Inpatient Neurobehavioral Unit
at Kennedy Krieger Institute

Who We Are
Established in the 1980s, the Neurobehavioral Unit (NBU) at Kennedy Krieger Institute is a unique, 16-bed inpatient unit for children and adolescents with severe behavioral issues in addition to developmental disabilities or an intellectual disability. We specialize in helping patients with serious problems when other interventions or treatments haven’t worked.

Attracting patients from around the country, the NBU is part of a continuum of care that also includes an outpatient program and varying levels of service, from consultation to intensive outpatient care. The program also conducts research and trains interns and fellows in applied behavior analysis (ABA) and other disciplines.

Who We Serve
Our patients include children and adolescents whose behavioral problems pose a high risk of injury to themselves and others, such as:
- Self-injurious behavior
- Aggression
- Property destruction
- Tantrums
- Disruptive behaviors
- Pica
- Elopement (i.e., running away)
- Mood instability
- Compulsive and repetitive behaviors
- Inattention and hyperactivity

The NBU serves patients with a variety of diagnoses, including:
- Autism spectrum disorder
- Developmental delay
- Intellectual disability
- Sleep disorders
- Feeding disorders
- Stereotypic movement disorder with self-injurious behavior
- Various genetic, metabolic, and chromosomal disorders

Our patients range in age from 4 to 21 years, with a median age of 13. Referrals for an inpatient admission come from a variety of sources, but the majority are received from the patient’s physician, other healthcare professionals, family, and school. Patients come to the NBU from a broad geographic area. Last year, 63 percent of patients were admitted from other states. Upon discharge, 73 percent of patients returned home, with the remainder going to a residential facility or a group home. In fiscal year 2015, there were no unplanned transfers of patients to another hospital setting.

Our Team
We take an interdisciplinary approach to treatment, relying on input from behavioral psychologists, psychiatrists, pediatricians, neurologists, nurses, social workers, and speech and language pathologists. Other disciplines are consulted on a case-by-case basis.
Julia’s Story

Most families of a 13-year-old girl worry about their daughter’s after-school activities, her friends, and whether or not she can start wearing make-up. For Julia, who was diagnosed with autism and engaged in severe self-injurious and aggressive behavior, her parents had a different set of worries: They were concerned that she might hurt herself or others. Her family couldn’t take Julia anywhere in the community, and she was no longer attending school because of her resistance to getting on and off the bus. Agreeing to have Julia admitted to Kennedy Krieger’s neurobehavioral inpatient unit was a hard decision, but now, everyone agrees it was well worth it.

Today, Julia is attending school, a daily after-school program, and a sleep-away camp twice a year, and is able to join her family in going to restaurants and other community outings. Julia, who previously refused to climb even one stair to get onto her school bus, now independently climbs entire flights of stairs in her home multiple times per day. Prior to her admission, Julia could not be left alone even for five seconds, for fear she would hurt herself. Now, she is able to play independently, a skill that many parents take for granted. With her new, engaging personality, Julia is an all-around joy to be around.

Our Treatment Approach

The NBU employs targeted behavioral and pharmacological interventions using a data-based approach.

Each patient receives intensive assessments, including a functional behavioral assessment, which helps us understand your child’s problem behavior, and preference assessments to identify activities your child likes and can earn as rewards. We try to comprehensively treat the individual using applied behavior analysis (ABA)—considered the best practice for working with patients like ours—and medication, when appropriate.

We maintain a staff-to-patient ratio of 1:1 or higher at all times. Under the supervision of a board-certified behavior analyst, each patient receives behavior assessment and treatment sessions from a team of three behavior therapists. We develop behavioral treatments based on our assessment results, and we closely monitor their success. Meanwhile, data-based psychiatric assessments and medication evaluations examine a number of factors, including problem behaviors, mood, and activity level. Treatment plans are designed around individual needs and focus on decreasing severe problem behaviors, while encouraging appropriate replacement behavior.

A critical component of our approach is working with each patient’s family, school staff, and any service providers throughout treatment to provide structured, intensive training in how to follow the patient’s behavioral program. This training helps us to ensure successful outcomes and maintain our patients’ progress over time.

Outcomes

Our outcomes data support the effectiveness of our approach. During the last five years:

- 85 percent of patients discharged had reduced problem behaviors by at least 80 percent.
- 88 percent of patients had maintained their treatment gains at follow-up.
- 95 percent of families reported satisfaction with services.
- 99 percent of patients were discharged with at least one caregiver prepared to follow and maintain their treatment plans.