



OFFICE OF THE UNDER SECRETARY OF DEFENSE  
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WASHINGTON, D.C. 20301-4000

PERSONNEL AND  
READINESS

The Honorable Roger F. Wicker  
Chairman  
Committee on Armed Services  
United States Senate  
Washington, DC 20510

AUG 19 2025

Dear Mr. Chairman:

The Department's response to Senate Report 118-188, pages 177-178, accompanying S. 4638, the National Defense Authorization Act for Fiscal Year 2025, "Report on Measuring, Tracking, and Treating Traumatic Brain Injury Among Servicemembers," is enclosed. Senate Report 118-188, pages 177-178, requests that the Secretary of Defense provide a report on the current practices and future plans for traumatic brain injury (TBI) baseline across all Service members; an overview of current programs and policies to treat Service members diagnosed with TBI; recommendations for increasing the availability of treatment for Service members diagnosed with TBI; and any additional budget requirements.

Promoting brain health enables our effectiveness as a fighting force operationally and mitigating the impact of TBI is a top priority for the Department of Defense (DoD) with continued focus on the near- and long-term health of our Service members. In support of this priority, the DoD established a joint effort between operational and medical forces called the Warfighter Brain Health Initiative. The initiative spans gap-driven research, clinical care, operational practices, and policy to holistically advance warfighter brain health and cognitive performance. Within the initiative, DoD's approach to TBI assessment and care leverages standardized assessment tools and protocols; specialty clinical sites networked for information sharing; and standardized policy to optimize documentation, screening, and care.

Thank you for your continued strong support for the health and well-being of our Service members. I am sending a similar letter to the Committee on Armed Services of the House of Representatives.

Sincerely,



Merlynn Carson, MD  
Performing the Duties of the Deputy Under  
Secretary of Defense for Personnel and  
Readiness

Enclosure:  
As stated

cc:  
The Honorable Jack Reed  
Ranking Member





OFFICE OF THE UNDER SECRETARY OF DEFENSE  
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PERSONNEL AND  
READINESS

The Honorable Mike D. Rogers  
Chairman  
Committee on Armed Services  
U.S. House of Representatives  
Washington, DC 20515

AUG 19 2025

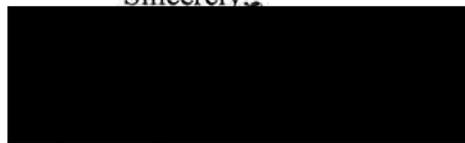
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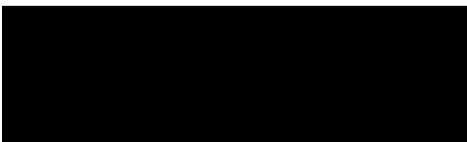
Sincerely,



Merlynn Carson, MD  
Performing the Duties of the Deputy Under  
Secretary of Defense for Personnel and  
Readiness

Enclosure:  
As stated

cc:  
The Honorable Adam Smith  
Ranking Member



# **Report to the Committees on Armed Services of the Senate and the House of Representatives**



## **Report on Measuring, Tracking, and Treating Traumatic Brain Injury Among Servicemembers**

**August 2025**

The estimated cost of this report or study for the Department of Defense is approximately \$3,400 in Fiscal Years 2024 - 2025. This includes \$1,900 in expenses and \$1,500 in Department of Defense labor.

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## **PURPOSE**

This report is in response to Senate Report 118–188, pages 177-178, accompanying S. 4638, the National Defense Authorization Act for Fiscal Year (FY) 2025, “Report on Measuring, Tracking, and Treating Traumatic Brain Injury among Servicemembers.”<sup>(1)</sup> The Secretary of Defense is to provide a report on the following:

(1) DOD’s current practices and future plans to integrate TBI baseline, triage, and measurement across all servicemembers from the time of entry into service until completion of service and transition to veteran status;

(2) Programs and policies currently in place to treat servicemembers who are diagnosed with TBI;

(3) Recommendations for increasing the availability of treatment for servicemembers diagnosed with TBI; and

(4) Any additional budget requirements associated with implementing a TBI baseline, triage, and measurement program for all servicemembers and increasing the availability of treatment for servicemembers diagnosed with TBI.

## **BACKGROUND**

Traumatic brain injury (TBI) can take many forms, impacting the near- and long-term health of Service members and hindering warfighters’ ability to make expedient and effective decisions on the battlefield, thus reducing the operational readiness of the fighting force. Since 2000, over 500,000 Service members have been diagnosed with a TBI, with the majority being mild TBI. Currently, there is an average of over 14,500 TBI-related medical encounters per month throughout the Military Health System (MHS). Mitigating the impact of such injuries is a top priority for the Department of Defense (DoD).

### **History**

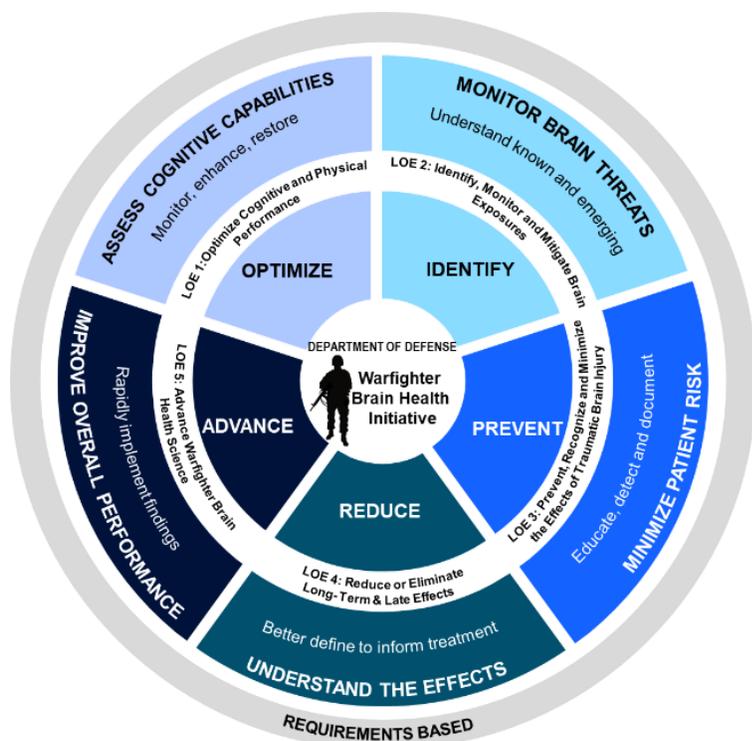
During Operation IRAQI FREEDOM/Operation ENDURING FREEDOM, the annual number of TBIs grew from just above 10,000 per year in 2000 to a peak of almost 33,000 per year by 2011. DoD responded to this increasing rate of TBI in combat through rapid expansion of TBI clinical care and research to support military forces around the globe. As insights grew from research investments and the experiences of military providers caring for Service members with TBI in combat and the home front, the military developed novel treatment paradigms and policy to maximize utilization across the force.

By 2018, military leaders began to explore the hypothesis that blast overpressure (BOP) exposures could result in brain health changes similar to those seen with diagnosed concussions. Also in 2018, the Deputy Secretary of Defense directed the development of a comprehensive strategy and action plan to promote brain health and counter TBI effects. Through this process, policymakers have been strongly engaged with DoD and members of the military and veteran community to advance solutions on issues of TBI, blast overpressure, and mental health.

## Current Framework

Today, TBI within the military is understood as part of a broad spectrum of issues within the umbrella of warfighter brain health — the physical, psychological, and cognitive status that affect a warfighter’s capacity to function adaptively in any environment and impacts readiness, operational capability, and mission effectiveness. In 2022, DoD established a joint effort between operational and medical forces called the Warfighter Brain Health Initiative (WBHI). The WBHI codifies policy and direction in support of unified efforts across the military in TBI and other areas of brain health, including cognitive and physical performance, identification of known and emerging brain threats in military environments (e.g., BOP, repetitive head impacts and Anomalous Health Incidents), and methods to immediately detect and treat brain injury.

DoD’s policy approach is iterative, directing clinical changes and gap-driven research investments informed by ongoing evaluation. The Department routinely assesses the efficacy of its brain health policies, identifying promising approaches to refine for effective scaling and reviewing gaps to prioritize areas to explore and advance alternative solutions. In addition, DoD regularly evaluates the results from DoD-funded and other research across TBI, post-traumatic stress disorder, suicide, and a range of other interrelated clinical diagnoses, with the goal of incorporating the state-of-the-science in Department policy and practices.



**Figure: Overview of WBHI Strategy and Action Plan (2022)<sup>(2)</sup>**

The Plan is a framework for deliberate, prioritized, and rapid development of comprehensive solutions for WBH, addressing brain health and exposures, including blast overpressure exposures from weapons/munitions, TBI, and long-term or late effects of repetitive exposures and/or TBI. It consists of five Lines of Effort encompassing 18 objectives and 53 associated activities.

## Limitations

While DoD has made significant progress in research, policy, and implementation, several opportunities for growth have been identified. As referenced in Senate Report 118–188, pages 177-178, the DoD Inspector General (IG) published a report on March 28, 2023, evaluating DoD’s management of TBI.<sup>(3)</sup> The DoD IG reported gaps in identification and assessment of

TBI patients among medical providers, along with inconsistent processes for TBI care management and disposition. The DoD IG's recommendations included updates to clinical guidelines and stronger oversight of TBI care management; this report highlights several areas where these have informed WBHI priorities and actions.

## **MONITORING ACROSS THE FULL LIFECYCLE**

*(1) DOD's current practices and future plans to integrate TBI baseline, triage, and measurement across all servicemembers from the time of entry into service until completion of service and transition to veteran status.* DoD is prioritizing end-to-end solutions for monitoring of cognitive health and exposures to enable early and accurate diagnosis and treatment, with the ultimate goal of reducing or eliminating long-term and/or late effects of TBI and other brain health issues. This section overviews four major DoD initiatives for warfighter brain health monitoring:

- Enabling early detection of cognitive changes through baseline cognitive assessments;
- Improving understanding of environmental and occupational hazards that may cause harmful brain exposures and identifying populations at high risk for exposure;
- Innovating in screening and diagnostics tools to enable more effective clinical evaluation and triage of TBI and other brain health issues; and
- Enhancing tracking of TBI through improvements in clinical coding practices.

### **Cognitive Monitoring**

Optimizing cognitive and physical performance is a fundamental aspect of the DoD WBHI. It entails the ability to monitor a Service member's cognitive health and determine if there is a need to either enhance or restore, especially if there has been a decrement through a hazardous brain exposure. The Department has been conducting cognitive assessments or TBI baselines since 2008 per DoD policy.<sup>(4)</sup> Historically, the goal of this policy was to obtain a baseline neurocognitive assessment for those who are within 12 months of deployment so that if the deployer was exposed to a potentially concussive event, they could be assessed for cognitive changes associated as part of a clinical evaluation.

As part of the new WBHI framework, the Department decided to expand the cognitive monitoring program to transition from a deployment-centric, TBI response-driven model to an injury prevention and mitigation model. As of the end of 2024, all Services have implemented cognitive assessments for accessions during the entry process, across all 15 initial military training (IMT) sites. As part of this effort, DoD has administered over 50,500 IMT cognitive assessments since June 2024. All 15 sites will continue to baseline test newly accessioned Service members as an enduring requirement.

At minimum, cognitive testing will be repeated every 5 years to enable longitudinal comparison and detect potential decrements. On August 8, 2024, the then-Deputy Secretary of Defense accelerated the timeline for obtaining baseline neurocognitive assessments for currently serving high-risk active duty Service members to the end of FY 2025, reducing the planned time to implementation by one-third.<sup>(5)</sup> The cognitive testing program covers all remaining personnel in

a phased approach, beginning with the Active Component and then the Reserve Component. The expansion of the cognitive monitoring program will improve DoD's ability to manage and excel the total health of the warfighter and impact overall readiness. DoD remains committed to iteratively assessing the effectiveness of the program and exploring opportunities to modernize testing tools and protocols.

## **Exposure Monitoring and Mitigation**

Another key focus of the WBHI is to achieve better understanding of known and emerging hazardous exposures and their effects on the brain, with a particular focus on BOP exposures that could result in mild TBI or other brain health issues. Deputy Secretary of Defense Memorandum, "Department of Defense Requirements for Managing Brain Health Risks from Blast Overpressure," August 8, 2024, codifies multiple ongoing Department-wide efforts to minimize, track, and protect Service members from BOP exposures.<sup>(6)</sup>

In particular, the policy is supporting more effective identification and triage of potentially harmful exposures through directing a series of interrelated actions:

- DoD has identified weapons systems that exceed the interim blast threshold of 4 pounds per square inch and is prioritizing changes to weapons acquisition and safety measures. For instance, innovative training approaches in the Navy and Marine Corps now include utilizing weapons or associated software with built-in monitoring of blast thresholds to trigger automatic notifications when exposure limits are reached.
- DoD also identified high-risk military occupational specialties to prioritize for enhanced screening and safety across all Services, including accelerated cognitive baseline assessments.
- DoD has developed a model (completed in December 2024) to assess the costs and value of a range of blast monitoring options, considering multiple operating environments, high- and low-risk occupational specialties, and multiple alternative mechanisms for monitoring. The model underpins an ongoing business case analysis to inform DoD decisions on blast monitoring opportunities.
- DoD created a module in the Defense Occupational and Environmental Health Readiness System – Industrial Hygiene (DOEHRS-IH), the Department's authoritative information system for occupational health, to capture blast exposures. DOEHRS-IH data can be ingested into the Individual Longitudinal Exposure Record (ILER), so the creation of this module is a key step to be able to link blast exposure data to individual Service members' medical records. DoD has also developed a plan for how to use the module to manage blast exposure sensor data and ingest insights for policymaking.

The Department also has in depth studies underway to determine health impacts of exposures and inform future long-term guidance and mitigations. Since TBIs are less visible and not a fully understood consequence of war and stateside training, the WBHI prioritizes efforts aimed at prevention and education strategies to minimize risk for brain exposures and injuries.

## **Screening, Diagnosis, and Assessment**

DoD's health assessment and deployment cycle programs (known as the periodic health assessment, post deployment health assessment, post deployment health reassessment) provide multiple opportunities for clinical providers to ask Service members about blast exposures, traumatic brain injury and ongoing symptoms and effects as a part of the continuum of care. These medical interactions focus on the early identification and treatment of physical and behavioral health issues as well as opportunities for education and awareness related to signs and symptoms following blast exposures and injuries. For instance, the Periodic Health Assessment is conducted annually for all Service members, and those individuals reporting a history of TBI (or circumstances suggestive of the possibility) are further assessed for treatment needs.

Education and training efforts are underway to maximize the likelihood that Service members will self-report issues during these assessments. They also provide an opportunity for MHS providers to inquire about the effects of firing weapons and offer follow-up care based on the latest clinical practice guidelines. In addition to routine assessments, in the deployed setting, all Service members who are within 50 meters of a blast event are required to undergo a mandatory medical screening and evaluation.

The current standard for clinical evaluation of TBI is the Military Acute Concussion Evaluation 2 (MACE 2).<sup>(6)</sup> The 2018 MACE 2 is an acute assessment tool for all medically trained personnel who treat Service members involved in a potentially concussive event. The clinical tool incorporates current state-of-the-science TBI assessment, including balance, eye movements and cognitive screening. This clinical advance was driven by DoD, first through research to clarify what was needed, and then through early adoption. DoD is currently preparing a shortened version of the MACE 2 based on feedback from medical staff utilization in combat that will enable more rapid screening, consistent with recommendations of the aforementioned DoD IG report. DoD is working to increase use of the tool and evaluating information from clinical and operational staff. The current tool — when used in full — is longer than ideal for certain circumstances. The Department is looking at options to evolve the tools to maximize their value while making them easier to use in a range of settings.

DoD also continues to invest in innovative tools to improve diagnosis, assessment, and triage. The Department is continuing development of a rapid test to diagnose TBIs in deployed settings and expects to field a portable, blood-based testing device for TBI biomarkers in Role of Care 2 and 3 later this year, as approved by the Food and Drug Administration in March 2024. DoD also continues to evaluate technology candidates for far-forward TBI assessment capabilities.

## **TBI Tracking**

Electronic health records (EHRs) are the primary means by which MHS providers and DoD health surveillance entities track personal history of TBI and TBI screening results, along with exposure history and health outcomes. Providers use codes from the International Classification of Diseases (ICD) to document TBI-related medical encounters.<sup>1</sup> The DoD IG found that

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<sup>1</sup> A TBI case is defined based on the DoD Standard Surveillance Case Definition for TBI used by the Armed Forces Health Surveillance Board for routine surveillance and reporting. The first inpatient or outpatient TBI medical encounter is identified using billing codes from insurance claims defined in the appropriate version of the ICD. The ICD, 10th edition, Clinical Modification (ICD-10-CM) took effect October 1, 2015, replacing the ICD-9-CM coding guidelines. Military treatment facilities code medical encounters using ICD-10-CM and other DoD specific codes.

providers' coding practices were inconsistent and recommended revising TBI coding methodology. DoD therefore partnered with the Department of Veterans Affairs (VA) to develop a specific blast medical diagnosis code in the ICD, Tenth Revision (ICD-10) for primary blast injury to the brain. The Department has developed guidance to ensure clear instructions for use of medical record TBI codes to help provide additional insights to inform clinical or operational decisions, as well as enable better medical surveillance for blast and brain injury. Ongoing training and education initiatives continue to assist in TBI tracking efforts.

Coding advancements are part of a broader effort to modernize EHRs. Currently, utilization and outcomes of standardized TBI screening tools and protocols are commonly documented in EHRs with an application known as PowerForms; when unavailable, providers rely on manual entry into patient encounter notes. EHR modernization is expected to include enterprise solution platforms for automated reporting of such measures, as well as tools and processes to better enable providers to access, update, and capture disposition of care through to return to duty status, as recommended by the DoD IG.

Accurate coding and EHR modernization are critical to capture and track TBI care. The Department analyzes TBI-related medical encounters on a quarterly basis to provide insight into the patient population and care utilization, and identify areas of high volume of TBI care so that educational efforts can be targeted. Per the previous section, as exposure data is captured and connected into the ILER, analysis of EHRs may also yield greater insights on the relationships between blast and other hazardous exposures and brain health outcomes. In parallel, the Department is beginning to explore opportunities to leverage artificial intelligence/machine learning and modernized environmental monitoring platforms that would reduce dependency on the EHR.

Underlying all these activities are ongoing efforts to encourage Service members to seek care following exposures or when experiencing TBI-related symptoms, including appropriate follow-up care when diagnosed with a TBI. The next section overviews the TBI care pathway, including the Department's efforts to promote access to and utilization of treatment options.

## **CARE AND TREATMENT**

*(2) Programs and policies currently in place to treat servicemembers who are diagnosed with TBI; (3) Recommendations for increasing the availability of treatment for servicemembers diagnosed with TBI.* DoD's framework for TBI and brain health care is designed to address both acute and chronic injuries, offering multiple pathways of care for these different patient types that come with distinct throughput and needs across deployed and non-deployed settings. DoD delivers care primarily through MHS clinics, hospitals, and centers, while also leveraging local purchased care networks and tapping complementary partner resources to fill specialty care needs and supplement MHS capacity. The Defense Health Agency (DHA) is the DoD component responsible for providing TBI care and treatment.

DoD's approach is evidence-based — DHA conducts clinical research at military medical treatment facilities across the globe to yield new knowledge related to the most efficacious diagnosis, treatment, and management of Service members with TBI and translates that research into clinical tools for providers. In addition to care provision and research, DHA organizes training and education for providers, patients, and family members.

## **Acute Care**

DoD's acute concussion and TBI care pathway is designed for battlefield response and goes beyond the civilian standard of care to meet DoD standards of warfighter operational readiness. It consists of the trauma care system (the Joint Trauma System) and provides a degree of standardization across the MHS while still being tailored to each Service member.

DHA's Acute Concussion Care Pathway, targeted for guidance across the worldwide MHS, was established with the goal of improving recovery times and outcomes by utilizing a multi-modal assessment tool at the time of injury — the MACE 2 tool discussed in the previous section — to ensure brain health deficits were identified even if only detectable in a subset of clinical domains. This tool also help ensure timely access to repeat evaluations with personalized treatment protocols that are demonstrated to accelerate injury recovery through individualized progressive return to activity processes. As noted above, the Department is working to understand the time requirements needed for the MACE 2 and propose ways to modify it to optimize adoption in pre-hospital and traditional healthcare delivery environments.

This pathway resulted in the clinical screening of approximately 20,000 first time TBI diagnosed Service members across the Military Services in FY 2023. As reported by the DoD IG, gaps remain in ensuring that all Service members receive follow up consistent with DoD's self-mandated 72 hour follow-up requirement. This military-unique clinical requirement is a key priority for DoD and the WBHI, and the Department seeking novel ways to enable consistent implementation of this level of care.

## **Post-Acute Care and Disposition**

The acute care pathway is aligned to clinical recommendations for Progressive Return to Activity (PRA). The PRA is an evidence-based return to activity protocol for primary care managers and concussion/TBI clinic providers.<sup>(7)</sup> It consists of a six-step approach that begins after the provider performs the MACE 2 and diagnoses the patient with a concussion/mild TBI. The PRA also contains primary care management strategies to treat common TBI-related symptoms and provides a staged approach to return Service members to full duty or activity. The stages start with relative rest and allow Service members to gradually increase activities until they receive clearance for return to full duty or activity. In each stage, the PRA offers general and military specific activities and options to help providers manage their patients' primary symptom clusters. The PRA specifically allows clinicians to follow recovery of symptoms identified in the MACE 2 and offer treatment tailored to a Service member's specific deficits (e.g., symptoms). It also offers recommendations on specialty referrals.

Post-acute care is conducted in accordance with the VA/DoD Clinical Practice Guideline for the Management of Post-Acute Mild TBI. This guideline has 19 evidence-based recommendations and provides an evidence-based framework for the management and rehabilitation of patients with symptoms attributed to mild TBI. The guideline is intended to improve patient outcomes and local management of patients with mild TBI. DoD is additionally leveraging its expertise in post-acute care for Service members to help enable improvements in post-acute TBI care for

civilians, through a collaboration with the National Academies of Science, Engineering, and Medicine to evaluate new clinical recommendations.

If recovery from acute injury does not progress as expected, the MHS has a wide range of clinical services to assist with more in-depth care for Service members, including specialty care services available through the chronic injury care pathway.

## **Chronic Care**

Chronic TBIs are often especially complex to treat — they may be refractory to treatments and recovery is often further complicated by other co-morbid conditions. To address these types of injuries, DoD has developed a holistic, patient-centered, interdisciplinary model of TBI care, delivered via the Defense Intrepid Network (DIN) for TBI and Brain Health.

The DIN comprises a network of 13 facilities total, including TBI specialty clinics and comprehensive interdisciplinary centers of excellence such as the National Intrepid Center of Excellence (NICoE). The DIN also collaborates with civilian healthcare facilities to enhance care for Service members with TBIs and psychological health conditions. DIN facilities have two outpatient program types, the traditional outpatient TBI clinic model and the interdisciplinary intensive outpatient program (IOP).

This network offers behavioral health services—such as psychiatry, psychology, and social work — alongside brain and physical health. Additional services may include neurology, sleep medicine, pain management, and rehabilitation services such as balance and vision therapy. DIN centers of excellence also offer innovative treatments such as creative arts therapies, animal-assisted therapies, and mind-body wellness services. This “high touch” approach is integrated with a “high tech” paradigm, wherein the DIN leverages neuroimaging, neuro-optometry, audiology, vestibular testing, and augmented reality/virtual reality assessment and treatment.

The DIN represents the state of the art in and best practices for clinical care, translational research, and education and training for DoD. Its IOP model is noted to be the most successful treatment for cases that have not responded to traditional care, with a patient satisfaction rate of 97.5 percent. Across the network, there have been over 94,000 patients treated since 2010 and over 1.3 million clinical encounters. In 2023, there were over 17,000 patients with over 180,000 medical encounters within this network.

## **System Capacity and Care Availability**

The majority of acute injuries are mild TBIs where short-term treatment is provided largely within the primary care setting, either within the MHS or through purchased care. DoD continually works to disseminate best practices, research findings, and resources to ensure that primary care providers have the appropriate tools and training needed to assess and treat patients with mild TBI or brain health-related symptoms. In support of this goal, DoD has recently established the WBH Hub, at [health.mil/brain](https://health.mil/brain), as the single source of information on brain health topics and launched a new smartphone app to promote access to its Provider Toolkit.

For cases requiring specialty care, DHA’s access to care standard is 28 calendar days from date of referral. Service members referred to the traditional outpatient clinic model consistently meet the access to care standard, but the timeframe for accessing intensive interdisciplinary care is often longer than this, as discussed below. DoD is working to increase the availability of care and close this gap, including through partnerships beyond the MHS.

Intensive Outpatient Care Availability

As the IOP care pathway is uniquely intensive — the NICoE IOP includes the scheduling of 105-130 separate encounters (varies with individual need) across 4 weeks with the assessment and treatment across 18 disciplines — DIN capacity is oversubscribed. Nine of the thirteen DIN sites have an IOP, and the cumulative waitlist for these locations is approximately 640 Service members. Each site proactively schedules patients into the program as openings become available, with Service members typically booked within 3 to 6 months leading to patient waitlists of over 200 days in some cases.

Managing IOP capacity requires a nuanced understanding of the patient population. In pursuit of career goals, there are periods in the training and deployment rotation of Service members where they are more willing to commit to the 4-week IOP program. These patients typically have greater than 15 years’ time in service — with some variation by the military occupation and/or community, severity of TBI and Service affiliation — and many are still functioning at a high capacity, though not at their full potential.

**Table: Patient population observations reported by Intrepid Spirit Center (ISC) sites**

Site	Observations
ISC Fort Bragg (Army Special Operations)	About 75 percent of Service members are within 2 years of retirement with the other 25 percent at mid-career (10-12 year).
ISC Camp Lejeune (Marine Special Operations)	The majority of IOP patients are at ~15-18 years of service; the outpatient program varies from first acute concussions event to pending retirement (e.g., 18+ years).
ISC Eglin (Airforce Special Operations)	For both IOP and outpatient, the average is 16 years’ time in service with an average patient age of 37 years old.
ISC Camp Pendleton (1st Marine Expeditionary Force)	A majority of Service members have 10 or more years of service.
ISC Fort Hood	There has been a diverse representation of mid and late career enlisted and officer participation at both levels of care (outpatient and IOP) over the last decade. In the last 2 years, there has been a spike in early career or junior soldiers who have not deployed but sustained concussions in while in garrison.

It is common for Service members with TBI symptoms and associated conditions to not to seek care until they are nearing the end of their careers due to fears of stigma, non-deployability, or duty limiting profiles. Therefore, Service members may choose to extend time from referral to engagement in the IOP and comprehensive medical and psychological evaluations (including diagnoses and treatment for TBI symptoms) continue to be highly sought after near the end of

military careers. Education and awareness continue to be a core focus of the DoD WBHI to encourage Service members and leaders to prioritize seeking care.

### Increasing Care Availability Through Partnerships

To ensure timely access to high-quality care for all Service members who need it, DoD has engaged in a series of public-private partnerships to supplement MHS capacity with civilian or other programs. DoD is engaged in the Comprehensive Brain Health and Trauma Program (ComBHaT), an ongoing pilot program to validate a short, intensive and comprehensive assessment of the health of Special Operations Forces (SOF) Service members. The program was based on a model developed for retired National Football League players and the pilot is set to complete at the end of FY 2025.

The ComBHaT program provides neuropsychological evaluation, comprehensive physical evaluation, musculoskeletal evaluation, physical therapy, psychological evaluation, psychopharmacology evaluation, speech language evaluation, neuroendocrine evaluation, orthopedic evaluation, diagnostic imaging, sleep study, nurse and clinical case management over a longitudinal time period. The ComBHaT pilot also offers an outpatient treatment program designed to treat SOF Service members with TBI and other co-morbid conditions. Both programs have over 18 specialty services and offer evidence-based therapy with complementary and alternative medicine approaches.

While ComBHaT supplements the capacity of the MHS and extends the availability of complex care to additional Service members, the program is also oversubscribed and has a patient waitlist. DoD continues to explore additional opportunities to increase availability of care. Specifically, the Department is seeking ways to carve out programs of record for specialty combat related topics like TBI within a healthcare delivery system that is largely based on traditional fee for service models. This work of looking at combat support or healthcare related readiness programs may require a business model that is funded differently from the legislatively mandated healthcare.

### **Policy and Oversight**

These care pathways are currently codified in a series of DoD policies, including:

- DHA Procedural Instruction 6490.04, “Required Clinical Tools and Procedures for Assessment and Clinical Management of Mild Traumatic Brain Injury/ Concussion in Non-Deployed Setting” April 26, 2021;
- Department of Defense Instruction (DoDI) 6490.11, “DoD Policy Guidance for Management of Mild Traumatic Brain Injury/Concussion in the Deployed Setting” September 18, 2012, as amended; and
- DoDI 6490.13, “Comprehensive Policy on Traumatic Brain Injury-Related Neurocognitive Assessments by the Military Services” September 11, 2015, as amended.

As emphasized by the DoD IG, while these policies are sound and appropriate based on research and clinical experiences, the requirements documented within them may be inconsistently

implemented on the ground. Proper oversight is critical to assure that DoD's standards for quality and timeliness of care are met throughout the continuum of care.

DoD also continues to leverage external expertise to pursue continuous improvement in its care framework. In particular, DoD is accelerating meaningful, technically sound, and implementable insights through early engagement with the National Academies of Science, Engineering, and Medicine (NASEM). Based on a recommendation from NASEM's TBI roadmap,<sup>(8)</sup> DoD is collaborating with the Departments of Health and Human Services, Veterans Affairs, and Transportation to develop a National Framework and Plan for Improvements in TBI Care, encompassing: (1) Care System Transformation; (2) Policy and Payment; (3) Education, Training, and Outreach; and (4) Research and Translation.

### **Budget Requirements**

*(4) Additional budget requirements associated with implementing a TBI baseline, triage, and measurement program for all servicemembers and increasing the availability of treatment for servicemembers diagnosed with TBI.* The DoD WBHI consists of an integrated, iterative series of efforts spanning clinical care, gap-driven research, training and operational activities, and MHS policy and oversight. It therefore requires investments across both Research, Development, Test, and Evaluation (RDT&E) and Operations and Maintenance (O&M) funding. There are multiple funding streams for research pertaining to TBI and other aspects of warfighter brain health, including approximately \$175 million annually from the Congressionally Directed Medical Research Program for TBI and Psychological Health, supplemented by additional investments from the core Defense Health Program (DHP) RDT&E budget and other sources. The FY 2025 President's Budget submission for DHP requests \$12.8 million in O&M funding to support DoD's program of record for cognitive monitoring to establish TBI baselines, as overviewed in the next section. The funding for WBH clinical care is embedded with Budget Activity Group (BAG) 1 – In House Care and WBH supplemental coordination of clinical and research care in BAG 3 – Consolidated Health Support in the FY 2025 President's Budget DHP Justification Book.

### **CONCLUSION**

Monitoring and caring for brain health is scientifically, clinically, and operationally complex. DoD is advancing an end-to-end approach to brain health grounded in the state of the science and continuous, iterative improvement. Moving forward, DoD seeks to create accurate and reliable data sets to document identified injuries, evaluate contributing causes, and assess responses to treatment. These data underpin an evidence-based approach to care, policy, and oversight.

## REFERENCES

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