



Alzheimer's Program



Dr. Anna Burke and Dr. Francisco Ponce announced the first patient in our Phase III clinical trial had undergone surgery to test Deep Brain Stimulation as a treatment for Alzheimer's.

→ EVERY 66 SECONDS an American is diagnosed with Alzheimer's disease. More than
5.7 million are being treated for it, a number expected to triple by 2050. Alzheimer's is now the sixth
leading cause of death in the United States and the only one in the top 10 that cannot be prevented,
cured or effectively treated.

Caregivers carry a huge burden. The Alzheimer's Association estimates more than 16 million Americans annually provide 18.4 billion hours of unpaid care, valued at more than \$232 billion. The emotional toll as a loved one's memory and identity ebb is beyond measure.

Anna Burke, MD, director of the Alzheimer's and Memory Disorders Division at Barrow Neurological Institute, understands this challenge first hand: In medical school, she became a caregiver to two of her grandparents who were diagnosed with dementia.

At Barrow, Dr. Burke and her team strive to provide exceptional care to Alzheimer's patients today while finding a cure for tomorrow.



MORE THAN 5 MILLION

Americans are living with Alzheimer's



EVERY 66 SECONDS

someone in the U.S. develops Alzheimer's



Women in their 60s are
TWICE AS LIKELY TO
DEVELOP ALZHEIMER'S
than breast cancer

ABOUT BARROW NEUROLOGICAL INSTITUTE



#1 IN ARIZONA #11 IN THE UNITED STATES

for neurology and neurosurgery



CLINICAL IMPACT

92,515

BNI Clinic visits

3,135

number of neurosurgeries

1,578

number of spine surgeries

\$2.8 MILLION

amount of charity care



GLOBAL IMPACT

54

visiting scholars, research fellows and observers from Mexico, India, Egypt, Pakistan, UK, Russia, China, Chile, Spain, Brazil, Japan, France, Italy, Kingdom of Saudi Arabia, Indonesia, Turkey, Germany, Poland, Colombia, Philippines, Israel, Argentina and Thailand.

PROGRAM ACCOMPLISHMENTS

At Barrow, our integrated team rejects the norm of "diagnose and adios," so common among healthcare providers who think nothing can be done to combat Alzheimer's disease.

To empower patients on their journeys, we added a social worker, nurse practitioner and behavioral neurologist, and we improved access to physical and occupational therapy as well as cognitive stimulation and life enrichment programs.

For caregivers, we launched the "Dementia with Dignity" handbook and a caregiver tool kit that includes community resource guides, practical advice, and important contact information. In addition, we developed complementary support groups and workshops for patients and caregivers:

- → Lewy Body Support Group allowing caregivers to attend a support group while patients attend a parallel engagement program (monthly).
- → **Alzheimer's / Dementia Caregiver Talks** featuring guest speakers on topics such as adjusting to the holidays and legal issues (monthly).
- → Finding Hope Workshop, Developed by Duet highlighting caregiver issues such as ambiguous loss, stress, resiliency and more (10-weeks, starting January 9, 2020).
- → Managing Memory Loss with Dignity Workshop for patients diagnosed with mild cognitive dementia and caregivers with units on brain biology, disease progression, transitioning care and more (10-weeks, starting January 9, 2020).

In Fiscal 2019, we conducted 16 educational, community outreach seminars. We also held three community memory screenings to identify those who may be in need of healthcare for cognitive decline or behavioral changes.

RESEARCH ADVANCES

In 2019, Barrow was designated a Global Alzheimer's Platform (GAP) site, allowing us to be a priority site for Alzheimer's clinical trials among major industry sponsors. Only the top Alzheimer's centers around the world are honored with GAP designation, and last year alone, we enrolled over 200 participants in research studies.

In September, Barrow became the **first institution in the world** to implant a deep brain stimulator (DBS) in an Alzheimer's patient as part of a pivotal



"Every day, we see a change in Kevin and see a little bit of him fade away, and that's just ... hard...because we know the fun, vibrant, loud, laughing guy that he is... We are just so thankful for the generosity of the community and the support of the donors who make the help that we're receiving from Barrow available."

TINA RODRIGUES, CAREGIVER

Kevin Rodrigues, 54, pictured with his wife and caregiver Tina, ↑ was diagnosed with Alzheimer's disease in 2014.

clinical trial evaluating whether this therapy can slow the symptoms of Alzheimer's.

The addition of a neuropsychiatry program allowed us to expand clinical trials to explore novel treatments for behavioral and psychiatric symptoms that plague individuals suffering from Alzheimer's and related dementias. We are now leading a trial focused on psychosis and agitation in dementia.

To ensure diverse populations are included in clinical trials, we have increased outreach for the Latino community as well as people with Down syndrome, who are more likely to develop Alzheimer's as they age.

ON THE HORIZON

The vision of the Barrow Alzheimer's and Memory Division is a bold one: End Alzheimer's disease. We are committed to pushing the boundaries of care beyond our walls and bringing our expertise to as many patients and their families as possible. The Barrow Cognitive Disorders Telemedicine Service will allow us to share expertise with primary care physicians just learning how to diagnose and manage memory disorders.

We will also keep expanding the clinical trials program while increasing patient access to biomedical research that will one day change the course of this disease and how it is treated.



RESEARCH

320 active research studies

patients enrolled in clinical trials

in federal research grant support



DONOR IMPACT

\$3.98 MILLION for basic and

translational research

\$3.65 MILLION

for strategic initiatives including Barrow Aneurysm & AVM Research Center, Barrow Artificial Intelligence Center, neuroimaging and stroke

> 1.26 MILLION for education and fellowship programs

\$2.52 MILLION for community outreach programs



THANK YOU FOR YOUR SUPPORT

I cannot thank you enough for supporting the Alzheimer's and Memory Disorders Program. As a physician and a caregiver for a family member with dementia, I have seen first-hand the devastating effects Alzheimer's disease has on patients and their families. Your support means innovation in the field of Alzheimer's research, while we focus on caring for our patients and their families.

With Gratitude, Anna Burke, MD

↑ Dr. Anna Burke has worked to create a comprehensive program for patients with Alzheimer's and their caregivers.

Barrow Neurological Foundation raises awareness and funding for patient care, medical education, community outreach and research offered at Barrow Neurological Institute. Barrow is an internationally-recognized leader in neurology, neurosurgery and neuroscience research, treating patients with a wide range of conditions, including brain and spinal tumors, concussion and brain and spinal traumas, neuromuscular diseases, stroke, cleft and craniofacial disorders, and cerebrovascular disorders. It is home to several centers of excellence, including the Ivy Brain Tumor Center, Muhammad Ali Parkinson Center and Gregory W. Fulton ALS and Neuromuscular Disease Center. www.SupportBarrow.org

