

# Acute hospital at home – an integrated, holistic and multidisciplinary service

**Authors:** Will Divall, James Richards, Patricia McCormack, Sue Trim and Katie Whitlock

## Aims

To assess the impact, effectiveness and ongoing development of an acute hospital at home (AH@H) service, created in January 2014.

## Methods

Retrospective review of AH@H patients between January 2014 and September 2017 specifically focusing on patient satisfaction, inpatient hospital bed days saved, main conditions treated and re-admission rates. Of discharge to assess (D2A) patients between April 2016 and September 2017 focusing on bed days saved, reduction of care needs and regained independence.

## Results

AH@H is a virtual inpatient ward run by a multidisciplinary team, who provide aspects of inpatient care to people in their own homes. Services provided include:

- > intravenous antibiotics (including administration via Surefuser pump)
- > facility to insert and manage PICC/mid-lines.
- > consultant-led daily virtual ward round
- > twice weekly review by senior house officer doctor at home
- > nursing assessments and observations (recorded electronically at the patient's home, through VitalPac)
- > complex wound care, including VAC pump dressings
- > blood tests
- > physiotherapy, occupational therapy, speech and language therapy and dietitian input
- > coordination with ambulatory care to arrange specialist reviews, further tests or imaging.

Since 2016 a D2A service has been developed that bridges care packages while giving multidisciplinary therapy input.

The AH@H service treats patients with a variety of medical and surgical conditions, the most common are:

- > respiratory infections- exacerbations of bronchiectasis/COPD/ asthma and pneumonia (17%)

- > cellulitis (14%)
- > venous thromboembolism (5%)
- > septic arthritis (4%)
- > infected diabetic foot ulcers (4%).

Between January 2014 and September 2017, 1,433 patients have been managed through the AH@H service, saving on average 9.64 bed days per day, with a re-admission rate of only 4.75%. A key success is the high degree of patient satisfaction: 98.13% of patients were 'likely or extremely likely to recommend the service' in the Friends and Family Test, compared with 83% on an inpatient ward. Patients feel they recover much better in their own home, eating their normal diet and being able to rest in a more relaxing environment without the disturbances of a busy inpatient ward. The average cost per day of an AH@H is £100, compared with £280 for an inpatient ward bed.

Between April 2016 and September 2017, D2A has managed 379 patients, saving on average 5.58 hospital bed days per day, while reducing 28.5% of patient's care needs and 21.11% regaining independence, no longer requiring a package of care.

## Conclusion

AH@H has been a success and the service has grown with the addition of D2A and increased junior medical cover. The key successes.

- > An average of 15.22 bed days saved per day.
- > High patient satisfaction – 98.13%.
- > On average saving £180 per patient per day, compared with inpatient care.
- > 49.6% of D2A patients regaining independence and having reduced care needs.
- > Being adaptable to a variety of medical and surgical conditions to assist patient flow through the hospital. ■

## Conflict of interest statement

None

**Author:** Dorset County Hospital Foundation Trust, Dorchester, United Kingdom