# Brain Injury Scope of Services

1. Department Description

The Inpatient Rehabilitation Center provides specialized rehabilitation services designed to enhance the independence, self-sufficiency and productivity of persons with brain injuries. The goals of the Inpatient Rehabilitation Center are to improve functional abilities, maximize independence, provide patient/family education to enhance health promotion and continued functional gains, ensure the utilization of appropriate community resources, and facilitate the transition of persons served into an active role within community following discharge. It is the intent of the program to treat persons who are medically stable and able to participate actively in a rehabilitation program. Trained and certified brain injury specialists provide intensive, comprehensive and integrated evaluation and treatment for persons with brain injury.

Every effort is made to provide a seamless continuum of care for patients who have experienced a brain injury. Admission Coordinators work closely with referral sources, patients and families to assure an easy and smooth transition to the Inpatient Rehabilitation Program. Throughout the program, social workers work with the patient and family to plan and coordinate required follow-up care. The Brain Injury Rehabilitation Program provides education/resources on injury prevention/health promotion and assists patients, their families/support systems to manage their future health to improve quality of life. The Brain Injury Rehabilitation Program also provides information about community services and resources to enhance the lives of patients and their families and support systems within the community. Each patient and family receive a personalized Health Resource Notebook that includes educational and discharge planning information to support continuity of care.

2. Location

The Inpatient Rehabilitation Center is a CARF accredited 49-bed comprehensive post-acute inpatient rehabilitation facility located on the fourth floor of the Moses H. Cone Memorial Hospital. The Center also includes therapy gyms, Activities of Daily Living apartment, day room, family room, additional treatment areas and office/documentation areas.

3. Populations Served

The Inpatient Brain Injury Rehabilitation Program provides services to adults and geriatrics with, but not limited to, the following diagnoses:

A. Traumatic Brain Injury
B. Closed Head Injury
C. Brain Aneurysm
D. Subdural Hematoma

E. Craniotomy
F. Meningitis
G. Encephalopathy
H. Hypoxia
I. Intracerebral Hemorrhage
J. Oncology Brain Diagnoses

4. Admission Criteria

Patients who, due to the complexity of their nursing, medical management and rehabilitation needs, require an intensive inpatient rehabilitation hospital environment may be admitted to the Brain Injury Program at the Moses Cone Rehabilitation Center. In addition to the previously listed diagnoses, admission decisions are based on medical necessity as defined below:

A. The patient must have experienced a loss in functional independence with activity limitations in the areas of mobility, self-care, and/or communication/cognition/ perception and require the active and ongoing therapeutic intervention of multiple therapy disciplines (Physical Therapy, Occupational Therapy, and/or Speech Therapy), one of which must be Physical Therapy or Occupational Therapy.
B. The patient must require an intensive rehabilitation therapy program. This is generally defined as consisting of at least 3 hours of therapy per day 5 days a week. In certain well-documented cases, this can consist of 15 hours of therapy over 7 consecutive days.
C. The patient must be reasonably expected to actively participate in and benefit significantly from an intensive rehabilitation program at the time of admission to the inpatient rehabilitation center.
D. The patient's condition and functional status must be such that the patient can reasonably be expected to make measurable improvement that will be of practical value to improve the patient's functional capacity or adaptation to impairments as a result of the rehabilitation treatment. This improvement should be expected within a prescribed period of time.
E. The patient must require physician supervision by a rehabilitation physician throughout the stay (face-to-face visits with the patient at least 3 days per week) to assess the patient both medically and functionally as well as to modify the course of treatment as needed to maximize the patient's capacity to benefit from the rehabilitation process.
F. The patient must be free from any major psychiatric or behavioral disorder that would prevent benefit from rehabilitation, must not have a primary medical diagnosis of alcoholism or drug addiction.
G. The patient must require an intensive coordinated interdisciplinary rehabilitation program.
H. Patients with Left Ventricular Assisted Device (LVAD) may be admitted once medically stable and cleared by LVAD team to discharge from acute care. Medically stable is defined as off cardiac drips, no longer requiring cardiac monitoring, and

ability to tolerate therapy intensity.

I. The patient must be 18 years of age or older.
J. Eligibility for admission to the Inpatient Rehabilitation Center is based upon the above admission criteria without regard to race, color, religion, sex, disability, or national origin.

Persons outside the scope of service include patients who:

- Require telemetry monitoring
- Require ventilator support (excluding Continuous Positive Airway Pressure (CPAP) or Bilevel Positive Airway Pressure (BIPAP)
- Require Intracranial pressure monitoring
- Are Ranchos Level I – II
- Require a negative pressure room

5. Discharge/Transition Criteria

Discharge from the Rehabilitation Center is a planned event in the rehabilitation process and comes at the time when:

- The patient no longer requires an inpatient setting with close medical management and 24-hour rehab nursing.
- The patient has achieved the goals for rehabilitation.
- The patient is unable to participate in the program for more than three days for medical, surgical, or psychiatric reasons.
- The patient's medical condition changes while on Rehab requiring frequent monitoring or frequent medical intervention.
- The patient fails to progress towards the goals identified by the team over a five-day period.
- The patient becomes noncompliant with the program.
- The patient refuses treatment on three consecutive days without medical reasons.
- The patient/family requests an alternate facility/venue.
- Payer denies continued services in inpatient rehabilitation center

Exceptions to the discharge criteria may be made at the discretion of the rehabilitation physician and the treatment team.

The discharge plan that was formulated on admission to the Rehabilitation Center is reviewed weekly at each team conference. This review includes a discussion of the overall plan for discharge and any barriers to this plan. All necessary home evaluations, recommendations for modifications and follow-up services, and equipment are completed prior to discharge. The patient's payer representative is contacted during the discharge planning process to determine resources available for follow-up services. Information is provided to the payer as needed to obtain appropriate authorizations and approvals.

The Social Worker informs the patient and family about options for follow-up services. Once options have been selected, the Social Worker finalizes all referrals for follow-up. The patient, family, and referral sources are provided as much notice as possible regarding the discharge

date. Appropriate information, including a discharge summary, is faxed to the referral source and the provider within 72 hours of discharge.

6. Services Provided

Individual needs, functional limitations, and responses to treatment determine the scope and intensity of services delivered to each patient. The Inpatient Rehabilitation Center utilizes an interdisciplinary approach to patient care. Services provided by the Rehabilitation Center include:

A. Rehabilitation Medicine
B. Rehabilitation Nursing
C. Case Management/Social Work Services
D. Physical Therapy
E. Occupational Therapy
F. Speech Therapy
G. Therapeutic Recreation Services
H. Neuropsychology
I. Nutrition Management

The Rapid Response Team is available for medical emergency situations twenty-four hours a day, seven days a week. The Acute Stroke Team is available to respond to a Code Stroke (called for sudden onset of neurological symptoms associated with a stroke) twenty-four hours a day, seven days a week.

Pharmacy, laboratory, respiratory therapy, dialysis services, pastoral care services, and diagnostic radiology services are available onsite at the Moses H. Cone Memorial Hospital twenty-four hours a day, seven days a week. All orders are addressed within 12 hours. Physicians are alerted with critical values per hospital policy. The majority of results are available to clinicians within 24 hours.

Consulting medical and surgical specialties, clinical psychology, psychiatric and audiology services are available through arrangements within Cone Health. Additional services such as vocational rehabilitation, prosthetics/orthotics, rehabilitation engineering and chemical dependency counseling are available through referral to community specialists and community programs. These services are available Monday through Friday only during normal business hours.

The Rehabilitation Center delivers services via information and communication technologies for safety monitoring and through the peer support program (teleconferencing technology) as needed.

Translation Services: Cone Health provides equal access to and equal participation in health care activities for persons with Limited English Proficiency (LEP) and for persons who are deaf

or hard-of-hearing through the use of qualified medical interpreters, written materials in the individual's identified language, Telecommunication Devices for the Deaf (TDD) and other assistive devices for patients who are deaf or hard-of-hearing in accordance with applicable state and federal laws. Cone Health provides communication assistance and services at no cost to the patient.

Referral Sources and Process: A physician referral is required for patients who are referred from inpatient settings. Patients referred from community settings will be reviewed for appropriateness of admission by a Board-Certified Physical Medicine & Rehabilitation physician. Majority of referrals are from internal physicians and case managers within Cone Health. Our secondary market includes referrals from non-Cone Health facilities.

7. Staffing Plan/Ratios

Nursing care is provided twenty-four hours per day, seven days a week by Rehabilitation Registered Nurses supported by Licensed Practical Nurses, nurse technicians and nursing secretaries. Budgeted nurse ratios are for 5 - 6 patients per nurse and 6 – 8 patients per nursing tech. Staffing ratios may be adjusted based on patient acuity or intensity of services needed.

Therapy services are provided from early morning to early evening seven days per week. Various disciplines are provided as follows**:

Therapeutic Recreation - (20 hours/week)
Physical Therapy – Seven days per week (7:30am – 6:00pm)
Occupational Therapy – Seven days per week (7:00am – 4:30 pm)
Speech Pathology – Seven days per week (8:00am – 5:00pm)
Dietary - Monday through Saturday PRN
Neuropsychology – various days/hours as needed
Case Management/Clinical Social Work - Monday through Friday (8:00am – 5:00pm); as needed after hours & weekends

**Times listed above may vary depending on staffing and census.

Most patients receive at least three hours of therapy 5 out of 7 days. In certain cases, 15 hours of therapy services may be spread over 7 days to meet special needs.

The rehabilitation physician and/or physician assistant is on the unit or available on-call twenty-four hours a day, seven days a week for the medical management of rehabilitation patients.

8. Specialized Services

The Brain Injury Rehabilitation Program offers a variety of specialty rehabilitative services including:

Advocacy Training

Airway Clearance Techniques
Aromatherapy
Assistive Technology
Balance and Fall Prevention Program
Behavior Assessment/Management
Bioness Integrated Therapy System
Body Weight Supported Gait
Brain Injury Support Group
Cognitive Rehabilitation
Community Reintegration
Education on Wellness After a Brain Injury
Fiberoptic Endoscopic Evaluation Swallow/Modified Barium Swallow Studies
Functional Electrical Stimulation
Group Therapy
Hydrotherapy
Iowa Oral Performance Instrument (IOPI)
Leisure Education
Lymphedema
Neurodevelopmental Treatment
Neuropsychology Services
Orthotics & Prosthetics Management
Pain Management
Palliative Care Involvement
Peer Support
Pet Therapy
Respiratory Muscle Strengthening
Spasticity Management
Therapeutic use of Music
Vestibular Rehabilitation
Wheelchair Seating
Wound Care

Individualized Care:
Individual preferences are assessed on admission and throughout the patient's stay. Clinicians include patient preferences and cultural considerations in treatment planning, goal setting, and discharge planning.

9. Staff Competencies and Skills to Provide Services

- Professional staff must have graduated from an accredited school/program.
- Professional staff must have a valid NC license/certification as required
- All staff must have current BLS training
- All staff must complete annual Safety at Work and Corporate Compliance education
- All staff must complete clinical competencies specific to their discipline

- Brain Injury team therapists will complete annual behavior management training.
- The interdisciplinary group of clinicians assigned to the brain injury patients undergoes specific orientation/training to issues related to the treatment of brain-injured individuals including but not limited to:
    1. Ranchos Los Amigos Scale
    2. Safety Equipment (Enclosure bed, bed/chair alarms, patient lift equipment)
    3. Handling Aggressive Behavior
    4. Health Resource Notebook
    5. Psychosocial issues
    6. Elopement
    7. Behavior modification
    8. Cognitive rehabilitation
    9. Community resources
    10. CARF Brain Injury standards
    11. Projected recovery based on Evidence Based Practice
    12. Swallowing precautions/dysphagia diets
    13. STARR training
    14. Agitated Behavior Scale
- Ongoing Competency is determined through defined annual competencies, required continuing education, nursing skills fairs, direct observation, peer feedback, and documentation review by the Nursing Director, Therapy Supervisor, and Therapy Clinical Specialists as documented through the performance appraisal process.

10. Payor Sources

The Cone Health Inpatient Rehabilitation Center accepts patients with Medicare, Medicaid, Veterans Administration, most major managed care plans and commercial insurances. The financial counselors of the organization and the rehab admissions coordinators work with each individual patient and family to allow access when there is no funding. The Inpatient Rehabilitation Center fee schedule is available upon request.