

2020

10
celebrating
years

THE NATIONAL INTREPID CENTER OF EXCELLENCE 10-YEAR ANNIVERSARY ANNUAL REPORT



Walter Reed
National Military
Medical Center



NATIONAL INTREPID CENTER OF EXCELLENCE



A WORD FROM THE DIRECTOR



Colleagues—

This fall I took over as the director for the National Intrepid Center of Excellence (NICoE) at the Walter Reed National Military Medical Center (WRNMMC) following Captain Walter Greenhalgh's retirement from the Navy after 30 years of exceptional service. I am proud and honored to join this amazing team and network of leaders dedicated to providing unparalleled care to our patients and continuing to grow an exemplary organization within the Military Health System (MHS).

The NICoE, as a part of the larger NICoE and Intrepid Spirit Center (ISC) Network, continues to be an authority in the patient-focused interdisciplinary care model, foundational research, and innovative information technologies that create best practices for TBI care improvement.

FY 2020 was a challenging year as we continued to provide exceptional care in the face of a global pandemic. Here we present to you the FY 2020 NICoE Annual Report, highlighting the NICoE's efforts and achievements over the last year and taking a glimpse at the past decade of TBI care, research, education, and transformation. We've come a long way since we first opened our doors to patients. As we work to realize our vision to be a global leader in TBI care and innovation, we recognize the invaluable need for partnerships across the Department of Defense (DOD), MHS, federal government, academia and other public and private entities.

In FY 2020, we evaluated our clinical practices to make our Intensive Outpatient Program (IOP) services more accessible to outpatients. Likewise, we examined our research portfolio and used our foundational research of longitudinal patient studies to guide future clinical studies that will help us better understand TBI symptoms and develop new TBI treatments. Even during the COVID-19 pandemic, we sustained and enriched our clinical and research missions by innovatively applying the tools we had available to best support the TBI Pathway of Care.

In some ways, the pandemic brought the NICoE and ISC Network closer together to ensure our patients received the same quality of care as before. Network staff exchanged advice as the pandemic moved throughout the country and

formed specialty working groups to share best practices with others in their field. Our informatics team continued to develop new functionality on the TBI Portal as others in the NICoE and ISC Network implemented these enterprise capabilities to track in real-time the clinical services received by TBI patients and outcome measures.

Of course, the NICoE would not be where it is without the dedicated staff who have served here over the last ten years. In addition to the work they do at the NICoE, our exceptional team continually sharpens their skills through continuing education opportunities and regularly shares their expertise at military and professional conferences to promote the advancement of TBI care. We are grateful to have these talented professionals, as well as the critical support of key stakeholders throughout the MHS, DOD, federal government, and private sector.

This introduction gives you a taste of what makes the NICoE so extraordinary; read on to discover what NICoE aspects have made it a leader in TBI care, research, and education over the last ten years.

Sincerely,

Captain Carlos D. Williams
Medical Corps, United States Navy
Director for the National Intrepid Center of Excellence
Walter Reed National Military Medical Center



MISSION

We improve the lives of patients and families impacted by TBI through excellence and innovation



VISION

To be a global leader in TBI care, research, and education



GUIDING PRINCIPLES

Excellence, Innovation, Compassion, Honor, and Collaboration

OVER THE LAST 10 YEARS, WHAT HAS

HOLISTIC TBI CARE

In response to a 2007 congressional mandate, the DOD created the NICoE to care for those with TBI and associated health concerns and serve as a leader in TBI care and research throughout the MHS. What made the NICoE stand out was that it was the first center within the DOD to develop a truly interdisciplinary approach to patient care. This approach allowed the NICoE to bring together professionals from a wide range of disciplines to improve the overall wellbeing of TBI patients and promote a medically ready military force.

Since first opening its doors to patients in 2010, the NICoE has continued to refine its interdisciplinary model and expand its reach. As part of the NICoE's ongoing commitment to continuous process and quality improvement, the NICoE 2020 Initiative began in December 2019 to make IOP services more accessible to outpatient services patients. As a result of NICoE 2020, the NICoE implemented a revised IOP in early July 2020, introduced new individual and group TBI outpatient offerings, revised intake and discharge criteria, developed a new IOP patient agreement, and rapidly integrated virtual health into all NICoE services—critical changes to continue patient care during the COVID-19 pandemic.

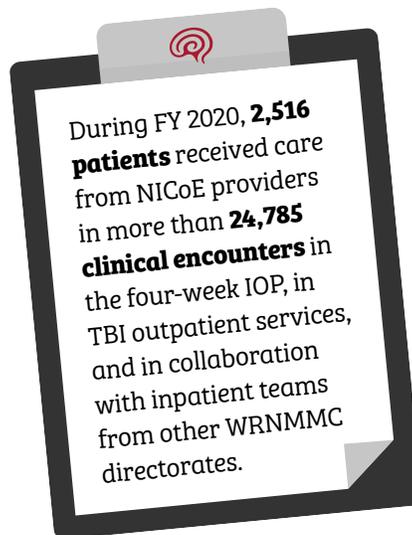
More than 75 participants from the NICoE, USU, and WRNMMC supported NICoE 2020 through 12 working groups and an environmental scan of more than 20 organizations.

WORLD-CLASS EXPERTS

A big part of what makes the NICoE so successful is its skilled and passionate staff. Since the beginning, patients have praised NICoE staff for their tireless efforts to improve the lives of patients and their families.

NICoE staff build patient resilience, contribute to force readiness, and serve as active organizational ambassadors through their various contributions to the larger MHS, civilian, and academic communities.

One major contribution during this challenging year was the NICoE clinical operation staff's efforts to boost provider resilience through the Operation Oasis Resiliency Initiative. This initiative delivered, and continues to deliver, daily live, virtual resiliency sessions spanning mind-body wellness, nutrition, fitness, and the creative arts to social media audiences and National Capitol Region, WRNMMC, NICoE, and ISC staff. In addition, NICoE and Arts in Health (AIH) staff helped sustain a ready medical force by facilitating hybrid (in-person and virtual) and in-person sessions for several WRNMMC departments.



“The way they [NICoE providers] took on the problems from all angles is something I haven't seen in 15 years of military medicine. — Patient”

In spite of the COVID-19 pandemic, the NICoE team provided 194 consultations and encounters for WRNMMC inpatients in FY 2020.



“My sincerest gratitude goes out to [NICoE providers] for their time and personal dedication in making this course available via telehealth. It is valuable not only in that it allows for continuity of care during this pandemic, but it shows the teams' dedication to providing the best possible patient care; despite any and all obstacles. — Patient”



From the start of Operation Oasis in April 2020, NICoE, AIH, and ISC staff delivered more than **175 hours of virtual resiliency sessions** to more than **1,800 participants** during FY 2020.

MADE THE NICoE WHAT IT IS?

TRANSFORMATIVE RESEARCH

Over the past 10 years, the NICoE has worked to improve patient outcomes through research by leveraging findings from longitudinal studies, treatment-based protocols, and data collection. Since before the NICoE had a building, NICoE researchers were involved in TBI research through the the Defense and Veterans Brain Injury Center (DVBIC)-supported 15-Year Studies, a series of longitudinal studies on the long-term physical and mental effects of TBI on service members. This year marked a major milestone in the studies as NICoE and DVBIC researchers reviewed their findings to-date for an 11-year congressional report.

Though face-to-face research was suspended due to COVID-19 in March 2020, the NICoE added four new studies to its portfolio, bringing its total to 30 active, IRB-approved research protocols. By developing and implementing a process to safely adapt these protocols during the COVID-19 pandemic, 12 of the 30 protocols have been approved to resume face-to-face research as of November 2020.

As the NICoE and ISC Network evolves, so do the interdisciplinary research teams from external partnerships with federal, university, and industry organizations. In September 2020, NICoE virtually hosted its 3rd Annual Research Fair to share with stakeholders its research findings that inform clinical practice and promote warfighter readiness.

30 active studies, including 7 multi-site collaborations with MTFs & academic institutions

11 treatment studies 15 observational studies 4 retrospective studies



- 61 abstracts & posters
- 41 invited presentations
- 32 journal articles
- 5 book chapters
- 1 doctoral dissertation
- 1 government report

141 publications & presentations

INNOVATIVE TECHNOLOGY

Technology at the NICoE has expanded over the years, from quick solutions to schedule patients to an expansive portal that breaks down the complex disease state of TBI into digestible information that influences patient care.

The NICoE continues to provide oversight on and manage the TBI Portal—DOD’s TBI registry that incorporates longitudinal data for more than 425,000 active duty service members diagnosed with TBI. In addition, the NICoE informatics team continues to enhance the DHA Survey Portal—a NICoE-designed enterprise system to collect and aggregate patient self-reports—based on feedback from pilot programs in different clinical communities.

Increased use of these common informatics platforms and increased collaboration in the NICoE and ISC Network have helped standardize how the NICoE collects, analyzes, and manages data and outcome metrics in support of research and clinical operations. These efforts drive innovation in TBI care, research, and education and support force readiness and TBI treatment capabilities in the MHS.



85% of IOP patients evidenced **clinically significant improvement** as measured by a standardized, self-reported symptom measure.

86% of patients chose the **highest satisfaction rating** when asked to rate the care at the NICoE.

96% of patients **would recommend the NICoE** to a family member or friend eligible for care in the MHS.



99% of patients feel that they are **better equipped to take care of their own health** based on their overall experience at the NICoE.



600+ active users of the TBI Portal



294,975 visits to the TBI Portal

28% of TBI encounters at the NICoE moved to **telehealth** in response to the COVID-19 pandemic between April 1, 2020 and September 30, 2020

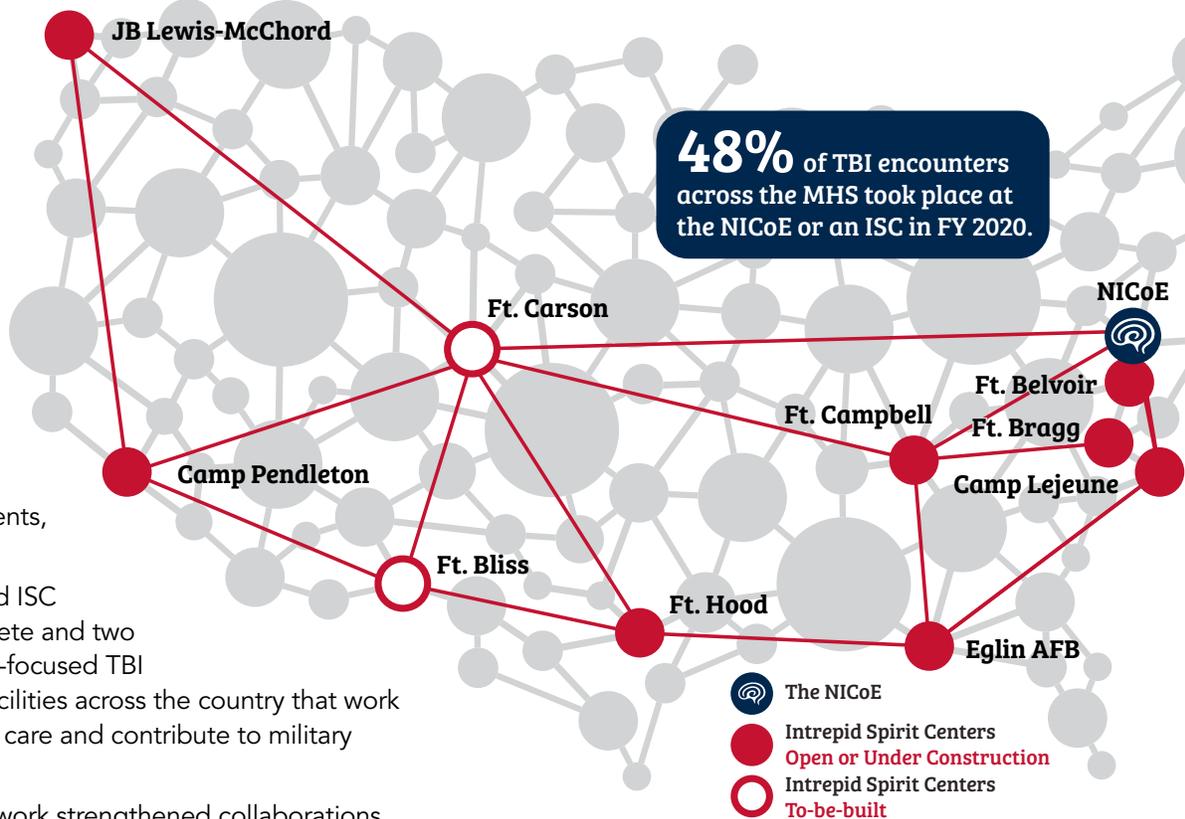


INTEGRATED TBI NETWORK

When the NICoE first started, it had three main goals: 1) develop a model of care that got service members better; 2) demonstrate that this model could be replicated in other centers by creating an ISC Network; and 3) use this network to create best practices for patient assessments, treatments, and outcomes.

Ten years later, the NICoE and ISC Network includes nine complete and two to-be-built integrative, health-focused TBI clinics at military treatment facilities across the country that work collaboratively to expand TBI care and contribute to military readiness.

Throughout FY 2020, the network strengthened collaborations among themselves and within the MHS TBI Pathway of Care to prioritize patient care during a global pandemic. Network staff exchanged ideas on personal protective equipment and clinical services to stay prepared and formed specialty working groups to share best practices across the network. The NICoE and ISC Network used novel tools such as the TBI Portal to standardize patient care by tracking in real-time the clinical services received by TBI patients and outcome measures regardless of treatment mode and location.



RESILIENT PATIENTS AND FAMILIES

Above all, the NICoE has always put the patient first, and its response to the COVID-19 pandemic was no different. To best serve the patient, the NICoE never closed its clinic and quickly expanded virtual health appointments for all 17 clinical services in less than two weeks.

During the first 90 days of the pandemic, the NICoE informatics team provided more than 30 telehealth training sessions to the TBI community, resulting in a significant adoption of those services within the NICoE and ISC Network.

The NICoE also continued face-to-face outpatient appointments within CDC-recommended guidelines based on patient preference. Though NICoE's IOP was suspended in late March, it resumed in early July with enhanced COVID-19 protocols. The IOP continues with a hybrid of face-to-face and virtual health appointments, and family services offerings are fully virtual, allowing family/significant other participation.

PROFESSIONAL EDUCATION OPPORTUNITIES

Along with patient care and research, education is one of the NICoE's main focuses, striving to enhance the knowledge of diagnosis, treatment, and research of TBI and associated health conditions within the NICoE, the MHS, and the global community. Some of the ways the NICoE prioritizes education of these invisible wounds of war are by playing an active role in MHS Brain Injury Awareness Month, hosting weekly didactic lecture series, synchronizing clinical care through the TBI Portal, publishing findings on the latest research, and participating in military health and specialty conferences.

497+ continuing education credits provided



17 didactic lectures held

In the face of COVID-19, the NICoE continued to educate interns, corpsmen, and current providers to ensure a ready medical force.

After a truly extraordinary year, we look forward with hope to another decade of excellent TBI care, research, and education for service members and their families.



The National Intrepid Center of Excellence

4860 South Palmer Road | Bethesda, MD 20889

For more information on the NICoE, please visit our website:

<https://walterreed.tricare.mil/Health-Services/Specialty-Care/National-Intrepid-Center-of-Excellence-NICoE>

We value your opinion; contact us here:

dha.bethesda.wrnmmc.mbx.nicoe@mail.mil

To view the NICoE's past award-winning annual reports, visit:

<https://walterreed.tricare.mil/Health-Services/Specialty-Care/National-Intrepid-Center-of-Excellence-NICoE/About/Annual-Reports>



The National Intrepid
Center of Excellence
(NICoE)



@NICoEPage



The National Intrepid
Center of Excellence