

Project Title

Trans-disciplinary Practice between Physiotherapy and Occupational Therapy in
Acute Setting

Project Lead and Members

Project lead:

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- Tang Li Wen, Senior Occupational Therapist
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- Vanessa Ho Yi Ki, Senior Physiotherapist
- Ng Kok Ping, Principal Physiotherapist
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Organisation(s) Involved

Tan Tock Seng Hospital

Project Period

Start date: October 2018

Completed date: Sep 2020

Aims

To integrate the initial assessment for both physiotherapist and occupational therapist; and trained a group of staff with trans-disciplinary competencies to screen, identify, assess and follow up with patients who are close to their premorbid functions, with generic care needs.

Background

See poster attached/ below

Methods

See poster attached/ below

Results

See poster attached/ below

Lessons Learnt

See poster attached/ below

Conclusion

The most reliable way to predict the future is to create it. Healthcare for today may not be relevant for tomorrow. TTSH has also been advocating for innovation, care redesign and workforce transformation so that the work that we do now, may be a possibility for tomorrow's healthcare.

This transdisciplinary care model has shown that there is a possibility to apply to a subset of patients in acute hospitals.

Project Category

Care & Process Redesign

Keywords

Care & Process Redesign, Workforce Transformation, Healthcare Training & Education, Workplace-Based Assessment, Workflow Redesign, General Medicine, Value Based Care, Efficient Care, Cost Savings, Trans-Disciplinary, Physiotherapy, Occupational Health, Allied Health, Tan Tock Seng Hospital, Bundled Referral, Cross Training

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Transdisciplinary practice between Physiotherapy and Occupational Therapy in Acute setting.



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Adding years of healthy life

BACKGROUND

A transdisciplinary care delivery model involving physiotherapy and occupational therapy was developed and conducted at an acute general medicine ward in TTSH. Concept development started in October 2018, followed by workflow design and training development before rollout in March 2019. There was a pause in July 2020 due to the outbreak disrupting ward changes and manpower deployment. The project was resumed in September 2020 with re-grouping and finetuning of the training curricula.

The team consists of senior and junior therapists from both the physiotherapy and occupational therapy departments.

IMPETUS FOR CHANGE

Despite the two departments having distinct roles, referral patterns show that there is a proportion of cases where referrals were made concurrently for very similar reasons.

These bundled referrals are oftentimes for similar reasons. Both professions will separately perform similar history taking, assessment, develop treatment plans, and both will follow up with the patients. There is however a specific group of patients with more generic care needs which may not require the reviews by both professions. As a result, patient may end up paying for what may seems be perceived as duplicate services, which may add to their healthcare cost. As healthcare's needs grow in our aging population and anticipation of shrinking healthcare workforce in the near future, innovative way of care redesign, workforce transformation and service delivery will need to be considered.

We explored possibility to integrate the initial assessment for both professions and trained a group of staff with trans-disciplinary competencies to screen, identify, assess and follow up with this group of patients who are close to their premorbid functions, with generic care needs

Baseline data and Strategy approach

Baseline review of the referral data (1month) of a General Medicine ward in TTSH has shown that approximately 50%(114/207) of total new referrals for PT and OT are bundled referrals. A clinical review performed by PTs and OTs revealed that approximately 66%(n=75/114) of these bundled referrals may likely not require interventions from both professions and hence the time spent by either of the professions could have been better utilised.

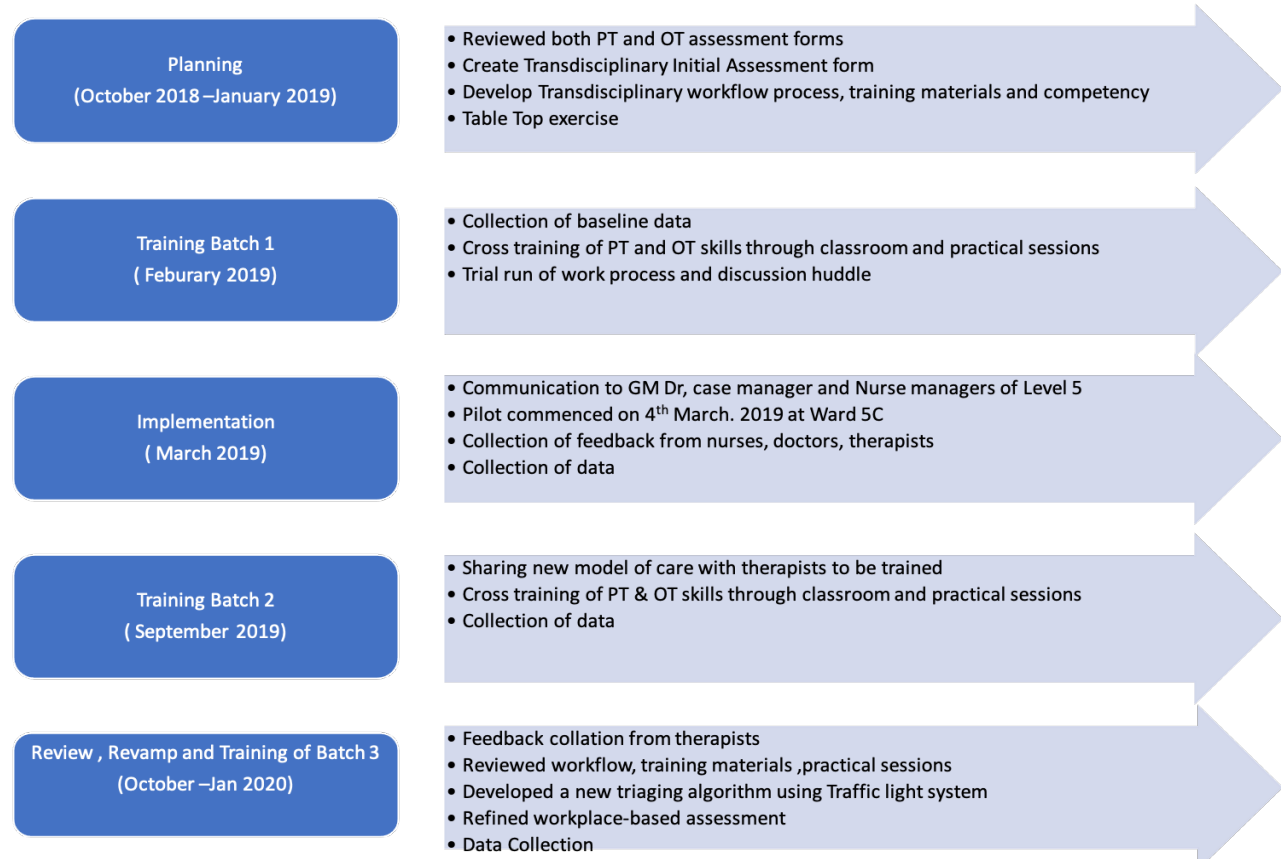
Project leads from both departments came together to review the data and to brainstorm on causes – this included a lack of knowledge of certain roles and competencies from other medical profession, resulting in bundled referring.

The team decided to employ a novel strategy. A transdisciplinary care model was designed that included

- Definition of cases suitable for this approach
- Combined transdisciplinary assessment for suitable cases
- Training content on identified relevant cross-training elements
- Escalation criteria
- Workflow & Communications

Implementation of intervention

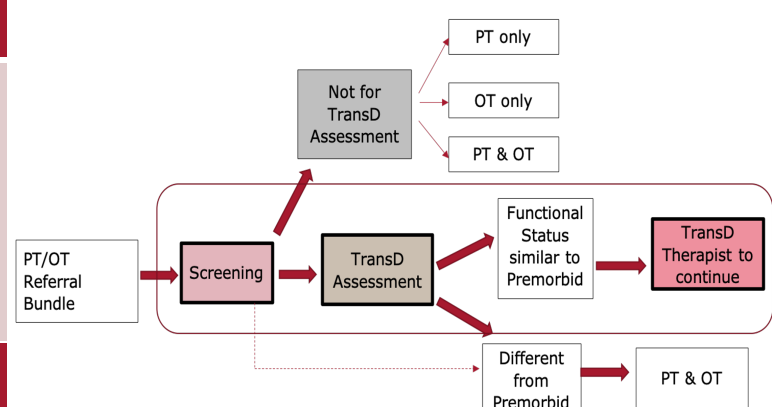
1. Timeline of planning and Intervention



Intervention 1: Transdisciplinary Training

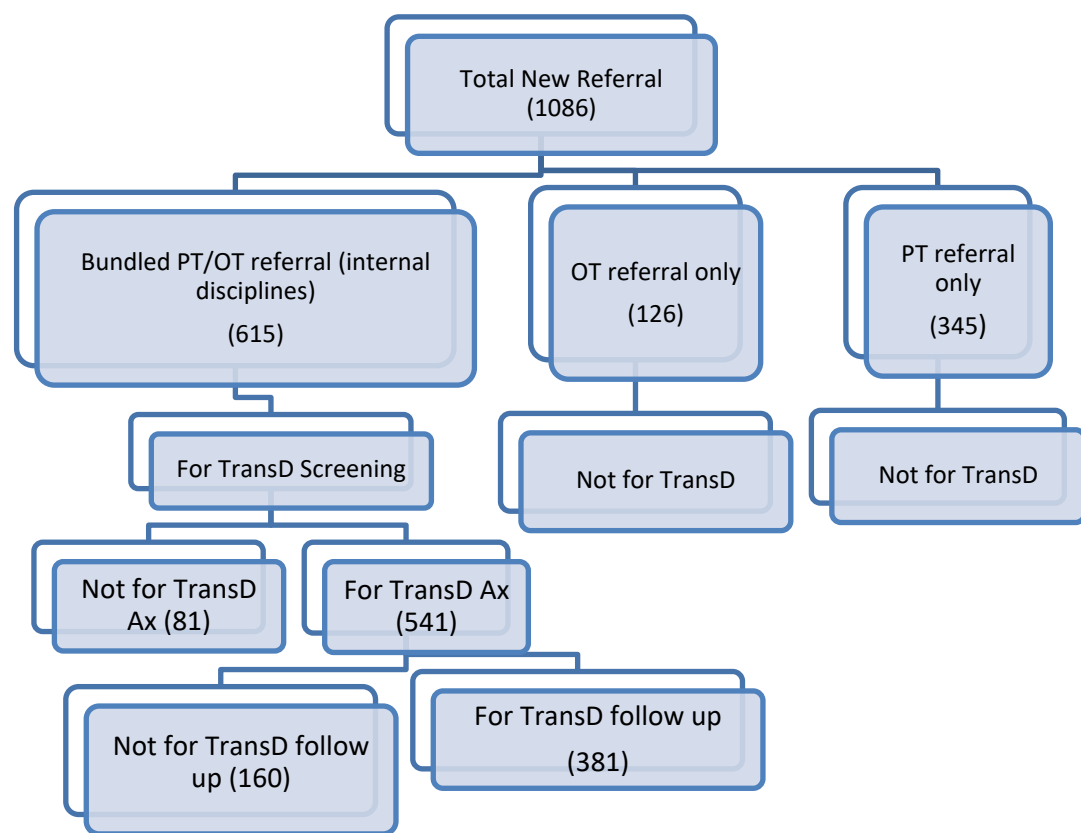
Components PT trained in:	Components OT trained in:
<ul style="list-style-type: none">Activity analysisModified Barthel Index (MBI)Basic wheelchair components, wheelchair mobilization skillsEASE programmeCognition & Activity engagement	<ul style="list-style-type: none">Vital signs (postural BP and management)Lower limb AssessmentSensory assessment of lower limbFunctional mobility assessmentWalking aidsBalance assessment (standing)
Components that were standardized:	
<ul style="list-style-type: none">Sitting balance assessmentBasic CognitionRange of motion of upper limbManual muscle testingSensory assessment of upper limb	

Intervention 2: Workflow redesign



EVALUATION AND MEASUREMENT OF OUTCOMES

Chart: Breakdown of number of cases in the 1 year of project (April 2019-March 2020) in Ward 5C



	Baseline (2 weeks)	1 year (N=1086)	Difference
No. of sessions per case	3.83	1.73	2.1
Therapy Time spent per case (Mins)	135	73	62

There were two outcomes measured.

Cost efficiency showed remarkable improvement, showing that 2 sessions of therapy were saved for each patient admission, from a pre-intervention of 3.8 sessions per patient.

Number of Adverse event/ Near Miss: nil reported

CONCLUSION

1. Savings in therapy time for Patients

There were savings in therapy session for patients under this new model. Patients received 2.1 fewer therapy sessions compared to baseline, hence cost saving as well for patients.

2. Early supported discharge of patients

There was early supported discharge of patients as the transdisciplinary therapist can make the recommended discharge plan for patient instead of await for other professions to assess and make their recommendation.

3. Staff satisfaction

Before embarking on this new model of care, staff from both professions shared that they were both excited and yet also apprehensive whether this new model of care will work in acute setting. Concerns over blurring of professional identity, perceived overcrossing professional boundaries and longer time may be taken to see patients on transdisciplinary care. They were also excited as this work may bring value add to both staff themselves and patients.

collaborative care, team spirit, greater understanding and appreciation. Verbatims from nursing staff also shared that this model of care is very good for patients!

4. Larger impact

This model of care, trialled as POC (Proof of Concept) in acute ward for patients with limited care needs, has shown that it can potentially be spread to settings where patients care needs do not require high level of specialised care, or community settings where care provision needs to be more streamlined and holistic.

5. Patient care

Patient care is more collaborative as there is less touch points from patient's point of view. Care is more direct and less confusing (more coordinated) with some reduction in therapy sessions and cost saving.

6. Reduction in waste

This project resolved the problem of duplication and waste generated from bundled referrals for generic and basic functional reviews

Lessons Learnt

Change management is important to be done well, particularly as this project involves what was perceived as dilution of professional identities. The team learnt this the hard way, and has since enhanced the training curriculum in the next phase of the project to include soft skills such as teamwork and communication

Realising that the educational and clinical constructs of the 2 professions are different, though the work they do are both centred on restoring rehabilitative functions. A reconciled training approach was adopted after rounds of discussion and both teams learnt to speak and accept each other's lingo

Another lesson is on the building of trusting relationships even in usual times. Beyond project needs, it is good to build close relationships between departments and professions.

Neighbourly trust would go a long way in overcoming challenges and influence the success of trans-professional types of projects.