



Excellence in evidence–based research delivering innovative solutions

This category is for individuals and teams who have used qualitative, evidence–based research to support the development and evaluations of innovative solutions which improve the health outcomes at the individuals or population level. The entry will include a copy of the research paper (if published), demonstrate robust data analysis, an original and innovative approach and demonstrated benefits.

Entrants must complete all sections	
<p>Title of entry Maximum of 70 characters Be specific, e.g. “Robust review to improve medication management”.</p>	<p>Proactively Managing Patients – Reduces Length of Stay and Saves 2209 Bed Days Over Eight Months Represents annualised of 3,313 beds, associated with an indicative saving of \$2,418,500.</p>
<p>About your organisation Maximum of 150 words A brief paragraph providing an overview of your organisation. In the case of a collaborative entry - the lead organisation, working group goal, terms of reference or vision statement.</p>	<p>Hawke's Bay Fallen Soldiers' Memorial Hospital Omahu Road Private Bag 9014 Hastings</p>
<p>Name of organisation/s Is entry submitted on behalf of one or a number of organisations? It is very important that you describe who is involved in this entry. This information is used in promotional materials, acknowledgements and inscribed onto awards, plaques and certificates.</p>	<p>Assessment Treatment and Rehabilitation Ward (AT&R)</p>
<p>Contact person Name of person/s who can be contacted in regards to this entry.</p>	<p>Dr Rachel Leigh Stewart Eadie</p>
<p>Email of contact person/s.</p>	<p>Rachel.leigh@hbdhb.govt.nz Stewart.eadie@hbdhb.govt.nz</p>
<p>Phone of contact person/s.</p>	<p>Dr Rachel Leigh – 027 332 3019 Stewart Eadie – 027 294 2527</p>

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Your organisation's CEO, GM, Service Director or Manager who has reviewed and endorsed this entry into the 2018 HB Health Awards

Name: Allison Stevenson

Signature:



Date: 14 September 2018

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Background

AT&R patients had a long length of stay with minimal improvement, compared to Australasia Rehabilitation Outcomes Centre (AROC). AROC analyses data from 248 centres across Australia and New Zealand, allowing individual centres to benchmark their performance against their peers.

Senior management and clinicians recognised a long length of stay was associated with sub-optimum patient outcomes, fractured staff culture, and a siloed approach to care. In order to gain objectivity, an external review was initiated and completed, providing many broad reaching suggestions.

This application focuses on one component of a successful change management project still being undertaken on AT&R.

Long length of stay is a common theme in the literature and a recent (2013) United Kingdom study conducted by the National Health Service found that a third of acute medical patients didn't need to be in hospital at any point in time². Following this significant finding, studies have been published exploring this issue in more detail. A common theme was how patients are managed, with nobody proactively driving care to ensure there are no wasted days, leading to increased length of stay, with associated wasted resources. As a result patient outcomes are negatively impacted because of deconditioning related to hospitalisation.

Summarise the approach and process

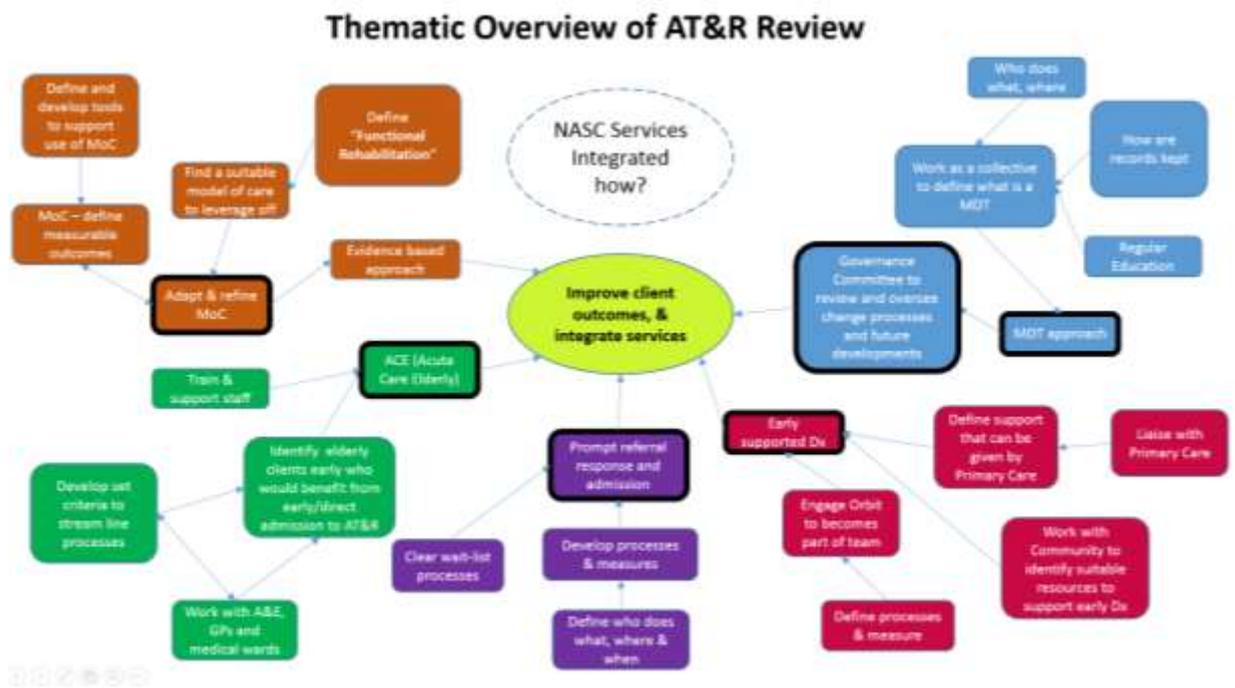
Following the external review, the first task was to undertake a literature review to better understand best practice internationally as discussed above. This was followed up by an in-depth internal audit of 25% of patient files over a five month period. This process was confronting to the reviewers, providing honest self-reflection, leading to a change in their practice.

The audit found poor systems and processes were associated with:

- Nobody responsible for driving care,

- Long waiting lists, and passively waited for referral,
- Unrealistic expectations about the potential for patients to improve,
- Repeated assessments by siloed teams, which frustrated patients,
- Not addressing whānau concerns (25% of patients) in every case leading to longer length of stay,
- Late recognition of cognitive issues also leading to longer length of stay,
- All associated with poor discharge planning,
- Lack of information driving quality and improvement and associated patient outcomes.

These processes culminated in a planning session where the key themes were brought together in a mind map (see below) to provide a pathway forward and help staff engage with the whole project.



Six working groups were established, using a bottom up approach with members largely drawn from staff directly interfacing with patients in order to engage staff. Each group focused on a single key theme identified above.

- Streamlining referral processes
- Working together (multidisciplinary team)
- Adapt and refine 'Model of Care' (MoC)
- Acute Care of Elderly
- Early supported discharge (ESD)
- Continuous quality improvement (CQI)

The groups involved 35 staff, (not including the consumer feedback group), the majority working on AT&R, and the remaining made up of key stakeholders. While this took significant commitment, it did pay dividends in ensuring decision making processes were robust and in

staff engagement.

Once the groups had presented their work, the project was then divided into three key components to allow effective implementation of the new model of care:

1. Proactive patient management:
 - Same day review of referrals.
 - Proactive pulling patients to AT&R.
 - Fast Track Fractured Neck of Femurs – pulling patients 48 hours post-surgery, maximising outcomes and freeing surgical beds.
 - Pulling patients from Emergency Department/Acute Assessment Unit, freeing beds and providing early rehabilitation.
 - Setting estimated date of discharge on admission has been shown to significantly reduce length of stay by assuring each patient is proactively managed throughout their hospitalisation. Each estimated date of discharge is individually benchmarked against Australasian best practice to provide objectivity for patient goals against their condition.
 - One assessment – to assess bio-psycho-social-cultural needs to reduce repeated assessments and ensure early intervention, improving patient outcomes (reducing length of stay, entry into Aged Residential Care, and readmission rates).
 - Daily rapid round, reviewing patient progress against goals and estimated date of discharge.
 - Decision making as one team.
2. Continuous quality improvement – driving, embedding, and evolving quality processes to improve patient outcomes.
3. Proactive patient and whānau engagement, to create one team, all working together to implement functional rehabilitation with every activity seen as an opportunity to increase patient independence.
4. A supported discharge service.

In addition, as part of the review, a learning culture was needed, and this was supported by applying for accreditation to provide training for Advanced Registrars, for which we were successful.

Outline the benefits and results

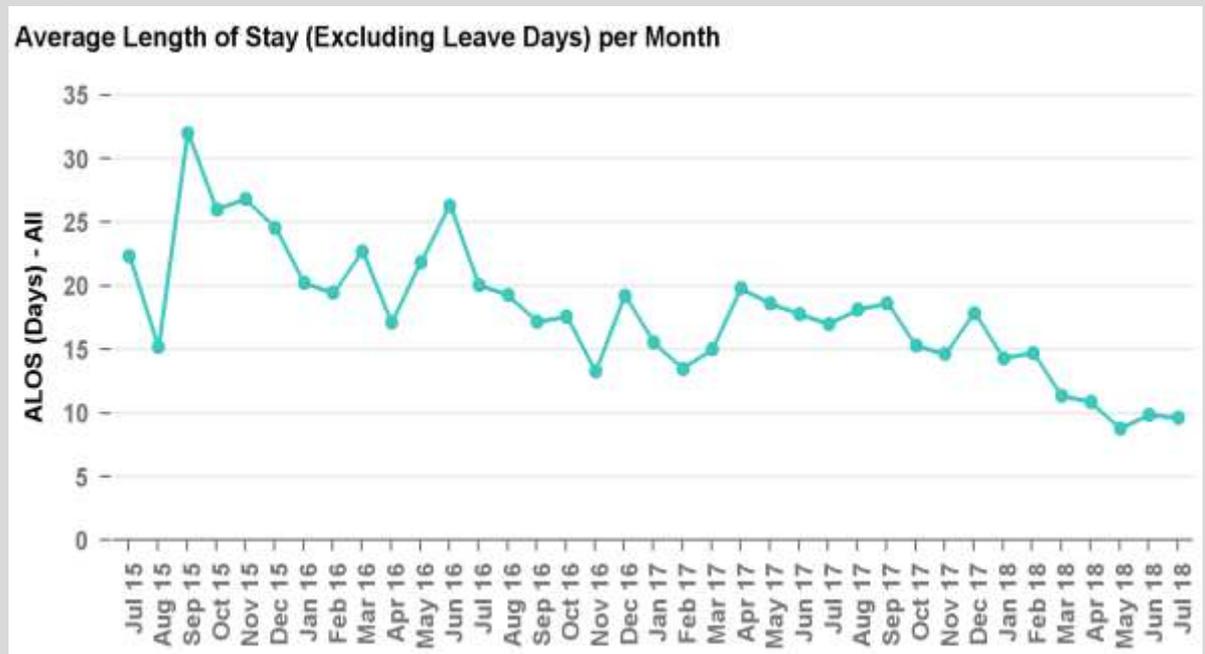
The evidence is clear a long length of stay negatively impacts patients long term outcomes as a result of hospital acquired deconditioning that starts within 48 hours of hospitalisation, rather than the presenting illness. Deconditioning leaves patients vulnerable to developing hospital acquired complications that increases their length of stay and in 50% of patients, this is irreversible. This leads to increased readmission rates, dependence, and entry into aged residential care.

As stated above, a United Kingdom study found one third of acute medical patients could be discharged home at any point in time. There is nothing to suggest that New Zealand would be

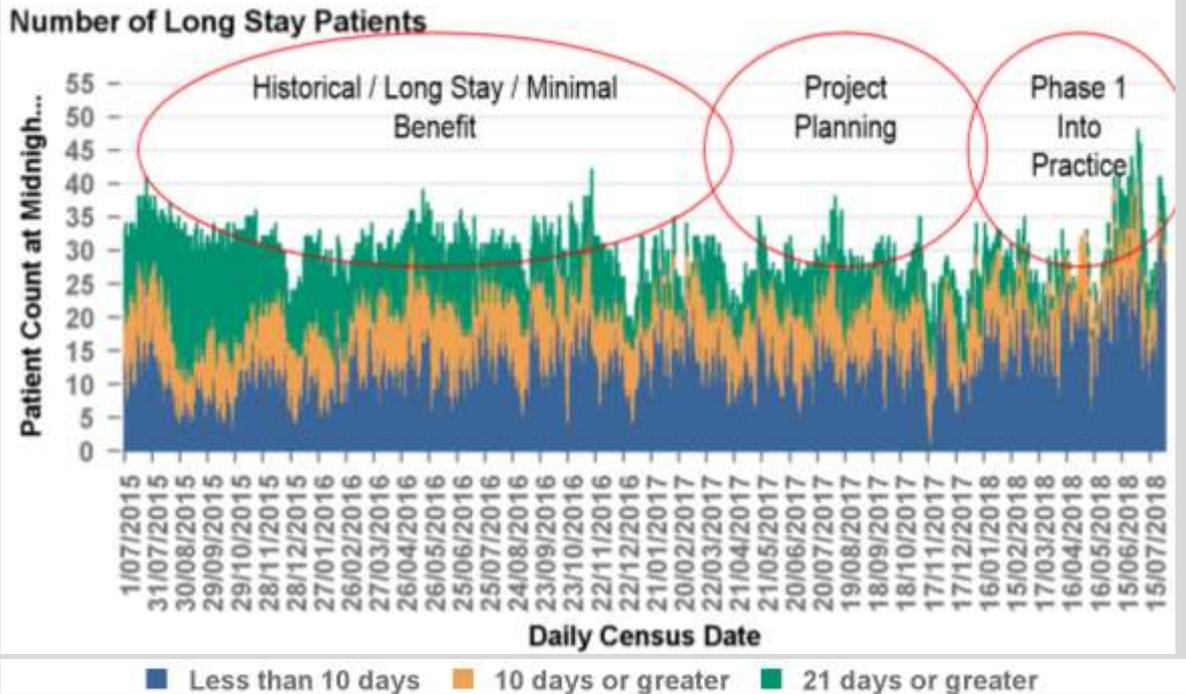
any different as our health statistics more often than not closely correlate with the National Health Service.

The challenge is to maximise every day so there is no wastage of time and that each day adds value to the patient journey. This is achieved through proactively managing all processes and systems, anticipating and proactively solving problems as they arise, to ensure the estimated date of discharge is met and minimise deconditioning of patients. Part of the solution is the art of engaging patients and their whānau as part of the rehabilitation team. This involves changing their perception of tradition hospitalisation where a patient lies passively in bed with their pyjamas on, to an active partner in their rehabilitation.

The graph below shows a 39% reduction in the average length of stay from when an external review was undertaken in late 2016 (21.6 days) through to July this year (13.2 days). The graph shows a slightly better outcome though this is distorted by medical admissions to the ward.

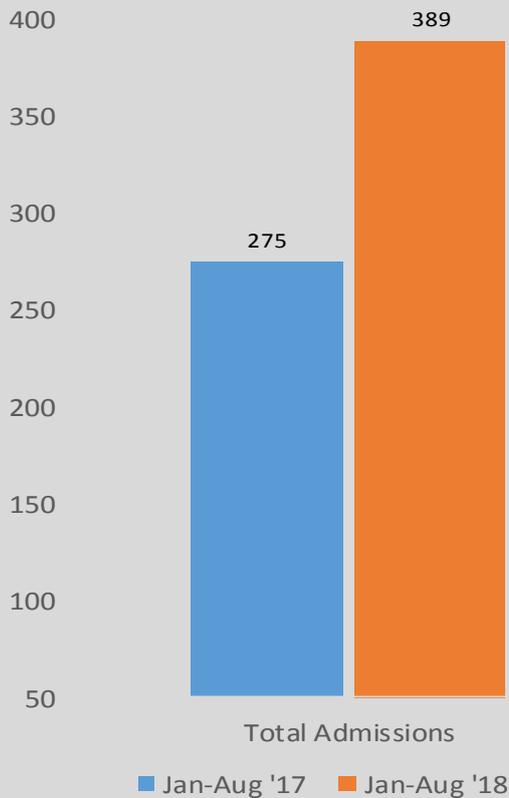


The below graph more clearly demonstrates how the project has achieved the above results. It is interesting to note the planning phase had a positive impact on length of stay as issues were realised and practice started to change as a result. However, the major change is seen over the last seven months where the number of patients with a stay of more than 21 days has been significantly reduced.



This decreased length of stay has been associated with a 41% increase in total admissions demonstrating the significant benefit for both patient outcomes and hospital efficiency. A review of 30 day all-cause readmission has shown no change from historical baselines.

Increased Admissions



The above represents the total admissions to the ward over an eight month period, a year apart. The average length of stay at this time was 19.9 days. As a result of improved processes and systems discussed earlier in this paper, actively seeking suitable patients for rehabilitation, and the resultant shorter length of stay, an extra 111 patients were admitted into AT&R, a 41% increase. This increased efficiency has helped the hospital manage the extra workload this winter by making available 2209 bed days, with an indicative savings value of \$1.6 million for eight months, or an annualised saving of \$2.4 million. This is worked out by multiplying 111 (patients) X 19.9 days \$730 a day, which is what would have been needed to manage the extra workload had the changes not been made.

**In summary
what were
the lessons
learned**

We learned that proactively setting an estimated date of discharge within 24 hours of admission and having daily rapid rounds, allowed care to be proactively driven by a united team. By working differently, AT&R significantly improved the length of stay and therefore improved patient outcomes with no extra expenditure.

We learned that the patient and whanau need to be included in this team in order to achieve better patient satisfaction and outcomes.

We learned that although commitment meant from senior management and Senior Medical Officers is crucial, a bottom up approach was successful in engaging staff to take ownership and find solutions, proving that culture and practices can change, resulting in significant outcomes for the people we serve.

We learned that changes to a small component of the overall system, can have a dramatic impact on outcomes for the whole organisation. However, the simplicity of the outcomes belies the complexity and commitment of staff. While systems and processes have been put in place to sustain these achievements, we still have some way to go to truly bed this in. This project has demonstrated significant future gains are achievable, but will need a more integrated approach to care of the elderly.

References:

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