Better at Home: substituting inpatient rehabilitation beds for home based multidisciplinary rehabilitation

Kimmel L (l.kimmel@alfred.org.au), Watterson D, Wolters C, Holland A, Burge A, Hunter P, Reed M, Brookes B, Lee V & Leong R
Alfred Health, Melbourne, Victoria

Better at Home is a bed substitution model of care aimed at transitioning inpatient rehabilitation care for appropriate patients to a home-based setting. Key principles of the Better at Home service include:

- At least daily contact from a health professional
- Goal directed, interdisciplinary & person centred care
- Access to ‘first day’ meals if required
- Greater options for where patients can receive rehabilitation following patient, carer and family engagement

The aim of this 12 week (Aug-Oct 2018) pilot study was to utilise available resources to trial the Better at Home model of care, analyse functional outcomes and patient experience and assess hospital response to this change in care delivery.

Outcomes:
Outcome measures included admission and discharge functional scores

- Modified Iowa Level of Assistance Scale (mILOA) – mobility scale (range 0-36; lower = better). Change score of 5.77 points = clinically significant difference.
- Functional Autonomy Measurement System (SMAF) - handicap score which measures domains including activities of daily living, mobility, communication, mental functions (0 indicates no unmet needs). Change score of -5 = clinically significant difference.
- Functional Independence Measure (FIM), a tool used widely in rehabilitation which measures 18 domains (range 18-126; higher =better) was compared to an inpatient rehabilitation cohort from 2017. A qualitative study of patients and staff was also conducted.

Results:
53 admissions to Better at Home:
- Average age 75 years, 65% female.

Median change in FIM scores was 6.5 (IQR 2.2, 17.5). Admission FIM scores for Better at Home patients averaged higher than for the inpatient rehabilitation cohort (2017). Average initial mILOA score was 10.4 points, reducing to 7.2 on discharge. Average initial SMAF was -5 which improved to -2 on discharge. No significant change was seen on any single domain.

No increase in 28 day readmission rate compared with inpatient rehabilitation wards. (11%, 13%).

QUALITATIVE STUDY: PATIENTS - THEMES
Satisfaction with the service was high
Model of service delivery was not always modifiable to patients perceived needs
Communication between staff and with patients was well regarded
Variable patient involvement in the decision making process for admission to Better at Home

QUALITATIVE STUDY : STAFF - THEMES
Strong communicators and worked well as a multidisciplinary team
Good support for the model in principle
Higher nursing, allied health and medical staff ratios is desired
Inclusion criteria needed to be better defined

Next steps:
Bed substitution model commenced June 2019 with the transfer of 10 beds from inpatient to home-based setting. Learnings from this study included:

- Consistent staffing leads to improved flexibility and goal directed therapy
- Expansion of the patient cohort to include less functionally able patients is vital
- A culture of “home first” must be fostered across acute and rehab wards