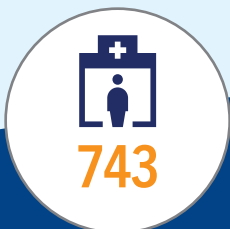


Barrow Neuro-Rehabilitation Center



SUFFERING A TRAUMATIC brain injury, brain tumor, stroke, or spinal cord injury can have devastating consequences. Thanks to the expertise of skilled neurosurgeons, many of these patients survive. But their story is far from over. The hardest part often comes after patients leave the hospital. Suddenly, they are faced with a long, daunting road to recovery and can start to feel extremely overwhelmed and isolated.

The Neuro-Rehabilitation Center at Barrow Neurological Institute provides a complete spectrum of care, including acute, inpatient, and outpatient rehabilitation services, work and school re-entry programs, adaptive recreation, and support groups. Barrow neuro-rehabilitation specialists understand that each patient's recovery journey is unique and employ a multidisciplinary approach across the entire continuum of care so patients can go on to lead fulfilling lives with a renewed sense of independence and self-esteem.



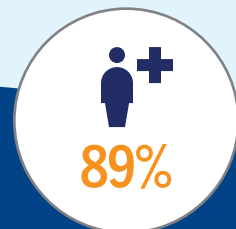
inpatient neuro-rehab admissions



outpatient therapy sessions conducted



different types of robotics/technologies



CTN patient return to part- or full-time employment

BARROW NEUROLOGICAL INSTITUTE BY THE NUMBERS



CLINICAL IMPACT

91,800+

total number of
patient visits

20,900+

telemedicine visits

5,500+

brain and spine surgeries



GLOBAL IMPACT

78

international
research fellows and
visiting scholars

PROGRAM ACCOMPLISHMENTS

Barrow was ranked as one of the Best Hospitals for Rehabilitation by *U.S. News & World Report* for the first time in 2022. The Barrow Neuro-Rehabilitation continuum also received accreditation by both the Joint Commission and the Commission on Accreditation of Rehabilitation Facilities (CARF). All programs received highly complimentary feedback on the quality and breadth of services, as well as the positive impact on patients.

Barrow Neuro-Rehabilitation launched its Physical Therapy Neurologic Residency Program last year. The one-year program is accredited by the American Board of Physical Therapy Residency and Fellowship Education and residents train under Barrow physical therapists across the entire continuum of care. In July 2022, Barrow welcomed two new physical therapist residents to the program.

Last year, the following renovations across the Barrow Neuro-Rehabilitation continuum were completed: upgrades to the acute neuro-rehabilitation gym and nurses' station, installation of a ZeroG® Gait and Balance System in the Rob and Melani Walton Outpatient Neuro-Rehabilitation Gym, and installation of an underwater treadmill and obstacle course in the Ashlyn Dyer Aquatic Center.

TECHNOLOGY AND INNOVATION

Barrow Neuro-Rehabilitation continues to be a leader in the use of neuro-robotics and is one of the only rehabilitation facilities to offer extensive technology across the entire continuum of care. The neuro-rehabilitation team is always on the lookout for the latest cutting-edge technology that can be used to improve the lives of patients. Most recently, they have been working on developing the use of the HoloLens for augmented reality (i.e., interacting with holograms in your environment) and the use of virtual reality to assist patients with endurance, balance, and function.

The team is also dedicated to sharing their expertise in neuro-robotics with others. During RehabWeek 2022 in Rotterdam, the Netherlands, rehabilitation technology program manager Trent Maruyama and rehabilitation therapy coordinator Jeremy Palmiscno presented on conducting group therapy with robotics and implementing robotics in a therapy program, plus how to optimize devices for different patient populations.

For National Rehabilitation Awareness Week 2022 (September 19–25), the team hosted a Rehab Technology Expo at Barrow, which featured 22 different technology displays and interactive stations. They also led a hands-on workshop at the Barrow Acquired Brain Injury & Spinal Cord

Injury Symposium, an event for rehabilitation professionals that focused on best practices and research for the treatment of acquired brain and spinal cord injuries.

CENTER FOR TRANSITIONAL NEURO-REHABILITATION

The Center for Transitional Neuro-Rehabilitation (CTN), led by Pamela Klonoff, PhD, offers an array of programs in a holistic-milieu environment, including the Transitional Program, the Home Independence Program, and the School and Work Re-Entry Programs. It also provides integral education and support to families and the community.

Research is a critical component of the CTN program. Over the past year, the team has either published or submitted seven papers to peer-reviewed journals and has generated 16 local, national, and international presentations. The team also developed a database to analyze the effect of cognitive retraining and demographic data on the return-to-driving process in patients with acquired brain injuries. Utilizing this database, they completed an exploratory statistical analysis, which was accepted as a poster presentation for the National Academy of Neuropsychology Annual Conference.

Additionally, the CTN implemented various improvements to technology and equipment to serve a variety of treatment needs. It continues to offer therapists the opportunity to attend education courses so they can learn new skills and techniques to maximize the use of technology.

ON THE HORIZON

Barrow Neuro-Rehabilitation has positioned itself to build the rehab center of the future. The neuro-rehabilitation team plans to introduce a new wave of technology for inpatient rooms to enhance patient safety and communication. For example, devices would allow patients to control different aspects of their room, such as temperature and lighting, and interface with their providers via an iPad. Renovations will continue throughout the Barrow Neuro-Rehabilitation continuum, with upgrades planned for the front entrance and lobby of the outpatient center to make them more accessible for patients.

A book Dr. Klonoff has co-authored will be published by Guilford Press in late 2022/early 2023. The ten-chapter “hands-on” manual and textbook provides detailed accounts of therapeutic interventions for patients with acquired brain injuries, depicting cutting-edge, holistic outpatient-milieu techniques emanating from more than 36 years of experience in the CTN.

BARROW NEUROLOGICAL INSTITUTE BY THE NUMBERS



RESEARCH

397

active research studies

791

patients enrolled in clinical trials

\$14 MILLION

in federal research grant support



DONOR IMPACT

\$20 MILLION

total distributed to Barrow Neurological Institute, including:

\$3.5 MILLION

designated to specific centers/programs

\$15.4 MILLION

for basic, clinical, and translational research

\$1.5 MILLION

in endowments



Specialists in the Rob and Melani Walton Outpatient Neuro-Rehabilitation Gym help a patient walk using the state-of-the-art exoskeleton robotic device.

THANK YOU FOR YOUR SUPPORT

We cannot thank you enough for the support you have given to the Barrow Neuro-Rehabilitation Center. We strive to provide exceptional care to every patient who comes here and to help all patients reach their highest level of independence and functioning. Research, technology, and education play a vital role in achieving this mission and allowing patients to go on to lead fulfilling lives. This would not be possible without our generous donors.

It is so important to have a place like the Barrow Neuro-Rehabilitation Center, where patients from all over the world can come to receive the best care possible. On behalf of our entire team, thank you for your support.

With gratitude,

Chris St. Clair

Sr. Director of Rehabilitation Services & Nursing Administration
Neuro-Rehabilitation Center, Barrow Neurological Institute

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 by educating the next generation of the world's leading neuroclinicians.

Barrow
Neurological Foundation

Barrow Neurological Foundation
2910 N. Third Ave., Ste. 450, Phoenix, AZ 85013
www.SupportBarrow.org