

# Hospital at Home care for older patients with cognitive impairment: a protocol for a randomised controlled feasibility trial

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## Introduction

An acute hospital admission is a stressful life event for older people, particularly for those with cognitive impairment. The hospitalisation is often complicated by hospital-associated geriatric syndromes, including delirium and functional loss, leading to functional decline and nursing home admission. Hospital at Home care aims to avoid hospital-associated adverse outcomes in older patients with cognitive impairment by providing hospital care in the patient's own environment.

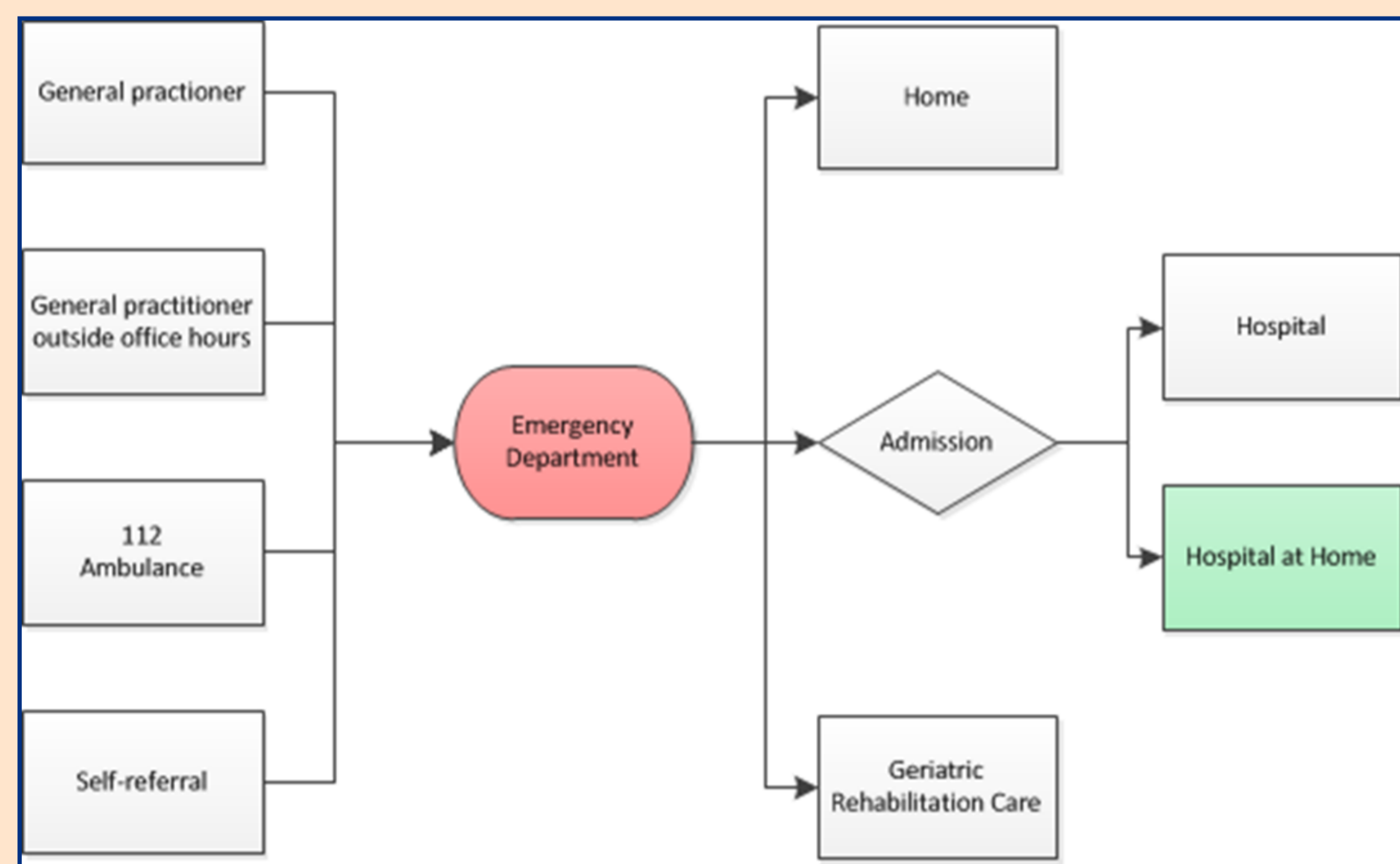


Figure: Route of patient in need of acute care

## Research question

To assess the feasibility of conducting a randomised controlled trial in terms of the recruitment, use and acceptability of Hospital at Home care for older patients with cognitive impairment.

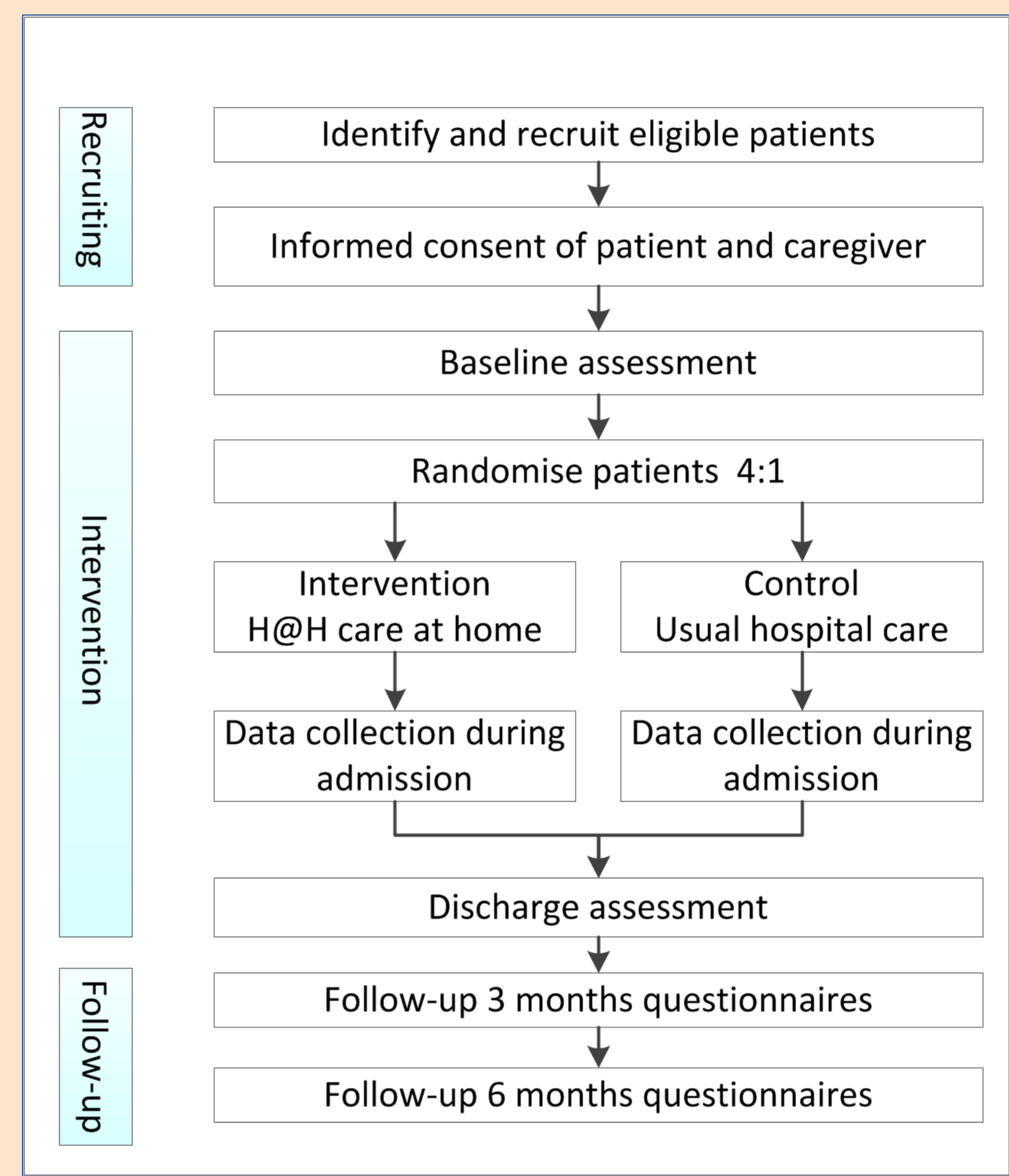


Figure: Flowchart of trial design summary

## Methods

This randomised, non-blinded feasibility trial assesses the feasibility of conducting a randomised controlled trial in terms of the recruitment, use and acceptability of Hospital at Home care for older patients with cognitive impairment. Eligible patients will be randomised either to Hospital at Home care in their own environment or usual hospital care. The intervention consists of hospital level care provided at patients' homes, including visits from health care professionals, diagnostics (laboratory tests, blood cultures) and treatment. The control group will receive usual hospital care. Measurements will be conducted at baseline, during admission, at discharge and at three and six months after the baseline assessment.

## Inclusion criteria

- Age 65 years of age and older
- Cognitive impairment
- Presenting at the ED with a defined acute illness
- Required hospital admission
- Living in hospital's catchment area (< 25 km)
- Informal caregiver present and able to understand and perform instructions
- Home suitable for Hospital at Home care

## Exclusion criteria

- Previously enrolled
- Hospitalised within the seven days preceding ED presentation
- Nursing home residents or awaiting a nursing home place
- Additional care needed (surgical assessment, dialysis dependent, expected terminal events etc.)

## Outcome measures

- Time spent at home
- total number of days alive and out of the hospital/skilled nursing facility in 6 months after hospital admission
- Quality of care
- geriatric syndromes, institutionalisation, mortality, total days with urinary catheter, length of hospital (at home) stay, and timing/intensity of the contact with health care professionals
- Financial analysis

## Strengths and limitations

This study addresses the feasibility of Hospital at Home care in patients with cognitive impairment, a patient population that is often excluded from participation in scientific research. Stakeholders were involved in the development of the design of the study which will support the implementation of Hospital at Home care and a future trial.

A process evaluation facilitates the investigation of factors that influence the experiences and perceptions of all persons involved in Hospital at Home care. Because of a limited sample size due to the study being centered on feasibility, results will not show effectiveness of Hospital at Home care compared to usual hospital care.