Project Title

Supervised Feeding in the Geriatric Ward

Project Lead and Members

Project Lead: Jasmine Boo Pei Ling

Project members: Dr Castillo Baby Clemencia Gonda, Yong Xing Tong, Florence Tang Mei Ai, Parveen Kaur Nijer, Elamparo Ingelyn Inciong & Ong Siew Chen

Organisation(s) Involved

Tan Tock Seng Hospital

Project Period

Start date: 01-2018

Completed date: 08-2018

Aims

To increase the percentage of patients who receive supervised feeding in a Tan Tock Seng geriatric ward (7C) from 15.5% to 100% in 6 months during lunch time

Background

Dependence for oral feeding is a significant predictor of pneumonia (Langmore et al, 1998; Terpenning et al, 2001). Choking incident/ sentinel event 10 years ago led to the establishment of supervised feeding guidelines: Patients who requires compliance to use of swallow strategies, patients who are impulsive and at risk of choking due to cognitive or behavioural issues. Ground sensing from the department that supervised feeding was not carried out as per ordered. Currently observed in the wards: Patient self-feeding, fed by family and nurses not available at bedside observing entire meal.

Methods

Team identify the cause of the ward not following the supervised feeding guideline and the top 3 cases are: Feeding guideline unclear about who can feed, lack of knowledge on supervised feeding and there no written guidelines or protocol on supervised feeding. Intervention were then introduced to tackle the causes. Firstly, to reinforce guidelines and increase awareness via in-service training and weekly roll call. Next, guidelines rolled out to STs to guide recommendations of supervised versus assisted feeding.

Results

With the intervention, the team achieved 100% supervised feeding from the original median of 15.5% in 1 month of intervention. Based on weekly number of inappropriate recommendations, the number from 6 drop to 1 with estimation to save inappropriate recommendation costing of $11K per year. However, the perfect percentage lasted for a month before it declines again, this suggest more intervention or reminder is needed.

Lessons Learnt

See poster appended/ below

Conclusion

Having perfect percentage for the ward to take up supervised feeding was achievable with interventions in place. Constant reminders and effort are needed to ensure every patients who needed supervised feeding receive it.

Project Category

Quality Improvement, Process Improvement, Safety

Keywords

Quality Improvement, Process Improvement, Pareto Chart, Cause and Effect Diagram, Safe Care, Cost Savings, Allied Health, Nursing, Geriatric Medicine, Tan Tock Seng

Hospital, Speech Therapy, Supervised Feeding, Swallowing Intervention, Feeding Protocol

Name and Email of Project Contact Person(s)

Name: Jasmine Boo Pei Ling

Email: Jasmine_Pl_Boo@ttsh.com.sg

SUPERVISED FEEDING IN THE GERIATRIC WARD

Ms Jasmine Boo Pei Ling
Department of Speech Therapy

Tan Tock Seng Hospital

National Healthcare Group
Adding years of healthy life

Mission Statement

To increase the percentage of patients* who receive supervised feeding+ in a geriatric ward (7C) from 15.5% to 100% in 6 months during lunch time

- Inclusionary criteria: Lunch period from 1130-1300
- Exclusionary criteria: Not in wards (eg. away for scans/downstairs with family), NBM status or currently being seen by ST for meal-time assessment.

* Patients who have supervised feeding ordered by ST/ Doctor on Aurora
\+ Supervised feeding: Ordered on Aurora & SN/RN observing and supervising the patient's entire meal

Team Members

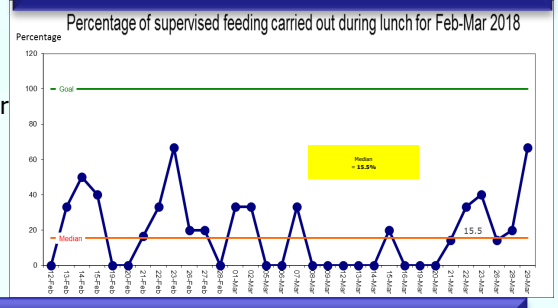
	Name	Designation	Department
Team Leader	Jasmine Boo Pei Ling	Senior Speech Therapist	Speech Therapy
Team Members	Dr Castillo Baby Clemencia Gonda	Medical Officer	Geriatric Medicine
	Yong Xing Tong	Speech Therapist	Speech Therapy
	Florence Tang Mei Ai	Speech Therapist	Speech Therapy
	Parveen Kaur Nijer	Senior Staff Nurse	Level 7
	Elamparo Ingelyn Inciong	Assistant Nurse	Level 7
	Ong Siew Chen	Nursing Educator	Nursing Service

Sponsor: Zenne T'ng Kuan Chen (Head of Department, Speech Therapy)

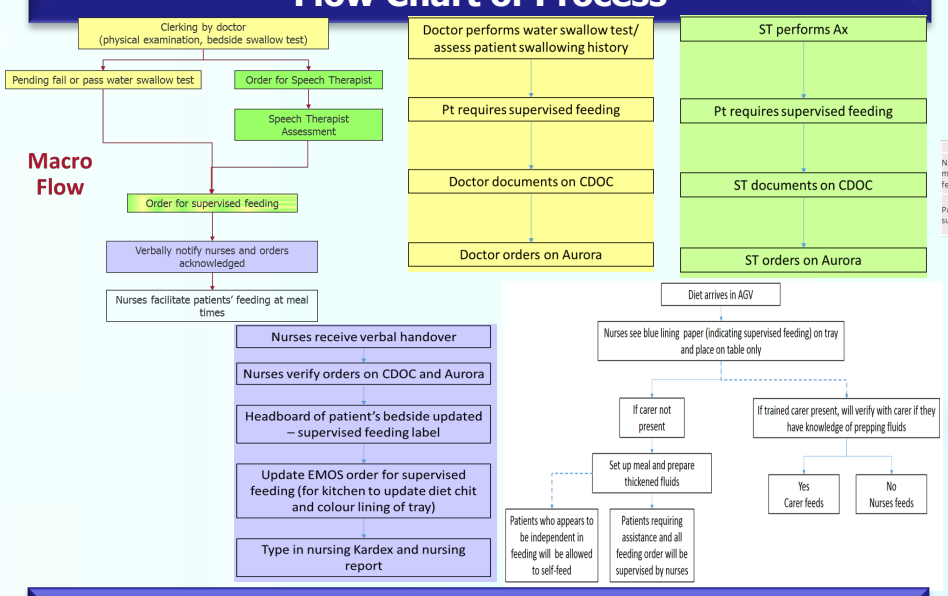
Evidence for a Problem Worth Solving

- Dependence for oral feeding is a significant predictor of pneumonia (Langmore et al, 1998; Terpenning et al, 2001)
- Choking incident/ sentinel event 10 years ago led to the establishment of supervised feeding guidelines:
  - ➢ Patients who requires compliance to use of swallow strategies
  - ➢ Patients who are impulsive and at risk of choking due to cognitive or behavioural issues
- Ground sensing from the department that supervised feeding is not carried out as per ordered. Currently observed in the wards:
  - ➢ Patient feeding self
  - ➢ Fed by family
  - ➢ Nurses not available at bedside observing entire meal

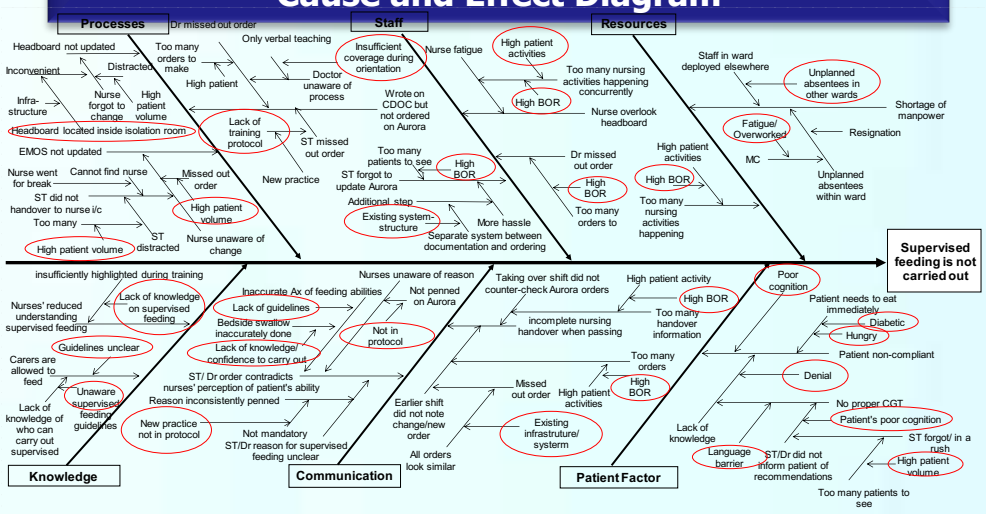
Current Performance of a Process



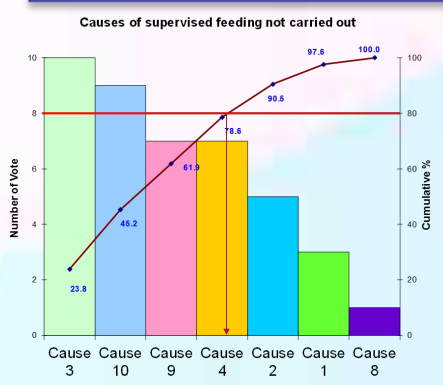
Flow Chart of Process



Cause and Effect Diagram



Pareto Chart

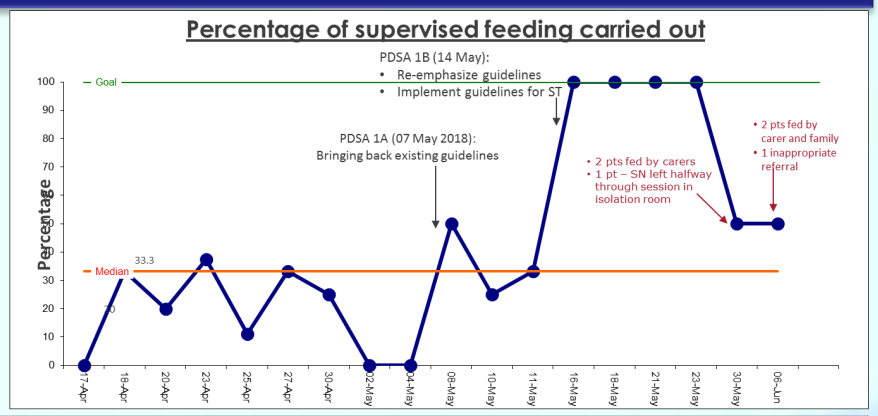


Cause 3	Supervised feeding guidelines unclear about who can feed
Cause 10	Lack of knowledge covered during nurses training
Cause 9	No written guidelines/protocol for ST/Drs on when to order supervised feeding
Cause 4	Unaware of supervised feeding guidelines
Cause 2	High bed occupancy rate
Cause 1	No protocol to tell STs to write reasons for supervised feeding on Aurora
Cause 8	Fatigued/overworked nurses

Implementation

CAUSE / PROBLEM (refer to Pareto Chart)	INTERVENTION	DATE OF IMPLEMENTATION
Cause 3: Feeding guideline unclear about who can feed **Cause 10**: Lack of knowledge on supervised feeding (from survey administered earlier – nurses are not fully aware of why, when and who to carry out supervised feeding)	To bring back existing guideline recommendation with the aim to reinforce guidelines and increase awareness though: -In-service training -Roll call for the week	07 May 2018 (PDSA cycle 1A)
Cause 9: No written guidelines/protocol for ST/Drs on when to order supervised feeding	Guidelines rolled out to STs to guide recommendations of supervised versus assisted feeding	14 May 2018 (PDSA cycle 1B)

Results



	17-Apr	18-Apr	20-Apr	23-Apr	25-Apr	27-Apr	30-Apr	02-May	04-May	08-May	10-May	11-May	16-May	18-May	21-May	23-May	30-May	06-Jun
Number of eligible meals for supervised feeding	3	3	5	8	9	3	8	9	6	4	4	3	2	1	2	1	6	6
Patients who received supervised feeding	0	1	1	3	1	1	2	0	0	2	1	1	2	1	2	1	3	3

Cost Savings

	Pre-Intervention	Post-Intervention
No. of Inappropriate Recommendation (Per Week)	6	1
Total No. of Inappropriate Recommendation (Annualized)	6 x 52 = 312	1 x 52 = 52
Estimated Cost of Inappropriate Recommendation (Annualized)	312 x $43.65 = $13,681.80	52 x $43.65 = $2,269.80
Cost Avoidance for Inappropriate Recommendation (Annualized)	$2,269.80 - $13,681.80 = **-$11,412.00**	

Cost of 1 Recommendation = $43.65

Lessons Learnt

- Team coordination and the importance of teamwork
- Flexibility and to embrace change
  - ➢ Multi-voting over watsapp
  - ➢ Deviation from original problem found
- Time management
- Perseverance through panel feedback
- Useful tools that may be extended to other aspects of work
- CPIP project does not just end here ……

Strategies to Sustain

1. ST to train carers to carry out supervised feeding:
   - Identify key family members/main carers
   - Train carers in 2 sessions
2. Supervised feeding champion in the ward (Nurse)
3. Train-the-trainer program for supervised feeding
   - Empowering nurses to be able to train carers to carry out supervised feeding
   - Certifying competency
4. Implementation for intake/output chart to record who fed patient to facilitate data collection