# The Pediatric Brain Injury Program

Rehabilitation Continuum of Care at Kennedy Krieger Institute

#### Who We Are

The Pediatric Brain Injury Program at Kennedy Krieger serves children and adolescents with intensive rehabilitation needs caused by neurological injury or illness. The program offers a coordinated continuum of care with services for all phases of recovery, including a 24-hour inpatient hospital unit, day treatment, home- and community-based services, and outpatient specialty programs. The goal of admission is to help those with rehabilitation needs prepare for a successful return to home, school, and community life. Established in 1979, Kennedy Krieger's Brain Injury Program was the first of its kind in Maryland to receive Commission on Accreditation of Rehabilitation Facilities (CARF) accreditation.

#### Who We Serve

The Pediatric Brain Injury Program provides services for a variety of diagnoses, including:

- Traumatic brain injury
- Anoxic brain injury
- Brain tumors
- Stroke
- Encephalitis
- Seizure disorders

Ninety-three patients participated in the programs during the most recent fiscal year ending June 30, 2015. Patients ranged in age from 6 months to 20 years, with a median age of 12. Most patients were referred immediately after an acute injury, but 10 percent were discharged to home and referred to the Institute at a later date with additional recovery goals. Patients come to Kennedy Krieger's Brain Injury Program from a broad geographic area. Last fiscal year, 27 percent of patients admitted came from outside the state of Maryland, including some from other countries.

Because of our proximity to, and affiliation with, Johns Hopkins Hospital, patients with more intensive medical needs can be admitted. For example, we accept patients on ventilators and have significant success transitioning them off this type of support (100 percent of patients who were dependent on ventilators were successfully weaned from them in FY 15). Occasionally, these more intensive medical needs require unplanned transfers to acute care. In FY 2015, 14 patients had unplanned transfers to acute care, with 86 percent returning promptly to Kennedy Krieger to complete their rehabilitation.

## **Greg's Story**

By age 17, Greg had performed in 60 musicals and had his sights set on Broadway. But two weeks into his senior year of high school, he went into cardiac arrest while running and sustained a severe brain injury.

When he was admitted to Kennedy Krieger's inpatient rehabilitation program, he was unable to move, speak, eat, or track with his eyes.



Under the care of his interdisciplinary team, Greg participated in intensive speech, physical, and occupational therapies, and worked with a neuropsychologist to help him cope with the changes caused by his injury. His therapists incorporated music and movement to help keep him motivated.

Greg can now get around in a power wheelchair and is learning to eat, walk, speak, and even sing again. His rehabilitation is ongoing in the Institute's day treatment program, and his team will help the family with educational and community resources after discharge.

# **Our Approach**

Directed by a pediatric physiatrist (physical medicine and rehabilitation specialist), our interdisciplinary team of highly skilled clinicians develops an intensive treatment plan tailored to meet the unique needs of each child and family. Inpatients in the Brain Injury Program receive a minimum of three hours of intensive therapy each day, and most receive more.

#### **Our Team**

Because patients recovering from brain injuries may have complex needs, our program has an experienced, interdisciplinary treatment team working with each child and family. This team includes:

- Pediatric physiatrists
- Developmental pediatricians
- Pediatric hospitalists
- Neurologists
- Nurse practitioners
- Orthopedists
- Nurses
- Recreational therapists

- Physical therapists
- Occupational therapists
- Speech-language pathologists
- Neuropsychologists
- Social workers
- Special educators

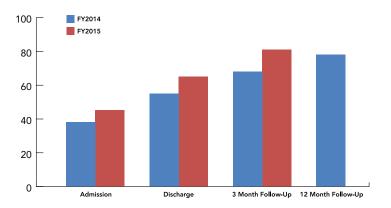


Consultative services, including adaptive equipment, assistive technology, psychiatry, behavioral psychology, nutrition, and audiology, are provided as needed.

#### **Outcomes**

#### Inpatient Rehabilitation Program

- The Brain Injury Inpatient Program treated 73 patients during its most recent fiscal year. Those patients stayed an average of 43 days.
- The Brain Injury Program uses the Functional Independence Measure for Children (WeeFIM), a standardized pediatric rehabilitation functional outcome scale, as well as specific scales developed at Kennedy Krieger, to evaluate other aspects of functional improvement.
- For patients with traumatic brain injuries, gains on the WeeFIM and the WeeFIM score at discharge from the inpatient program are similar or better in comparison to other facilities and the national benchmark.



#### **Satisfaction Survey Results:**

#### At the time of discharge:

- 99 percent of those surveyed would recommend Kennedy Krieger Institute.
- 99 percent of those surveyed reported being satisfied with the services they received.
- 100 percent of children and adolescents surveyed indicated that they felt Kennedy Krieger helped them get better and do more things independently.

#### At three-month follow-up:

- 95 percent of families would recommend Kennedy Krieger to family and friends who needed rehabilitation services.
- 93 percent of families felt they were adequately prepared for their child's return to home, school, and community activities.
- 94 percent are living in the community.

## **Outpatient Programs:**

#### **Specialized Transition Program (STP)**

- Twenty patients with brain injury participated in the Institute's Specialized Transition Program (STP) with an average stay of 46 days.
- 96 percent of family members reported overall satisfaction with our care.
- 93 percent of children met or exceeded goals set for their admission.
- 96 percent of children had all appropriate school services in place at discharge.

#### Community Rehabilitation Program (CR)

- Thirteen patients with brain injury were served through the CR program and were enrolled an average of 50 days.
- 100 percent of families surveyed were satisfied overall with the CR program and would recommend the program to others.

The data on this form are taken from the fiscal year July 1, 2014 – June 30, 2015.

#### **Contact Information**

# Pediatric Brain Injury Program at Kennedy Krieger Institute

For more information or to speak to an intake coordinator, please call 443-923-9400, or toll-free at 888-554-2080. TTY: 443-923-2645 or Maryland Relay 711, or email Intake@KennedyKrieger.org.

#### KennedyKrieger.org

Physicians & Healthcare Professionals To make a referral, call our Physician Referral Line at 443-923-9403.

#### Address:

707 North Broadway Baltimore, MD 21205

Kennedy Krieger Institute provides care that preserves cultural, psychosocial, spiritual, and personal values, beliefs, and preferences. Care is free from discrimination based on age, race, ethnicity, religion, culture, language, physical or mental disability, socioeconomic status, sex, sexual orientation, and gender identity or expression including transgender. We encourage patients and families to become active partners in their care by asking questions, seeking resources, and advocating for the services and support they need.











