



**National Intrepid Center of Excellence Brief**  
Defense Health Board  
1 November 2010



## Intrepid Fallen Heroes Fund



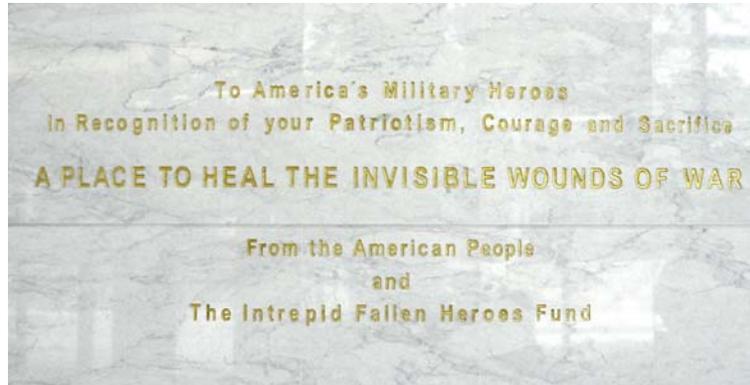
- The Intrepid Fallen Heroes Fund (IFHF) continues the mission of helping US military service members and veterans begun in 1982 by Zachary and Elizabeth Fisher, the founders of the Fisher House Foundation and the Intrepid Sea-Air-Space Museum in New York Harbor
- The successful fundraising efforts of Arnold Fisher have generated philanthropic contributions to the IFHF for advanced medical facilities for military service members
- The Center for the Intrepid (CFI) opened at Brooke Army Medical Center in 2007 for amputation prostheses and functional limb loss care





## Dedication

- The NICOE was officially dedicated and proffered to the Department of Defense in a Ribbon Cutting Ceremony on June 24, 2010
- The \$65 million, 72,000-square-foot facility marks the generous contributions of the American people and the IFHF



## National Intrepid Center of Excellence



**Location:** NNMC campus, Bethesda, MD

**Lot Size:** ~3 AC

**Building Size:** ~72,000 SF

**Number of Stories:** 2

**Number of Personnel:** ~111

**Major Diagnostic / Rehabilitation Equipment:**

- Magnetic Resonance Imaging (3-T) / Functional MRI / Diffusion Tensor Imaging
- Positron Emission Tomography with Computed Tomography (PET/CT)
- Magneto encephalography (MEG) Scanner
- Trans-Cranial Doppler Ultrasound
- Fluoroscopy
- CAREN (Computer Assisted Rehabilitation Environment) system





## NICoE Overview



**Vision:** The NICoE is an instrument of Hope, Healing, Discovery, and Learning

**Mission:** To be the leader in advancing world-class psychological health and traumatic brain injury treatment, research, and education

### Key Principles:

- A model of interdisciplinary diagnostic and treatment planning in a family focused, collaborative environment which promotes physical, psychological and spiritual healing
- A research hub to leverage the unique patient base, the most current technical and clinical resources in order to initiate innovative pilot studies designed to advance medical science in TBI and PH
- An education and training venue for the dissemination of next generation standards of care and resilience to providers as well as service members and families
- An innovative platform committed to long-term follow-up and family contact

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## Major Milestones

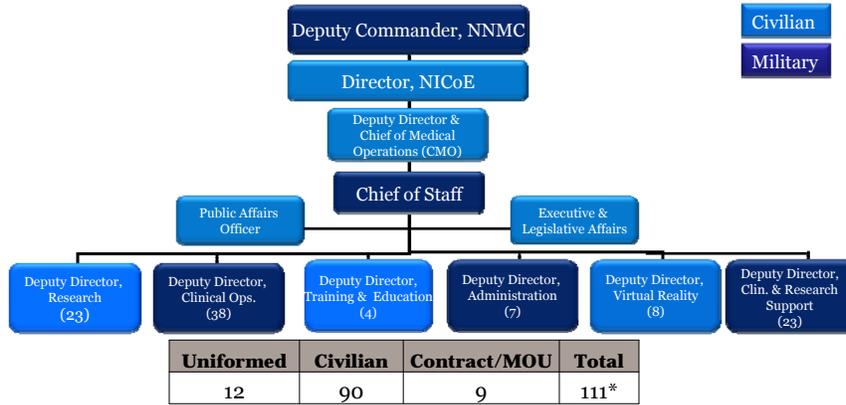


- Fall 2007 – Establishment of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE)
- 3 December 2007 – NICoE proffer to DoD by Intrepid Fallen Heroes Fund
- 27 December 2007 – NICoE Work Group established, chaired by COL(P) Sutton, DCoE
- January 2008 – December 2009 – Initial CONOPS developed and market analysis of clinical & research requirements
- February 2009 – Dr. James Kelly named Director, NICoE
- Spring 2009 – Summer 2010 – Program design and preparation for IOC
- 24 June 2010 – Ribbon Cutting/Dedication Ceremony /Beneficial Occupancy
- 10 August 2010 - Transfer of Authority from DCoE/TMA to NNMC/JTF CapMed
- 4 October 2010 - Initiation of IOC Clinical Care

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## Organization at Full Operating Capability (FOC)



- Capacity for 20 patients and families at any given time receiving individualized assessment and treatment plans
- Ongoing research protocols underway pending IRB approval
- Training & Education for service members, families, and providers

\* As of 29SEP 10 - continuing to review/validate CONOPS



## Clinical Care

- The NICOE's clinical mission is to:
  - Offer specialized interdisciplinary diagnostic evaluations of complex TBI and PH conditions
  - Provide a patient and family centered holistic clinical care environment
  - Produce a comprehensive individualized treatment plan
  - Measure outcomes of therapeutic interventions
- Clinical Small-Working Groups (SWGs), comprised of expert panels, were developed to provide recommendations on NICOE's clinical evaluation processes. The Clinical Operations Integration team is now identifying requirements and NICOE-specific:
  - Clinical Practice Guidelines / Standard Operating Procedures
  - Personnel requirements
  - Equipment requirements
  - Follow-up Metrics



## Patient Profile

- Active duty service members with TBI complicated by other impairing PH conditions, who are not responding to conventional therapy and who have been prevented from returning to full duty
- The profile of service members who will be seen at the NICoE will include:
  - Active Duty
  - Mild to moderate TBI and PH (OEF/OIF/OND related)
  - Persistence of symptoms despite "defined" standard treatment
  - No active/untreated substance abuse disorder (no potential for withdrawal)
  - Capable of participating in an Intensive Outpatient Level of Care, including:
    - Able to perform all ADLs
    - Able to independently obtain/provide for their own food, transportation and conduct their own financial affairs
    - Not a danger to self or others
    - Not in need of services requiring a level of nursing care or medical monitoring higher than what can safely be provided in an outpatient setting



## October 2010 –January 2011 Referral Process

- Continuity Services provides NNMC Warrior Care Clinic with Provider Referral Form
- Warrior Care Clinic fills out Provider Referral Form and includes additional description and records
- Clinical Care White Team reviews referrals and stratifies patients based on initial information
- White Team confers with the referring primary providers to confirm accuracy of patient condition
- Referral forms will be modified based on iterative process
- Continuity Services will take the lead on capturing input from the White Team and NNMC/WRAMC referring team in order to modify NICoE referral forms
- The modified forms will be used in the initial process in the next phase (February-June 2011)



## FOC Referral Process

- **Providers will have access to an online referral form**
- **Licensed Social Worker Continuity Managers (CM) will work with the Warrior's provider to establish the appropriateness of their referral**
  - **A NICoE interdisciplinary screening team will work with CMs and referring provider to determine the most appropriate course of action**
- **Details of the Warrior's command approval, funding, scheduling, travel arrangements and billeting at the dedicated NICoE Fisher House will be managed by Concierge Support Services**
  - **As the individualized treatment planning begins, Continuity Services Managers will determine the long-term capability of the Warrior's medical support structure to maintain and sustain the most appropriate treatment strategies supportable near the service member's home as it is developed**
- **Continuity Services personnel will establish and maintain a long-term follow-up method with the Warrior and the home provider support system**

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## Evaluations

- **NICoE Clinical Evaluations include:**
  - Physical / Neurological Examination
  - Psychiatric / Psychological Health Evaluation
  - Physical Rehabilitation Evaluation
  - Vestibular / Audiology / Speech Assessment
  - Neuro-Ophthalmology Testing
  - Electrophysiology (including Sleep Evaluation)
  - Family Evaluations
  - Vocational Testing/Screening
  - Neuroimaging Evaluation
  - Complementary and Alternative Medicine (CAM)
  - Assistive Technology Lab
  - Virtual Reality Diagnostic Assessment
  - Nutritional Evaluation
  - Clinical Pharmacy Evaluation
  - Spirituality Consultation
  - Substance Use Assessment

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## Research

- NICOE's research goals are focused on:
  - Serving as a collaborative research hub by leveraging advanced technical and clinical resources and providing an environment for sharing information across military, federal, academic and industry partners.
  - Designing and implementing next generation pilot studies which advance novel diagnostic and treatment strategies of TBI and PH conditions
  - Serving as a knowledge source that applies evidence-based medicine and approaches which elevate the highest level of care on a global scale
  - Establishing a robust research database and specimen repository for advanced bio-informatic analysis by military and civilian academic and industry research partners.
- Planned collaborations with the Department of Veterans Affairs, Defense Centers of Excellence, Uniformed Services University of the Health Sciences, National Institutes of Health, Walter Reed Army Medical Center, and civilian academic centers.

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## Training and Education

- NICOE's Training and Education (T&E) mission is to serve as:
  - An education catalyst for stimulating research and discovery
  - An agent for advancing clinical practices
  - A platform for disseminating the next generation of standards of care for patients with complex PH and TBI to providers, service members and their families
- T&E at the NICOE is based on four key components:
  - Warrior and Family Education Resources
  - Interprofessional Staff Development
  - Continuing Health Professions Education
  - Student, Resident and Fellow Education

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## Outreach / Network



- A NICoE Network will be a virtual or physical connection to Military Treatment Facilities and major military clinics engaged in the care of wounded Warriors with PH / TBI issues enabling sharing of health data, clinical diagnostic and treatment protocols, outcome assessment measures and best practices
- Projected capabilities of NICoE networks include:
  - Extension of treatment capabilities and clinical practice guidelines
  - Liaison personnel and workspace
    - Free standing
    - Incorporated in another facility
  - Key to operationalizing and maintaining a “string” to post-NICoE patients
- A web of networks will elevate and expand the quality of care for PH / TBI and establish standards for future clinical, research and educational projects through the rapid and timely exchange of information