Hospital at Home (Secondary Care)

Study	MENDOZA 2009[202]
Study type	RCT; prospective, randomised study
Number of studies (number of participants)	1 (n=80); Randomised into 2 groups (1:1); 9 patients withdrew; analysis done on n=71; Hospital at Home (n=37), Inpatient Hospital Care (n=34)
Countries and setting	Txagorritxu University Hospital, Vitoria-Gasteiz, Spain, with a catchment area of 250'000 people and a HaH unit staffed by 6 physicians and 8 nurses
Duration of study	Between May 2006 and March 2007
Stratum	Admission avoidance
Subgroup analysis within study	n/a
Inclusion criteria	Aged ≥65 years; with diagnosis and prognosis evaluation of heart failure (HF) since at least 12 months prior to the study; New York Heart Association (NYHA) functional class II or III before coming to ED due to exacerbation
Exclusion criteria	Admitted in the preceding 2 months for deterioration of HF or acute coronary syndrome; presence of severe symptoms such as sudden worsening of HF; poor prognosis factors (haemodynamic instability, severe arrhythmia, baseline creatinine above 2.5 mg/dL); no response to treatment in the ED; active cancer, severe dementia, or any other disease at an advanced stage indicating life expectancy of less than 6 months; acute psychiatric diseases, active alcoholism; active pulmonary tuberculosis; those living in a psycho-geriatric institution; no guarantee of all-day supervision; absence of a telephone at home or living more than 10km from the hospital
Recruitment/selection of patients	All patients sought care at the ED on their own initiative or were referred by GP. When ED doctors diagnosed decompensation of CHF and identified patient as potential candidate for the study based on eligibility criteria, the doctor responsible for recruitment to the study was called. Once patient assigned consent form, they were randomly allocated (1:1) to one of the intervention groups.
Age, gender and ethnicity	Hospital at Home (n=37)= Age – Mean (SD): 78.1 years (6.2). Gender (M/F): 1/1. Ethnicity: no information given Inpatient Hospital Care (n=34)= Age – Mean (SD): 79.9 years (6.3). Gender (M/F): 2/1. Ethnicity: no information given
Further population details	There are differences in group characteristics although not statistically significant: For example, patients in Inpatient Hospital Care group slightly older, more males (p=0.06), less admissions in previous year for HF, lower functional status (p=0.06; Barthel index).

Study	MENDOZA 2009[202]
Extra comments	Although they recorded data at months 1, 3, 6 and 12, the authors only report outcome data at 1 year follow-up.
Indirectness of population	No indirectness
Interventions	(n=37) Intervention 1: Hospital at Home- HaH unit staffed by 6 physicians and 8 nurses Patients were explained HaH unit while they were still in ED, given an info sheet and contact numbers. Within 12 – 24 hours of ED visit they received visits to their homes from an internal medicine specialist and a nurse, who were staff members of the HaH unit. In case of deterioration occurring outside working hours (daily 8am to 9pm), patients and family were instructed to call 112, emergency services, explaining that they were patients under the supervision of the HaH unit. Apart from nursing and clinical evaluation, samples were taken for laboratory tests and ECGs performed in patient's home when necessary. X-ray and echocardiography at hospital was equally accessible for HaH patients as for inpatients. Daily visits by specialist nurse. Physician visited daily or every other day depending on their clinical condition. Treatment within HaH finished with referral to primary care after recovery or, in the case of deterioration or no response to treatment, with transfer to the cardiology ward. (n=34) Intervention 2: Inpatient Hospital Care Patients were admitted to the hospital, cardiology ward and were managed by the usual staff of cardiology specialists and nurses, in accordance with guideline recommendations. Concurrent medication/care: both received usual care Follow-up: After initial admission (intervention), patients were followed up by their primary care physician, who was not aware of the study. A physician or nurse from the study team contacted each patient at months 1, 3, 6 and 12 to record events such as death, new admissions, or visits to ED, the cardiologist, or GP. Blood tests, re-evaluation of functional status and health-related QoL were performed at month 12.
Funding	This study was financed with a grant from the Caja Vital Kutxa ('a Spanish Savings Bank, a socially-conscious financial institution that leads the financial sector in its 116 area of influence').

All results at 12 months follow-up as no other data presented

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME versus INPATIENT HOSPITAL CARE

Protocol outcome 1: Mortality
- Actual outcome: Death; Group 1: n=2/37; Group 2: n=3/34; p=0.67; 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 outcome 2: Readmission
- Actual outcome: Readmission for heart failure at 1 year; Group 1: n=15/37, Group 2: n=17/34; p=0.42; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness

Study	MENDOZA 2009[202]
Protocol outcome 3: length of stay - Actual outcome: average length of stay: days (SD); Group 1: 10.9 (5.9), Group 2: 7.9 (3.0); p=0.01; 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 outcome 4: Quality of Life (physical) - Actual outcome: Quality of Life (physical component of SF36); Group 1: 3.6 (-0.5; 7.7); Group 2: 2.2 (-1.9; 6.4); p=0.47; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness Protocol outcome 5: Quality of Life (mental) - Actual outcome: Quality of Life (mental component of SF36); Group 1: 4.0 (-0.9; 8.9), Group 2: 2.8 (-2.4; 8.0); p=0.38; Risk of bias: All domain - High, Selection - High, Blinding - High, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness Protocol outcome 6: Functional status (difference from baseline) - Actual outcome: Variation in Barthel Index (higher values=more independent); Group 1: 4.0 (-0.9; 8.9), Group 2: 4.7 (-2.2; 11.5); p=0.21; Risk of bias: All domain - High, Selection - High, 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	Avoidable adverse events, patient and/or carer satisfaction, number of presentations to ED, number of unnecessary admissions, reduced GP presentations

Study	PATEL 2008[229]
Study type	RCT; open, randomised, controlled pilot study
Number of studies (number of participants)	1 (n=31); Randomised into 2 groups; Hospital at Home (n=13), Conventional Care (n=18)
Countries and setting	Sahlgrenska University Hospital/Oestra, a hospital serving 250’000 inhabitants in Goeteborg, Sweden
Duration of study	Between April 2004 and May 2006
Stratum	Early discharge
Subgroup analysis within study	n/a
Inclusion criteria	Prior diagnosis of chronic heart failure (CHF) according to the European Society of Cardiology guidelines, assessed as being in need of hospital care by their consulting physician and complying with all of the inclusion criteria:. Earlier diagnosed with (CHF) with diastolic or systolic left ventricular dysfunction; deterioration of HF 3 days with symptoms of increasing dyspnoea, orthopnoea, weight gain ≥ 2kg, debuting peripheral oedema or abdominal swelling; clinical signs, for example, extended

Study	PATEL 2008[229]
	jugular vein, leg oedema, tachypnoea, pulmonary rales, ascites and third heart sound; at least one symptom and one sign should be present; New York Heart Association (NYHA) class II-IV
Exclusion criteria	Unwillingness to participate; worsening of CHF <3 days; newly onset HF; pulmonary or pre-pulmonary oedema; need for monitoring of arrhythmia; other morbidities indicating need for hospitalisation; living at an institution; inability to follow instructions; S-Haemoglobin < 100 g/L or a decrease of S-haemoglobin > 20 g/L; S-Creatinine > 250 µmol/L; S-Potassium >5.5 mmol/L or <3.4 mmol/L; S-Troponin T>0.05 µg/L; Creatine kinase-MB>5 µg/L; ASAT and ALAT >three times above the normal value; Systolic blood pressure <95 mm Hg; heart rate <45 or >110 beats/min
Recruitment/selection of patients	Patients seeking care for deterioration of CHF were identified within 24 hr after admission from 3 medical facilities: an ED, a heart failure (HF) outpatient clinic and a medical ward. After one year the protocol was amended with an extension of time to 48 hr for study inclusion. After consent was obtained routine blood tests were performed, complete history taken and examination done by cardiologist, and then patients were randomised to one of the 2 groups.
Age, gender and ethnicity	Hospital at Home (n=13)= Age – Mean (SD): 77 years (10). Gender (M/F): 1/1. Ethnicity: no information given Conventional Care (n=18)= Age – Mean (SD): 78 years (8). Gender (M/F): 4/1. Ethnicity: no information given
Further population details	The conventional care group included a larger number of male, more educated patients as well as a higher prevalence of diabetes ($p<0.05$).
Extra comments	Three of the 18 patients in the conventional care group withdrew their consent during the study period (2 because of fatigue, 1 did not give a reason). Sample size quite small; considerably smaller than their sample size calculation suggested (77 per group). Paper sets out to measure QoL but then does not report it, just QALY's. Study records follow-ups at 1, 4, 8 and 12 months, but only presents data relevant to clinical review at 12 months follow-up. Paper is not clear whether they are Means (SD) or Medians (SE).
Indirectness of population	No indirectness
Interventions	(n=13) Intervention 1: Hospital at home Hospital at Home (paper calls it Home Care group): patients were initially treated in ED or in the ward for up to 48 hrs and subsequently sent home. All patients were followed up the day after returning home by a specialist nurse from the HF clinic. Patients were visited daily or every other day by the specialist nurse for the next 5-7 days as determined by the patients' health status. Home visits were terminated when a patient: was symptomatically stable or improving; had stable or falling weight; had no signs of pulmonary rales and had no oedema above the ankle. Specialist nurse could be phoned during office hours; nurses at intensive cardiac care unit could be phoned after office hours. Cardiologist was always available for telephone consultation. After termination of home visits, patients were referred to the HF clinic for drug up-titration if necessary. After each home visit, the nurse and study physician had a short consultation to discuss the patient's condition. (n=18) Intervention 2: Conventional Care -patients treated in accordance with hospital treatment guidelines. All data were collected in the same way as in the HC group.

Study	PATEL 2008[229]
	Concurrent medication/care: both received usual care
Funding	Support from Swedish Research Council and other academic and government bodies.
All results at 12 months follow-up as no other data presented RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME versus CONVENTIONAL CARE Protocol outcome 1: Mortality - Actual outcome: Death; Group 1: n=2/13; Group 2: n=2/18; Risk of bias: All domain - high, Selection - high, Blinding - high, Incomplete outcome data - Low, Outcome reporting - Low, Measurement - Low, Crossover - Low, Subgroups - Low; Indirectness of outcome: No indirectness Protocol outcome 2: length of stay - Actual outcome: average length of stay of hospitalisation: mean number of days (SD); Group 1: 5.6 (9.4); Group 2: 4.5 (6.2); Risk of bias: All domain - high, Selection - high, 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	Avoidable adverse events, patient and/or carer satisfaction, number of unnecessary admissions, presentation to ED (data does not make sense – removed from analysis), re-admission (data does not make sense – removed from analysis), reduced GP presentations; quality of life

Study	TIBALDI 2009[296]
Study type	RCT; prospective, single-blind, randomised controlled trial
Number of studies (number of participants)	1 (n=101); Randomised into 2 groups (1:1); Hospital at Home (n=48), General Medical Ward (n=53); followed-up to 6 months: Hospital at Home (n=39), General Medical Ward (n=43)
Countries and setting	San Giovanni Battista Hospital of Torino, Italy (large, urban university teaching and tertiary care hospital)
Duration of study	1st April 2004 to 31st April 2005
Stratum	admission avoidance
Subgroup analysis within study	n/a

Study	TIBALDI 2009[296]
Inclusion criteria	Aged ≥75 years with pre-existing diagnosis of chronic heart failure (CHF- stage C according to the American Heart Association classification) and a persistent functional impairment indicative of New York Heart Association (NYHA) class III or IV status were considered eligible for the study when admitted to the ED of the hospital for acute decompensation of their chronic condition and assessed as being in need of hospital care. Additional inclusion criteria: appropriate care supervision at home, telephone connection, living in the hospital-at-home catchment area, informed consent, at least 1 previous admission for acute CHF, and need for intravenous drug infusion
Exclusion criteria	New-onset heart failure; absence of family and social support; need for mechanical ventilation, haemodialysis, or intensive monitoring; severe dementia (Mini Mental Examination score <14); terminal malignant neoplasm; severe renal impairment (estimated glomerular filtration rate <20 mL/min); hepatic failure (Child-Pugh classes B and C); serum haemoglobin levels less than 9 g/dL (to convert to grams per litre, multiply by 10); and planned cardiac surgery (for example, valve replacement).
Recruitment/selection of patients	In the ED all potentially eligible patients with an acute decompensation of CHF underwent baseline standard clinical evaluation, routine blood tests, chest radiography etc. Study participants were enrolled within 12 to 24 hours of ED admission by research assistants who screened patients for eligibility and obtained informed consent. The project manager then randomly assigned patients to one of the two groups.
Age, gender and ethnicity	Hospital at Home (n=48)= Age – Mean (SD): 82.2 years (5.2). Gender (M/F): 1/1. Ethnicity: no information given General Medical Ward (n=53)= Age – Mean (SD): 80.1 years (4.9). Gender (M/F): 1/1. Ethnicity: no information given
Further population details	At baseline 2 groups were similar in all sociodemographic, health and clinical characteristics apart from age: patients in HaH group slightly older (p=0.04).
Extra comments	Sample analysed on intention-to-treat basis. The population sample was very old, comorbid and acutely ill. The number of deaths (7 in HaH and 8 in hospital group) and patients lost to follow-up (2 in each group) was very similar for both groups.
Indirectness of population	No indirectness
Interventions	(n=48) Intervention 1: Hospital at Home Hospital at Home (paper calls it Geriatric Hospital at Home service): provides substitutive HaH care in a clinical unit model and has been in operation for more than 20 years. The MDT is equipped with 7 cars and consists of 4 geriatricians, 13 nurses, 3 physios, 1 social worker, and 1 counsellor. The main feature is that physicians and nurses work together as a team, with daily meetings to discuss the needs of each patient and to organise individualised medical care plans. 7 days a week and on average for 25 patients per day and 450 patients per year. Close collaboration between HaH team and ED department. HaH patients are considered hospital patients, and all services are provided by the hospital, which retains legal and financial responsibility for care. In the ED all necessary diagnostic tests are provided and then the patient moves home by ambulance. In the first days after admission to HaH each patient was visited at home on a daily basis by physicians and nurses. Thereafter at intervals of 2 to 3 days or less, as required by the clinical condition of the patient. (n=53) Intervention 2: General Medical Ward Routine hospital care. Protocols for prevention of nosocomial infections, bed sores, and immobilisation are routinely adopted for frail

Study	TIBALDI 2009[296]
	elderly inpatients. Concurrent medication/care: both received usual care Study reports follow-up at 6 months.
Funding	Not mentioned. But author affiliations are with the Department of Medicine at the University of Torino, Italy
All results at 6 months follow-up as no other data presented RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME versus GENERAL MEDICAL WARD Protocol outcome 1: Mortality - Actual outcome: Death; Group 1: n=7/48; Group 2: n=8/53; 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: Admission - Actual outcome: Admission to hospital; Group 1: n=8/48, Group 2: n=18/53; 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: length of stay - Actual outcome: average length of stay in ED: mean hours (SD; range); Group 1: 14.6 (3.4; 3-24 hrs), Group 2: 16.3 (3.0; 5-24 hrs); 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 indirectnessProtocol outcome 4: length of stay - Actual outcome: average length of stay of first additional hospital admission: mean (SD); Group 1: 22.1 (9.5); Group 2: 25.3 (12.2); 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 5: length of stay - Actual outcome: overall length of treatment: mean days (SD); Group 1: 20.7 (6.9); Group 2:11.6 (10.7); p=0.001; 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 indirectnessProtocol outcome 6: Quality of Life - Actual outcome: Nottingham Health Profile (higher values=better; mean (SD) changes in scores from baseline); Group 1: +1.09 (2.57), Group 2: +0.18 (1.94); 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, patient and/or carer satisfaction, number of presentations to ED, readmission, reduced GP presentations

Study	Talcott 2011[286]
Study type	RCT (Patient randomised; Parallel)
Number of studies (number of participants)	1 (n=117)
Countries and setting	Conducted in USA; Setting: Hospital and home
Line of therapy	1st line
Duration of study	Intervention + follow up:
Method of assessment of guideline condition	Adequate method of assessment/diagnosis
Stratum	Admission avoidance
Subgroup analysis within study	Not applicable
Inclusion criteria	Adult outpatients with post chemotherapy fever and neutropenia (absolute neutrophil count less than 500µl) that persisted after at least 24 hour.
Exclusion criteria	AIDs associated malignancy, neutropenia arising more than 21days after chemotherapy, and intensive chemotherapy requiring bone marrow or peripheral stem cell support.
Recruitment/selection of patients	Outpatients at presentation, exhibit no indication for hospitalisation other than fever and neutropenia, such as systemic hypotension, altered mental status, respiratory failure, or inadequate oral fluid intake during 24 hour observation, and have adequately controlled cancer.
Age, gender and ethnicity	Age - Median (range): Hospital care: 47 (20-81); early discharge: 47 (25-74). Gender (M:F): Hospital care: 33/33; HAH: 28/19. Ethnicity: not stated
Further population details	1. Frail elderly
Indirectness of population	--
Interventions	(n=47) Intervention 1: Hospital at home - Hospital at home led by primary care. Patients were supervised by the treating physician with additional assistance available from the research team. Patients at home were required to measure their temperature and blood pressure at least 4 times daily. They were examined by a home care nurse who used a written protocol and was instructed to contact the primary physician if abnormal findings occurred. In addition, a physician examined each home care patient 2 to 4 days after discharge, at least weekly thereafter. Outpatients were readmitted to the hospital whenever a physician felt the patient's condition warranted it, if the patient requested or it proved infeasible to administer the prescribed antibiotics. Duration: study period. Concurrent medication/care: not feasible (n=66) Intervention 2: Hospital-based care/services. Continued inpatient antibiotic therapy. Duration: study period.

Study	Talcott 2011[286]
	Concurrent medication/care: not stated
Funding	Funding not stated
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME LED BY PRIMARY CARE versus HOSPITAL-BASED CARE/SERVICES Protocol outcome 1: Mortality at during study period - Actual outcome for Early discharge: Mortality at end of study; Group 1: 0/47, Group 2: 0/66; 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 admissions to hospital at After 28 days of first admission - Actual outcome for Early discharge: Hospital re-admission at end of study; Group 1: 4/47, Group 2: 0/66; 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; 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	Vianello 2013[304]
Study type	RCT (Patient randomised; Parallel).
Number of studies (number of participants)	1 (n=59).
Countries and setting	Conducted in Italy; Setting: Hospital and home.
Line of therapy	1st line.
Duration of study	Intervention + follow up: Follow-up -3 months.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis.
Stratum	Admission avoidance.
Subgroup analysis within study	Not applicable.
Inclusion criteria	Neuromuscular disease patients with respiratory tract infection and with urgent need of hospitalisation
Exclusion criteria	Requirement of critical care with 24 hour surveillance; living outside the geographic area covered by our district nurse service; no non-professional care givers or care giver networks at home; and presence of an advance directive

Study	Vianello 2013[304]
	declining to undergo intubation and/or CPR.
Recruitment/selection of patients	All consecutive neuromuscular disease (NMD) patients who were referred to the ED or to the out-patient clinic between Jan 2009 and Dec2011 with respiratory tract infection and urgent hospitalisation were recruited.
Age, gender and ethnicity	Age - Mean (SD): HAH: 44.6 (20.4); HOSPITAL: 46.7 (20.2). Gender (M:F): HAH: 17/9; Hospital: 24/3. Ethnicity: not stated.
Further population details	1. Frail elderly.
Indirectness of population	No indirectness.
Interventions	(n=26) Intervention 1: Hospital at home - Hospital at home led by primary care. Non-invasive ventilation (NIV) delivered at home by a portable ventilator; manually and/or mechanically assisted cough; continuous SpO2 monitoring; antibiotic therapy; pulmonology visit at home; district nurse visit at home; telephone access to pulmonologists. Duration: end of study. Concurrent medication/care: not stated. (n=27) Intervention 2: Hospital-based care/services. Patients received usual care, consisting of the same drugs and all other supportive measures delivered to the hospital at home group at the discretion of the ward team. Duration: end of study. Concurrent medication/care: not stated.
Funding	Funding not stated.
RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: HOSPITAL AT HOME LED BY PRIMARY CARE versus HOSPITAL-BASED CARE/SERVICES. Protocol outcome 1: Mortality at during study period. - Actual outcome for Admission avoidance: Mortality at 3 months; Group 1: 3/26, Group 2: 4/27; Risk of bias: All domain - Low, Selection - High, Blinding - Low, Incomplete outcome data - 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.