

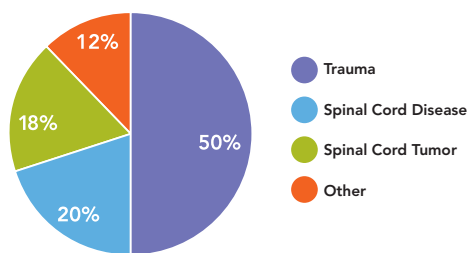
# The Pediatric and Adolescent Spinal Cord Injury Program at Kennedy Krieger Institute

## Who We Are

The International Center for Spinal Cord Injury (ICSCI) at Kennedy Krieger Institute was founded on the philosophy that there is always hope for individuals with paralysis to recover sensation, function, mobility, and independence—months or even years after their injuries. The Center offers intensive medical and therapy programs focused on recovery from spinal cord injuries and dysfunction, even for those with chronic paralysis. We offer a coordinated continuum of care that includes inpatient, outpatient, and home- and community-based services. Our goal is to improve each child's health and quality of life, enabling engaged participation in home, school, and community life.

## Who We Serve

The Center serves patients with spinal cord injuries or paralysis, which can have a variety of causes. The chart below shows the distribution of our patients by cause of injury.



- In FY 2015 (July 1, 2014 – June 30, 2015), Kennedy Krieger provided services to 37 inpatients and 179 outpatients with paralysis.
- Patients ranged in age from 6 months to 21 years, and the median age was 14.1 years.
- Six patients had unplanned transfers to acute care, with patients returning promptly to complete their rehabilitation. Because of our proximity to, and affiliation with, The Johns Hopkins Hospital, the Center is able to admit patients with intensive medical needs, such as those requiring a ventilator. Occasionally, these more intensive medical needs require unplanned transfers to acute care and then subsequent return to Kennedy Krieger to complete rehabilitation.

## Our Team

An experienced, interdisciplinary treatment team works with each patient. This team includes:

- Aquatic therapists
- Assistive technology professionals, and seating and mobility specialists
- Behavioral psychologists
- Developmental pediatricians
- Hospitalists
- Neurologists
- Nurses and nurse practitioners
- Occupational therapists
- Occupational therapy assistants
- Orthopedists
- Physiatrists
- Physical therapists
- Physical therapy assistants
- Psychologists
- Recreational therapists
- Social workers
- Special educators
- Speech-language pathologists

## Our Approach

Our Center emphasizes an innovative therapy technique known as activity-based restorative therapy (ABRT). ABRT focuses on restoring function, rather than only teaching people to compensate for their loss of function. Therapists and physicians emphasize activity to optimize the nervous system for recovery and offset the rapid aging and chronic complications of paralysis. Specific therapeutic approaches of ABRT include functional electrical stimulation, weight bearing, task-specific practice, massed practice, locomotor training, and aquatic therapy. Individualized treatment plans are tailored to the unique needs of each patient and family. Upon discharge, patients receive an individualized, detailed home rehabilitation program to improve and maintain gains between visits of therapy.

## Treatment programs:

- **Inpatient Program:** The inpatient program, directed by a physician, is a comprehensive medical and therapeutic evaluation and treatment program for patients with acute or chronic paralysis. Inpatients receive at least four hours of therapy each day, and most receive more.
- **Outpatient Medical Clinic:** Physiatrists provide evaluations, periodic follow-ups, and medical management of spinal cord dysfunction. The focus is to minimize and prevent medical complications. Transition of care from pediatric to adult specialists is accomplished seamlessly, providing lifelong follow-up and health promotion.
- **Outpatient Therapy Program:** In our medically supervised outpatient therapy program, therapists work one on one with patients, focusing on achievement of goals set by the patient, physician, and therapist. We offer two unique therapy options:
  - **Short-term intensive therapy:** In this five-day-a-week program, patients attend therapy for two to three weeks and receive a minimum of three hours of therapy each day.
  - **Extended intensive therapy:** In this program, patients attend therapy one to three times per week for eight to 12 weeks, and receive a minimum of three hours of therapy per session.
- **Aquatic Therapy Program:** This program features innovative pools with multiple jets, built-in treadmills, video systems, and floors that operate on lifts to allow barrier-free entry and exit for patients in wheelchairs.



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

International Center for Spinal Cord Injury  
at Kennedy Krieger Institute  
*Research. Restoration. Recovery.*

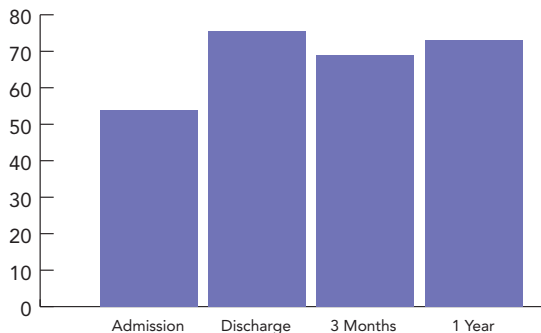
## Outcomes

### Inpatient Rehabilitation Program

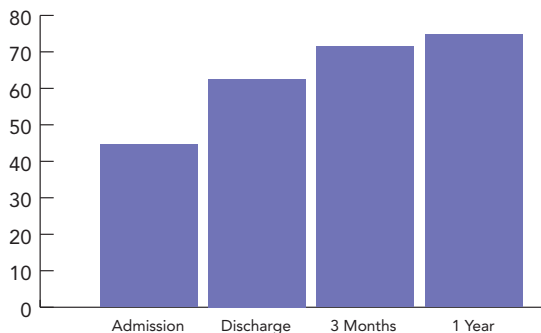
#### Satisfaction Survey Results

- 100% of those surveyed at discharge would recommend Kennedy Krieger.
- 100% of those surveyed three months after discharge were satisfied with their child's rehabilitation outcomes.
- The average stay for patients in our Spinal Cord Inpatient Program is 45 days.
- The 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 functional improvement. Overall, patients make excellent gains as measured by WeeFIM.
- 98% of patients met or exceeded goals set at admission.

**FY 2014 Non-traumatic Spinal Cord Injury WeeFIM Scores**



**FY 2014 Traumatic Spinal Cord Injury WeeFIM Scores**



Unless noted otherwise, the inpatient data is taken from FY 2015 (July 1, 2014 – June 30, 2015).

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.



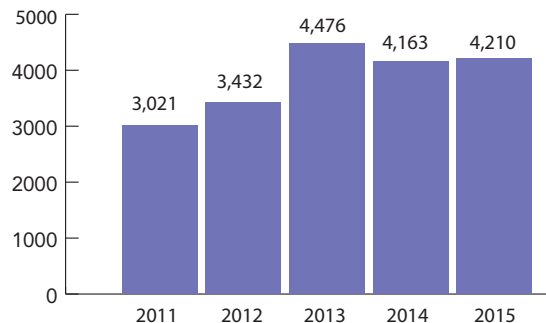
## Outpatient Program

### Satisfaction Survey Results: FY2013 – FY2015

- 100% of those surveyed rated the therapy services as “excellent.”
- 100% of those surveyed would recommend Kennedy Krieger to another patient with paralysis.

The members of our interdisciplinary team have years of experience developing and tailoring treatment plans with the unique physical, developmental, educational, and social needs of children in mind.

**Total Outpatient Pediatric Spinal Cord Injury/ Dysfunction Patient Visits (Fiscal Year)**



## Pfeiffer's Story

When Pfeiffer was 8 months old, she became paralyzed as a result of transverse myelitis (TM), a rare neurological disorder caused by inflammation of the spinal cord. The prognosis for TM is unpredictable, but ICSCI offered hope that recovery was possible through activity-based restorative therapy (ABRT). The goal was to restore sensation, movement, and independence. After Pfeiffer's initial inpatient stay, she began outpatient therapy and medical care at ICSCI. Her outpatient visits included therapy with various specialized pediatric rehabilitation equipment, and her hard work is paying off—she progressed from walking with a walker to walking with forearm crutches, to a cane, then finally to walking without an assistive device for short distances. Pfeiffer continues to improve.

## Contact Information

### International Center for Spinal Cord Injury at Kennedy Krieger Institute

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**

### SpinalCordRecovery.org

### Physicians and Healthcare Professionals

To make a referral, call our Physician Referral Line at **443-923-9403**.

### Mailing Address:

707 North Broadway  
Baltimore, MD 21205



Learn More. Get Involved. Stay Connected. Visit [KennedyKrieger.org/Connect](http://KennedyKrieger.org/Connect).