

Frequency of Swallowing Intervention for Patients with Nasogastric Tube

Ms Chok See San
Department of Speech Therapy

Mission Statement

To improve percentage of *eligible inpatients with nasogastric (NG) tube at TTSH Rehab Centre who receive swallowing intervention at least 5 days a week from <50% to 100% within 6 months

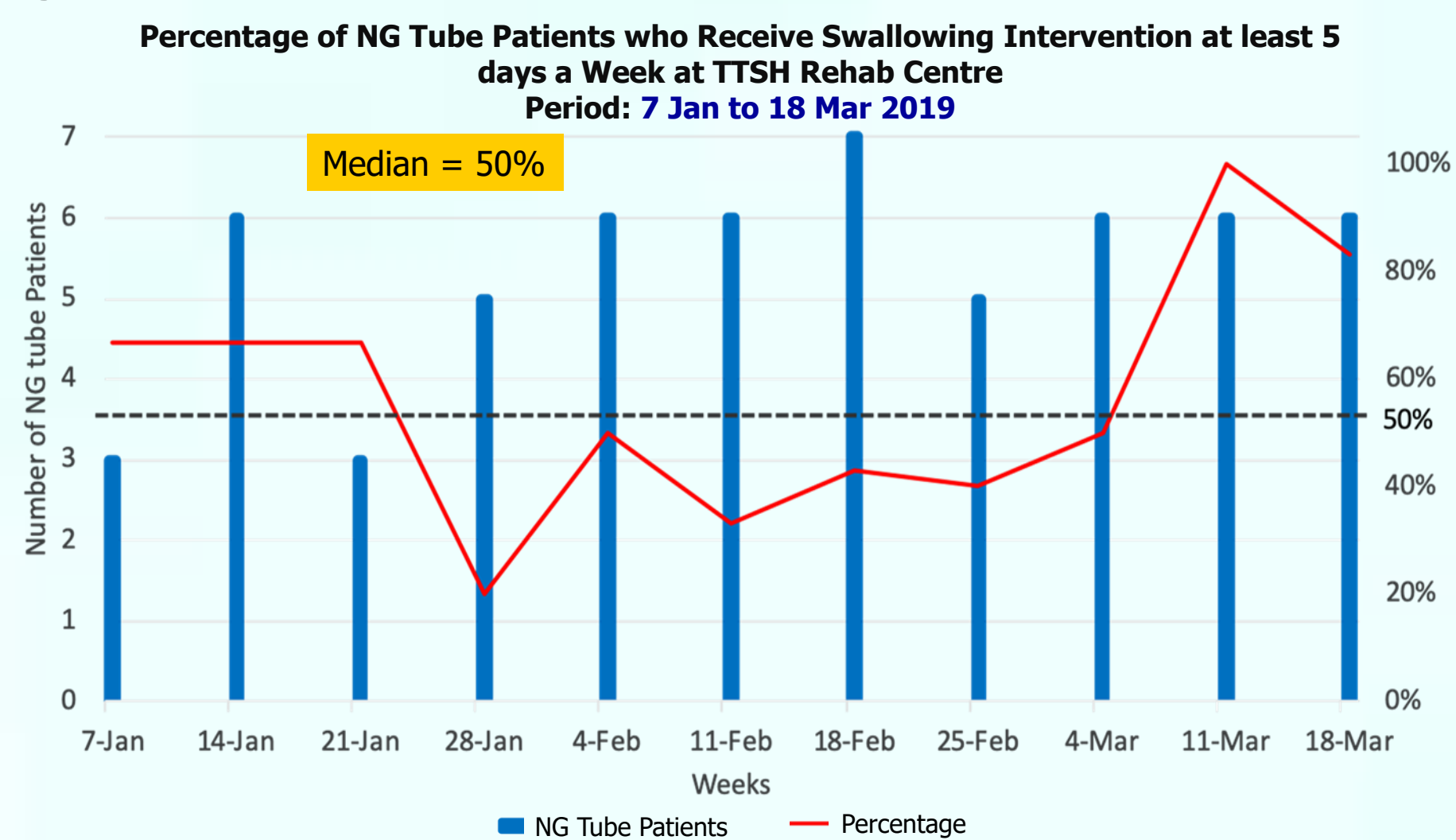
*Eligible inpatients with NG tube: No changes in medical conditions, not on NG tube > 6 months, willing to participate in swallowing intervention.

Team Members

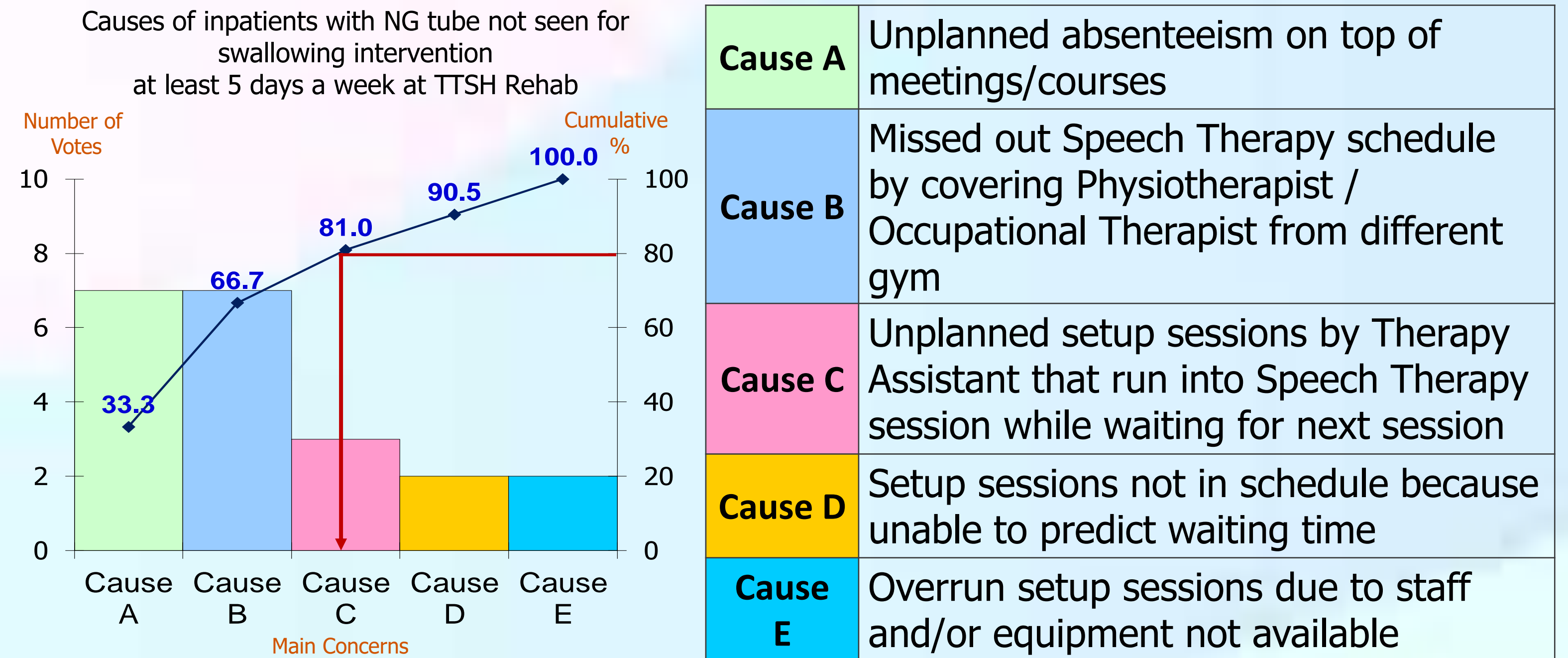
Name	Designation	Department
Team Leader Ms Chok See San	Speech Therapist	Speech Therapy
Team Members	Ms Ng Seok Kheng	Speech Therapist (Unit Head) Rehab Centre
	Ms Koh Kai Ting	Speech Therapist Rehab Centre
	Ms Tay Wan Yi	Healthcare Assistant Rehab Centre
	Ms Lim Yoke Sim	Physiotherapist Rehab Centre
	Dr Jocelyn Thio Mei Lin	Rehab Physician Rehab Centre
	Ms Nooryati Binte Yaya	Therapy Assistant Rehab Centre
Sponsor Ms Sharon Sew Woan Yeen	Head of Service	Rehab Centre
Mentor/Sponsor: Ms Zenne Tng Kuan Chen (Head of Service, Speech Therapy)		

Evidence for a Problem Worth Solving

- Most stroke patients recover from dysphagia within first 4 weeks, although 15% of them may develop long term swallowing difficulties (Enteral Tube Feeding for Dysphagic Stroke Patients, 2015).
- High-intensity therapy was associated with an increased proportion of patients who returned to a normal diet by 6 months (Behavioral Intervention for dysphagia in acute stroke: a randomized controlled trial, 2006).
- TTSH Rehab: Average 50-60% of NG tube patients resume oral feeding (2018)



Pareto Chart

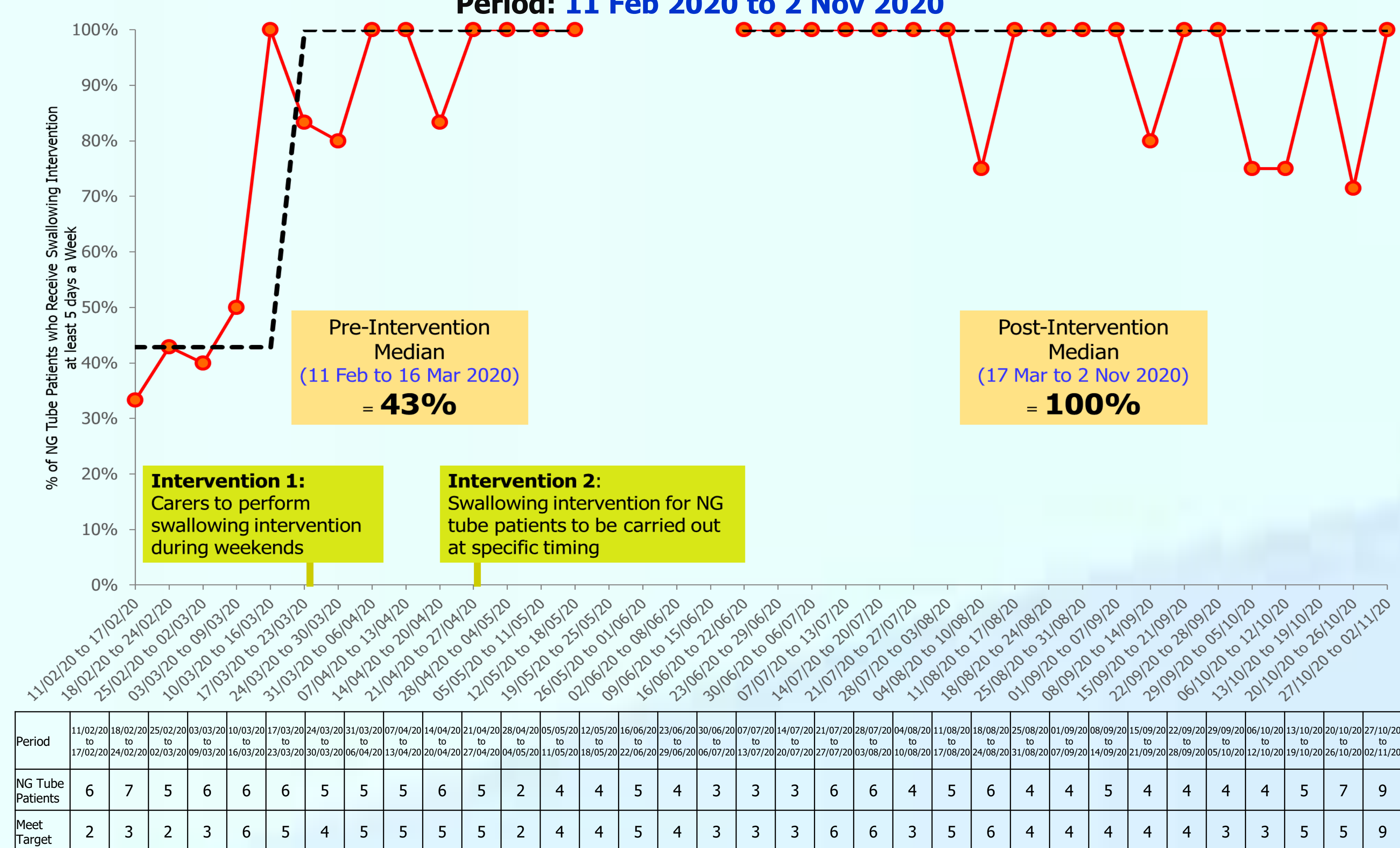


Implementation

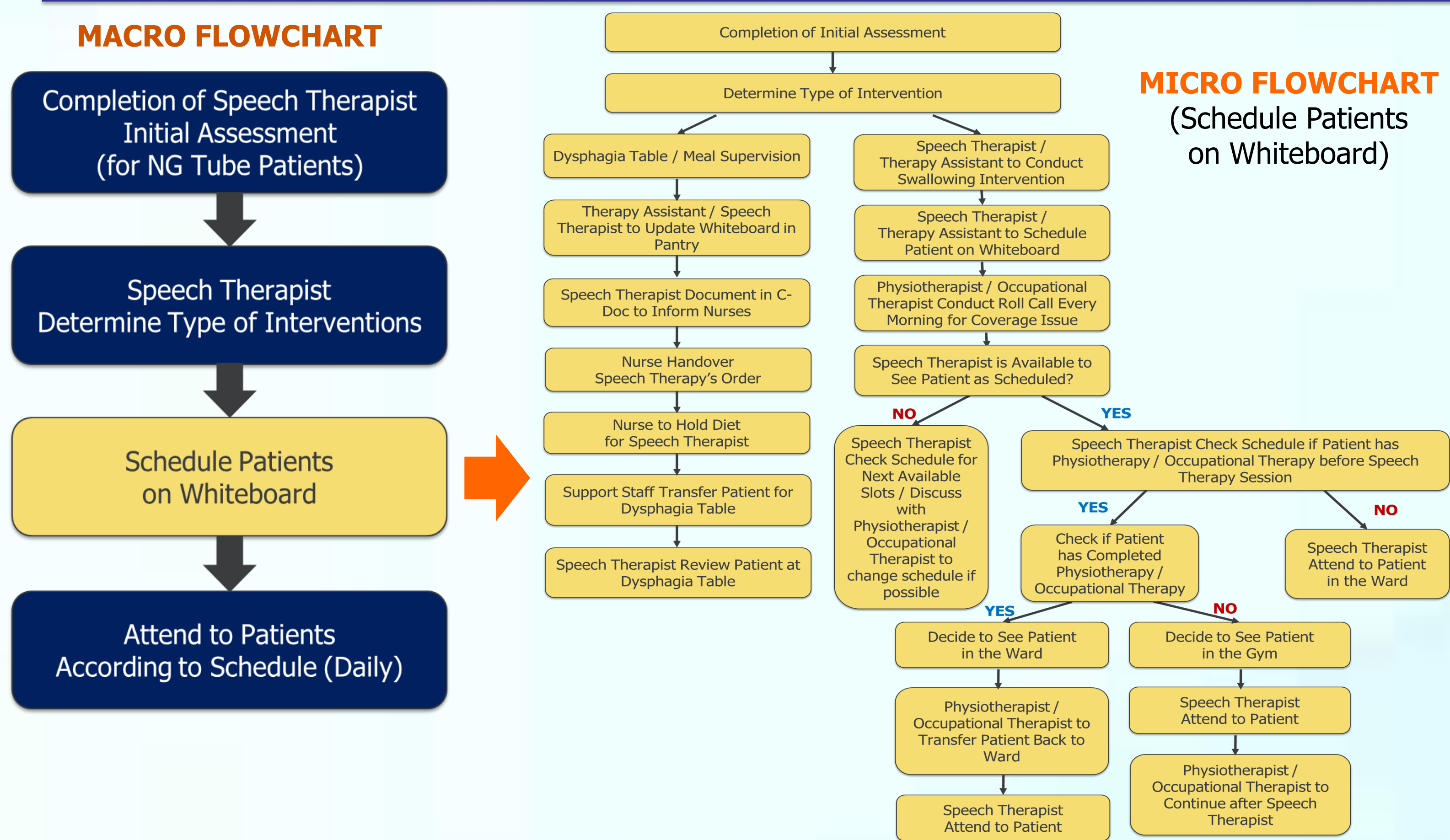
Root Cause	Intervention	Implementation Date
Cause A: Unplanned absenteeism on top of meeting/courses	Intervention 1: Carers to perform swallowing intervention during weekends	18 Mar 2019
Cause B: Missed out Speech Therapy schedule by covering Physiotherapist / Occupational Therapist from different gym	Intervention 2: Swallowing intervention for NG tube patients to be carried out at specific timing	22 Apr 2019
Cause C: Unplanned setup sessions by Therapy Assistant that run into Speech Therapy session while waiting for next session		

Results

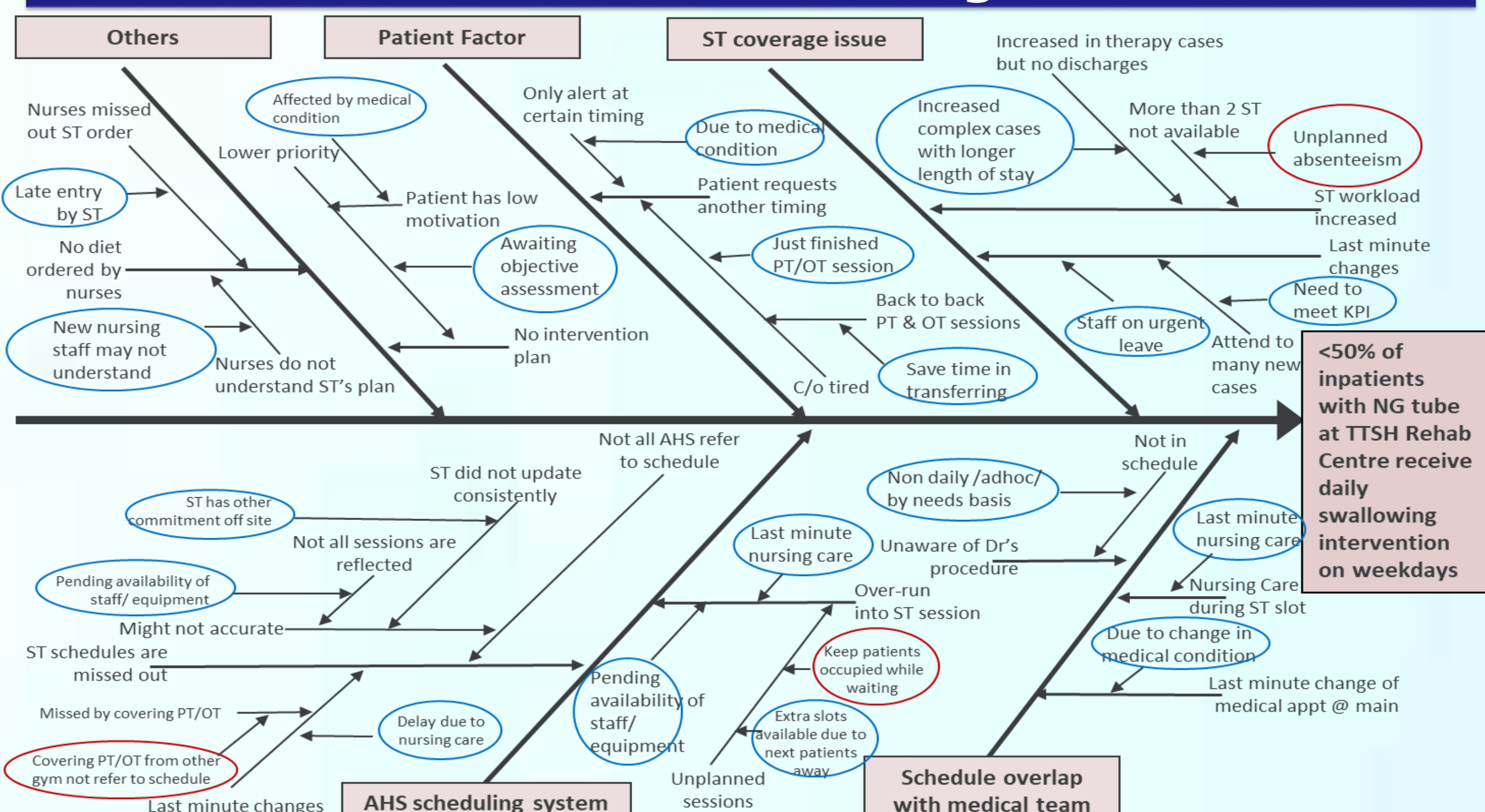
Percentage of NG Tube Patients who Receive Swallowing Intervention at least 5 days a week at TTSH Rehab Centre
Period: 11 Feb 2020 to 2 Nov 2020



Flow Chart of Process



Cause and Effect Diagram



Cost Avoidance

Cost of Swallowing Intervention	\$60
Number of Sessions Performed by Carers	2 Sessions per Week
Estimated Length of Stay at Rehab	6 Weeks
Average Number of NG Tube Patients Per Week	5

Potential Cost Avoidance in 6 weeks:

$$\$60 \times 2 \times 6 \times 5 = \$3,600$$

Lessons Learnt

- Discussion via WhatsApp - not as efficient as what we thought it would be
- Assumptions made - all team members understand the workflow
- Multiple communications to different stakeholders are needed

Strategies to Sustain

- Share the outcomes of project with various stakeholders
- Discuss with Therapy Assistant Coordinators to involve other Therapy Assistants in this program
- Continuous results monitoring. Reassess periodically. Seek Feedback.