

## Neuro-Rehabilitation Center



### IMPACT OF PHILANTHROPY



**700**  
acute patients



**35,135**  
outpatient visits



**99.5%**  
outpatient  
satisfaction rate

The Barrow Neuro-Rehabilitation Center is dedicated to helping patients maximize their independence and return to life with renewed confidence and self-esteem. It provides a complete spectrum of care, including acute, inpatient, and outpatient services. Its Center for Transitional Neuro-Rehabilitation (CTN) focuses on reintegrating patients into their community with work and school re-entry programs.

Barrow is a leader in the use of neuro-robotics across the rehabilitation continuum and is ranked among the country's Top 50 Best Hospitals for Rehabilitation by *U.S. News & World Report*.

YOU ADVANCE INNOVATIVE RESEARCH AND TECHNOLOGY.

**Conventional vs. Robotic Therapy**

Christina Kwasnica, MD, director of Physical Medicine & Neuro-Rehabilitation, evaluated patient outcomes with robotic and conventional therapy. She found that using robotics yielded a higher level of patient engagement and commitment to the therapy regimen.

**Soft Robotics**

Barrow is collaborating with ASU and Ability360 on a study to develop opportunities to bring soft robotics to underserved communities. Soft robotics assist patients in improving functional mobility and are easier to transport than traditional robotics.

**Spinal Cord Model Systems**

Barrow is collaborating with the University of Alabama on a spinal cord injury model system. This database will track long-term health and quality-of-life outcomes, including whether patients participated in physical therapy.

**Brain Injury & Caregiver Burden**

Pamela Klonoff, PhD, director of the CTN program, worked on a study to determine whether strengthening self-awareness (social, emotional, and functional) in patients with brain injuries reduces caregiver burden.

You contribute to increased knowledge and education.

**Neuro-Robotics:** Last year, Trent Maruyama, rehabilitation technology program manager, traveled to Spain to present on the implementation and use of robotics in neuro-rehabilitation. Barrow also held its annual Rehab Technology Expo, which featured 17 different rehabilitation technologies.

**CTN Program:** Thanks to Barrow donors, CTN therapists can attend continuing education courses. These specialized training workshops allow therapists to implement state-of-the-art treatment techniques to optimize patients' recovery.

**Physical Therapy Residency:** Barrow's Physical Therapy Neurologic Residency is a year-long program that trains residents in comprehensive treatment and care across the rehabilitation continuum. Since its inception in 2022, the program has graduated five residents.



## You empower patients to live every day to the fullest.

The Center continues to offer a Weekend Robotics Program in the inpatient setting and a Wellness Robotics Program in the outpatient setting. Both programs are designed to provide patients with increased access to advanced robotics and technology under the supervision of a Barrow therapist.

The Barrow Therapeutic Recreation and Adventures Program provides adaptive sports and activities to increase patients' independence. Through philanthropy, the program acquired an adaptive golf cart to expand its adaptive golf program to more patients. It also partnered with Creighton University to launch an adaptive yoga program.

“After suffering a major stroke, my doctor told me I’d probably be in a wheelchair for life. But then I came to Barrow, where everyone believed in me—from my neurologists to Dr. Pamela Klonoff and all the CTN therapists. Now, I can walk entirely on my own. They gave me my life back.”

**Dave Allen**



**Read the full story:**

SCAN ME



## On the Horizon

The Neuro-Rehabilitation Center will be expanding research efforts across the continuum of care, from inpatient rehabilitation to the CTN program. This includes collaborating closely with other Barrow departments, maximizing research collaborations with outside institutions, and capitalizing on data collected from neuro-robotics and other technologies.



The mission of Barrow Neurological Foundation is simple: to be the catalyst of our donors' passion for transformation by providing the resources for Barrow Neurological Institute to achieve its mission of saving human lives through innovative treatment, groundbreaking research, and educating the next generation of the world's leading neuroscience specialists.