The Pediatric Brain Injury Program

Rehabilitation Continuum of Care at Kennedy Krieger Institute

We are all born with great potential. Shouldn’t we all have the chance to achieve it?

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 individuals in 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 recently discharged from acute care to 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 Brain Injury Program provides services for a variety of diagnoses, including:

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

Kennedy Krieger treated 73 inpatients with brain injury during its most recent fiscal year ending June 30, 2013. Eighteen patients with brain injury were served in the Institute’s Specialized Transition Program (STP), an intensive rehabilitation day program, and ten patients with brain injury were served in the Community Rehabilitation program (CR) at Kennedy Krieger. Of these, 50 percent began their rehabilitation as an inpatient at Kennedy Krieger.

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 with additional recovery goals.

Patients come to Kennedy Krieger’s Brain Injury Program from a broad geographic area. Last fiscal year, 19 percent of patients admitted came from outside the state of Maryland, including some from other countries.

Because of our proximity to and affiliation with the 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. Occasionally, these more intensive medical needs require unplanned transfers to acute care and then subsequent return to Kennedy Krieger to complete their rehabilitation. In CY 2012, 15 patients had unplanned transfers to acute care, with 80 percent returning promptly to Kennedy Krieger to complete their rehabilitation.

Mark’s Story

For many 12-year-olds, meeting a roomful of strangers is intimidating. But not for Mark, who sees such occasions as new opportunities to win over a crowd. Once a promising young performer, Mark was unable to sing, dance, or act for months after he sustained a severe traumatic brain injury in a jet skiing accident. But true charisma knows no limitations. When he was admitted to Kennedy Krieger for rehabilitation, Mark could barely speak, required tube feedings, and relied entirely on his wheelchair to get around. Today, at age 16, Mark’s tracheostomy is gone and his speech is crystal clear. He eats normally, is independent in his daily routine, walks on his own, and attends a regular school where he is back on the stage again.

Our Treatment Approach

Directed by a pediatric physiatrist, 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.

For more information, visit kennedykrieger.org or call 888-554-2080.
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 and language pathologists
- Neuropsychologists
- Social workers
- Special educators

Consultative services, including adaptive equipment, assistive technology, psychiatry, behavioral psychology, nutrition, and audiology, are provided as needed. Treatment plans are developed with the patient and the family and are tailored to meet the unique needs of each child.

Outcomes

Inpatient Rehabilitation Program

- Patients admitted to the Brain Injury Inpatient Program stay an average of 40 days.
- 84 percent of patients are discharged directly home from the inpatient program.
- 96 percent are living in the community at three-month follow-up.

<table>
<thead>
<tr>
<th>FY 2013 Functioning Levels</th>
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<tbody>
<tr>
<td>Admission</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>80</td>
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- The Brain Injury Program uses the Functional Independence Measure for Children (WeeFIM), a national pediatric rehabilitation functional outcome scale, as well as specific scales developed at Kennedy Krieger to evaluate other aspects of functional improvement. Overall, patients in our inpatient Brain Injury Program make excellent functional gains as measured by the WeeFIM, and continue to make progress as reported at three-month and one-year follow-ups.

<table>
<thead>
<tr>
<th>Traumatic Brain Injury</th>
<th>Kennedy Krieger Institute</th>
<th>Similar Facilities</th>
<th>National</th>
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<tbody>
<tr>
<td>Gains on WeeFIM</td>
<td>29.1</td>
<td>29</td>
<td>27.7</td>
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<tr>
<td>Discharge WeeFIM Score</td>
<td>79</td>
<td>73.7</td>
<td>72.6</td>
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- For patients with traumatic brain injuries, gains on the WeeFIM and WeeFIM score at discharge from the inpatient program are similar or better in comparison to other facilities and the national benchmark.

- In FY 2013, 88 percent of patients met or exceeded goals set at their admission.

Satisfaction Survey Results:
At the time of discharge:
- 99 percent of those surveyed at discharge would recommend Kennedy Krieger Institute.
- 98 percent of those surveyed reported being satisfied with the services they received.
- 93 percent of those 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 parents indicated they had received information that helped them care for their child at home.
- 98 percent of parents reported that this information was available to them both during and after their child’s treatment at Kennedy Krieger.

Outpatient Programs:

Specialized Transition Program (STP)
- Patients with brain injury stayed an average of 62 days in the STP program and made excellent functional gains on the WeeFIM (13 points).
- 100 percent of families surveyed were satisfied overall with the STP program.

Community Rehabilitation Program (CR)
- Patients with brain injury were enrolled an average of 50 days in the CR program and made excellent functional gains on the WeeFIM (8 points).
- 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, 2012 – June 30, 2013.

Contact Information

Pediatric Brain Injury Program
For more information or to schedule an appointment, please call 443-923-9400, or toll-free at 888-554-2080.
TTY: 443-923-2645 or Maryland Relay 711
kennedykrieger.org

Physicians and 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 recognizes and respects the rights of patients and their families and treats them with courtesy and dignity. Care is provided in a manner that preserves cultural, psychosocial, spiritual and personal values, beliefs, and preferences. We encourage patients and families to become active partners in their care by asking questions, requesting resources, and advocating for the services and support they need.