National Stroke Association
and the
Great Lakes Regional Stroke Network
present
Swallow Screening, Performance Improvement and Stroke in the Great Lakes Region

Presented by:

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GLRSN Dysphagia History

- Feedback told us dysphagia was an issue.
  - Hosted previous calls on dysphagia that were well attended.
- Primary stroke centers in the Great Lakes Region also looking at dysphagia.
- Request went to list serve looking for volunteers to serve on this workgroup.
- Response was overwhelming: over 40!
- Mix of SLP, nursing
- Mix of hospital size
- Some Primary stroke center hospitals
- Some outside of Great Lakes region
- All participants shared their current swallow screen.

Participants presented...

- When it was developed?
- Why it was developed?
- Who developed it?
- How was it tested?
- How is it working?
- Compliance?
- Documentation?
- Frequency?
- When is it conducted?
- Training?
- SLP Coverage/Hospital size.
- Anything additional?
### Comparison Overview of Screens

**Table: Components used in swallow screening**

<table>
<thead>
<tr>
<th>Component</th>
<th>Observations</th>
<th>Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Test*</td>
<td></td>
<td>43%</td>
</tr>
<tr>
<td>Straw</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Juice</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Ice</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Water only</td>
<td></td>
<td>77%</td>
</tr>
<tr>
<td>Water test</td>
<td></td>
<td>86%</td>
</tr>
<tr>
<td>Weak cough</td>
<td></td>
<td>62%</td>
</tr>
<tr>
<td>No drooling/ability to manage secretions</td>
<td></td>
<td>69%</td>
</tr>
<tr>
<td>No dysarthria/stuttered speech</td>
<td></td>
<td>77%</td>
</tr>
<tr>
<td>Alertness</td>
<td></td>
<td>46%</td>
</tr>
</tbody>
</table>

*All food test were in addition to the water swallow test.

**Observation components are from the 74% of hospitals performing pre-oral intake observation.

Reported n may be greater than 35 due to screening tools that administer more than one substance or consistency.
What we found

• The majority of the screens were created through a partnership between SLP and nursing.
• Developed for PSC certification.
• Everyone had SLP follow-up if the patient failed
• No facility had speech language pathology coverage 24/7.
• All facilities shared the same challenges with compliance, on-going education, and documentation
• This effort a welcome collaboration

What we did…..

After all screens reviewed…
• Literature review
• Identified screens in the literature
• Developed consensus
• Hosted conference calls:
  – Site reviewer from TJC to better understand the measure,
  – Creator of the TORBSST to better understand that screen and rationale,
  – Presented findings on a GLRSN quality of care teleconference
• Follow up evaluation
### Screen vs. Evaluation/Assessment*

**SCREEN**
- Seeking signs and symptoms that suggest patient is at risk
- Quick, efficient, safe for patient at highest risk
- Does not give: physiology, merely provides information

**EVALUATION/ASSESSMENT**
- Provides physiological data
- In depth history
- Observation
- Considerable expertise by clinician
- Invasive

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### Literature Review

- Systematic Review of literature by members
- All completed the same review sheet
- Shared findings of article with group
- Bibliography created
- Continually updated with new information
- Focus on what the literature says
  - Limited to stroke dysphagia
  - Particularly interested in levels of evidence
Identified Screens in the Literature

- Bedside Swallow Assessment
- Bedside Swallow Assessment EATS
- Burke Dysphagia Screening Test (BDST)
- Gugging Swallow Screen
- Kidd Water Test
- Massey Bedside
- Nishiwaki et al.
- Scottish Intercollegiate Guidelines Network (SIGN)
- Standardized Swallowing Assessment (SSA)
- Timed Test
- TORBSST©

Expert Consensus

- Maintain NPO until swallowing status is determined.
- Regular oral care. Oral care completed prior to dysphagia screen.
- Screen for swallowing status by team member that is licensed and trained in swallow screen protocol once patient is awake and alert.
- Swallowing assessment by speech language pathologist for all those who fail bedside screen.
- Where appropriate, feeding assistance or mealtime supervision by individuals trained in aspiration precautions.
- Education of patient and family regarding recommendations and feeding/swallowing plan of care.
Future Directions

- Further definition.
- Development of a standardized tool.
- Correlation to an outcome measurement such as nutrition.
- Correlation to speech pathology evaluations.
- Hospitals need to continue to test, validate and modify their screening tool and process to establish reliability, validity, inter-rater reliability and then publish their results in peer related journals.
- A cost savings analysis on a bedside swallow screen should also be considered.
- Failure criteria
- Amount of water
- The location of the screen and who performs the screen also warrants further discussion.

The Joint Commission Measure

All core measures are endorsed by the National Quality Forum (NQF).

The stroke set (10 measures) were submitted for their review in July 2008. NQF endorsed eight of the measures. They decided not to endorse STK-7 because the measure allowed the hospital to choose the dysphagia screening protocol. There are several evidence-based protocols available; however, there is lack of consensus as to a single, universal protocol that should be used by all. Therefore, the measure did not receive NQF endorsement. Clinically speaking, there is agreement that dysphagia screening is very important in the early management of the stroke patient. That has not changed and PSCs should continue the practice. At this time, there are no plans for development of a new dysphagia screening measure.
SLHSN Baseline Score Checklist

PART ONE: Your student score

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is evidence based (was performed on another student referenced when developed)?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>2. Is qualified (were results in some way compared to EBP evidence and results)?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>3. Published in the literature?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>4. Legible with no care?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>5. Is it clear with vital signs (pulse, respiration, blood pressure, temperature, respiratory rate, and oxygen saturation)?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>6. Is medication progressive (medication was given in the right amount and right time)?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>7. Is medication administered accurately (was medication given in the correct amount)?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>8. Is medication administered properly (was medication given in the correct route)?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>9. Is medication administered safely (was medication given in the correct dosage)?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>10. Is medication administered effectively (was medication given in the correct frequency)?</td>
<td><strong>X</strong></td>
</tr>
</tbody>
</table>

Criteria for completing your score is determined by:

- **X** Is your score higher than the EBP?
- **X** Is your score lower than the EBP?
- **X** Is your score equal to the EBP?

Score: 100%

Last assessed: [Date]

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PART TWO: Your patients learn to train

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did the patient have a clear understanding of the learning objectives?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>2. Did the patient have a clear understanding of the learning objectives?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>3. Did the patient have a clear understanding of the learning objectives?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>4. Did the patient have a clear understanding of the learning objectives?</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>5. Did the patient have a clear understanding of the learning objectives?</td>
<td><strong>X</strong></td>
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</tbody>
</table>

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- **X** Is your score higher than the EBP?
- **X** Is your score lower than the EBP?
- **X** Is your score equal to the EBP?

Score: 100%

Last assessed: [Date]
Follow Up Evaluation

Did you make any modifications to your swallow screen as a result of participating in the GLRSN dysphagia work group?

- Yes
- No

Did you make any changes to swallow screen process as a result of participating in the GLRSN dysphagia work group?

- Yes
- No
Did you make any changes to your training process as a result of your participation in the dysphagia work group?

Yes
No

What did you find most beneficial about this work group?

- Seeing other dysphagia screens used by facilities
- Literature review
- Allowed us to refine our swallow screen process
- Provided evidenced-based justification for the swallowing screen
- Prompted internal evaluation of swallow screen tool and/or process
- Other
What more could the GLRSN do to help you with your dysphagia screening process?

- Provide tools to help you evaluate your process
- Continue to provide CEU calls about dysphagia
- Continue to provide updates to dysphagia bibliography
- Continue to have this work group meet to discuss dysphagia
- Other (please specify)

Will you still continue to monitor swallow screening in your facility even though it is not a TJC measure?

- Yes
- No
Do you monitor the correlation of dysphagia screening with the rate of nosocomial pneumonia?

- Yes
- No

Where are you located?

- Illinois
- Indiana
- Michigan
- Minnesota
- Ohio
- Wisconsin
Resources

- Dysphagia Checklist
- Swallow Screen Assessments in the Literature
- Dysphagia Bibliography

GLRSN  http://glrsn.uic.edu – main page

BrainWave
http://nationalstrokeSCN.ning.com/
http://nationalstrokeSRN.ning.com/

Resources

To contact today’s presenters:

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SPECIAL THANK YOU!
Angela Hedworth
and the
Great Lakes Regional Stroke Network

Questions?
National Stroke Association Professional Members are invited to continue today’s discussion on
BrainWave
Not a member?
Visit our website or contact us for information:
www.stroke.org/memberships
memberships@stroke.org
SAVE THE DATE!
National Stroke Association Members-Only
Dysphagia Webinar
Wednesday, June 23, 1 – 2 pm eastern

Presented by:
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Medical Director
Outpatient PM&R Clinics
Johns Hopkins Hospital
Assistant Professor, PM&R
Johns Hopkins University

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