Primary care-based telemonitoring for home care patients with heart failure and chronic lung disease

Submission date	Recruitment status	Prospectively registered		
15/03/2010	No longer recruiting	☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
20/04/2010	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
04/04/2013	Circulatory System			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number N/A

Study information

Scientific Title

Evaluation of a primary care-based telemonitoring intervention for home care patients with heart failure and chronic lung disease: a randomised controlled trial

Acronym

TELBIL project

Study objectives

Home care patients with heart failure and chronic pulmonary disease may benefit from a primary care-based telemonitoring intervention which could result in a reduction of hospital admissions, duration of the hospitalisations and mortality. We postulate that home telemonitoring may improve the quality of life of these patients in a way that is cost-effective and acceptable to patients and health care professionals.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Local Ethics Committee for Scientific Research (CEIC, Basurto Hospital, Bizkaia, Spain) approved on the 16th December 2009

Study design

Randomised controlled open clinical trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Heart failure and chronic pulmonary disease

Interventions

Intervention group:

Telemonitoring will consist of daily patient self-measurements of respiratory rate, heart rate, blood pressure, transdermal oxygen saturation, weight and body temperature. Additionally, the patient will complete a qualitative symptom questionnaire daily using the telemonitoring system. After a local intelligent analysis the abnormal measurements, suggesting clinical alarm, will be sent by GPRS to the primary care team responsible for the care of each patient. Routine telephone contacts will be conducted every fortnight.

Control group:

Patients receive the standard care consisting of periodic medical examinations. The frequency of the medical examinations will vary depending on the clinical, social and family situation of each patient. In addition, the general practitioner or nurse will see or call the patient on demand in the event of a deterioration in the medical condition.

The physicians and nurses responsible for the care of the patients in the control and intervention groups have received specific training in the early detection and management of acute decompensations prior to the start of the study.

The total duration of intervention and follow-up for both intervention and control group is 12 months.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Measured at 3, 6, and 12 months:

- 1. Number and duration of hospital admissions
- 2. Mortality rate
- 3. Cost-effectiveness

Key secondary outcome(s))

Measured at 3, 6, and 12 months:

- 1. Number of emergency department visits
- 2. Number of home visits
- 3. Number of primary care visits
- 4. Number of specialist care visits
- 5. Number of telephone contacts
- 6. Number of acute heart or respiratory decompensations
- 7. Quality of life (EQ-5D questionnaire at baseline and after 3, 6 and 12 months of follow-up)
- 8. Patient and professional satisfaction with the telemonitoring technology using validated questionnaires (after 3 months of follow-up)
- 9. Medication changes

Completion date

01/06/2011

Eligibility

Key inclusion criteria

- 1. Home care patients aged over 70 years of any gender
- 2. Heart failure and/or chronic pulmonary disease
- 3. At least two hospital admissions during the previous year (with at least one of the admissions due to the above mentioned diseases)

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

- 1. Residents in nursing homes
- 2. Paediatric patients (younger than 14 years of age)
- 3. Refusal to participate in the study
- 4. Frequent users of specialist healthcare services (i.e., rehabilitation, haemodialysis, frequent visitors to hospital day-care centres, etc.)
- 5. Terminal illness with life expectancy less than 6 months
- 6. Cognitive impairment

Date of first enrolment

01/02/2010

Date of final enrolment

01/06/2011

Locations

Countries of recruitment

Spain

Study participating centre Comarca Bilbao de Atención Primaria

Bilbao Spain 48011

Sponsor information

Organisation

Basque Government (Spain) - Department of Health and Consumer Affairs

ROR

https://ror.org/00pz2fp31

Funder(s)

Funder type

Government

Funder Name

Basque Government (Spain) - Department of Health and Consumer Affairs

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created Date added	Peer reviewed?	Patient-facing?
Results article	results	28/03/2013	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	No	Yes