



Aurora Health Care®

*Importance of Integrating
Stroke Rehabilitation Across the
Continuum of Care*

Dori Tooke, MHA, PT, CSCS

Manager-Inpatient Rehab Program

St. Luke's Medical Center

Milwaukee, WI

Disclosure

- Nothing to disclose

Objectives

- Discuss the incorporation of rehabilitation services through the continuum of stroke care, from acute admission to post stroke management
- Describe how rehabilitation clinicians can help prevent complications from and recurrence of stroke
- Provoke thoughts on how rehabilitation services can help improve the quality of stroke care
- Describe a stroke survivor plan of care from a rehabilitation perspective

Definitions

- Rehab-means different things to different people
- Rehabilitation services: PT, OT, SP, TR, Psych
- Inpatient Rehabilitation Program (IRP)
- The act of making a person better - to rehabilitate

Rehabilitation Services: The Need for Integration Identified

- Many stroke initiatives focus solely on the medical management of the acute stroke
- “plan for rehab is considered”

Proposing a new goal-

- “patient is evaluated for rehabilitation needs and a plan is implemented”

Rehabilitation Clinicians Can:

- Assist with meeting quality criteria
- Prevent complications
- Spot subtle deficits
- Contribute to plan of care
- Contribute to d/c planning
- Rehabilitate the patient
- Provide for secondary prevention

Meeting Criteria-Quality Measures

- Dysphagia screening
 - Minimize impact on nursing for success
 - Utilize your specialists
 - Keep it to a screen, not an evaluation

Dysphagia Screen Example

- **Dysphagia Screen Part 1:**
- A. Assess patient on and during admission for the following behaviors:
 - a. Known history of dysphagia
 - b. Wet vocal quality
 - c. Excessive drooling or an inability to handle their own secretions
 - d. Facial numbness or drooping
 - e. Decreased consciousness
 - f. Slurred speech
 - g. Expressive or receptive aphasia
 - h. Confusion or disorientation
 - i. Impaired memory
 - j. Weak or absent volitional cough response
 - K. Weak, breathy, rough, or strained voice
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- B. If any of the above are noted:
 - a. Make the patient NPO
 - b. Obtain a consult for a swallow evaluation by Speech Therapy



Dysphagia Screen Example, Cont.

- **Dysphagia Screen Part 2:**
- Complete this only if patient passes the Dysphagia Screen Part 1

- A. Sit the patient up at 90 degrees
- B. Evaluate the patient's swallow, first with a sip(s) of water and then trial a cracker if indicated
- C. Watch for the following signs of dysphagia:
 - a. Coughing or choking
 - b. Throat clearing
 - c. Wet vocal quality
 - d. Change in breathing pattern or patient becomes short of breath
 - e. Difficulty sealing lips around a spoon, cup or straw
 - f. Difficulty chewing the food or lengthy oral prep
 - g. Pocketing of food or excessive oral residue
 - h. Complaint of pain or discomfort when swallowing
 - i. Needing frequent verbal cues to swallow
 - j. Leakage of food from the mouth or nose
- D. If any of the above are noted:
 - a. Make the patient NPO
 - b. Obtain a consult for a swallow evaluation by Speech Therapy

Dysphagia Screen Implementation

Prior to initial implementation:

1. Speech therapy staff will review screening and rectify any discrepancies in understanding of terminology among therapy staff if necessary
2. Speech therapy staff will train nursing staff who will be responsible for the screening (approximately 30 minutes)

Dysphagia Screen Implementation

Implementation of the screening:

1. Nursing staff will complete Bedside Dysphagia Screening Part 1 in the ED or as early as possible during evaluation/admission process
2. Completion of screening and observations will be documented in the medical record
3. Should patient fail any portion of Part 1, patient becomes NPO and orders for speech therapy swallow eval are obtained/sent
4. Should patient pass Part 1, proceed to Part 2
5. If patient fails any portion of Part 2, make the patient NPO and obtain orders for speech therapy swallow evaluation
6. Speech therapy prioritizes NPO swallow evaluation patients 7 days per week
7. Patient should have nothing by mouth once deemed NPO until speech therapy evaluation is completed with recommendations made, including medications
8. Reminder to staff and physicians periodically that dysphagia screening (and subsequent speech therapy evaluations if NPO) are a Joint Commission requirement of Primary Stroke Centers
9. It is recommended that nursing, therapy, and nutrition staff demonstrate competence in thickening liquids and diet consistencies



Meeting Criteria-Quality Measures

- Plan for rehab considered
 - Auto-check PT, OT, SP on order sets
 - At the very least, use a thorough triggers list to consult therapies

Prevention of Complications

- Early mobilization-during acute phase
 - ACE principles
 - Orientation
 - Lung status
 - Skin integrity
 - Progressive mobility

Prevention of Complications

- Rehabilitation later in recovery (post-acute)
 - Tone management
 - Orthotic devices
 - Assistive devices
 - Bowel and bladder dysfunction
 - Shoulder management
 - Positioning
 - Medical management
 - Depression



Subtle Deficits

- Order sets
- If a person is admitted, he/she should at least be evaluated by
 - PT
 - OT
 - SP
 - *Physiatry* (if you have it)

Subtle Deficits

- Cognition
 - IADLs
- Mobility
- Community Re-entry

Plan of Care-Assisting with Acute Management of Length of Stay

- Assisting nursing with patient management strategies
- Assisting all staff with patient and family education
- Providing the necessary information to determine best discharge destination
- Ensuring rehabilitative and medical follow up occur

Discharge Destination from Acute

- Home (OP, home care, follow up programs)
- Day rehab
- Assisted living
- Inpatient rehab
- Subacute
- Long term care
- Long term acute care



Discharge Destination from Acute

- Criteria based
- D/C planners should have a strong knowledge of best disposition based on function, medical needs and social support

Quality Measures-Benchmarking

- Depending on the quality measures used to benchmark, certain outcomes such as discharge disposition can affect perception of quality

Contribution to Quality Measures

- Acute
 - Acute LOS
 - Onset days to IRP or subacute
 - Acute 30 day readmissions
 - Meeting the “plan considered” standard
 - Assisting with the dysphagia screen standard
 - Reduction of aspiration pneumonia and other co-morbidity associated with reduced mobility

Contribution to Quality Measures

- Inpatient Rehab Program
 - IRP home discharge rates
 - FIM change
 - Case mix
 - IRP length of stay
 - IRP acute transfers
 - 30 day readmissions

Outcomes versus Quality Measures

- Not always the same thing:
 - Clinical outcome tools
 - Patient outcome measures
 - Department or program outcome measures

Secondary Prevention

- Stroke education classes
- Stroke support groups
- Stroke follow-up programs

Stroke as a Chronic Disease

- Chronic disease management principles
 - Why not apply to stroke?

Rehabilitation Plan of Care

- Focuses on:
 - Rehabilitation of functional and cognitive status
 - Training of family and caregivers
 - Procurement of adaptive equipment
 - Environmental modifications
 - Integration into home roles
 - Integration into community settings
 - Social support / coping
 - Movement along the continuum of care

Summary Points

- Get your rehab services people involved early in acute care
- Use your rehab services people to further your acute management and quality outcomes
- Recognize that rehab services clinicians can bring a continuum to the care provided for post-stroke patients that leans to chronic management

THANK YOU