

Project Title

Delivery of Therapy Interventions by Upskilled Therapy Assistants

Project Lead and Members

Project lead: Lim Si Min

Project members:

- Koe Zi Yi
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Organisation(s) Involved

Tan Tock Seng Hospital

Project Period

Start date: July 2019

Completed date: Ongoing

Aim

Upskilling of TAs to conduct simple therapy assessments and interventions to medically stable patients.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

The taskforce learnt the importance to constantly review the project's progress to ensure that it remained on course. Root cause analysis of project's roadblocks was administered at different time points to address challenges and implement targeted solutions. The taskforce also adopted a bottom-up approach to engage the stakeholders and harness combined knowledge to overcome probable challenges and ensure a successful transformation.

The TAs chosen had diploma qualifications and demonstrated excellent work performance. These were definitely key success factors. Considering the issue of future upscaling of TA job redesign, we may have to design a system that identifies suitable attributes of staff for job redesign, as well as one that clearly differentiates between tasks that need assisting versus tasks that can be delegated to higher-trained support staff.

Conclusion

See poster appended/ below

Project Category

Workforce Transformation

Keywords

Workforce Transformation, Healthcare Training & Education, Assessment, Lean Methodology, Plan Do Study Act, Allied Health, Physiotherapy, Occupational Health, Tan Tock Seng Hospital, Therapy Assistants

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Tan Tock Seng
HOSPITAL

Delivery of Therapy Interventions by Upskilled Therapy Assistants

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Adding years of healthy life

BACKGROUND

In May 2019, a team comprising of two senior physiotherapists (PTs) from the Cardiopulmonary Physiotherapy team, one Occupational Therapist (OT) and three therapy assistants (TAs) formed the Tan Tock Seng Hospital (TTSH) Therapy Redesign Taskforce. The taskforce aims to upskill TAs to provide simple therapy assessments and interventions to medically stable patients in the acute and subacute settings. These patients are often at risk of hospital-associated deconditioning which can result in marked deficits in physical function and activities of daily living – two factors strongly predictive of hospital readmissions, institutionalization and mortality. Therefore, these patients will usually require rehabilitation for either optimisation or maintenance of functional status. The training program for TAs commenced in July and ended in August 2019. The TAs achieved full independence in reviewing the identified patients in September 2019.

IMPETUS FOR CHANGE

With a rapidly greying population and greater prevalence of chronic diseases, there has been an escalation in the demand for physiotherapy and occupational therapy services in recent years. From September to December 2018, an average of 3,372 physiotherapy sessions were conducted by the cardiopulmonary PTs each month. An average of 1024 occupational therapy sessions were conducted by the subacute OTs each month in the same period.

As the complexity of care increases, therapists will need to devote more time to manage the complex or sicker patients. Additionally, as bed occupancies grow, there is also a greater need to have a shorter length of stay in acute hospitals. Therefore, therapists will need to spend more time per session to assess new patients, coordinate care and prepare patients for earlier discharge. Consequently, patients with simpler or less urgent care needs may potentially be lower prioritised. Since the current model of care is unsustainable, there is an urgent need to develop sustainable solutions to tackle this emerging problem while keeping healthcare costs affordable.

TTSH believes that a system-based approach is necessary to attain, expand and sustain innovation. Innovation begins with care and process redesign to enhance patient outcomes and value, then applying innovation to achieve the process and lastly, redesigning job to increase value (Diagram 1). With this, there can be increased manpower capacity for role redesign. The taskforce aims to achieve this by capitalising on the untapped potential of the TAs. Conventionally, TAs perform routine, assistive roles to therapists. With upskilling, the TAs are able to conduct simple therapy assessments and interventions independently. This would in turn, free up therapists' time to attend to medically complex patients who require specialised therapy interventions. Overall, this increases patients' accessibility to specialised care, as well as workforce sustainability to meet the growing healthcare demands. This is also in line with the divisional support framework to engage and advance capabilities to support the professional development of TAs (Diagram 2).

STRATEGY FOR CHANGE

The change strategy is detailed in Diagram 3. In order to create the climate of change, communication sessions with therapists were held as one of the strategies to engage them as key stakeholders. The sessions were organised to understand their perspectives on TAs role enhancement, as well as potential challenges faced if the proposed project were to be



Diagram 3: Summary of Change Strategy (Adapted with slight change from "8 Steps to Change model" developed by Dr John Kotter)

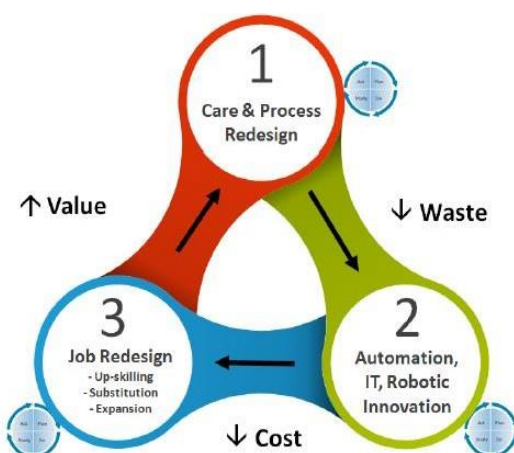


Diagram 1: Innovation Cycle adopted in TTSH



Diagram 2: Divisional Level Support Staff Development Framework

implemented. Interviews with prospective TA candidates were also conducted to assess interest and create ownership of the project by encouraging and empowering active participation in the design process of the project.

To ensure that a safe environment is created for change to sustain, the Therapy Support Staff Clinical Governance Framework was used (Diagram 4). The use of this framework not only provided a platform for TAs to practice safely at their highest potential, but also ensured that patients receive safe and optimal therapy care. In addition, Plan-Do-Study-Act (PDSA) cycles were conducted regularly to resolve any obstacles faced in the project. The taskforce also explored the possibility of spreading this model of care to patients of other acuities and disciplines.



Diagram 4: Seven Components of Therapy Support Staff Clinical Governance Framework

OUTCOMES

Increased Rehabilitation Dosage

Over the six-month period, the project resulted in an additional 498 TA-led physiotherapy rehabilitation sessions in the acute setting and 234 TA-led occupational rehabilitation sessions in the subacute setting. The subacute OT TA also saw another 286 patients in 45 groups.

Comparable Patient-Related Functional Outcomes with Cost Savings

There were no preventable adverse events reported since the commencement of the project, indicating that safe care was being provided. Additionally, clinical outcomes on patient's functional status were

collected and analysed. Positive therapy outcomes were observed - 100% of all patients planned for active rehabilitation achieved improvements in functional status. 100% of all patients planned for maintenance rehabilitation demonstrated no deterioration in functional status. It is safe to conclude that TA-led and therapist-run rehabilitation sessions were comparable in outcomes. Furthermore, patients paid lesser to receive equally efficacious rehabilitation. Patients' cost savings for the 498 rehabilitation sessions are estimated to range from \$4,009-17,430 depending on ward class. For the patients seen by the subacute OT TA, cost savings are \$2,548 (C class).

Greater Professional Manpower Capacity

One TA is able to consistently review an average of 4-5 patients in a span of 2.5-3 hours daily. Extrapolating this to a full work day of 8 hours, the TA is able to review a total of 10 - 12 patients per day. This is equivalent to a full day workload of a therapist. The taskforce has achieved an overall professional headcount savings of 1 Full-time Equivalent (FTE).

Increased Staff Satisfaction

The TAs expressed increased job satisfaction with the enhanced job roles as they are empowered to do more for the patients. Therapists involved in the project also expressed satisfaction in the work of the upskilled TAs by rating the TAs $\geq 4/5$ on a 5-point Likert scale. Being able to practise at the top of their licence also provided therapists greater job satisfaction.

CONCLUSION

Workforce transformation and care redesign, though challenging to implement, is feasible with the right resources, work processes and if change is embraced. With care redesign, patients not only have increased accessibility to rehabilitation but also received equally efficacious sessions at lower costs. This model of care adequately addresses the burgeoning healthcare demands. Simultaneously, it is also vital to align TAs' career framework with their value creation and provide greater opportunity for professional development.

