FRAZIER REHAB INSTITUTE SCOPE OF THE BRAIN INJURY PROGRAM

Introduction to Frazier

The Frazier Rehab Brain Injury Program provides comprehensive services to the individual who has experienced a brain injury and to the individual's family and other members of their support network. Frazier Rehab Institute has achieved CARF (Commission on Accreditation of Rehab Facilities) Accreditation for the Brain Injury Program.

Frazier's admission nurses and affiliated physiatrists (doctors specializing in rehab medicine) are either present in the local and regional hospitals or available through phone and email contact to work closely with the acute care hospital team and the family to transition the patient into rehab. At Frazier we are always willing to open our doors for family tours. We are pleased to show families what is available at Frazier and to introduce them to key team members who will be responsible for the patient's care. Family and friends can also take a virtual tour of a Frazier inpatient floor on our website.

Frazier introduces the family to rehab while the patient is recovering in the acute care hospital. We then provide our brain injury program to the patient and family through our continuum from inpatient rehabilitation through post-acute outpatient rehab. The intent of the Frazier Brain Injury Program is to provide intensive and comprehensive services designed to prevent or minimize chronic disabilities of persons with a primary diagnosis of acquired brain injury. The program aims to restore the person to optimal levels of physical, cognitive, behavioral, social, and emotional functioning within the context of the person, family, and community.

Goals of the program are:

- 1. To provide a formally organized program for support and advocacy for the brain injured individual and family.
- 2. To educate families to understand the effects of the brain injury and the recovery process.
- 3. To improve behavioral problems, address personality changes, educate the patient and family about self-awareness deficits associated with brain injury through psychological intervention and an interdisciplinary approach.
- 4. To improve the patient's thought processes, memory skills, perception and judgment through cognitive retraining activities.
- 5. To encourage active participation and education of the patient's family through attendance at the patient's therapy sessions when appropriate, and through routine scheduled family teaching sessions.
- 6. To develop a comprehensive discharge plan for the patient by working closely with the patient and family to identify needed resources and services and make appropriate referrals.
- 7. To restore each person served to his or her fullest potential of independence and productivity at home, in the workplace, at school and in the community.

Persons Served

Frazier Rehab Institute's Brain Injury Program offers comprehensive services to patients of all ages. Our rehab team has clinicians specializing in pediatric and adult brain injury treatment. The Brain Injury Program is available to patients at any level of recovery after injury – from coma to mild brain injury. The Brain Injury program offers services to people who have had a traumatic brain injury or a non-traumatic brain injury such as anoxic or hypoxic events, exposure to toxic substances, and brain tumors.

To be admitted to the Frazier inpatient program, an individual must have family or other caregivers available to participate in the family teaching program with the goal to care for the patient in the home setting; be medically stable and able to participate in 3 hours of therapy per day. To be considered medically stable, a patient must meet all of the following:

- All vital signs stable
- Free of fever for at least 48 hours
- Adequate nutrition/hydration (orally or by feeding tube)
- All medications adjusted/finalized and plans for use defined
- Must not require one-on-one care by a nurse
- All work up procedures and surgical interventions completed (or definite plans finalized)
- Participation restrictions and activity limitations defined.

To be admitted to the inpatient Brain Injury Program, the patient must not require constant psychiatric intervention or active treatment for chemical detoxification. Further, infectious disease must be absent or controlled so that the safety and health of other patients are not compromised and so the patient is not prevented from participating in the rehabilitation program.

Inpatient Rehab

Frazier offers inpatient rehabilitation to individuals who are recovering from brain injury either on the adult neurologic floor or the pediatric floor. Each of these inpatient floors has been specially designed for patients' and families' comfort, privacy, and care needs. Patients are provided large rooms that are well equipped to manage medical and nursing care and to allow family and friends to visit comfortably. The patient rooms are wired for internet access for family members' convenience and are equipped with large flat screen televisions. Wireless internet access is available to our guests throughout the Frazier building. A family member is permitted to stay with their patient if the family wishes and if the overnight stay is in the best interest of the patient and the family member. A patient dining room is available on the floor for meals and for recreational activities. Families are welcome to reserve a dining room for a special family occasion.

The adult neurologic unit has treatment areas on the floor that have been especially designed with the therapy needs of the neurologic patient in mind. The therapy space on the floor is comprised of:

- Therapy gym for Occupational and Physical Therapy
- Speech Pathology offices
- o Private treatment room for use when distractions need to be minimized
- Kitchen area
- o Practice bathroom area for daily living skills
- Splinting room

The equipment available in the neurologic therapy areas can be used for general rehab purposes, but was primarily selected because of the needs of the neurologically involved patient. Our therapeutic approaches and equipment address difficulty with balance, sitting, mobility, self-care, vision, cognition, behavior, emotions, communication and swallowing. Some examples of technology and techniques we have available to the brain injury patient are:

- DynavisionTM for visual perception
- BiometricsTM for upper extremity rehab
- robots for improving shoulder/elbow, wrist, and hand movement
- overhead lifts for transfers, standing, and walking
- MotomedTM for exercise and retraining
- NustepsTM for exercise and retraining
- modified constraint induced movement therapy
- locomotor training using a body weight support treadmill system
- BionessTM for functional electrical stimulation
- deep physical agent modalities including ultrasound, electric stimulation, and anodyne
- dynamic splinting for upper extremity functional return
- fluoroscopy for the swallow evaluation
- endoscopy for the swallow evaluation
- neuromuscular electrical stimulation for the swallow
- Frazier Water Protocol
- ramps, curbs, stairs, and parallel bars for ambulation therapy
- therapy pools
- animal assisted therapy
- assistive technology and wheelchair seating resource center, and
- a car for practicing getting in and out of a vehicle

The pediatric floor also has patient rooms with the same comfort and care features as the adult floors. The pediatric therapy areas are equipped for children with special emphasis on the needs of children with neurologic injuries and illnesses. The beautiful therapy gym has a wide array of specialized equipment including parallel bars, ramps, curbs, stairs, motomeds, nustep, and gross motor play equipment.

Adjacent to this space is a sensory integration gym which is loaded with swings, slides, and climbing apparatus. Sensory integration therapy is available to our children with brain injuries. There are speech pathology offices and a private treatment room located in the therapy area as well.

We have a classroom space in the therapy area for educational tutoring sessions. Our Academic Reintegration Coordinator arranges for tutoring through the Jefferson County Public School System as appropriate and coordinates record exchange and return to school with the child's home school district if the child resides out of Jefferson County.

Also located on the pediatric floor is the Snoezelen room where patients are provided sensory stimulation in a calm, non-distracting environment. The pediatric floor has the Ronald McDonald Family Room for family relaxation and the LaRosa Lounge for fun activities including karaoke, foosball, air hockey, a basketball arcade game, and a library of books, games, and DVDs.

On the Frazier grounds we have built an outside therapy area that contains playground equipment and mobility space. The pediatric patient has access to any equipment located on the adult neurologic floor or elsewhere in the building if the clinical need is present.

The Frazier inpatient rehab program operates seven days per week. Adult and pediatric patients should expect to receive at least 3 hours of therapy five of every seven days. Inpatient therapy begins as early as 7:30 am and can continue until approximately 4:30 pm. Each patient's schedule is adjusted as needed to best suit his/her progress and situation. Some therapy may take place in the patient's room, for example basic self-care activities involving grooming, dressing, and hygiene. Other activities are better suited to spaces where the specialized therapy equipment is located. Some therapy activities might occur in other parts of the building and campus including the outdoor therapy area. On occasion, the therapists may accompany the patient on a community outing or to his/her home to evaluate the accessibility of the home and how the patient can best function in the home environment. Most therapy sessions are provided one-on-one with patients. We also offer co-treatments by two therapy disciplines teaming up to treat the patient together. Some therapies may best be provided in a group format.

Upon admission each rehab team member completes an evaluation and works with the patient, family, and other team members to develop an individualized and integrated treatment plan. The patient and family are considered essential team members in this planning process. Our goal is to get the patient home and the family often holds the key to making this happen. We need to understand how the family functions, and what is considered important by the family and the patient. Our team will use information about your family's lifestyle and personal goals to help craft a plan for promoting the smoothest recovery and return to home. The program operates on the premise that continual, individualized assessment, intervention, and evaluation occur throughout the patient's rehabilitation.

A person coming to Frazier for brain injury rehab is usually showing physical, cognitive, emotional, social and/or behavioral changes. The individual with a brain injury may not be responding to others, or may be confused and agitated. The person may be saying things that he/she normally wouldn't be saying and might be having memory problems. The person might not be able to walk or swallow. There are many different problems a person with a brain injury might experience. No two people with a brain injury show exactly the same problems or impairments. This is because everyone's brain is different, and the extent and type of brain injury varies amongst individuals. Despite the differences, there are predictable patterns of recovery that most people with brain injury typically experience. The Rancho Los Amigos Cognitive Recovery Scale is utilized as a guideline for progression of the treatment plan. Our team understands brain injury recovery and we teach the family to have an ongoing understanding of the patient's level of recovery and the best intervention approaches at each stage of recovery.

The rehab team will provide family members literature, education, and support as the patient goes through rehab. We will conduct team and family meetings as needed to ensure the family and the rehab team goals are the same. Our program has many team members who are specialized in brain injury rehab. The entire team will provide relevant education to the patient and family throughout the rehab stay. A brain injury education and support group for family meets once a week. The patient is welcome to attend if able to benefit from the sessions. We want you to always feel comfortable to ask questions of any of our team members.

The Frazier inpatient team members include:

- Physiatrist (rehab doctor)
- Neuropsychiatrist
- Other consulting physicians
- Case manager
- Rehab nurses
- Nursing assistants
- Psychologists
- Occupational therapists
- Occupational therapy assistants
- Physical therapists
- Physical therapist's assistants
- Speech-language pathologists
- Dietitians
- Pulmonary rehab clinicians
- Recreation therapists
- Rehab aides.

The team can assist in addressing spiritual needs by connecting the patient and family with available religious services provided through the medical center. If preferred, an individual's personal religious ministers may be called in for spiritual support.

Our case managers are the team members who act as the team coordinator. The case manager's role is to link the family, patient, and rehab team. The case manager is the team member who works with the insurance companies to report progress and to advocate for the continuing stay in Frazier while progress is occurring. The case manager coordinates and schedules family education and team and family conferences. The case manager supports the patient and family in discharge planning by identifying services, support and equipment that will be needed after inpatient rehab. The case manager is an expert in knowing about community resources including post-acute rehab services, transportation agencies, brain injury support groups, and financial programs. We have a commitment to our patients to assist them in conserving their financial resources to meet their long-term care needs. Our case managers provide the patient and family with recommendations relative to their existing financial resources and relative to alternative financial programs such as the Acquired Brain Injury Trust Fund, Acquired Brain Injury Waiver program, and Vocational Rehab services.

The case manager works closely not only with the family and patient but also the entire rehab team that is responsible for the patient. There is frequent communication between team members about patient issues and progress so that team members are updated routinely. Great communication leads to the best care and optimal rehab outcomes. We designed our Frazier inpatient floors and established our teams with great communication in mind. The team meets formally at least every 7 days to gauge overall progress toward discharge and to update the plan as appropriate. More frequent, informal meetings are held as needed to plan care.

Family teaching is essential to the patient's success. We expect the family to attend therapy sessions to learn how to best care for the patient and to support what the patient is learning. New learning is more likely to occur and become stable, when the family helps the patient carryover the techniques or recommendations that were taught in therapy or at the bedside and when we are all being consistent in our approaches. Families are expected to attend the Brain Injury Education and Support group offered each week.

A representative from the Brain Injury Alliance of Kentucky (BIAK) visits Frazier weekly and is available to meet patients and families. The BIAK's mission is to serve Kentucky citizens whose lives have been affected by brain injury through advocacy, education, prevention, research, service and support.

After Inpatient Rehab

Recovery from brain injury is a long-term process lasting several years. Inpatient rehab is typically a short stay and patients are discharged to home after a few weeks. The rehab team generally makes recommendations for continued therapies after inpatient discharge. Many patients are able to return home and resume therapies in an outpatient setting. Young children are best served in our downtown outpatient pediatric program. The children are treated on the pediatric floor in the specialized therapy spaces with the appropriate equipment and team members.

Frazier operates the NeuroRehab Program located on Brownsboro Road, which is a comprehensive outpatient program that specializes in managing the rehab needs of patients with neurologic conditions. The NeuroRehab Program accepts patients from adolescence through the geriatric years. Admission criteria include:

- Medical stability
- Continent of bowel and bladder
- Rancho Los Amigos Cognitive Recovery Scale score of 5 or above
- Ability to learn and progress toward goals
- Willingness to attend and participate reliably
- Willingness to address substance abuse if needed
- Willingness to address psychiatric conditions if needed

The team approach offered to the brain injured outpatient in the NeuroRehab Program is individualized to decrease the level of disability and the need for assistance, while increasing productivity in the home, workplace, and community.

Services offered at the NeuroRehab Program include:

- Cognitive, behavioral, and emotional treatment
- Physical conditioning
- Vocational preparation
- School re-entry
- Substance abuse counseling
- Driving skills training
- Bioptic Driving Program
- Home evaluations
- Home management
- Mild Brain Injury Program
- Visual-perceptual treatment
- Job analysis
- On-site work evaluations
- On-site work re-entry
- Preparation for independent living
- Prevention and wellness education.

The NeuroRehab Program team consists of:

- Occupational Therapists
- Speech-Language Pathologists
- Physical Therapists
- Psychologist
- Case Manager
- Recreational Therapist
- Rehab Aide

The NeuroRehab Program works closely with the Frazier Neuropsychology department to make appropriate referrals for and to obtain information from neuropsychological evaluations. Neuropsychological evaluations provide valuable information to the patient, the family, and the therapists working with the patient. These assessments are part of the outpatient treatment program. The information gained from the neuropsychological assessment can help determine the individual's current level of functioning and learning abilities for school or work environment, in addition to identifying cognitive skills that need to be addressed in therapy.

The NeuroRehab Program collaborates with the Department of Vocational Rehab which is a state funded agency that provides a vocational counselor that assists patients with return to school or gainful employment. A vocational rehab counselor is on site at the NeuroRehab Program.

Traditional Outpatient Rehab Services

Frazier offers outpatient rehab at multiple sites throughout the Louisville Metro area. The case manager can help the patient and family to identify the most suitable location to receive outpatient therapy based on convenience or specialized services available.

The outpatient clinic located in the downtown Frazier Rehab Institute building has access to all the equipment and technology available to the inpatient brain injury patients. Young children are best served in our downtown outpatient pediatric program. The children are treated on the pediatric floor in the specialized therapy spaces with the appropriate equipment and therapists with a pediatric specialty.

Some patients may require therapies provided in the home for a period of time because travelling to an outpatient setting may be too difficult for them. Frazier can provide rehab in the home through the Visiting Nurse Association (VNA) that is a part of Jewish Hospital and St. Mary's Healthcare or can make referrals to other home care agencies if preferred by the family.

Some patients may continue to require 24 hour nursing care and a less intense level of therapy and may be discharged to a skilled nursing facility. While other patients may need a more intensive, longer term residential treatment program to achieve more progress before being able to return to the home setting. We are connected to the rehab world at large and can make appropriate referrals for skilled nursing facility placements and specialized residential brain injury programs if necessary.

The Frazier Rehab Institute Brain Injury Program provides intensive and comprehensive services designed to prevent or minimize chronic disabilities while restoring the person to optimal levels of physical, cognitive, and behavioral functioning. The clinical team is both competent and compassionate. We are committed to providing the best environment, services, support, and education to assist the patient to achieve the highest level of independence possible.

We understand that a brain injury can prove traumatic to the patient, family and network of friends. We try very hard as a team to be aware of the difficulties each one is experiencing and to help you feel comfortable with and knowledgeable about the services we are providing you.