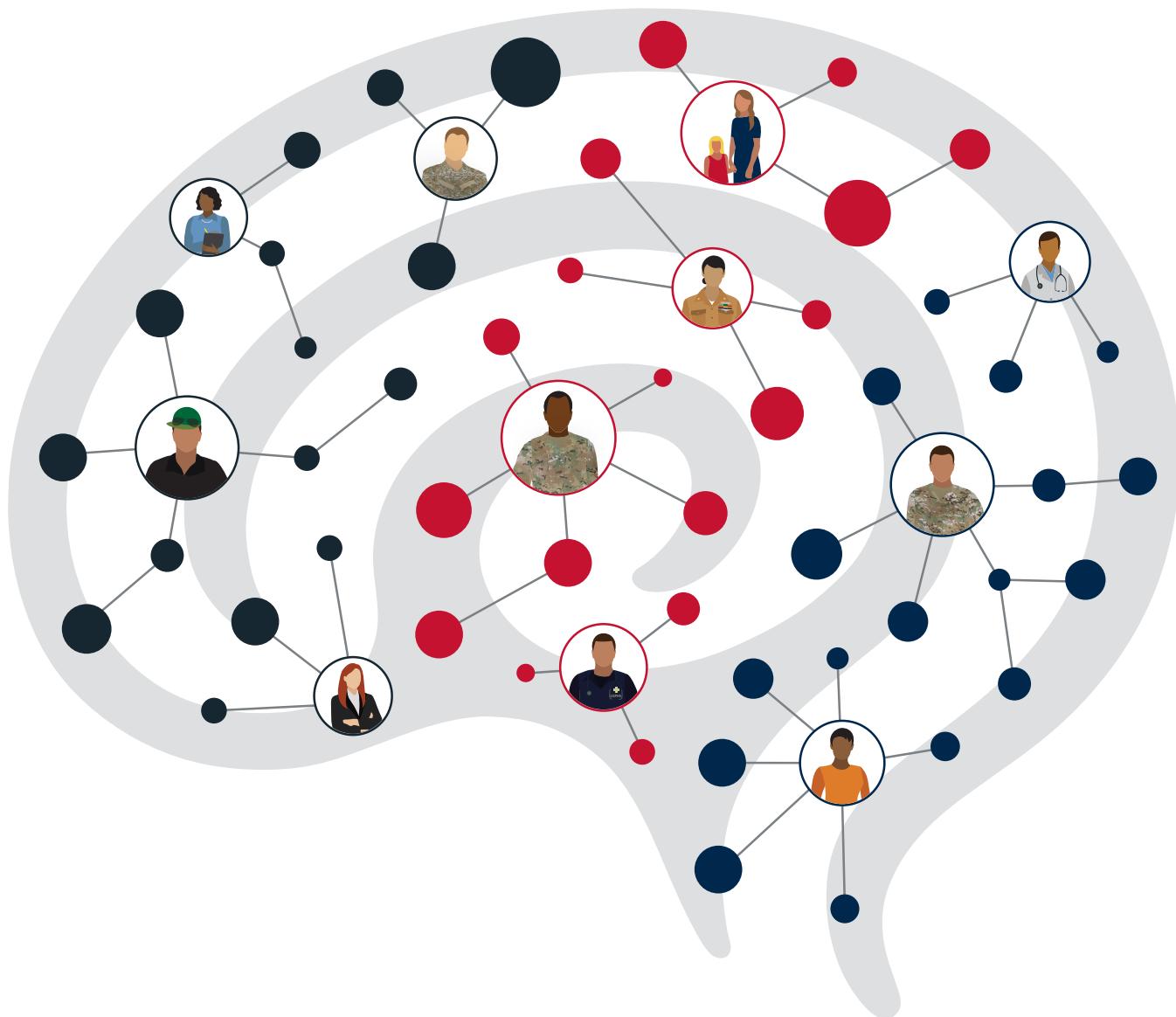


# THE NATIONAL INTREPID CENTER OF EXCELLENCE

HOPE | HEALING | DISCOVERY | LEARNING



# LETTER TO STAKEHOLDERS



Colleagues,

We are delighted to provide you with the Fiscal Year (FY) 2018 National Intrepid Center of Excellence (NICoE) Annual Report. Last year we spoke of exciting upcoming changes both here at the NICoE and across the Intrepid Spirit Center (ISC) Partnership Network, and our year did not disappoint!

In the spring of 2018, two new ISCs opened at Joint Base Lewis-McChord and Marine Corps Base Camp Pendleton augmenting the traumatic brain injury (TBI) Pathway of Care. Also, in FY 2018, the Intrepid Fallen Heroes Fund offered to build a 10th ISC at Eglin Air Force Base (AFB). These additions to the Network will enhance interdisciplinary TBI care for our patients and their families across the country.

Additionally, the NICoE is proud to collaborate with federal, academic, and private/nonprofit organizations to advance the science of TBI. Our first-annual NICoE Research Fair brought together more than 60 researchers, clinicians, and partners to review 23 presentations, and to engage, educate, and discuss opportunities and needs for the future of TBI research. The NICoE continues to develop and strengthen collaborations within the Military Health System (MHS), federal partners, and academic institutions across the country, including close partnerships with Defense and Veterans Brain Injury Center (DVBIC) and the Center for Neuroscience and Regenerative Medicine (CNRM), expanding our ability to deliver relevant data, findings, and clinical best practices to the larger TBI community.

In FY 2018, we updated our NICoE Strategic Plan to refresh goals and objectives that drive our continued

growth and success as an organization within the MHS and a developing ISC Partnership Network. In addition to goals supporting patient care, research, education, staff engagement, and the NICoE value proposition, we added an additional goal aimed at codifying the NICoE and ISC Partnership Network with other major stakeholders across the TBI Pathway of Care. One notable milestone already underway is the expansion of the TBI Portal, formerly the NICoE Continuity Management Tool (NCMT). Now the enterprise informatics and analytics application for TBI, the Portal will support future standardization and big data capabilities for TBI assessment across the MHS.

This year's success would not have been possible without the dedication of our NICoE Directorate staff; including our amazing clinicians, nurses, Navy hospital corpsmen, clinical researchers, and administrative staff. We are also grateful for the support of our stakeholders at many different levels who make the success of this critical mission possible.

This year promises to be another significant year for the NICoE and our Network partners. Continued expansion and increased collaboration in clinical care, research, and informatics across the Network will lead to enhanced understanding of best practices and TBI health outcomes. In addition, we will have new opportunities for insight into how precision medicine, neuroimaging, and genomics may impact patient-centered treatment and standards for TBI rehabilitation. For all our service members, their families, and military health beneficiaries, this continues to be our purpose, our honor, and our privilege.

A handwritten signature in black ink that reads "Walter M. Greenhalgh".

Sincerely,  
**Captain Walter M. Greenhalgh**  
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





The National Intrepid Center of Excellence (NICoE) at the Walter Reed National Military Medical Center (WRNMMC) continues its mission to improve the lives of patients and families living with traumatic brain injury (TBI) and associated conditions. Our mission supports the advancement of TBI knowledge and treatment worldwide through research, education, and data-sharing initiatives.

The NICoE plays a key role within the Military Health System (MHS) TBI Pathway of Care, providing consistency and continuity in services across TBI treatment and the research continuum. NICoE patients receive care through the four-week Intensive Outpatient Program (IOP) or TBI Outpatient Services. Patients spend dedicated time with their NICoE health care providers through an interdisciplinary approach that includes traditional and complementary medicine, and advanced diagnostic techniques. The NICoE also collaborates with federal, academic, and private/nonprofit organizations to advance TBI evaluation and treatment forward.

In this Fiscal Year (FY) 2018 Annual Report, we are pleased to share feedback from our patients, stakeholders, and providers throughout. Each of the featured quotes are aligned with a graphic representation of the speaker to highlight the importance of their work and overall impact.

## Setting New Goals

In January 2018 we updated our 2018-2020 NICoE Strategic Plan, adding a new goal to strengthen network collaboration to best serve our patients, families, staff, and stakeholders.

## Improving Efficiency

In August, the NICoE-developed TBI Portal became the approved enterprise application available for TBI care facilities to use across the MHS TBI Pathway of Care. This improves the efficiency of patient care in interdisciplinary TBI practice models.

## Opening New Doors

Ribbon-cuttings for the ISCs at both Marine Corps Base Camp Pendleton and Joint Base Lewis-McChord were held in April 2018. Additionally, the ISC Partnership Network welcomed Eglin Air Force Base as the newest to-be-built ISC in 2019.

With the update of the NICoE Strategic Plan, we added a new goal to codify the growing NICoE and ISC Partnership Network.



The updated NICoE Strategic Plan drives readiness efforts across the ISC Partnership Network. These strategic goals contribute to the understanding of best practices and continuity of care for service members and their beneficiaries.

## EDUCATION



**43** engagement and training opportunities were offered to staff.

**73% of NICoE staff** agreed or strongly agreed that they were satisfied with educational and engagement offerings.

## Training

**Weekly Didactic Series** events that showcased knowledge and best practices for TBI care and research.

**Bi-monthly clinical education lectures** to expand knowledge of TBI.

**21 experiential learners** received hands-on practice through internships, fellowships, and young professional programs.

**400+ Continuing Education (CE) credits** provided through Didactic Series and guest speakers held in FY 2018.

## Engagement

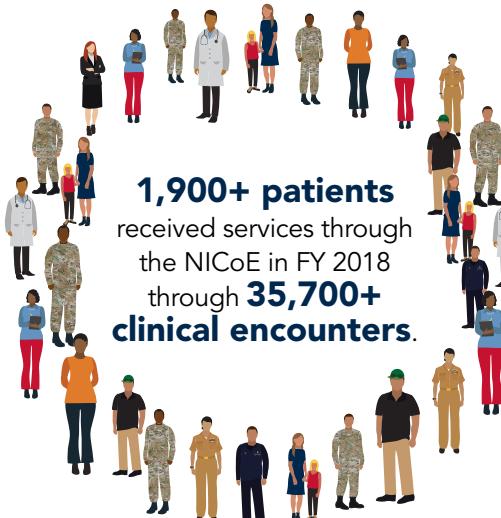
**23 presentations** for the NICoE's first-ever research fair.

**12 Leadership forums** with staff to enhance clinical care, research, and administrative functions.

# CLINICAL

NICoE staff provided inpatient consultative TBI care to **90+ WRNMMC patients** through **350+ encounters**.

Headache, sleep disorders, and general behavioral health concerns were the **most common diagnoses** among our IOP patient population.



**229 patients** attended the four-week Intensive Outpatient Program (IOP) with each receiving **117+ provider encounters**.

**245 patient family members** participated in an integrated program where they joined the patients at the NICoE to support them through their treatment and **path toward recovery**.

The NICoE and the ISC Partnership Network are **working together** to improve access to the right care, for the right patients, at the right time, in the right place.

## Continuity of Care



If continued care for TBI and associated conditions is needed following discharge from the NICoE, our providers work closely and collaborate with **patient home stations, local TBI clinics, and other ISCs** to ensure patients continue progressing toward their treatment goals.

**97%**  
**Patient satisfaction with the IOP**

“ I have never received such personalized care and attention in my 30 years of service. This program is wonderful! ”



**80%**  
**of IOP patients**

reported **clinically significant improvement** on a standardized self-report survey that addresses some of the more commonly occurring symptoms that may follow TBI.

## 15-Year Studies

In support of DVBIC's Congressionally-mandated portfolio of 15-Year Studies, the NICoE collaborated on the **Caregiver Study** to develop new measures of health-related quality of life for caregivers of military and civilian TBI patients.

As part of the 15-Year Caregiver Study, DVBIC and the NICoE published **18 manuscripts** to help advance the science of TBI care, inform clinical practice, and form the basis of a report to Congress.

Several of these peer-reviewed manuscripts were published in an ongoing series describing the development of a self-reported questionnaire that will assess aspects of **TBI caregivers' quality of life**.

## RESEARCH



At national and international meetings, NICoE researchers and clinical staff presented:

**23 Lectures**  
**36 Posters**

“ .....  
**Increased collaboration** among the network has helped standardize how we treat TBI. ”



**42**

**Peer-reviewed Manuscripts**

NICoE and NICoE-affiliated researchers published scientific products and editorials in national and international journals including:

**Journal of the American Medical Association (JAMA) Neurology**

**The Journal of Head Trauma Rehabilitation**

**Journal of Neurotrauma**

**Military Medicine**

The NICoE continues to build on collaborations through:

**Continuing** our multisite study on dietary intervention for post-traumatic headaches

**Expanding** one of our post-traumatic stress disorder (PTSD) studies to include other sites

**Launching** a new study to understand depression as it relates to TBI

# SHARING THE VALUE OF THE NICoE



**48**  
Provider  
Participants

**11**  
Countries

The NICoE shared knowledge and best practices through a provider orientation program to influence TBI care within MHS and civilian sectors.

Distinguished visitors from U.S. and worldwide military, federal government, Congress, and other academic and research partners visited the NICoE. This effort contributes to our vision of being a global leader in TBI care, research, and education.



“ Developed by the team at NICoE, the TBI Portal is amazing! It's a tool that has been deemed THE platform for TBI care within the MHS.

- External stakeholder

“ What I really like about the NICoE and Intrepid Spirit Center Partnership Network is that it shows how we will be delivering care in the future.

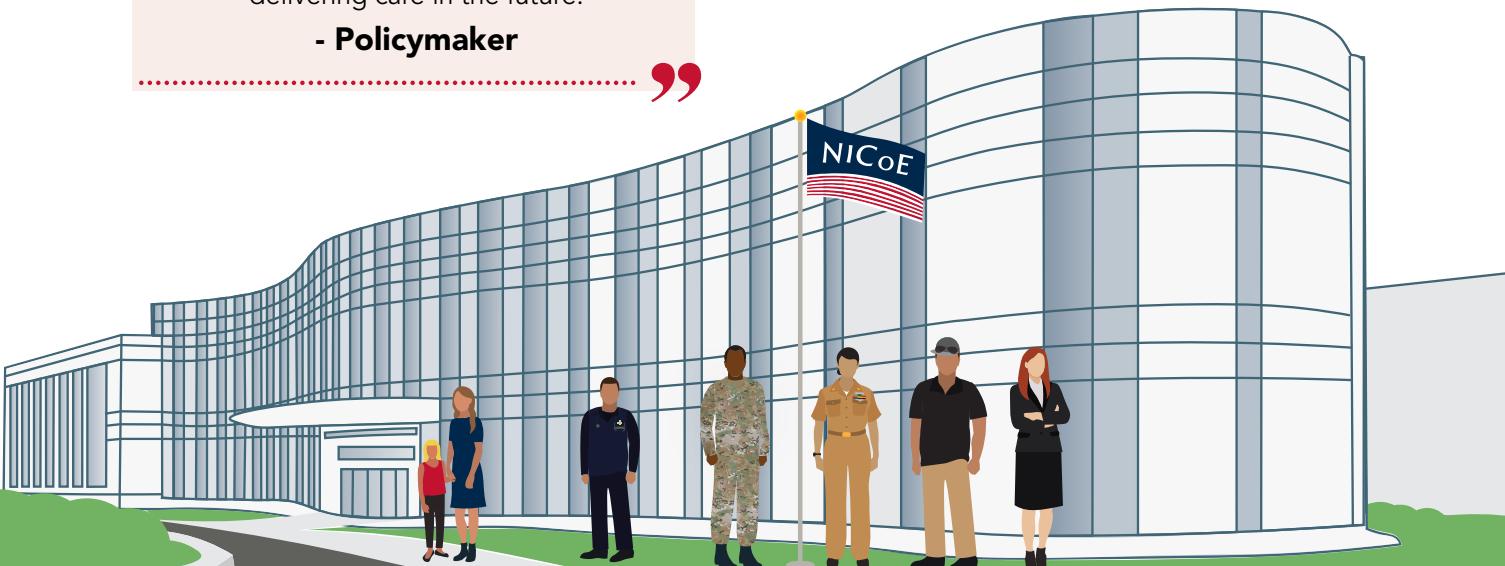
- Policymaker

“ NICoE does such an amazing job treating the service member as a whole and their family. All the providers work together on every case.

- Patient

“ NICoE's dedication to military families is admirable, thank you!

- Family member





## The National Intrepid Center of Excellence

4860 South Palmer Road | Bethesda, MD 20889

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

<https://www.wrnmmc.capmed.mil/NICoE>

Email: [dha.bethesda.ncr-medical.mbx.nicoe@mail.mil](mailto:dha.bethesda.ncr-medical.mbx.nicoe@mail.mil)

To view the NICoE's past award-winning annual reports,  
visit: <https://www.wrnmmc.capmed.mil/NICoE/about/SitePages/annual-reports.aspx>