - Low, Blinding - Low, Incomplete outcome data - high, Outcome reporting - Low, other-low For subjective outcomes: Risk of bias: Selection - low, Blinding - high, Incomplete outcome data - high, Outcome reporting - Low, other-low	Included in Cochrane: Hospital at home admission avoidance and Randomised controlled trials comparing home versus hospital care treatment for acute exacerbation of COPD. 3 month follow up
Hernandez 2003[141] RCT Spain	Hospital at home (early discharge) Team: GP-led, respiratory nurse Versus	Adults (n=222) with exacerbations of chronic COPD	Mortality, ED visits, readmissions, quality of life, satisfaction Risk of bias (assessed in Cochrane review)	Included in Cochrane: Hospital at home for acute exacerbations of chronic obstructive pulmonary disease (COPD).

Study	Jeppesen 2012[160]			
	Control group: normal discharge after usual hospital care.		For objective outcomes: Risk of bias: Selection - Low, Blinding - Low, Incomplete outcome data - Low, Outcome reporting - Low, other bias-high For subjective outcomes: Risk of bias: Selection - low, Blinding - high, Incomplete outcome data - Low, Outcome reporting - Low, other bias-high	
Ojoo 2002[222] RCT UK	Hospital at home Team: outreach nurses Versus Control group: inpatient care.	Adults (n=60) >18 years, with an acute exacerbation of COPD	Satisfaction Risk of bias (assessed in Cochrane review) For subjective outcomes: Risk of bias: Selection – unclear risk, Blinding - high, Incomplete outcome data - Low, Outcome reporting - low, other bias- low	Included in Cochrane: Hospital at home early discharge. Hospital at home for acute exacerbations of chronic obstructive pulmonary disease (COPD).
Skwarska 2000[277] RCT UK	Hospital at home Team: GP and nurses. Review at weekly meetings with consultant and medical advice from on call registrar or consultant. Versus Control group: treated in the inpatient respiratory unit.	Adults (n=184) with an acute exacerbation of COPD	Quality of life, satisfaction. Risk of bias (assessed in Cochrane review) For subjective outcomes: Risk of bias: Selection - low, Blinding - high, Incomplete outcome data - high, Outcome reporting - Low, other-low	Included in Cochrane: Hospital at home early discharge. Hospital at home for acute exacerbations of chronic obstructive pulmonary disease (COPD). Follow up of 18 months.

Study	Shepperd 2008[271]
Study type	Systematic review of RCTs – Hospital at home admission avoidance.
Number of studies (number of participants)	10 (n=1333). (8 RCTs included in our review).
Countries and setting	Conducted in Australia, Italy, New Zealand and the United Kingdom.
Duration of study	Databases were searched through to January 2008.
Stratum	Admission avoidance.
Subgroup analysis within study	Sys review – pre-specified in protocol.
Inclusion criteria	Patients aged 18 years and over that were included in admission avoidance hospital at home schemes.
Exclusion criteria	Patients with long-term care needs were not included unless they required admission to hospital for an acute episode of care. Evaluations of obstetric, paediatric and mental health hospital at home schemes were excluded from the review since the preliminary literature searches by the authors suggested that separate reviews would be justified for each of these groups.
Recruitment/selection of patients	Randomised controlled trials recruiting patients aged 18 years and over. Studies comparing admission avoidance hospital at home with acute hospital inpatient care. The schemes may admit patients directly from the community, so avoiding physical contact with the hospital, or may admit from the emergency room.
Age, gender and ethnicity	Not stated overall.
Further population details	Two trials recruited patients with chronic obstructive pulmonary disease (COPD) (Davies 2000; Nicholson 2001), two trials recruited patients recovering from a moderately severe stroke who were clinically stable (Kalra 2000; Ricauda 2004), and three trials recruited patients with an acute medical condition who were mainly elderly (Caplan 1999; Harris 2005; Wilson 1999). As noted above, there was one trial each for patients with cellulitis (Corwin 2005), patients with community acquired pneumonia (Richards 2005).
Extra comments	-
Indirectness of population	No indirectness
Interventions	Hospital at home - Admission avoidance hospital at home schemes compared to acute hospital inpatient care. The schemes may admit patients directly from the community or from the emergency room. Definition used by the authors: hospital at home is a service that can avoid the need for hospital admission by providing active treatment by health care professionals in the patient's home for a condition that otherwise would require acute hospital in-patient care, and always for a limited time period. In particular, hospital at home has to offer a specific service to patients in their home requiring health care professionals to take an active part in the patients' care. If hospital at home were not available then the patient would be admitted to an acute hospital ward. Therefore, the following services are excluded from this review: • services providing long term care;

Study	Shepperd 2008[271]
	• services provided in outpatient settings or post discharge from hospital; and
	• self-care by the patient in their home such as self-administration of an intra-venous infusion.
Funding	Not stated.
Summary of included studies	

Study	Intervention and comparison	Population	Outcomes	Comments
Caplan 2005[46] Caplan 1999[47] RCT Australia	Hospital outreach team providing antibiotics, medications, blood transfusion. Team: included nurse, GP, hospital physician, physiotherapists and occupational therapist. Versus Control group: treated in accordance with standard regimens.	Adults (n=100) >65 years of age. Range of conditions including pneumonia, urinary tract infections and cellulitis, endocarditis and osteomyelitis.	Quality of life (Barthel), patients and carer satisfaction, adverse events and mortality. Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance. 3 month follow up.
Corwin 2005[66] RCT New Zealand	Hospital at home Team: GP or community GP and community care nurses Versus Control group: hospital administration of antibiotics.	Adults (n=200) >16 years of age, with clinical signs of cellulitis or failure of oral antibiotics	Adverse events, length of stay, satisfaction Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance.
Davies 2000[79] RCT UK	Hospital at home. Team: nurse-led but 'clinical responsibility for the patients remained with the hospital respiratory physician' Versus Control group: hospital care as an inpatient.	Adults (n=150) with a mean age of 70 years; experiencing an acute exacerbation of COPD.	Admissions, quality of life, mortality. Risk of bias (assessed in Cochrane review) Risk of bias: Selection – unclear risk (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance and Randomised controlled trials comparing home versus hospital care treatment for acute exacerbation of COPD.

Study	Shepperd 2008[271]			
				3 month follow up
Harris 2005[138] RCT New Zealand	Home from hospital Team: nurse-led but 'clinical responsibility was held by dedicated HAH registrar, consultant geriatrician and in some cases the GP' Versus	Adults (n=285) with a mean age of 81 years presenting at ED or admitted to hospital for a broad range of diagnoses: fractures (28%); miscellaneous medical problems (18%); respiratory problems (16%); stroke and neurological diagnoses (14%); falls and injuries (11%); cardiac diagnoses (8%); and rehabilitation and other problems (5%) Location: New Zealand	Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance. Hospital at home early discharge.
Kalra 2000[164] RCT UK	Hospital outreach admission avoidance MDT with joint care from community services. Three arm trial: Stroke unit care (n=148) Versus Stroke team (n=150) Versus Home care (n=149)	Adults (n=457) recovering from a moderate to severe stroke	Mortality, Readmission, length of stay, Ranking level of independence, Barthel Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance.
Nicholson 2001[215] RCT Australia	Hospital at home (discharge from Emergency Department) Patients retained in patient status and received clinical supervision from hospital specialist, and hospital had legal and financial responsibility; also	Patients with chronic obstructive pulmonary disease Inclusion criteria: age > 45 years, COPD, current or ex smoker, FEV1 < 60% predicted, admission requested by GP or OPD clinic staff or ED	Cost to the health service Risk of bias (assessed in Cochrane review) Risk of bias: Selection – unclear risk (no further details for other domains)	

Study	Shepperd 2008[271]			
	received care from GP, community nursing and domiciliary care. Hospital medical staff provided 24 hour telephone support	staff, telephone at home treatment = 13 control = 12		
Ricauda 2004[240] RCT Italy	Home treatment (from a geriatric home hospitalisation service) Team: geriatricians, nurses, dieticians, physiotherapists, psychologists and social workers dedicated to the home management of stroke. Versus General medical ward.	Adults (n=120) elderly patients, with a mean age of 82 years; admitted to the emergency department with first acute ischemic stroke.	Quality of life, mortality, avoidable adverse events (respiratory and urinary tract infections) Risk of bias (assessed in Cochrane review) Risk of bias: Selection – unclear risk (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance.
Richards 2005[242] RCT New Zealand	Hospital at home Team: GP and primary care nurses Versus Control group: hospital management	Adults (n=55) with mild to moderately severe pneumonia	Length of stay (days to discharge), satisfaction. Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance.
Wilson 1999[312] Wilson 2002[314] Wilson 2003[313] RCT UK	Hospital at home Team: nurse-led, physiotherapist, occupational therapists, health workers. GPs retain responsibility. Versus Control group: hospital care.	Adults (n =199) with an acute condition.	Mortality, readmission, length of stay, satisfaction. Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance.

Study	Shepperd 2009[273]
Study type	Systematic review of RCTs – Hospital at home early discharge.
Number of studies (number of participants)	26 (n=3967). (6/26 studies included in our review)
Countries and setting	Conducted in Australia, Canada, New Zealand, Norway, Sweden, Thailand, and the UK (the majority of trials).
Duration of study	Databases were searched through to January/February 2008.
Stratum	Early discharge.
Subgroup analysis within study	Sys review – pre-specified in protocol.
Inclusion criteria	The review includes evaluations of early discharge hospital at home schemes that include patients aged 18 years and over. Patients were either recovering from a stroke, following elective surgery, or were older people with a mix of conditions.
Exclusion criteria	Patients with long-term care needs were not included unless they required admission to hospital for an acute episode of care. Evaluations of obstetric, paediatric and mental health hospital at home schemes were excluded from the review since the authors' preliminary literature searches suggested that separate reviews would be justified for each of these groups due to the different types of patient group and volume of literature. The following services were excluded from this review: services providing long term care, services provided in out-patient settings or post discharge from hospital, and self-care by the patient in their home such as self-administration of an intravenous infusion.
Recruitment/selection of patients	The review includes evaluations of early discharge hospital at home schemes that include patients aged 18 years and over. Patients were either recovering from a stroke, following elective surgery, or were older people with a mix of conditions.
Age, gender and ethnicity	Not stated overall.
Further population details	Not stated.
Extra comments	-
Indirectness of population	No indirectness – we excluded the papers with patients recovering from elective surgery for our analysis.
Interventions	Studies comparing early discharge hospital at home with acute hospital in-patient care. The authors used the following definition to determine if studies should be included in the review: hospital at home is a service that provides active treatment by health care professionals in the patient's home for a condition that otherwise would require acute hospital in-patient care, and always for a limited time period. In particular, hospital at home has to offer a specific service to patients in their home requiring health care professionals to take an active part in the patients' care. If hospital at home were not available then the patient would not be discharged early from hospital and would remain on an acute hospital ward. Therefore, the following services were excluded from this review: services providing long term care, services provided in out-patient settings or post discharge from hospital, and self-care by the patient in their home such as self-administration of an intravenous infusion.

Study	Shepperd 2009[273]			
Funding	Not stated.			
Summary of included studies				
Study	Intervention and comparison	Population	Outcomes	Comments
Cotton 2000[67] RCT UK	Hospital at home (early discharge) Team: specialist respiratory nurses, GP Versus Control: discharged after usual care.	Adults (n=81) exacerbation of COPD	Readmission, length of stay, mortality Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home early discharge. Hospital at home for acute exacerbations of chronic obstructive pulmonary disease (COPD).
Donald 1995[89] RCT UK	Hospital at home Team: full-time nurse, manager/coordinator, physiotherapists and occupational therapists. Overall responsibility for the patient while under the care of HAH remained with the consultant, although the GP provided routine and emergency medical care Versus Control group: conventional discharge.	Adults (n=60) with a mean age of 82 years, who had been admitted acutely under the care of the elderly care physicians.	Readmission, mortality, length of hospital stay. Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	In Cochrane Review: Hospital at home early discharge.
Harris 2005[138] RCT New Zealand	Home from hospital Team: nurse-led but 'clinical responsibility was held by dedicated HAH registrar, consultant geriatrician and in some cases the GP' Versus	Adults (n=285) with a mean age of 81 years presenting at ED or admitted to hospital for a broad range of diagnoses: fractures (28%); miscellaneous medical problems (18%); respiratory problems (16%); stroke and neurological	Mortality, Readmission, Quality of life, Satisfaction, Length of stay Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home admission avoidance. Hospital at home early discharge.

Study	Shepperd 2009[273]			
		diagnoses (14%); falls and injuries (11%); cardiac diagnoses (8%); and rehabilitation and other problems (5%) Location: New Zealand		
Ojoo 2002[222] RCT UK	Hospital at home Team: outreach nurses Versus Control group: inpatient care.	Adults (n= 60) >18 years, with an acute exacerbation of COPD	Satisfaction Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home early discharge. Hospital at home for acute exacerbations of chronic obstructive pulmonary.
Shepperd 1998[265] Shepperd 1998[268] RCT UK	Hospital at home Team: nurse-led, physiotherapist, occupational therapist, pathology, SALT. GPs held responsibility. Versus Control group: inpatient hospital care.	Adults (n=532) recovering from surgery mainly but elderly and COPD patients also (table 6&7); outcomes for medical elderly patients reported only	Quality of life, carer satisfaction, readmission, mortality. Risk of bias (assessed in Cochrane review) Risk of bias: Selection – low (no further details for other domains)	Included in Cochrane: Hospital at home early discharge.
Skwarska 2000[277] RCT UK	Hospital at home Team: GP and nurses. Review at weekly meetings with consultant and medical advice from on call registrar or consultant. Versus Control group: treated in the inpatient respiratory unit.	Adults (n=184) with an acute exacerbation of COPD	Quality of life, satisfaction. Risk of bias (assessed in Cochrane review) Risk of bias: Selection – unclear risk (no further details for other domains)	Included in Cochrane: Hospital at home early discharge. Hospital at home for acute exacerbations of chronic obstructive pulmonary. Follow up of 18 months.