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# Continuum of Stroke Care

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# Disclosure Statement

- All statements made as a part of this presentation and/or discussion will be based on the best available evidence.
- I have no financial relationships to disclose.



# Learning Outcome

- Describe how to effectively utilize the stroke continuum of care to maximize rehabilitation outcomes for persons with stroke.



# Stroke Rehab Continuum of Care

- Multiple levels of care with formal linkages and smooth transitions
  - Acute Care
  - LTACH
  - IRF (Acute Rehab)
  - SNF
  - Intense Outpatient (Rehab Day Program)
  - Outpatient



# Why Does Use of a Continuum Make Sense?

## Effectiveness

- Low level rehab program can begin on LTACH while addressing medical issues/stability
- Medical and rehab improvements do not happen in isolation (e.g. vent wean, activity tolerance, improved mobility)
- Prevention of complications which have negative impact on intense acute rehab
- Most patients with diagnosis of SCI, CVA and BI who use LTACH and IRF return home



# Why Does Use of a Continuum Make Sense?

## Efficiency

- Cost containment for acute care – lower ALOS
- Pay for performance - return to acute care much lower in LTACH than SNF
- Maximize time in rehabilitation – Medicare patients qualify for LTACH and IRF stay
- One shot at intense rehab



# Case Study- G.O.

- 78 year old female w/ acute onset stroke on June 26, 2017
- Seen in ER at CHI Health GI St Frances with right sided facial droop, right upper and lower extremity weakness and global aphasia
- Neurology consulted, IV tPA initiated and patient transferred to CHI Health Good Samaritan in Kearney
- CT showed large acute L MCA ischemic stroke (probably cardioembolic)
- Following tPA, improvement noted in facial droop and UE/LE weakness as well as neglect
- Medical complications: pneumonia, acute kidney injury (fluid overload), new onset atrial fibrillation
- Social history: retired school teacher, lives with spouse in ranch style home, previously independent with daily activities, loves to garden, play cards, and do crossword puzzles and crafts



# Is this patient a good candidate for IRF (acute rehab)? If so, why?

- Patient is medically stable
- Patient has complex medical (stroke) rehab, and nursing needs
- Patient would benefit from an intense rehab program (able to tolerate 3 hours therapy per day at least 5 days per week) with a coordinated, interdisciplinary team approach
- Patient requires the expertise of multiple therapy disciplines (PT, OT, SLP, orthotics and/or prosthetics)
- Patient is expected to make measurable improvement in functional status in a reasonable time frame
- Patient has a safe and reasonable discharge plan





# Admission to IRF (Acute Rehab)

## July 7, 2017

- Transfers & bed mobility- SBA
- Ambulates up to 600' w/ CGA
- Bathing & dressing- CGA
- Toileting- CGA
- Right visual field deficit
- Sitting balance- Supervision
- Standing balance- CGA
- Global aphasia
- Mild dysphagia- honey-thick liquids, mechanical soft diet



# Long-Term Goals

- Transfers & bed mobility- Indep
- Ambulate > 1,000' independently w/o assistive device
- Ascend/descend 12-14 steps independently w/ railing
- Score  $\geq$  50/56 on Berg Balance Scale to decrease risk for falls
- Self cares- Indep using adaptive equipment/techniques
- Toileting- Indep
- Home management tasks like simple meal prep and laundry- SBA
- Safely swallow regular/thin diet texture w/o signs of aspiration w/ supervision
- Demonstrate multi-modal communication skills to communicate basic wants/needs w/ frequent cues
- Demo adequate receptive skills for comprehension of sentences w/ frequent cues



# Rehab Interventions

- Gait training, stair climbing
- High level standing dynamic balance activities
- Self cares and home management tasks
- Recreation and leisure activities
- Communication/speech—naming, written choice, concrete/abstract/yes-no, automatic speech tasks
- Dysphagia treatment- oral trials different consistencies, chin tuck strategy
- Neuropsych for coping & adjustment
- Patient/family education & training



# Discharge from IRF

## July 22, 2017

- Transfers & bed mobility- Independent
- Ambulates > 1,000' w/ supervision w/o assistive device
- Bathing & dressing- supervision
- Toileting- Independent
- Sitting balance- Independent
- Standing balance- Independent
- Moderate receptive aphasia
- Severe expressive aphasia
- Regular/thin diet- supervision



# Coordination & Follow-Up

- OT & SLP at Grand Island Physical Therapy  
Balance & Mobility
- PCP
- Neurology
- Interventional Radiology
- Resource info provided: Meals on Wheels, Lifeline, Stroke Support Group, Stroke websites



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# Panel Discussion Q & A



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# References

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