

Project Title

Safe and Fast Thickened Fluids Preparation for Dysphagia Residents

Project Lead and Members

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Organisation(s) Involved

Kwong Wai Shiu Hospital

Healthcare Family Group(s) Involved in this Project

Allied Health, Nursing

Applicable Specialty or Discipline

Speech Therapy

Project Period

Start date: Aug 2021

Completed date: Dec 2021

Aim(s)

- Nursing staff to achieve 100% accuracy of thickened fluids preparation using Resource clear thicker to residents with dysphagia in Ward 8 from August to Dec 2021.
- Shorten preparation time of thickened fluids by Nurses/ Healthcare Attendants / Therapists by 50% from 3minutes to 1.5minutes in Ward 8 from Aug to Dec 2021.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

See poster appended/ below

Conclusion

See poster appended/ below

Additional Information

This project was featured at the Central Health Action & Learning Kampung (CHALK) Poster Showcase 2022.

Project Category

Care Continuum

Rehabilitative Care, Intermediate and Long Term Care & Community Care, Nursing Home Care

Care & Process Redesign

Productivity, Cost Saving, Time Saving, Quality Improvement, Clinical Practice Improvement

Keywords

Rehabilitative Care, Nursing Home, dysphagia, Fluid Preparation

Name and Email of Project Contact Person(s)

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Safe and Fast Thickened Fluids Preparation for Dysphagia Residents

Team Members

Clarice Chia Speech Therapist | Tania Teo Speech Therapist | Ms Michelle Lew Director, AS |
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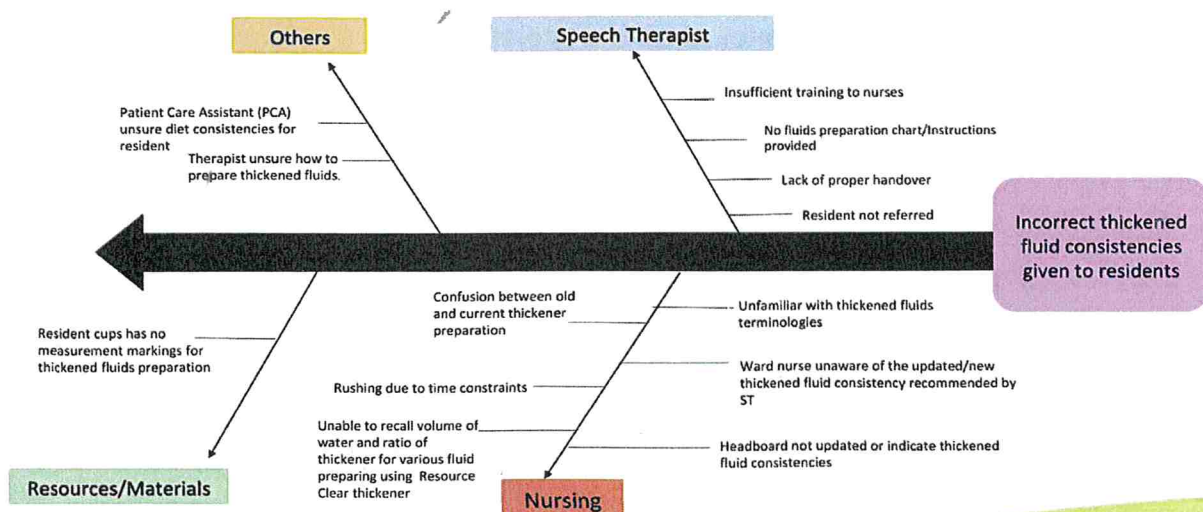
Background

- Dysphagia is a common consequence in nursing home residents with neurological conditions.
- Thickening agents are often employed in nursing facilities to reduce aspiration risks.
- Errors and variations in fluid consistency related to hand thickening are common in Kwong Wai Shiu Hospital @ Serangoon (KWSH).

Challenges

Based on Fishbone diagram, a few challenges were identified during thickened fluids preparation in KWSH.

- Recipe errors based on inaccurate or 'estimated' measurements.
- Residents' cups do not have measurement markings.
- Long time taken to prepare the correct consistency accurately.
- Fluid consistencies not indicated or updated timely.



Fishbone Diagram - cause of incorrect fluid consistencies given to residents

Interventions

Objectives/Aims Of Project

1. Nursing staff to achieve 100% accuracy of thickened fluids preparation using Resource clear thickener to residents with dysphagia in Ward 8 from August to Dec 2021.
2. Shorten preparation time of thickened fluids by Nurses / Patient Care Assistants / Therapists by 50% from 3 minutes to 1.5 minutes in Ward 8 from Aug to Dec 2021.

Approach/Method

Plan:

- Speech Therapists (STs) brainstormed and shortlisted the causes using the fishbone diagram.
- STs designed the (i) Thickened Fluids Preparation Chart based on Resource Clear thickener, and (ii) labelled resident cups with measurement markings.
- Identified ward and residents with dysphagia using Resource Clear thickener.

Do:

- Implementation project in Ward 8
- Each dysphagic resident was given a drinking cup with measuring labels and thickened fluids preparation chart
- ST used IDDSI flow test to measure accuracy of thickened drinks prepared by nurses. Data collected.
- Self-Report Satisfaction Survey given to nurse / Patient Care Assistants (PCA)

Check:

- Improvements checks and updates to resources were done.
- Other stakeholders identified.

Act:

- PCAs, PTs and OTs were also briefed on the project.
- ST ensured each dysphagic resident still had their (i) updated individualised preparation charts pasted below the headboard and (ii) cup with measuring labels, during the project.

Outcomes

1. Based on IDDSI Flow test, staff/PCA achieved 100% accuracy of thickened fluids preparation using Resource Clear thickener to residents with dysphagia in KWSH.
2. Duration of preparation reduced to about 1 minute. Reduced by 67%, exceeded the initial aim of 50% reduction in preparation duration.

Conclusion/Solution

Implementation of the fluid preparation chart and cup with measuring units, addressed the aims of project by:

- Standardising and improving the quality of thickened fluids preparation to 100% accuracy.
- Shorten preparation time to 1 minute. With a total of 61 dysphagic residents in KWSH, this could potentially save 732 minutes (~12.2 hours) per day, for other direct nursing care.

Additional benefits include:

- Reduced wastage of approximately 7 cans of thickener per day, This potentially saves about \$84 per day (1 can of thickener cost \$12x7 = \$84), and annual savings of \$30,660.
- Thickened Fluid Preparation chart has been used by Staff nurses as a visual teaching aid to teach new foreign nurses.