Rehabilitation Therapies

Bluebonnet Medical Rehabilitation Hospital

512-444-4835 or 800-252-5151
www.texasneurorehab.com
Austin, Texas
Rehabilitation Therapies

▪ Physical Therapy
  - Neuromuscular re-education
  - Serial casting/Splinting
  - 1:1 pool therapy
▪ Advanced Technology Rehab Devices
  - Bioness Hand and Foot Electrical Stimulation Systems
  - Saebo Dynamic Neurological Orthoses
  - WalkAide System
  - Lee Silverman Voice Treatment (LSVT®)
  - Neuromuscular Electrical Stimulation (NMES)

▪ Speech Therapy
  - Intensive swallow therapy
  - On-site radiographic swallow studies
  - NMES and Deep Pharyngeal Neuro Stimulation
  - Augmentive communication system assessment
  - Cognitive therapy

▪ Occupational Therapy
  - Neuromuscular re-education
  - Serial casting/Splinting
  - Cognitive therapy
  - 1:1 pool therapy

▪ Recreational Therapy

▪ Vocational Therapy

▪ Education through on-site accredited school

▪ Pet Therapy

What Sets Us Apart

▪ JCAHO Accredited (Joint Commission on Accreditation of Healthcare Organizations
▪ LTAC (Long-Term Acute Care) Medicare designation
▪ Texas Department of State Health Services, Special Hospital License
Bluebonnet Medical Rehabilitation Hospital at Texas NeuroRehab Center provides acute medical rehabilitation and long-term acute care services. Specializing in the treatment of individuals who have sustained severe brain injuries, Texas NeuroRehab Center is the only hospital accredited by the Commission for Accreditation of Rehabilitation Facilities (CARF) in Stroke and Brain Injury rehabilitation in Central Texas, and one of only five in the state of Texas. The facility is located on 67 acres of serene countryside within Austin’s city limits.

**Areas of Expertise**

- Acquired Brain Injury
- Stroke/CVA
- Other Neurological Diagnosis
- Pulmonary Disease, including Ventilator/Tracheotomy Weaning
- Complex Medical Care Including Dialysis
- Complex Wound Care
- Multiple Trauma including Orthopedic Injuries

**Additional Program Features**

- On-site Medical Director
- On-site Neurology Staff
- Case Management Services
  - Coordination of care
  - Funding source interface
- Social Work Services
- Formal Family Education and Training
- Private Rooms
- Activities of Daily Living Suite
- Clinical Education and Research Site
- Coordinated Full Time Wound Care Team
  - Physician wound care specialist
  - Wound care certified nurse
  - Physical therapy staff
- On-site Neuropsychological Services

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**Occupational Therapy**

**Evaluation**  Provided by a licensed occupational therapist and may address the following:

- **Performance in areas of occupation**
  - Activities of Daily Living: eating, grooming, dressing, toileting, bathing
  - Instrumental Activities of Daily Living: cooking, housekeeping, laundry, shopping, budgeting/finances
  - Education, work, play, leisure, and social participation

- **Performance skills to enhance areas of occupation**
  - Motor functions: range of motion, posture control, mobility, coordination, strength, activity, tolerance, muscle tone, edema
  - Mental functions: consciousness, orientation, attention, memory, perception, organization, motor planning, problem solving, safety awareness, stress management, communication / interaction
  - Sensory functions: vision, hearing, temperature, touch, proprioception, pain

- **Performance patterns, context, activity demands**

**Activities of Daily Living**

Patient and caregiver have the opportunity for an overnight stay in the on campus Activities of Daily Living (ADL) Suite before discharge. The ADL suite provides the following:

- Treatment space for re-training of cooking, laundry, housekeeping, and grocery shopping
- Fully equipped bathroom for tub and toilet transfer training
- Simulated home environment to practice independent living skills
Occupational therapy (OT) promotes health by enabling engagement in occupations of life. The OT department is part of a team approach to rehabilitation of an individual with a neurological diagnosis and/or complex medical issues. Occupational therapists work with individuals and families, to maximize ability to function in a meaningful way. The primary goal of occupational therapy is to enable participation in the activities of everyday life. Outcome is achieved by enabling individuals to perform activities enhancing ability to participate or by modifying the environment to better support participation.

Therapeutic Treatment

Therapeutic treatment is provided while engaging in actual occupations, goal directed behaviors or activities, or in preparation for occupational performance. Occupational therapists collaborate with the patient to identify a problem, create and carry out possible solutions, and alter them as necessary for greater effectiveness.

Aquatic therapy is available for a patient meeting appropriate criteria. Individual, group, or co-treatments with other disciplines are received at a frequency determined by the occupational therapist and physician. To ensure carryover of therapeutic activities in the home and on the living unit, the occupational therapist works closely with family members and unit staff.

A UE positioning device for muscle tone or joint integrity and adaptive equipment for increased functional independence may be provided. The patient receives recommendations for home modification and/or follow-up therapy prior to discharge.

Therapeutic Interventions

- Enhance Performance
- Establish New Skills
- Restore Impaired Skills
- Preserve Performance Capability
- Revise Activity Demands
- Prevent Barriers
Speech-Language Pathology

Evaluation Provided by ASHA certified and licensed speech-language pathologist and may address the following:

- Cognition, including attention, memory, organization, problem solving, sequencing, executive functioning
- Swallowing and safe eating: bedside evaluation and/or modified barium swallow study when appropriate
- Receptive and expressive language
- Social Communication
- Oral-peripheral examination of structures and function
- Speech: articulation and/or phonology, fluency & voice
- Hearing screening when appropriate
Speech and language pathology (SLP) specializes in speech, language, swallowing and/or other cognitive-communication disorders. The SLP department is an active part of the multidisciplinary treatment team and provides intervention where there is evidence of these disorders. Speech-Language therapists utilize state-of-the-art treatment modalities to help individuals achieve optimal levels of functioning and improve quality of life.

Modified Barium Swallow Studies
Modified Barium Swallow Studies, (MBSS) completed in conjunction with the physician, evaluate the swallow of a patient with dysphagia, determine presence or risk of aspiration, cause of aspiration, and assesses effectiveness of facilitation or compensatory techniques. Recommendations regarding the safety of oral feeding and diet are made.

Therapeutic Treatment
Individual therapy may focus on one or more of the following areas:

- **Cognitive Therapy**
  May include basic orientation, attention training, use of compensatory tools for memory deficits, organization and planning skills, functional problem solving, increase in awareness of Errors/deficits, and community reintegration.

- **Language Therapy**
  Addresses delayed language development or acquired language disorders with emphasis on increasing overall comprehension of language, ability to express or communicate needs, and the effective use of language during social interactions.

- **Speech Therapy**
  Addresses areas including dysarthria, apraxia, articulation and/or phonological disorders. May also treat disorders of resonance, vocal quality, pitch, intensity, rate, fluency, and prosody of speech.

- **Dysphagia Therapy**
  May include gustatory/thermal stimulation, use of deep pharyngeal neuromuscular stimulation, neuromuscular electrical stimulation, trial therapeutic feedings, compensatory swallowing techniques, and diet modifications.

- **Augmentative Communication**
  May include the development of an alternate communication system such as gestures, signs, yes/no cards, picture boards, computerized system or speech generating device to enable the individual to express wants/needs and interact with others.
Evaluation

Provided by a licensed physical therapist to access the following:

- Neuromotor performance
- Posture and balance
- Skin integrity and breakdown risk
- Strength and range of motion/muscle tone
- Need for adaptive and specialized equipment
- Cardiovascular fitness/endurance
- Mobility and safety
Physical Therapy is a health care specialty involved in evaluating and treating disorders of neurologic or musculoskeletal systems. Physical therapy staff use specialized evaluation and treatment techniques to promote the ability to move, reduce pain, prevent injury/disability. Physical therapists examine each individual and develop a customized treatment plan based to meet the patient’s needs and patient goals. Physical therapy works with patients to maximize their independence, safety and ability to return to their prior level of function.

**Therapeutic Treatment**

An individualized treatment plan serves as framework for reaching defined goals. The physical therapists serve as advocates and continued resources for the patient and family. Once every two weeks the treatment team meets and develops an individualized treatment plan. The treatment plan is adjusted according to patient response to therapies and may include the following:

- Wound care
- Vestibular training
- Neuromuscular re-education
- Gait training
- Serial casting and tone management
- Modalities to promote more normalize movement or reduce pain
- Balance training
- Aquatic therapy
- Therapeutic exercise
- Functional activity training
- Caregiver training and family education
- Mobility safety training

**Evaluation**

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State-of-the-art Functional Electrical Stimulation (FES) systems that facilitate muscle contraction are implemented into the continuum of care.

The inpatient and outpatient medical rehabilitation programs utilize Bioness systems including the NESS H200 and the NESS L300. The L300 device addresses foot drop and the H200 promotes increased functional use of the hand and wrist by stimulating the muscles needed for grasp and release.

Benefits of the Bioness System may include neuromuscular re-education, reduction of muscle spasm, maintenance/increase of joint range of motion and increase in local Blood circulation.

Additional information, www.bioness.com

Saebo's Functional Dynamic Neurological Orthoses are offered to individuals who meet the appropriate criteria. The Saebo devices provide innovative rehabilitation for individuals suffering from neurological injuries.

Additional information, www.saebo.com
WalkAide is a revolutionary FDA approved medical device that leverages functional electrical stimulation (FES) to improve walking ability of people living with foot drop. WalkAide is a neuroprosthetics device that channels electrical stimulation to the leg and foot in order to restore typical nerve-to-muscle signals, effectively lifting the foot at the appropriate time.

Additional information, www.walkaide.com

Lee Silverman Voice Treatment (LSVT), an innovative and clinically-proven method for improving voice and speech in individuals with Parkinson disease.

Additional information, www.lsvtglobal.com

Neuromuscular electrical stimulation (NMES) is the application of electrical stimuli to a group of muscles for the purpose of rehabilitation.

Combining NMES and traditional therapy allows accelerated strengthening, restoration of function, and helps brain remap the swallow. Research demonstrates that combining therapies result in better outcomes.