Swallow More: Increasing the Frequency of Swallow Rehabilitation for Patients with Dysphagia

Introduction
Swallow assessments by Speech Therapists (ST) allow patients with dysphagia (swallowing difficulties) to eat safely, reducing aspiration risks and pneumonia. After assessment, swallow rehabilitation is prescribed to improve a patient’s swallowing function, sometimes assisted by our Therapy Assistants (TA). However, in a fast-paced acute hospital setting, the assessment of patients’ dysphagia is often prioritized over providing swallow rehabilitation. While ongoing assessment is important to prescribe safe diet textures and fluid consistencies, frequent rehabilitation of swallowing can also promote a more timely recovery for our patients. This can reduce dependency on modified diets and fluids, or even enteral feeding, eventually reducing costs to patients.

Problem
Over a period of 3 months, only 27% of our swallow rehabilitation needs were met. We aimed to increase the met demand for swallowing rehabilitation (rehab) received by dysphagic inpatients managed by the Surgical-Oncology Speech Therapy (ST) team, to 40% over 6 months.

Methodology
A Ishikawa structure analysis by our team identified the following possible reasons for low met demand in 4 main categories:

1. Manpower
   - Inefficient use of Therapy Assistant’s (TA) time
   - Insufficient number of STs and ward time

2. Policies
   - New referrals were prioritized over rehabilitation cases

3. Processes
   - Patients were transferred to different wards, or were with other healthcare professionals or discharged quickly

4. Patients
   - Declined rehab
   - Not medically stable

Using the Pareto chart, our team identified the main causes contributing to low frequency of swallow rehabilitation in our workload:

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>A: Inefficient use of TA time</td>
<td>38%</td>
</tr>
<tr>
<td>B: Patient is not available</td>
<td>25%</td>
</tr>
<tr>
<td>C: Priority given to new cases</td>
<td>25%</td>
</tr>
<tr>
<td>D: Patient declines rehabilitation</td>
<td>12%</td>
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</tbody>
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Interventions / Initiatives
Two Plan-Do-Study-Act (PDSA) cycles were conducted. In Cycle #1, a Rehab List (RL) using Microsoft Excel program was developed and shared on the intranet for easy access by team members. In Cycle #2, training for ST and TAs commenced to ensure standardisation and accurate use of the Rehab List.

The Rehab List:
1. Patient’s details and swallow rehabilitation prescribed would be recorded on the RL by ST I/C
2. TAs would check the RL and confirm with ST I/C if the patient was medically stable to proceed with rehabilitation exercises
3. Upon confirmation, TA proceeds with swallow rehabilitation with the patient
4. TAs would text ST upon completion of rehabilitation
5. ST I/C to document swallow rehabilitation details

Results
A significant increase in the frequency for swallow rehabilitation sessions provided was noted during February to July 2018, from 27% to 44% (p<0.01). Thus, this improvement is unlikely due to chance.

Limitations
- Unpredictable work load resulted in reduced number of patients identified for rehabilitation at times
- Prioritization of new referrals for swallow assessments over swallow rehabilitation cases is compulsory

Conclusion
- Inpatient patients with dysphagia can be suitable for early swallow rehabilitation
- With more frequent rehabilitation sessions, our patients’ swallowing function can improve faster, increasing their chances to return to their premorbid diet, resulting in improved quality of life
- TAs’ time is also used more efficiently as they are given the autonomy to utilize the RL, increasing their productivity. TAs also reported increased feelings of empowerment and productivity
- There has been a shift in mindset among the Surgical Oncology ST team, to actively look out for patients who are suitable for rehabilitation
- With efficient reallocation of manpower, we can provide both swallow assessments and more rehabilitation sessions for our patients.