Project Title

Improving Ng Teng Fong General Hospital (NTFGH) Stroke MBI Workflow for Patient Care

Project Lead and Members

Project lead: Nur Hafizah Mohd Amin

Project members: Kelly Chan, Fadhlina Hassan, Maznah Marmin, Sheryl Yong, Patricia Lim, Lyon Loo, Abdul Rashid Jailani

Organisation(s) Involved

Ng Teng Fong General Hospital

Healthcare Family Group Involved in this Project

Allied Health

Applicable Specialty or Discipline

Neurology, Physiotherapy, Occupational Therapy

Aims

Only **52%** of MBI data were completed for Stroke Integrated Care Pathway (ICP) monitoring between Apr 2018 to Mar 2019. This is below the hospital's target of 100% for completion of data. As of Jan 2019: Our short-term goal was to reach **70%** completion by 31 Dec 2019.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

Collaboration amongst relevant stakeholders in aligning expectations & standards of a team-based care delivery was crucial in enabling this project.

Conclusion

Standardization of early referral and MBI documentation to AHS to enhance functional recovery of stroke patients.

Project Category

Care Continuum, Inpatient Care, Rehabilitative Care

Keywords

Modified Barthel Index, functional outcomes

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IMPROVING NTFGH STROKE MBI WORKFLOW FOR PATIENT CARE

MEMBERS: HAFIZAH AMIN, KELLY CHAN, FADHLINA HASSAN, MAZNAH MARMIN, SHERYL YONG, PATRICIA LIM, LYON LOO, ABDUL RASHID JAILANI

- ☐ SAFETY
- ☑ QUALITY
- ☐ PATIENT EXPERIENCE
- ☑ PRODUCTIVITY
- ☐ COST
- ☑ TEAMWORK
- ☑ COMMUNICATION

Define Problem, Set Aim

Modified Barthel Index (MBI)
Chair/bed transfers
Ambulation
Stair climbing
Ambulation (wheelchair)
Toileting
Bowel control
Bladder control
Bathing
Dressing
Personal hygiene
Feeding

MBI is an objective tool that tracks the functional recovery of stroke patients.

This include all ischemic & hemorrhagic stroke patients admitted & discharged from NTFGH.

An incomplete MBI makes it difficult to prognosticate duration of rehabilitation & discharge destination for patients.

Unnecessary time is also spent to trace incomplete data retrospectively.

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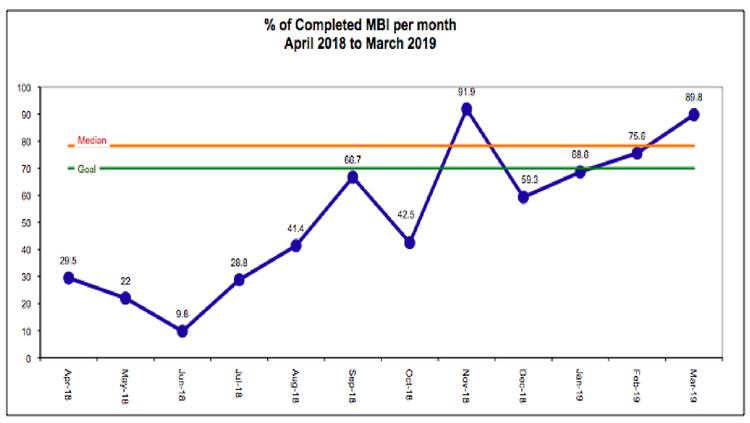
Our short-term goal was to reach **70%** completion by 31 Dec 2019.

Establish Measures



Process Measure:
% of monthly completed premorbid, admission & discharge MBI

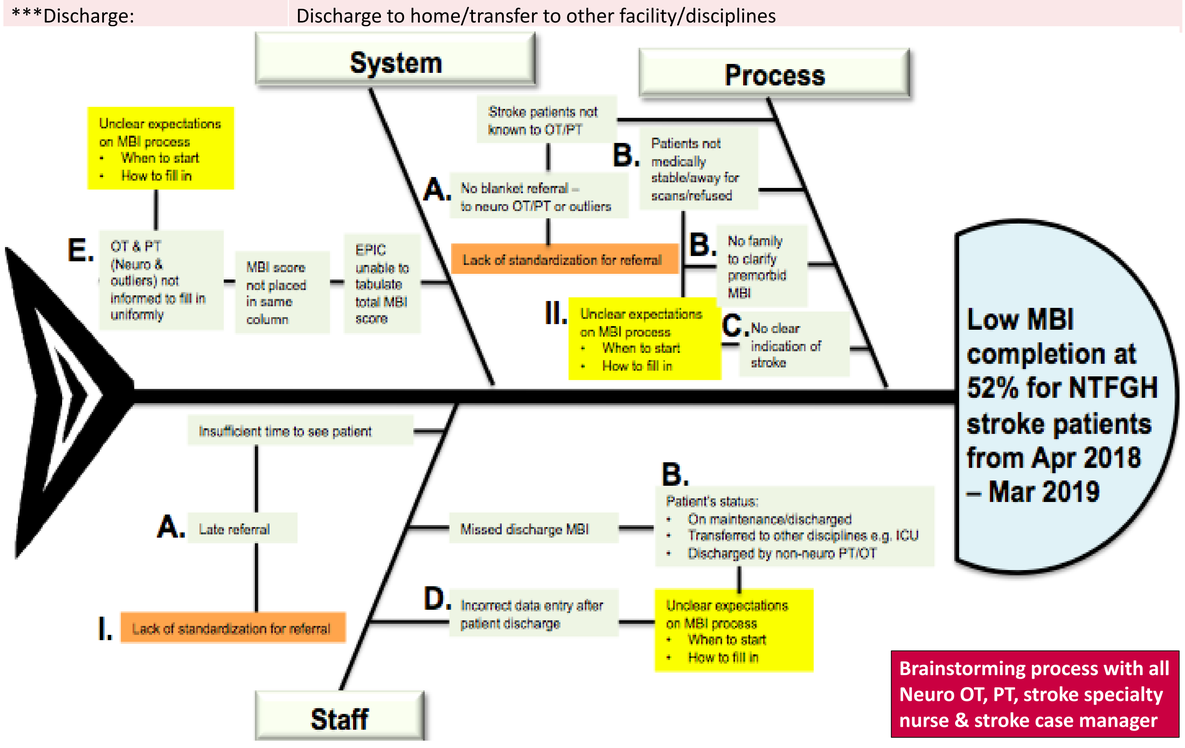
Balancing Measure:
Increase in therapists' time for other direct patient-related tasks

Outcome Measure:
% **of monthly completed MBI** data

Analyse Problem

Stroke Identification in General Ward	Referral	Review	***Discharge
*Neurology (Neuro) / NES Team ** Stroke Outliers	Neuro OT & PT Non-Neuro OT & PT	Assessment & MBI documentation by therapists (premorbid & admission MBI)	Discharge MBI documentation by therapists

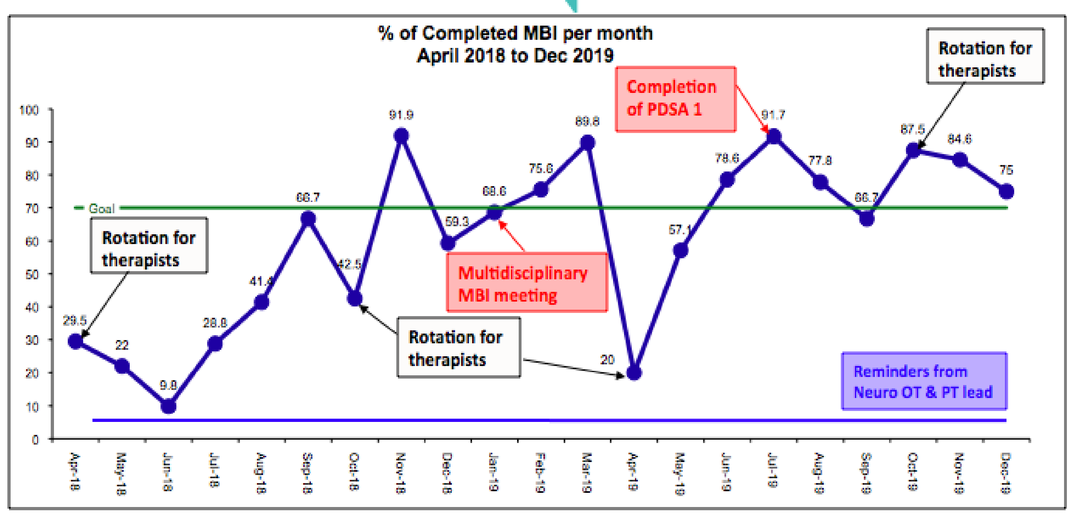
*Neuro/NES Team:	Identified by doctors, case managers, Neuro/NES stroke specialty nurses
**Stroke Outliers:	Identified by non-Neuro/NES disciplines (from blue letter referrals or co-managed with other disciplines
***Discharge:	Discharge to home/transfer to other facility/disciplines



Select Changes

Root Cause		Solution	
I.	Lack of standardization for referral	A.	Consensus reached during a multidisciplinary meeting in Jan 2019 • Neuro doctors to refer to therapists early • Ensure blanket referrals to both OT & PT for all patients with stroke
Root Cause		**Solutions**	
II.	Unclear expectations on MBI process	B.	Standardization on MBI documentation for Neuro OT & PT: • Expectations & indications for scoring • What to do in common & atypical patient scenarios • Therapists to have their own patient list & drag all new referrals into the list to prevent missing discharge MBI documentation
		C.	• Therapists to check with stroke case manager on TigerConnect group whether patient has a stroke, if diagnosis on EPIC is not clear
		D.	• Coordination amongst Neuro OT & PT on accurate data entry upon patient discharge
		E.	• Neuro OT & PT lead to inform non-Neuro therapists on TigerConnect to fill in MBI • Coordination amongst Neuro OT & PT in scoring MBI column to ensure correct tabulation
		B-E:	• Combined Neuro OT & PT re-orientation for static staff & orientation for new staff

Test & Implement Changes



Spread Changes, Learning Points

Possible strategies to spread changes after implementation include:

- Continue PDSA cycle 2, but for a longer duration up to 1 year, with re-orientation at every 3 months mark of rotation for sustainability.
- If sustainable, apply to other outcome measures e.g. One-Rehab outcomes.

Key learnings from this project:

- Collaboration amongst relevant stakeholders in aligning expectations & standards of a team-based care delivery was crucial in enabling this project.

Ng Teng Fong General Hospital

Jurong Community Hospital