

Inpatient Rehabilitation for Stroke



Julie Ladwig MHA, PT, MRMC
**Director of Inpatient Rehabilitation
Services**

What is Inpatient Rehab?

- Post-Acute Care Setting-Definition
- Post-Acute care setting: LTAC, IRF, SNF/SAR, Home Care
- Distinct Patient Unit
- Highly regulated by CMS
- Second highest level of care for post acute
- Full admission and full discharge from acute care
- Best to visualize us as a separate free-standing building
- Full Access Team consisting of 2 RN Admission Liaisons, Admission Secretary and Physician
- Stroke patients do not just come to us-there is a ton of work that is done by the acute care therapy team, case management team, and our access team to get patients into our beds.

Inpatient Rehab Operations

- Intensive inpatient rehabilitation program which requires physician oversight and 24-hour registered nursing care along with 3 hours of therapy 5 days per week
- IRF-PAI- Inpatient Rehabilitation Facility Patient Assessment Instrument
- QRP- Quality Reporting Program- established by CMS
- CMS.gov website displaying quality data from IRF facilities
- CMG versus DRG- Case Mix Group
- Payment is determined for IRF stay by:
 - Diagnosis-Impairment Group Code
 - Admission functional score (QRP)-scored by RNs, PTs, OTs, STs and CM
 - High acuity medical conditions (tier codes)
- Etiologic Diagnosis and RIC (Rehab Impairment Category)
- Length of stay is determined by CMS expected length of stay. The Stroke LOS is between 9-26 days.

Welcome Video

- <https://youtu.be/WCOmE-dqs3k>



Stroke Data from eRehab Calendar year 2021

Total Number of Patients: 146

Onset Days: 8.3(less than N&R by 4 days)

Case Mix Index: 1.7(same as N&R)

Back to Community: 84%(higher by 10%)

Skilled Nursing Facility Discharges: 9.6%(lower by 5%)

Acute Care Transfers: 6%(lower by 4%)

Length of Stay: 17.3(same)

Mobility upon admit: 19.6(same)

Mobility upon discharge: 32.2(Higher)

Self-Care upon admit: 20.5(same)

Self-Care upon discharge: 32.9(Higher)

60% Rule- What does this mean? Compliant versus Non-compliant?

The 13 medical conditions that qualify for the 60 percent rule are:

- 1. Stroke
- 2. Spinal cord injury
- 3. Congenital deformity
- 4. Amputation
- 5. Major Multiple Trauma
- 6. Fracture of femur (hip fracture)
- 7. Brain Injury
- 8. Neurological disorders including: Multiple sclerosis, Motor neuron diseases, Polyneuropathy, Muscular dystrophy and Parkinson's disease

60% Rule- What does this mean? Compliant versus Non-compliant?

Continued... The 13 medical conditions that qualify for the 60 percent rule are:

- 9. Burns

Arthritis **IF** the patient has failed outpatient therapy and:

10. Active polyarticular rheumatoid arthritis, psoriatic arthritis, and seronegative arthropathies resulting in significant functional impairment of ambulation and other activities of daily living (ADLs)

11. Systemic vasculitides with joint inflammation resulting in significant functional impairment of ambulation and other ADLs

12. Severe or advanced osteoarthritis (osteoarthrosis or degenerative joint disease) involving **two or more weight** bearing joints (elbow, shoulders, hips, or knees but not counting a joint with a prosthesis) with joint deformity and substantial loss of range of motion, atrophy of muscles surrounding the joint, and significant functional impairment of ambulation and other ADLs

- 13. Knee or hip joint replacement **IF**:

- a. The patient underwent bilateral knee or bilateral hip joint replacement surgery during the acute care hospital admission immediately preceding the IRF admission
 - b. The patient is extremely obese with a Body Mass Index of at least 50 at the time of admission to the IRF
 - c. The patient is age 85 or older at the time of admission to the IRF
- The 60% rule has been around longer than IRF PPS

NEUROPLASTICITY

- **Neuroplasticity**, also known as **neural plasticity**, or **brain plasticity**, is the ability of [neural networks](#) in the [brain](#) to change through growth and reorganization. These changes range from individual [neuron pathways](#) making new connections, to systematic adjustments like [cortical remapping](#). Examples of neuroplasticity include circuit and network changes that result from [learning](#) a new ability, environmental influences and practice.
- [Neuroplasticity – Wikipedia](#)
- The importance of rehab is to help create new pathways which will lead to clinical recovery.

THERAPEUTIC INTERVENTIONS

- The importance of influencing a stroke patients' medical, sensory, motor, speech, swallow, psychological well being, and cognitive systems requires rehab stroke specialization in the treatment of these patients. Here are some examples of what our amazing interdisciplinary team does.
- Some of the interventions include:
 - Videofluoroscopy swallow studies
 - Light therapy
 - Adjustment and psychological support
 - BIONESS electrical stimulation units for UE and LE
 - High Intensity Gait Training
 - SAEBO upper extremity devices
 - Kinesiotaping for facilitation or inhibition
 - Bracing and Splinting
 - Cognitive, speech and swallow treatment interventions
 - Many other interventions....

Care of a stroke patient on acute care and inpatient rehab

- Automatic order set for PM&R, PT, OT and ST when a patient is admitted with a stroke
- Timeliness of evaluation and treatment is important for overall clinical outcome
- Goal is to complete acute care evaluation within 24 hours for PT, OT and ST
- When possible, preference is to treat stroke patients on acute care more frequently.
- Patients do not automatically admit to our inpatient rehab unit. There is a lot of work done by the admissions team and the acute care team to get a patient into a rehab bed. Our admissions team will be presenting later and talk more specifics
- Once admitted to the rehab unit- they have a full and active schedule of physician care, nursing care, neuropsychology, care management and therapy services- Physical Therapy, Speech Therapy and Occupational Therapy.
- Family involvement during rehab is key for a successful discharge home

CONCLUSION

- There is a lot of hard work happening on our rehab unit by both staff and patient and a lot of FUN too.
- Here are some pictures on the next few slides to show the fun we have on our unit and to highlight our caregivers.

Interdisciplinary
team with a
grateful patient



Nursing Team





Occupational Therapy & Speech Therapy

Hat club



Physical Therapy

