

## **Project Title**

Improving Nurses and Patient Care Associates' Compliance to Speech Therapy  
Electronic Meal Ordering System (EMOS) Comments

## **Project Lead and Members**

Project lead: Chang Huey Fang  
Project members: Wendy Sim, Ruth Yeoh

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

## **Healthcare Family Group Involved in this Project**

Allied Health, Nursing

## **Applicable Specialty or Discipline**

Nutrition & Dietetics

## **Aims**

The Speech Therapy Department intends to increase Nurses and PCAs' compliance to ST EMOS comments to above 92% from Feb 2020 onwards to improve the safety of dysphagic patients. 92% was selected as a realistic short-term goal as we work towards our final target of 100%.

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Lessons Learnt**

Education sessions during roll call, provision of reference sheets, coupled with feedback of errors were effective in increasing nursing and PCAs' compliance to ST EMOS comments to above 92%.

Analysis of limitations can guide future system changes (change specific EMOS comment given persistent error).

## **Conclusion**

See poster appended/ below

## **Project Category**

Care & Process Redesign

Value Based Care, Safe Care, Adherence Rate

Training & Education

## **Keywords**

Standardised EMOS comments

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# IMPROVING NURSES AND PATIENT CARE ASSOCIATES' COMPLIANCE TO SPEECH THERAPY EMOS COMMENTS

MEMBERS: CHANG HUEY FANG, WENDY SIM, RUTH YEOH

## Define Problem, Set Aim

### Problem/Opportunity for Improvement

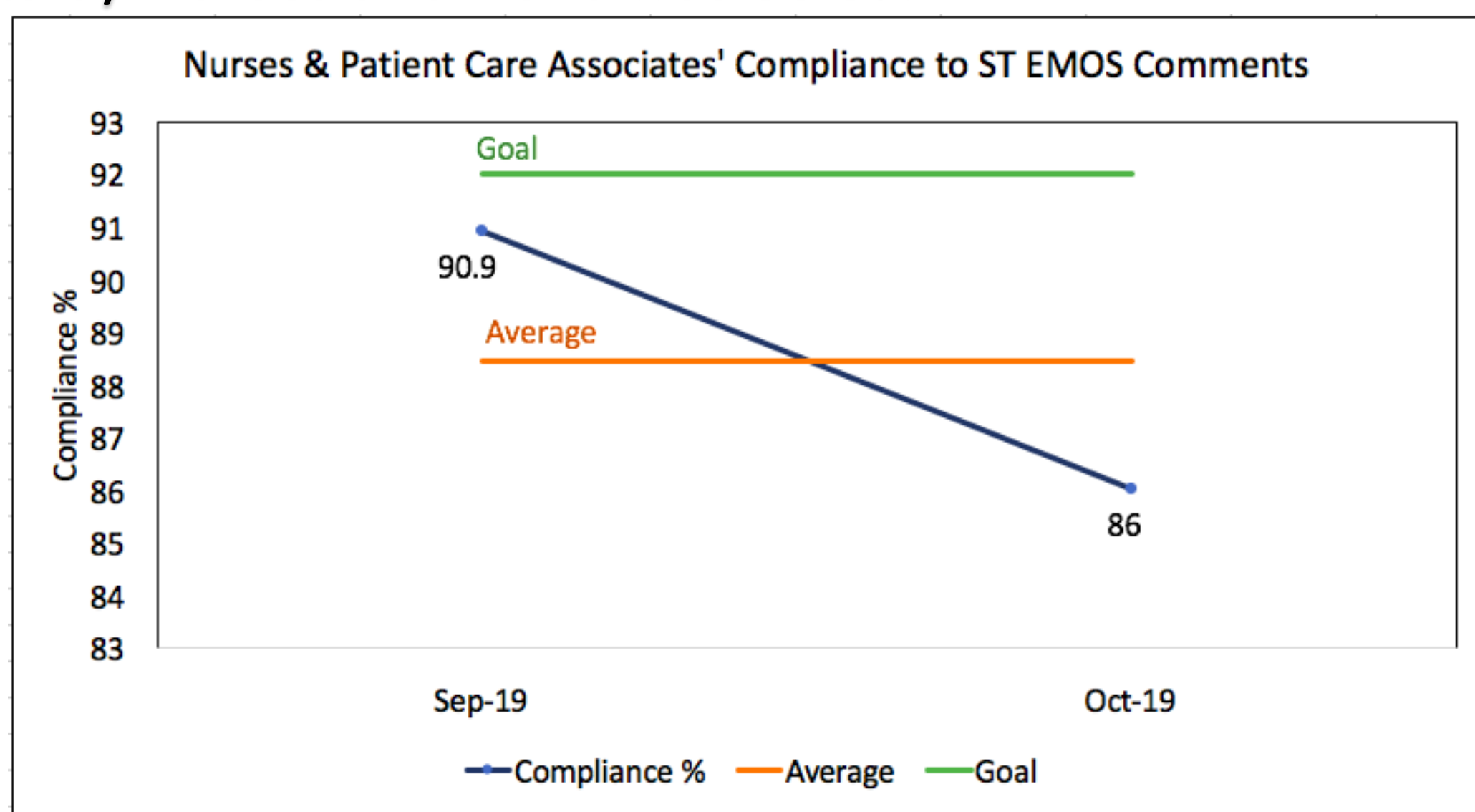
In NTFGH and JCH, Speech Therapists (STs) type out ST Electronic Meal Ordering System (EMOS) comments on EMOS to further restrict diet consistencies served to dysphagic patients. Non-compliance to ST EMOS comments when ordering diet on EMOS compromises patient safety as there is a risk of aspiration and subsequently aspiration pneumonia when patients receive incorrect diet consistencies. The average compliance rate to ST EMOS comments by Nurses and Patient Care Associates (PCAs) when ordering on EMOS between Sep and Oct 2019 was 88.5%.

### Aim

The Speech Therapy Department intends to increase Nurses and PCAs' compliance to ST EMOS comments to above 92% from Feb 2020 onwards to improve the safety of dysphagic patients. 92% was selected as a realistic short-term goal as we work towards our final target of 100%.

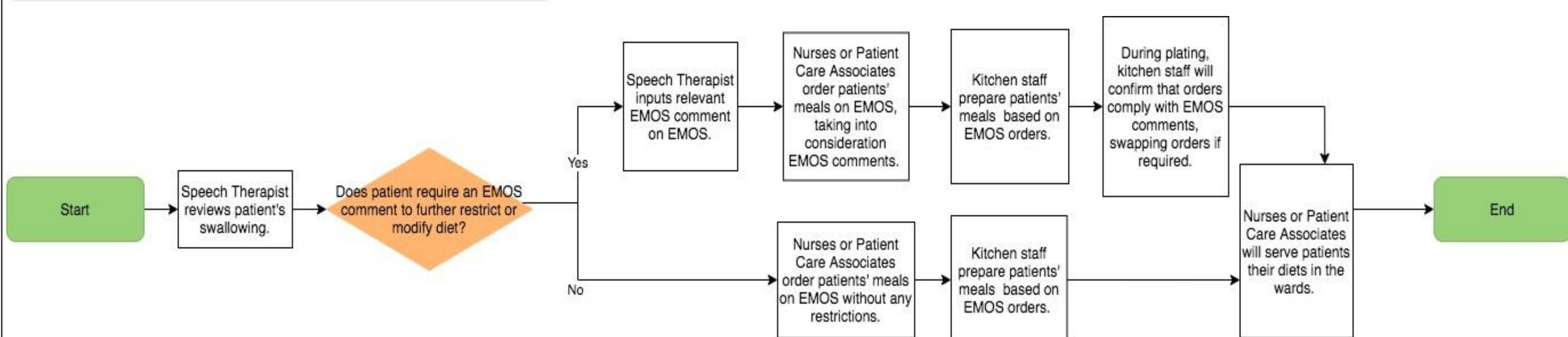
## Establish Measures

Between Sep and Oct 2019, the average compliance rate to ST EMOS comments by Nurses and PCAs was 88.5%.

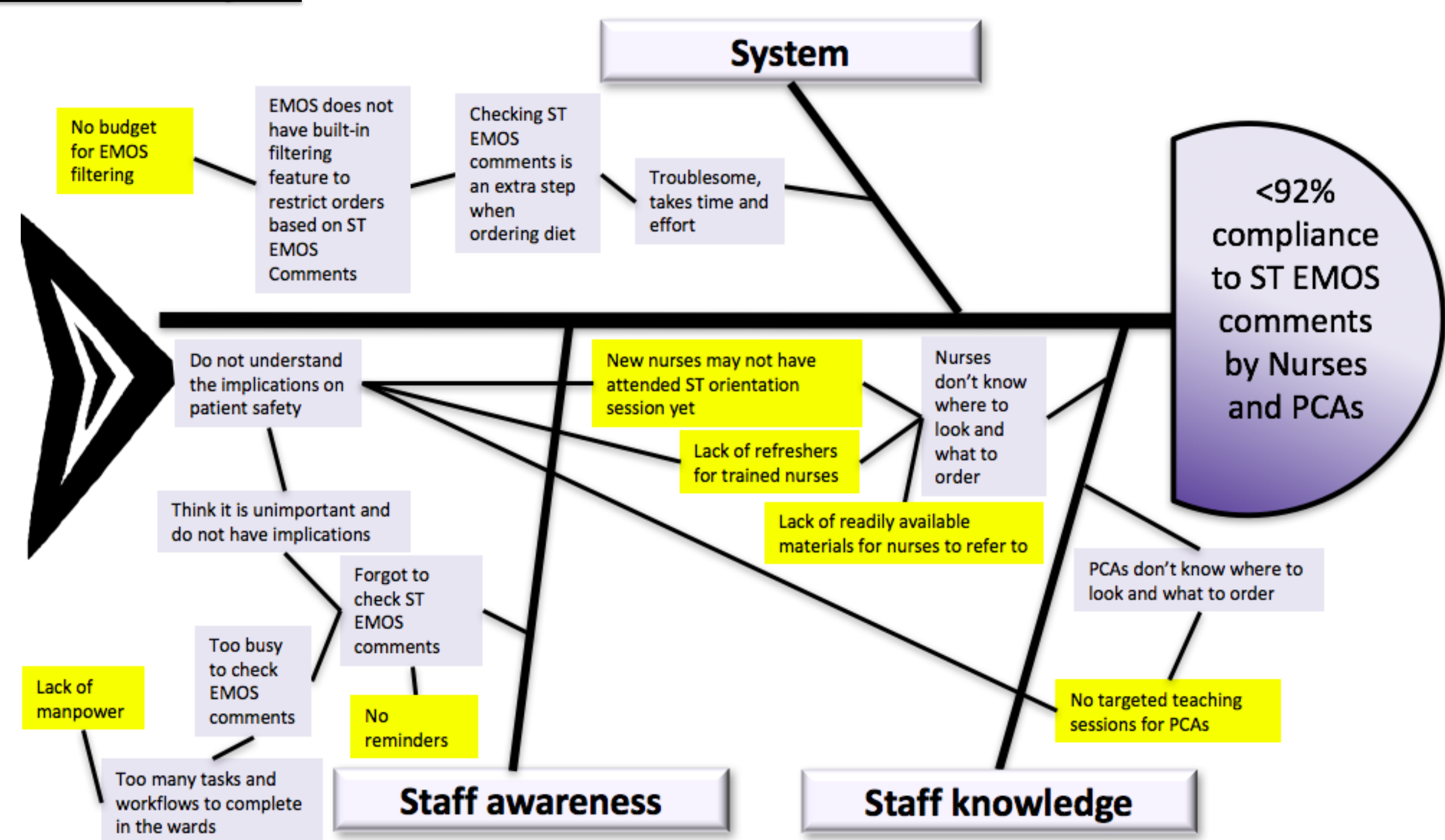


## Analyse Problem

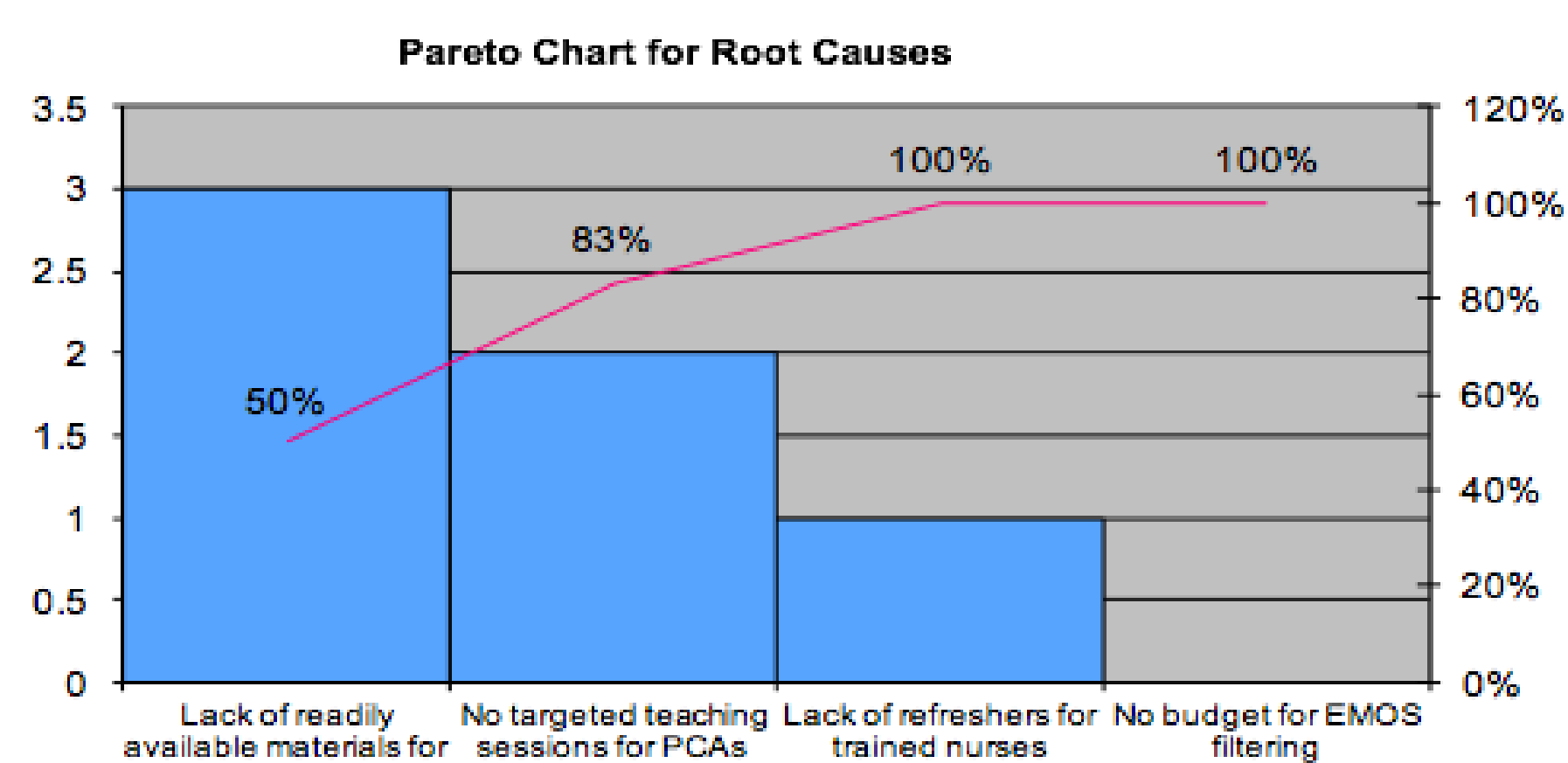
### Current Process Mapping



### Root Cause Analysis



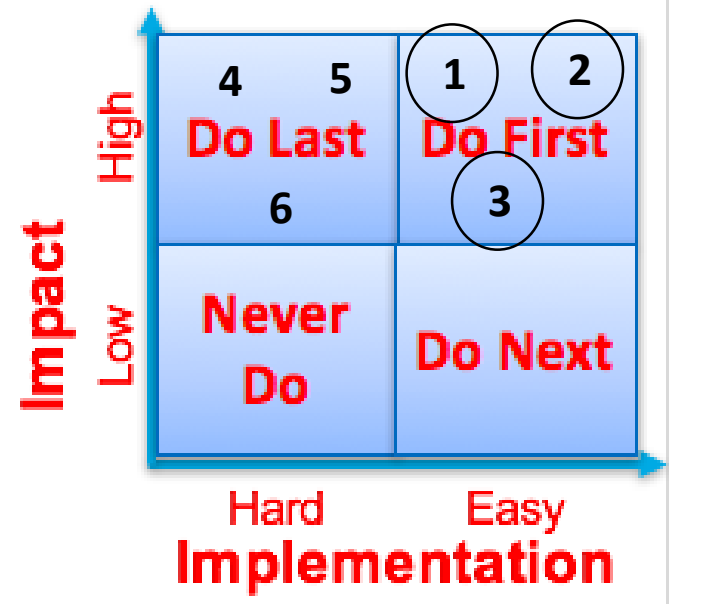
### Pareto Chart



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

## Select Changes

Root causes	Potential solutions	Priority ranking
Lack of readily available materials for nurses to refer to	To provide laminated <b>EMOS comments reference sheets</b> to put up around each ward for Nurses and Patient Care Associates to refer to when ordering diets on EMOS.	1
No targeted teaching sessions for PCAs	To include PCAs in an <b>adapted ST nursing orientation training sessions</b> (which also covers EMOS comments). All Ward STs to conduct once-off <b>short education session</b> focussing on EMOS comments <b>during ward roll calls</b> .	4
Lack of refreshers for trained nurses	All Ward STs to conduct once-off <b>short education session</b> focussing on EMOS comments <b>during ward roll calls</b> . To conduct <b>ST nursing refresher training sessions</b> for ward nurses in all wards.	3
No budget for EMOS filtering	To request for budget for EMOS filtering	5
		6



ST EMOS Comments Reference Sheet for Nurses and PCAs

Diet	ST comments in EMOS	What this means
Regular/soft	ST ____ DO/NO/YY: no mixed consistencies e.g. watermelon, melon, banana	Do not order: - melon - banana - watermelon - noodle soup e.g. kway teow soup
Soft	ST ____ DO/NO/YY: allow normal rice	No action required
Minced	ST ____ DO/NO/YY: no pasta	Do not order pasta
	ST ____ DO/NO/YY: congee/porridge/oats only	Do not order pasta or soft rice
	ST ____ DO/NO/YY: congee/oats only	Do not order soft rice, porridge with sides or pasta
Pureed	ST ____ DO/NO/YY: allow normal porridge	No action required
	ST ____ DO/NO/YY: no tofu, steamed egg, pudding	Do not order tofu, steamed egg or pudding
ST diet trial	ST ____ DO/NO/YY: ST Diet trial	No action required
Full feeds/ clear feeds	ST ____ DO/NO/YY: no ice cream, jelly	Do not order ice cream or jelly

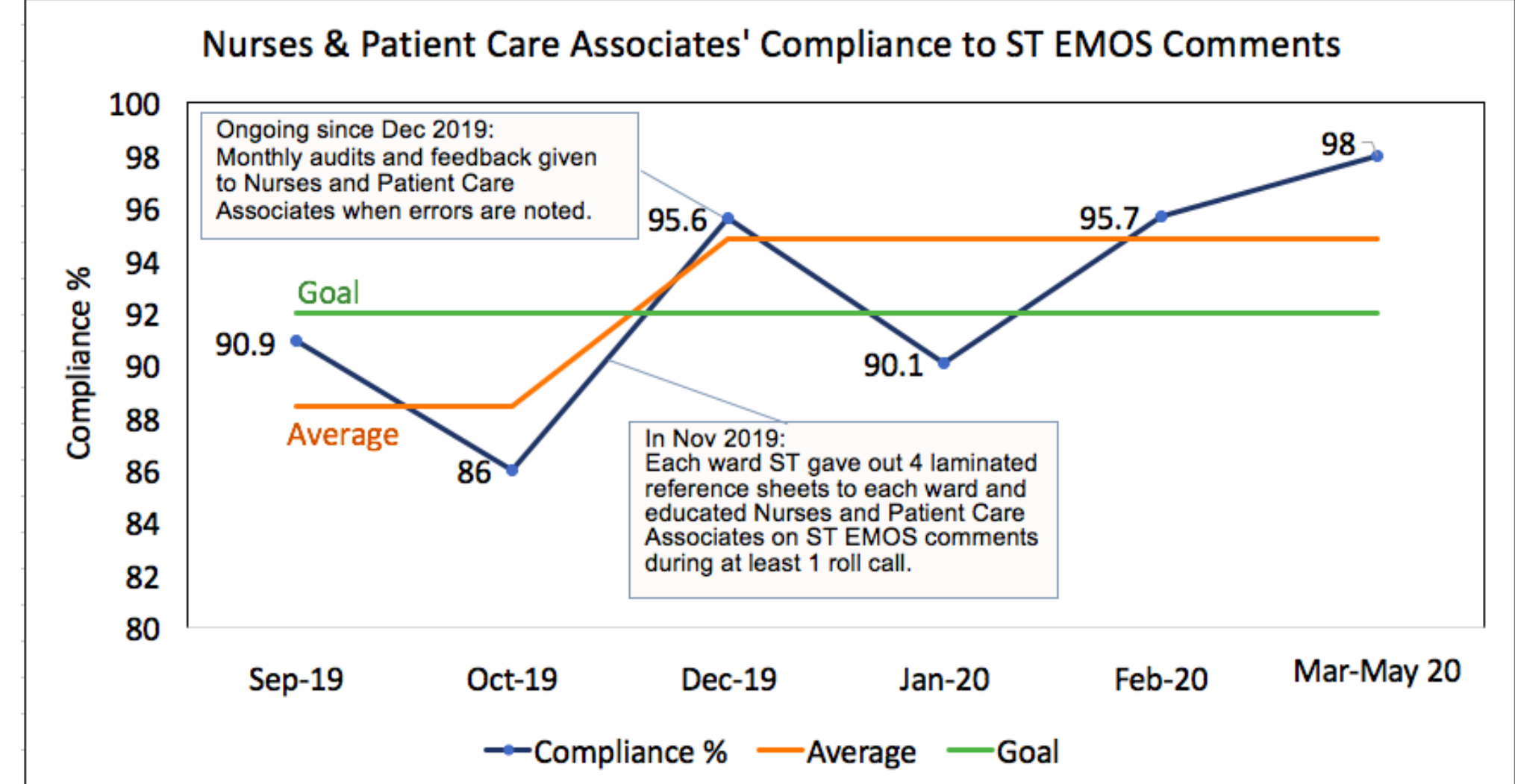
## Test & Implement Changes

**PLAN:** The aim is to increase nursing and PCA compliance to ST EMOS comments to at least 92% by Feb 2020 through roll call education sessions in all wards and provision of reference sheets.

### DO:

- In Nov 2019, Ward STs conducted education sessions for Nurses and PCAs in every ward during at least 1 ward roll call. Education session provided information such as where to check ST EMOS comments, how to interpret each ST EMOS comment, common pitfalls and implication of non-compliance on patient safety.
- During each roll call education session, Ward STs distributed 4 laminated reference sheets. These were put up around the wards, on nursing counters and COWs used to order patients' diets.
- Since Dec 2019, ongoing audit and feedback given to nurses and PCAs when errors were noted.

### STUDY:



- Compliance increased to 95.7% in Feb 2020 and 98% during follow-up quarterly monitoring between Mar and May 2020. Compliance rate reached an average of 94.9% between Dec 2019 and May 2020.
- Further analysis of the nature of errors revealed that errors pertaining to 'no mixed consistencies' EMOS comment decreased from 42.1% to 0% while errors pertaining to 'congee/porridge/oats only' EMOS comment increased from 47.5% to 94.7%.

### ACT:

- To continue with quarterly audits and feedback of errors. Ongoing close monitoring of compliance as dip may indicate need for repeat roll call education sessions or new maintenance strategies.
- In view of persistent errors, to replace 'congee/porridge/oats only' with 'no soft rice' when updating EMOS comments for upcoming alignment with IDDSI (International Dysphagia Diet Standardisation Initiative) in Jan 2021.
- To work on moving education sessions online to eLearning platforms for a more sustainable and efficient approach.
- To explore with relevant stakeholders regarding feasibility of building EMOS filtering based on ST EMOS comments during NGEMR transition in order to automate the ordering process and eliminate human error.

## Spread Changes, Learning Points

- Education sessions during roll call, provision of reference sheets, coupled with feedback of errors were effective in increasing nursing and PCAs' compliance to ST EMOS comments to above 92%.
- Capitalising on solution that can potentially target 2 root causes can facilitate efficiency and effectiveness (i.e. roll call education session for both PCAs and nurses).
- Analysis of limitations can guide future system changes (change specific EMOS comment given persistent error).
- To collect more baseline data during project design for a more representative baseline measure.