Swallowing Concerns in Acute Stroke Care

Laurie Broadfoot

Speech Language Pathologist

Acute Stroke Best Practices Workshop

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Objectives

- To review the Standardized Stroke Swallowing Screen
- To provide an overview of swallowing problems associated with stroke
- To review oral mouth care and its importance in patient care

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Why perform a swallowing screen?

- Incidence of dysphagia post-stroke is high (1/3 to 2/3 of acute stroke) with potential for life-threatening airway obstruction, aspiration pneumonia and malnutrition
- It is a best-practice for stroke care
- Ensures patients who can be fed, are fed
- Ensures that patients who are not safe for any oral intake can be flagged for an alternative means of nutrition or medication administration

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Swallowing Screening

- There is an automatic order to complete a swallowing screen as part of the Digital Order Sets for acute stroke
- Screening must be done within the first 24 hours of admission/presentation to hospital
- This *screening* is a nursing measure to determine if the patient needs to be *assessed* by a speech-language pathologist.

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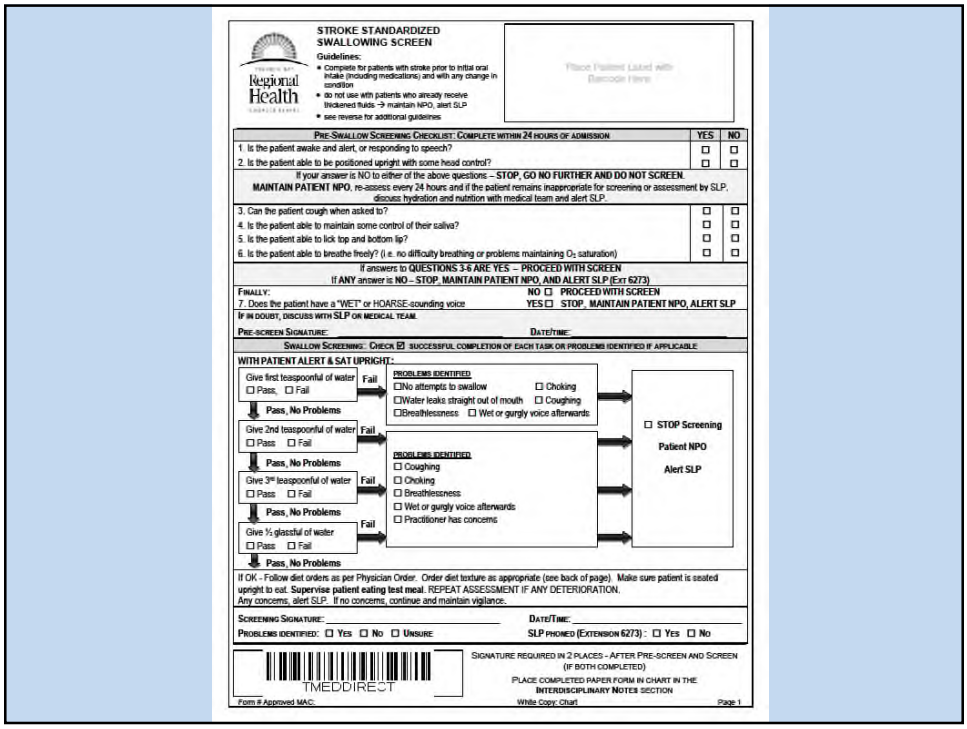

STROKE STANDARDIZED SWALLOWING SCREEN

Guidelines:
- Complete for patients with stroke prior to initial oral intake (including medications) and with any change in condition
- do not use with patients who already receive thickened fluids → maintain NPO, alert SLP
- see reverse for additional guidelines

Place Patient Label with Barcode Here

PRE-SWALLOW SCREENING CHECKLIST: COMPLETE WITHIN 24 HOURS OF ADMISSION	YES	NO
1. Is the patient awake and alert, or responding to speech?	☐	☐
2. Is the patient able to be positioned upright with some head control?	☐	☐
If your answer is NO to either of the above questions – STOP, GO NO FURTHER AND DO NOT SCREEN. MAINTAIN PATIENT NPO, re-assess every 24 hours and if the patient remains inappropriate for screening or assessment by SLP, discuss hydration and nutrition with medical team and alert SLP.		
3. Can the patient cough when asked to?	☐	☐
4. Is the patient able to maintain some control of their saliva?	☐	☐
5. Is the patient able to lick top and bottom lip?	☐	☐
6. Is the patient able to breathe freely? (i.e. no difficulty breathing or problems maintaining O_2 saturation)	☐	☐
If answers to QUESTIONS 3-6 ARE YES – PROCEED WITH SCREEN If ANY answer is NO – STOP, MAINTAIN PATIENT NPO, AND ALERT SLP (EXT 6273)		
FINALLY: 7. Does the patient have a "WET" or HOARSE-sounding voice	NO ☐ PROCEED WITH SCREEN YES ☐ STOP, MAINTAIN PATIENT NPO, ALERT SLP	

IF IN DOUBT, DISCUSS WITH SLP OR MEDICAL TEAM.

PRE-SCREEN SIGNATURE: _____ DATE/TIME: _____

SWALLOW SCREENING: CHECK ☑ SUCCESSFUL COMPLETION OF EACH TASK OR PROBLEMS IDENTIFIED IF APPLICABLE

WITH PATIENT ALERT & SAT UPRIGHT:-

Give first teaspoonful of water ☐ Pass, ☐ Fail — Fail → PROBLEMS IDENTIFIED: ☐No attempts to swallow ☐ Choking ☐Water leaks straight out of mouth ☐ Coughing ☐Breathlessness ☐ Wet or gurgly voice afterwards

Pass, No Problems

Give 2nd teaspoonful of water ☐ Pass ☐ Fail — Fail

Pass, No Problems

Give 3rd teaspoonful of water ☐ Pass ☐ Fail — Fail → PROBLEMS IDENTIFIED: ☐ Coughing ☐ Choking ☐ Breathlessness ☐ Wet or gurgly voice afterwards ☐ Practitioner has concerns

Pass, No Problems

Give ½ glassful of water ☐ Pass ☐ Fail — Fail

Pass, No Problems

→ ☐ STOP Screening Patient NPO Alert SLP

If OK - Follow diet orders as per Physician Order. Order diet texture as appropriate (see back of page). Make sure patient is seated upright to eat. **Supervise patient eating test meal.** REPEAT ASSESSMENT IF ANY DETERIORATION. Any concerns, alert SLP. If no concerns, continue and maintain vigilance.

SCREENING SIGNATURE: _____ DATE/TIME: _____

PROBLEMS IDENTIFIED: ☐ YES ☐ NO ☐ UNSURE SLP PHONED (EXTENSION 6273) : ☐ YES ☐ NO

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SIGNATURE REQUIRED IN 2 PLACES - AFTER PRE-SCREEN AND SCREEN (IF BOTH COMPLETED)

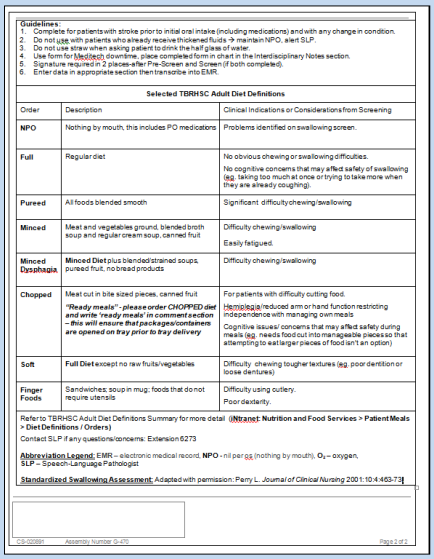
PLACE COMPLETED PAPER FORM IN CHART IN THE INTERDISCIPLINARY NOTES SECTION

Form # Approved MAC: White Copy: Chart Page 1

The Tool: Stroke Standardized Swallowing Screen

Reverse side has information regarding:

- Guidelines
- Diets
- Abbreviations
- Contact Information
- Reference



Guidelines:
1. Complete for patients with stroke prior to initial oral intake (including medications) and with any change in condition.
2. Do not use with patients who already receive thickened fluids → maintain NPO, alert SLP.
3. Do not use straw when asking patient to drink the half glass of water.
4. Use form for Meditech downtime, place completed form in chart in the Interdisciplinary Notes section.
5. Signature required in 2 places-after Pre-Screen and Screen (if both completed).
6. Enter data in appropriate section then transcribe into EMR.

Selected TBRHSC Adult Diet Definitions

Order	Description	Clinical Indications or Considerations from Screening
NPO	Nothing by mouth, this includes PO medications	Problems identified on swallowing screen.
Full	Regular diet	No obvious chewing or swallowing difficulties. No cognitive concerns that may affect safety of swallowing (eg. taking too much at once or trying to take more when they are already coughing).
Pureed	All foods blended smooth	Significant difficulty chewing/swallowing
Minced	Meat and vegetables ground, blended broth soup and regular cream soup, canned fruit	Difficulty chewing/swallowing Easily fatigued.
Minced Dysphagia	**Minced Diet** plus blended/strained soups, pureed fruit, no bread products	Difficulty chewing/swallowing
Chopped	Meat cut in bite sized pieces, canned fruit ***"Ready meals" - please order CHOPPED diet and write 'ready meals' in comment section – this will ensure that packages/containers are opened on tray prior to tray delivery***	For patients with difficulty cutting food. Hemiplegia/reduced arm or hand function restricting independence with managing own meals Cognitive issues/ concerns that may affect safety during meals (eg. needs food cut into manageable piecesso that attempting to eat larger pieces of food isn't an option)
Soft	**Full Diet** except no raw fruits/vegetables	Difficulty chewing tougher textures (eg. poor dentition or loose dentures)
Finger Foods	Sandwiches; soup in mug; foods that do not require utensils	Difficulty using cutlery. Poor dexterity.

Refer to TBRHSC Adult Diet Definitions Summary for more detail (**INtranet: Nutrition and Food Services > Patient Meals > Diet Definitions / Orders**)

Contact SLP if any questions/concerns: Extension 6273

Abbreviation Legend: EMR – electronic medical record, **NPO** - nil per os (nothing by mouth), O_2 – oxygen, SLP – Speech-Language Pathologist

Standardized Swallowing Assessment: Adapted with permission: Perry L. *Journal of Clinical Nursing* 2001;10:4:463-73

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Keep in mind:

- This screening tool should not be redone on a patient who has already been seen by an S-LP (if there's a change in condition and S-LP is not available, keep the client NPO until S-LP can reassess)
- This screening tool is only appropriate for patients with stroke
- If the patient "passes" the screening, they should not be requiring thickened fluids of any sort.

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Bedside Swallowing Assessment

- Allows the SLP to directly assess the oral phase of swallow
- Relies on clinical judgment and inferencing skills to evaluate pharyngeal and esophageal phases
- Takes into consideration the objective, subjective, and behavioural information from physicians, nurses, other therapists, family, and any other individuals interacting with the client.

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Bedside Swallowing Assessment

Objective information including

*Diagnosis and onset of symptoms

*Past and current medical history

*CT/MRI/CXR results

*Flow sheet information (input, output, temps)

*Current levels of nutritional intake and difficulties with intake

*Medications

*Respiratory status

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Bedside Swallowing Assessment

Subjective information including:

*Mentation/cognition

*Level of alertness

*Willingness of client to participate

*Impression of client's swallowing from the client, the family, and other team members

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Bedside Swallowing Assessment

- **Start the assessment with discussing what the client feels is a concern and what they typically eat at home.**
- **Complete an oral peripheral exam prior to offering food or fluid to the client**
  - *How is the client's positioning
  - *What do the oral structures look like (lips, tongue, teeth, palate)
  - *What does the client's voice sound like
  - *Does the client have and effective cough

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Bedside Swallowing Assessment

- **Begin swallowing trials with fluids or what the SLP feels appropriate.**
- **Teaspoon amounts are typically offered initially and the client may be asked to try on their own if they seem safe.**
- **Progression to various textures is dependent on how well the client managed the previous texture of food/fluid.**
- **Good information can also be gathered by watching the client or caregiver take/give the food/fluid as they normally do at home.**

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Bedside Swallowing Assessment

- Diet recommendations will depend on what is observed during the assessment.
- Ideally the client and SLP discuss and agree upon safe food and fluid textures for the client to have on their trays.
- Diet recommendations work best when the client, their family, and staff all agree and comply with the recommendations.

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Videofluoroscopic Swallow Study

- When information from the bedside swallow assessment is inconclusive or if the client's performance is inconsistent, a Videofluoroscopic Swallow Study (VFSS) may be requested.
- The procedure is the same as at the bedside, but the client is assessed in Diagnostic Imaging and barium is added to the food and fluid because it allows the food/fluid to be seen on x-ray

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VFSS

- The oral, pharyngeal, and part of the esophageal phases are able to be visualized and gives the SLP a clearer picture of what is happening before, during, and after the swallow.

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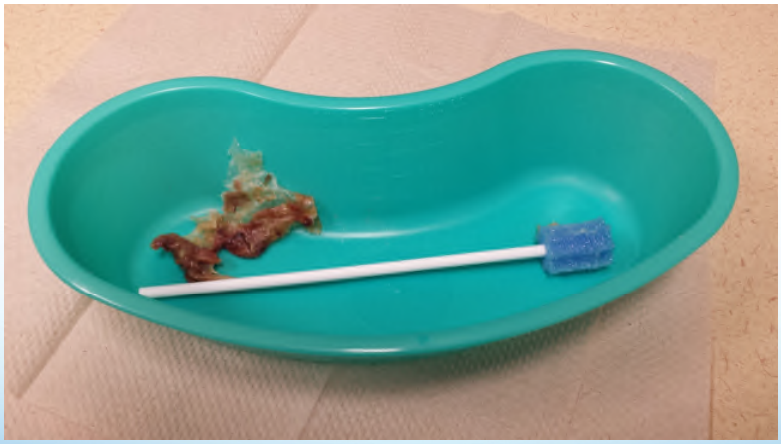
Oral Care



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Stroke and Oral Care

- Physical disability from stroke impacts oral care
- >1/3 of stroke patients reported difficulty with tooth cleaning
- Degree of physical disability strongly related to degree of difficulty with tooth cleaning *(Hunter et al., 2006)*
- Physical weakness, lack of coordination and cognitive problems may prevent a person from maintaining good mouth care on their own *(Brady et al, 2007)*

Reference: http://www.mouthcarematters.hee.nhs.uk/wp-content/uploads/2016/10/MCM-GUIDE-2016_100pp_OCT-16_v121.pdf

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Stroke, Dysphagia & Oral Care

- Dysphagia (difficulty swallowing) has numerous causes, including stroke, and is most frequently seen in elderly patients
- Reduced oral clearance (removing food from the mouth) in such patients negatively impacts their oral health
- Dysphagia found to be related to oral thrush, reduced saliva and dependency on others for oral care.*(Poisson et al. 2014)*
- Extra care should be taken to reduce the risk of a patient aspirating toothpaste or any debris that may be present in the mouth.

Reference: http://www.mouthcarematters.hee.nhs.uk/wp-content/uploads/2016/10/MCM-GUIDE-2016_100pp_OCT-16_v121.pdf

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Other Reasons for Mouth Care

- Patient dignity
- A clean mouth feels good
- Food tastes better
- Patients have improved oral awareness when their mouth is clean, ie. Better/safer swallowing
- Can help prevent pneumonia and heart disease
- Both conscious *and* unconscious patients require mouth care

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Strategies to help with Dysphagia

- Mouth Care – many patients have significant swallowing concerns and often are NPO with tube feeds for nutritional support. It is very important to keep up with mouth care for those patients who don't eat or drink orally, not just with the patients who are able to eat and drink.
- Positioning in bed or a chair – ensuring that the patient is sitting upright so that there is good breath support and not at risk for premature spillage to the airway

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Strategies to help with Dysphagia (cont'd)

- **Diet texture changes – increasing or decreasing diet textures or fluid consistencies can improve the client's management of oral intake**
- **Chin tuck – keeps the food/fluid near the front of the mouth to avoid premature spillage to the airway**
- **Head turn – turning the head to the affected side helps avoid pocketing with some patients**

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ORAL CARE STRATEGIES

Client is at risk for aspiration. Frequent oral care (after every meal and before bed) is necessary to minimize the onset of respiratory infection.

Position client as upright as possible to minimize/prevent choking on saliva or mouthwash.
Use a **toothbrush and fluoride paste** to clean **all** surfaces within the mouth (teeth, cheeks, gums, tongue, palate).
Antibacterial mouthwash is recommended if toothpaste not available. Dip toothbrush in mouthwash and brush, rinsing and re-dipping frequently.
If client has dentures, **remove and clean.** Soak in water with cleaning tablet. Scrub with toothbrush dipped in mouthwash to remove debris and bacteria.

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Safe Swallowing Suggestions

- Offer mouth care before and after each meal
- Make sure the client is alert and responsive
- Position the client to facilitate good swallowing
- Feed the client at eye level (Sit if the client is in a chair or in bed, if you want to stand, raise the client's bed to your height)
- Use teaspoons, not tablespoons
- Go slowly and wait for the client to swallow

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Safe Swallowing Suggestions

- Offer fluids slowly from a wide nosed cup or from a teaspoon (minimize flexing the neck back). No big gulps or continuous drinking.
- Not everyone can manage a straw, check with the SLP or the chart for recommendations.
- Encourage more than one swallow per bite/sip if necessary.
- Minimize distractions – turn off the TV or minimize talking during the meal. Focus on intake.

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When Oral Intake is Not an Option

- There are times when oral intake is not safe for the client and is not recommended by the S-LP
- It is important to include all the team members in the discussion about oral and non-oral feeding, which may include the patient, the physician, nurse, speech-language pathologist, registered dietician along with any family or friends the patient may want there.
- Different feeding options may be discussed (NG tube feeds vs. PEG feeds) and the reasoning why either may be appropriate for the Patient

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QUESTIONS?

Laurie Broadfoot
Speech-Language Pathologist
broadfol@tbh.net
x 6273
pager 624-1066

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