Tracheostomy Management Team Project: “Lets get our consumers involved”

Organisation Name: Royal Brisbane and Women’s Hospital, Metro North Hospital and Health Service
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Key Problem

• Historically, costs and length of stay for patients with a tracheostomy at the RBWH had exceeded Health Round Table benchmarks.

• Emergency (unplanned) readmissions for patients with a tracheostomy had increased in 2013/14.

• This suggested that in some instances patients were being discharged too soon. Improved consistency of care across a wider spread of wards (20) was proposed to improve the patient experience and organisational outcomes.
Key Problem
Inconsistency of patient experience

- Patients at the RBWH may be discharged from ICU to one of 20 wards, with some wards having greater exposure in managing patients with a tracheostomy than others.
  - This was reflected in the Relative Stay Index where typically wards with the lowest throughput of patients with a tracheostomy have the longest length of stay, while those with the higher throughputs would tend to have a shorter length of stay.

- Further observations were that reductions in the Relative Stay Index from the current (in 2013/14) 92% to 77% could save 1,230 bed days annually. (Source: Health Round Table).

- Should variances in RSI be attributable to a lack of skill or confidence of staff in wards with fewer episodes, it was proposed the knowledge a dedicated team could bring may improve organisational outcomes.
Aim of this innovation

The aim was to improve safety and quality outcomes through a dedicated service providing consistent care for patients (model limited to just the ‘A06A-Tracheostomy with ventilation >95hrs’) discharged from the Intensive Care Unit (ICU) to acute wards. The service’s aims were to:

• **Improve the patient experience**
  • Better support ward based teams caring for patients with a tracheostomy discharged from the Intensive Care Services (ICS)
    • The provision of support to all wards where patients with a tracheostomy are admitted to help lift skill/competence and confidence in treating this patient cohort.

• **Realise organisational benefits**
  • Reduced: time to decannulation; adverse events’: tracheostomy-related complications; emergency readmissions; and average length of stay
Baseline data

• Emergency (unplanned) readmissions for tracheostomy patients had increased from 4.4 to 6.9% over 2013/14
• Relative Stay Index in 2013/14 was 92%
• In 2013/14 59% of total A06A patients bed days were spent in the acute wards. Average length of stay was trending gradually up (7.7 days over target in 2013/14)
• No objective understanding of our patient’s experience of tracheostomy management at the RBWH
Changes implemented

• Establishment of the 4 person multidisciplinary Tracheostomy Management Team comprising of a medical consultant, clinical nurse co-ordinator, speech pathologist and physiotherapist.
  • Necessary resources, equipment, administration and strategic marketing were put into place
  • Staffing documents were written and the care framework fully defined
  • Consumer and Clinician engagement was undertaken to optimise service implementation and develop educational frameworks.
Outcomes so far

Consumer and Clinician Engagement

Novel pre-implementation practices focused initially on consumer and clinician engagement. The initial phase of the project was focused on partnering with consumers. A Consumer Engagement strategy was developed which included development and implementation of a TMT Consumer and Community Engagement “Shopping list” tool & face-to-face interviews.

- The qualitative data from 12 consumers was analysed in conjunction with a consumer representative against the Picker Institute Principles of Patient Centred Care, taking into account additional, emerging themes of concern.
- Main domains of concern identified for consumers were communication and education, emotional support, clinical practice, alleviation of fear and anxiety and physical discomfort.
- Results were presented to patients and staff to directly inform the
  - TMT Model of Care
  - TMT patient information publications
  - The tracheostomy management procedure
  - Staff training framework
Outcomes so far
A clinician survey was also undertaken to better understand ward based staffs’ self-rated confidence, knowledge, skill and competency in provision of care.

- The clinician surveys, using 10-point confident scores and free text, had responses aligned to tracheostomy management practices. These were distributed to staff through survey monkey and/or hard copy.
  - 239 clinician surveys were received across four professions (Medical 12%, Nursing 65%, Physiotherapy 16%, Speech Pathology 7%).
  - 30% of respondents had low confidence levels (≤5/10) in tracheostomy management.
  - Increasing clinician experience demonstrated fewer reported concerns in tracheostomy management however these concerns were more complex in nature.
  - Ad hoc training was the primary educational pathway in tracheostomy management. 43% of clinician reported they were unaware of, or had not accessed, existing tracheostomy management procedures.

- Key performance indicators were collected prospectively between Feb-June 2015 (N= 22) and compared to a retrospective cohort between Feb-June 2014 (N=19). Preliminary results showed an improvement in:
  - Hospital LOS (70 to 35 days),
  - Days to decannulation (35 to 22 days)
  - Tracheostomy related adverse events: (32% reduction).
  - ICU capacity rose (by 312 bed days) through supporting complex ventilation needs in the acute wards.

- Additional outcomes
  Facilitation of high level ventilatory support on the wards resulting in:
  - Reduction in ICU Bed Days (188 days)
  - Cost saving per day (ICU bed less ward bed) = $4500
  - 20% reduction in proportion of referrals to ENT
Lessons Learnt

Collaboration:

• The TMT works in a collaborative model with ward staff and patients and when establishing working relationships with key stakeholders.

• Ongoing collaboration and partnering with disciplines such as ENT, Allied Health and ICU allows for improved service integration and provision of clinical excellence.

• Joining the Global Tracheostomy Collaborative will result in ongoing sharing of knowledge and propagating best practise in Tracheostomy management: RBWH will both contribute to and benefit from membership.
Contact for this Innovation

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