

## **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

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- ☐ 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.

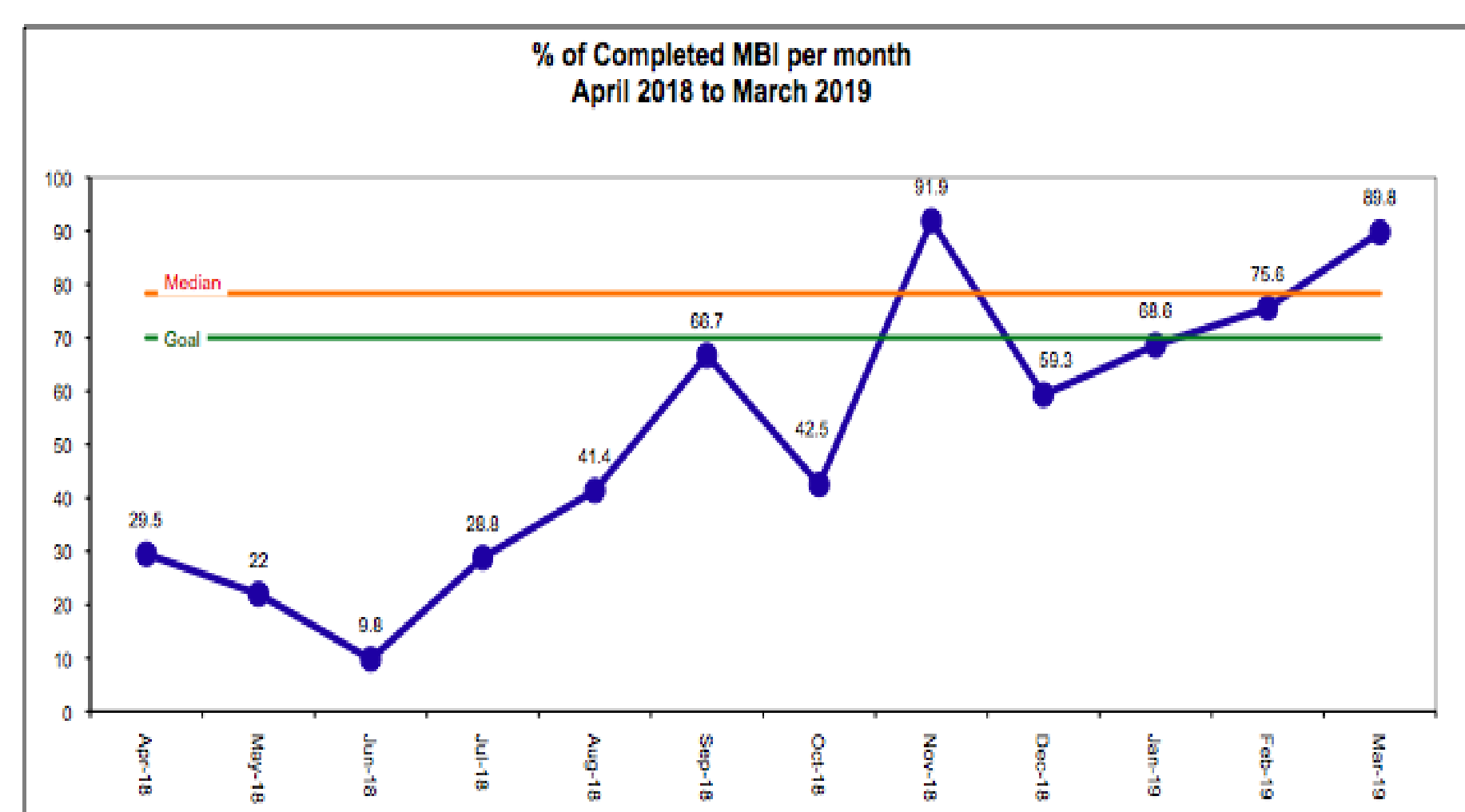
An incomplete MBI makes it difficult to prognosticate duration of rehabilitation & discharge destination for patients.

Unnecessary time is also spent to trace incomplete data retrospectively.

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.

## Establish Measures



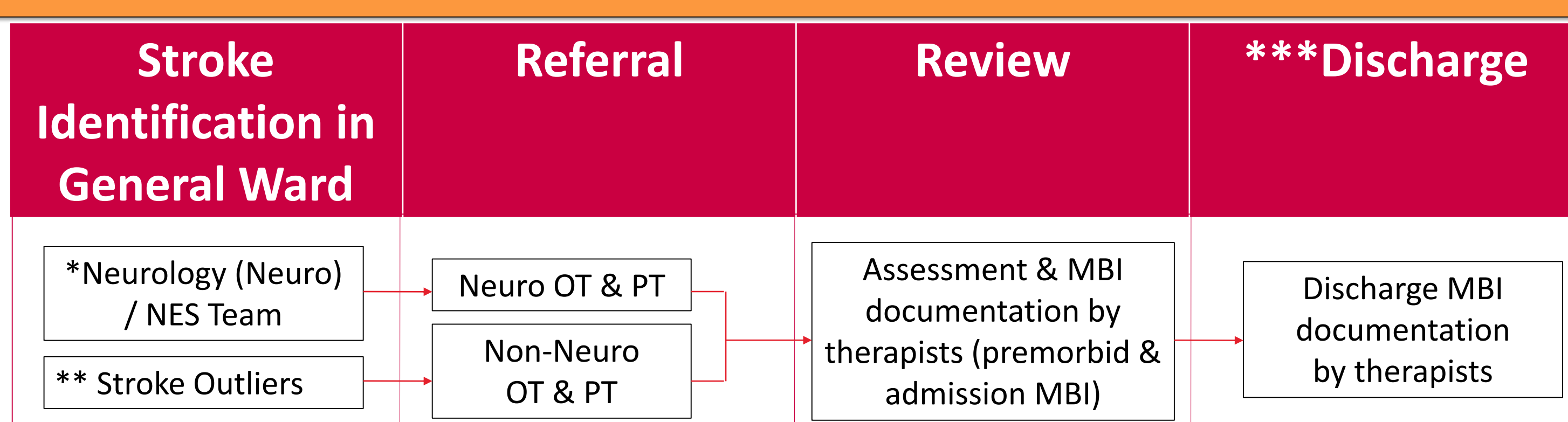
**Process Measure:**  
% of monthly completed premorbid, admission & discharge MBI

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

**Outcome Measure:**

% of monthly completed MBI data

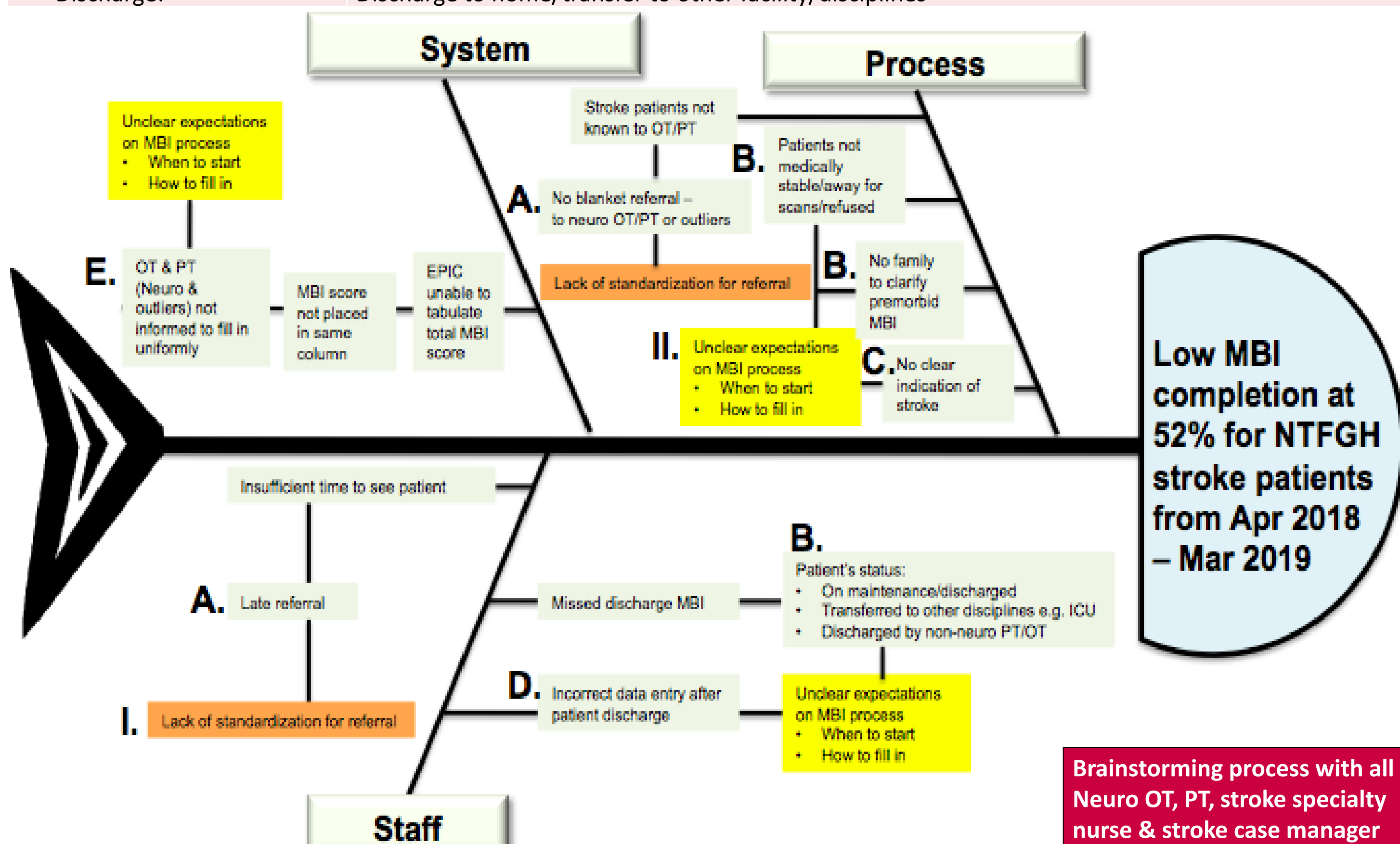
## Analyse Problem



\*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)

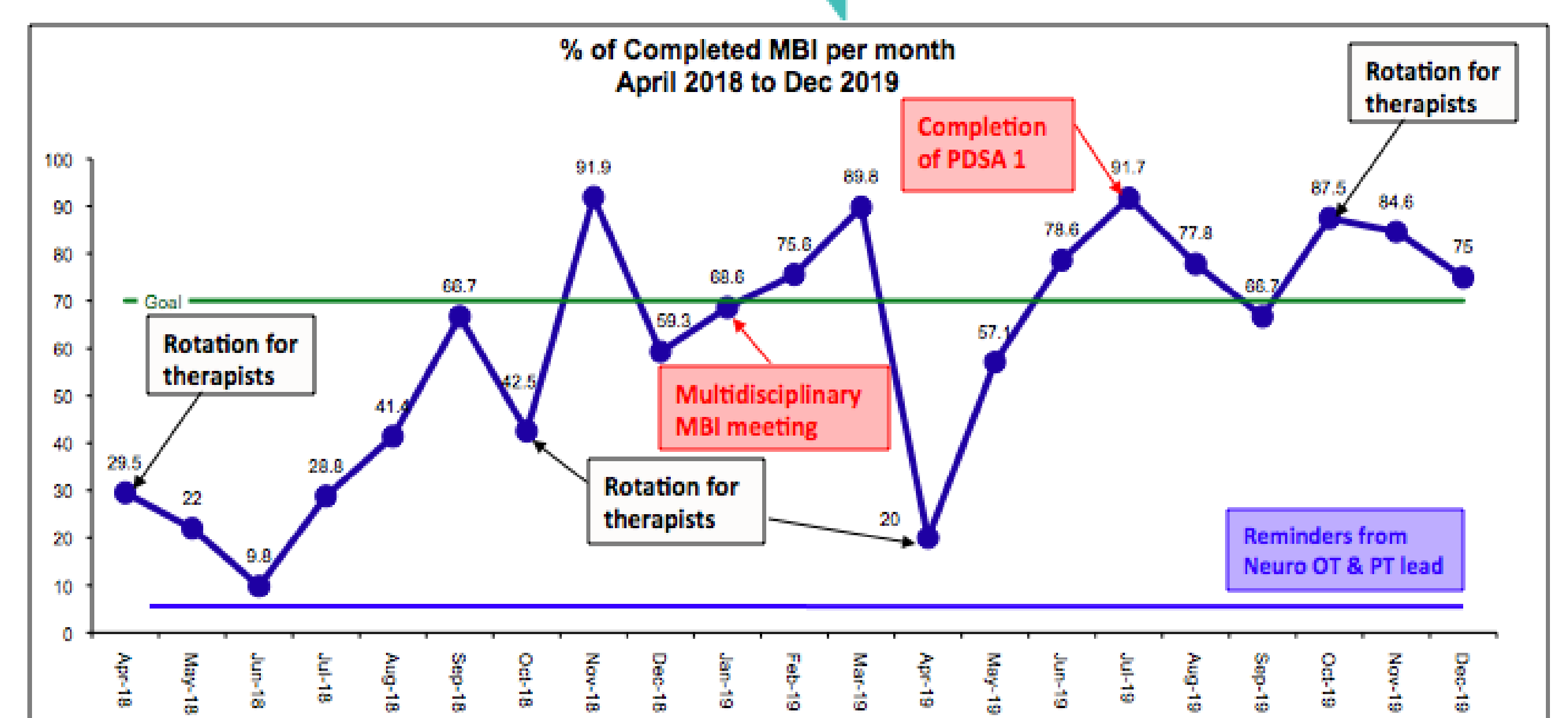
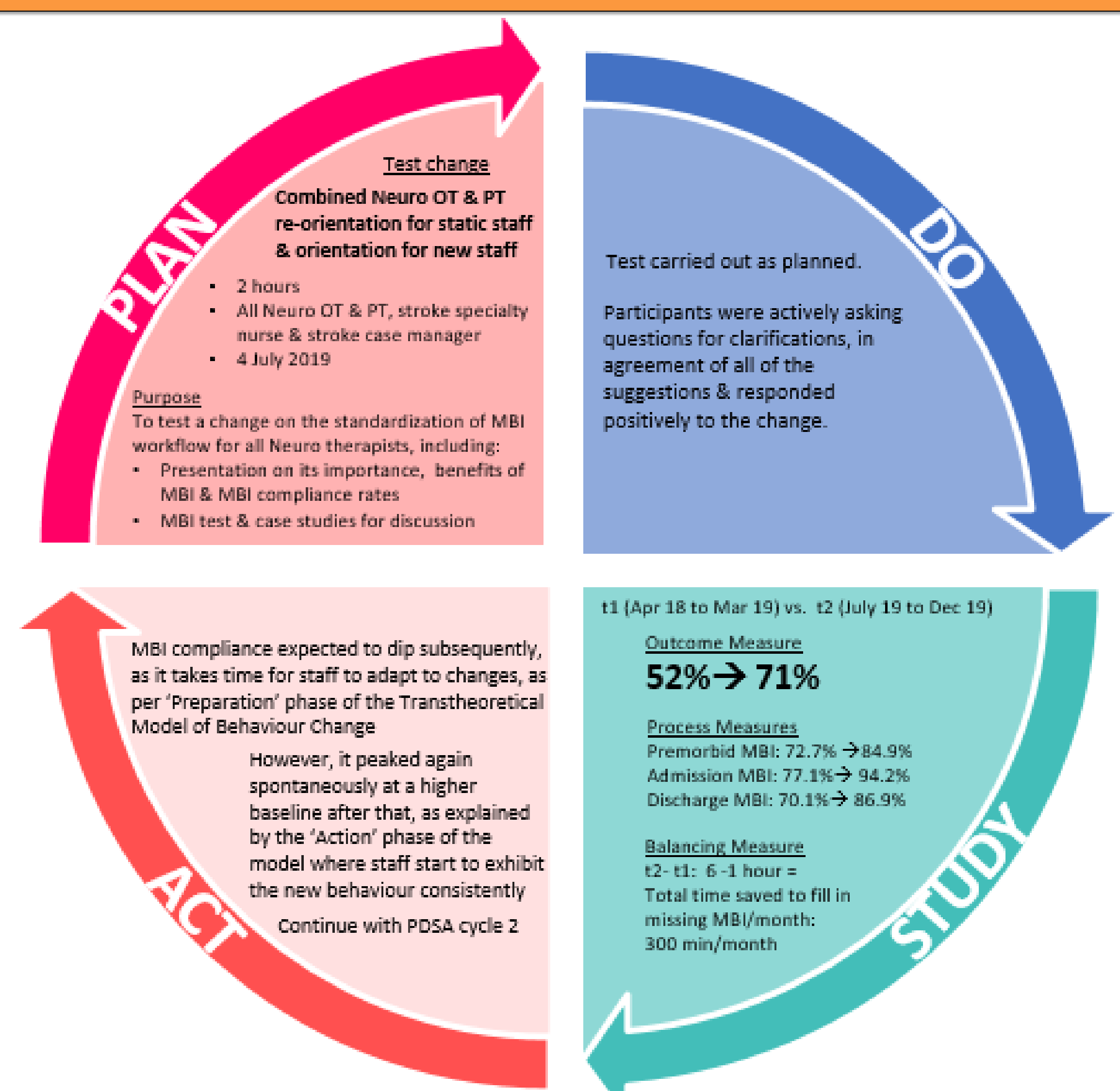
\*\*\*Discharge: Discharge to home/transfer to other facility/disciplines



## Select Changes

Root Cause	Solution
I. Lack of standardization for referral	A. Consensus reached during a multidisciplinary meeting in Jan 2019 <ul style="list-style-type: none"> <li>Neuro doctors to refer to therapists early</li> <li>Ensure blanket referrals to both OT &amp; PT for all patients with stroke</li> </ul>
II. Unclear expectations on MBI process	B. Standardization on MBI documentation for Neuro OT & PT: <ul style="list-style-type: none"> <li>Expectations &amp; indications for scoring</li> <li>What to do in common &amp; atypical patient scenarios</li> <li>Therapists to have their own patient list &amp; drag all new referrals into the list to prevent missing discharge MBI documentation</li> </ul>
	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
	F. Coordination amongst Neuro OT & PT in scoring MBI column to ensure correct tabulation
	G-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.