

Jeffrey R. Leonard, MD Chief, Pediatric Neurosurgery Nationwide Children's Hospital Professor, Clinical Neurosurgery The Ohio State University

Jonathan Pindrik, MD
Pediatric Neurosurgeon
Nationwide Children's Hospital
Assistant Professor of
Neurosurgery
The Ohio State University,
College of Medicine

Ammar Shaikhouni, MD, PhD

Pediatric Neurosurgeon Nationwide Children's Hospital Assistant Professor of Neurosurgery The Ohio State University College of Medicine

Eric Srignick, MD, PhD
Pediatric Neurosurgeon
Nationwide Children's Hospital
Assistant Professor of
Neurosurgery
The Ohio State University,
College of Medicine

Michelle W'ez/emeyer, MD, PhD

Pediatric Neurosurgeon Nationwide Children's Hospital Assistant Professor of Neurosurgery The Ohio State University College of Medicine

Albert Isaacs, MD, PhD
Pediatric Neurosurgeon
Nationwide Children's Hospital
Assistant Professor of
Neurosurgery
The Ohio State University
College of Medicine

700 Children's Drive Columbus, OH 43205

P: 614-722-2010 F: 614-722-2041 June 6, 2024

Chairman Edwards, Vice Chair LaRe, Ranking Member Sweeney, and esteemed members of the Ohio House Finance Committee:

I am grateful for the opportunity to present testimony on HB434, The Traumatic Brain Injury Treatment Accelerator Pilot Program (TBITXL). My name is Jeffrey Leonard MD, and I am the Chief of Neurosurgery at Nationwide Children's Hospital in Columbus, Ohio. Treating traumatic brain injuries presents one of the most intricate challenges I confront daily as a trauma surgeon. The intricacies of each case and the need for tailored treatment approaches contribute to the formidable and challenging nature of this condition, which in turn explains the limited investment from pharmaceutical companies in this field.

Despite my dedicated efforts, I recognize that the true battleground extends beyond the confines of the operating room. Approximately 23% of traumatic brain injury patients are discharged to skilled nursing, inpatient rehab, long-term care, hospice, or psychiatric facilities, where they face mounting social, economic, and medical pressures. Traditionally, our approach to treating TBIs has been reactive, primarily aimed at mitigating immediate damage rather than addressing the underlying sequelae that may surface months or even years after hospital discharge. This outdated approach necessitates a shift towards early intervention through drug development to enhance patient outcomes.

Data from the National Council for Compensation Insurance indicates that the average inpatient stay for traumatic brain injuries requiring surgical intervention spans 9 days, more than double the duration of all other surgical admissions. During this period, hospitalization expenses average \$87,000. A study published in the Journal of Neurosurgery comparing the costs of aggressive treatment regimens for severe TBIs with standard care in the ICU revealed that the former not only yielded superior outcomes across all age groups but also resulted in lower overall costs, projecting a lifetime care cost of \$1,264,000 compared to \$1,361,000 for the routine care plan. This underscores the necessity for innovative approaches and therapies aimed at reducing hospital costs.

While Ohio boasts a hospital network where 96.8% of residents live within 60 minutes of a level I or II trauma center, such accessibility is not universal across the United States, with only 82% of individuals enjoying similar proximity to trauma centers nationwide. In 2023, Banner Wyoming Medical Center became Wyoming's first and only level II trauma center. Despite Ohio's robust hospital network, effective treatments for brain injuries remain elusive, resulting in persistent challenges and fatalities. Alarming statistics released by the Ohio Department of Health and Ohio Hospital Association in 2019 underscore the urgency of the matter, revealing:

2,609 deaths 11,332 hospitalizations 113,356 emergency room visits.

The Brain Injury Research Foundation (TheBIRF) is spearheading a new approach to invigorate, modernize, and unite Ohio's leading research teams in the pursuit of meaningful treatments for traumatic brain injuries.

From renowned university research hospitals to remote rural community hospitals, it is our responsibility to extend assistance beyond our borders by dismantling barriers and disseminating our research globally.

Pediatric Neurosurgery

We pledge our support to TheBIRF and its endeavors to elevate standards, and we urge you to stand alongside them in the battle, offering hope to those patients most in need. With highest regards,

Jeffrey Leonard, MD Chair of Neurosurgery

Nationwide Children's Hospital