Prepared Statement

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REGARDING

THE CURRENT STATE AND FUTURE AIMS OF PSYCHOLOGICAL HEALTH AND TRAUMATIC BRAIN INJURY TREATMENT, THERAPIES, AND RESEARCH IN THE MILITARY HEALTH SYSTEM

BEFORE THE

SENATE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON PERSONNEL

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Chairman Graham, Ranking Member Gillibrand and members of the Committee, we are pleased to discuss the Department of Defense's (DoD) efforts to promote psychological health (PH) and prevent, diagnose, and treat traumatic brain injury (TBI) and behavioral health conditions. We are honored to be joined by Dr. Amy Street, the Deputy Director of the Department of Veteran Affairs' (VA) National Center for Post-Traumatic Stress Disorder's (PTSD) Women's Health Sciences Division.

We want to thank the Committee for its sustained leadership and support for the work we perform in the Military Health System (MHS) to care for our Nation's Service members, veterans, and their families - especially those dealing with the complex issues of PH and TBI. Your investments in medical research have led to important advancements in care and a greater understanding of where future research should be targeted.

Advances in combat medicine and protective equipment have saved the lives of countless Service men and women who would have died from their injuries in conflicts of the past. With that welcome increase in survival rates, however, comes a lifelong obligation to Service members whose road to recovery, both physical and mental, is long. By their nature, the signature invisible wounds of our recent wars -- PTSD and TBI – demand greater sensitivity in identification of the injury or illness, as well as an ability to coordinate treatment with other injuries.

Over the last 15 years over 300,000 Service members have suffered a TBI and over one million have been treated for behavioral health conditions. To meet these challenges, we have expanded the ability of our military hospitals, military clinics and network of civilian providers to treat these conditions, introduced new therapies to improve recovery, and generated a

comprehensive portfolio of research efforts to advance the state of the science and drive evolution of care.

Although our recent conflicts have added greater awareness and urgency to understanding PH and TBI, these medical conditions are not confined to military personnel alone. That is why the DoD has partnered with other government agencies, academic research institutions, and the private sector to share what we know and what we have learned, address our gaps in knowledge, and increase our collaboration on research. Many of the efforts and milestones that will be discussed today are a result of this ongoing collaborative work.

Current State of TBI/PH Research, Treatment, and Therapies

TBI and PH research represent complex undertakings, as these conditions are heterogeneous and often associated with other medical conditions. Our research often involves differentiating comorbidities like PTSD, depression, substance abuse, and chronic pain - all factors which can complicate the prevention and treatment of other PH conditions and TBI. The best way to account for these comorbidities, and effectively identify treatments and therapies, is through the kinds of comprehensive and longitudinal research efforts we have undertaken. What we've learned about the brain over the past decade of PH and TBI research outpaces any advancement of knowledge to date – and only through continued effort will we reap the benefits of the research we have begun.

The President's Executive Order in 2012 directed Federal agencies to develop a coordinated National Research Action Plan (NRAP). This directive has accelerated the knowledge we have gained and strengthened inter-agency cooperation and coordination. The

DoD, VA, and Department of Health and Human Services (HHS), responded to the Executive Order with a wide-reaching plan to improve scientific understanding, develop effective treatment, and reduce occurrences of PTSD, PH conditions, TBI and suicide. The NRAP represents the ten-year strategic blueprint for interagency research to identify and develop more effective diagnostic and treatment methodologies to improve outcomes for TBI and PH and we are eager to continue working with our inter-government partners to advance our understanding of these conditions.

Specifically, two jointly funded VA and DoD consortiums are focused on priorities outlined in the NRAP: The Consortium to Alleviate PTSD (CAP), and the Chronic Effects of Neurotrauma Consortium (CENC). The CAP seeks to improve the psychological and physical health and well-being of Operation Enduring Freedom, Iraqi Freedom, and New Dawn Service members and veterans by developing and evaluating the most effective preventive, diagnostic, prognostic, treatment and rehabilitative strategies for combat-related PH issues and comorbid conditions. The CENC is dedicated to establishing a comprehensive understanding of the chronic sequelae that may be associated with mild TBI. Together, CAP and CENC ensure that high priority research areas are being addressed and efforts are not being duplicated across or within agencies. This collaboration supports a more unified vision for research within the federal community to better anticipate and respond to emerging medical requirements.

In 2012, DoD funded an independent study to assess access to mental health providers for more than 1.3 million Service Members and their families who reside in rural and remote locations. Initial results of the study were released in January 2015 and included a geospatial development tool to monitor locations of US military members, their families, and their distance

from mental health care. Recommendations emerging from these findings included the increased use of telehealth and other technologies to improve access to care for remote populations. The Department is pursuing the study's recommendations, including incorporating the increased use of telehealth and other technologies to improve access to care for remote populations. We recently updated our policies on telehealth and telemedicine to encourage greater adoption by both providers and patients and continue work to expand utilization of telemedicine capabilities.

The Department has taken other steps to increase access to needed behavioral health services, and we monitor our performance in access and quality. We have eliminated the limit on inpatient behavioral health bed days in our TRICARE program, and we are finalizing our policies to ensure alignment with the Mental Health Parity Act in 2016. The MHS is a leader among US health systems in achieving high rates of timely outpatient follow-up visits for patients with PTSD or depression after psychiatric hospitalization for PTSD: 86 percent of patients who were hospitalized were seen as an outpatient within 7 days of discharge; 95 percent were seen within 30 days. Additionally, 91% of patients diagnosed with PTSD and 82% of patients with depression received psychotherapy.

The Department has also introduced new approaches to how we screen for TBI in Service Members returning from deployment. Improvements in TBI screening, including screening in theater, and changes in the post-deployment health assessment and re-assessment were based, in part, on evidence derived from DoD-funded studies.

The use of integrated interdisciplinary treatment programs has also increased since 2007 due to evidence from DoD studies for management of severe TBI and a number of DoD-funded studies are cited by the Joint Theater Trauma System Clinical Practice Guideline Management of

Patients with Severe Head Trauma. This highly practical guidance is revised annually and directs care for severe and penetrating TBI sustained in theater.

DoD continues to develop innovative technologies in areas of TBI care that improve recovery and reintegration. Examples of novel interventions for TBI under study include neurofeedback, biofeedback, the interactive metronome, computer-based cognitive rehabilitation, and non-invasive electrical stimulation devices. To identify objective TBI screening, diagnostic, and assessment tools, the DoD is studying the effectiveness of innovative technologies such as portable devices to measure the brain's electrical activity, environmental sensors and other concussion detection systems, and neurocognitive assessment tools.

Current progress in the upstream treatment of PH and TBI is exemplified by the inTransition program established in response to Executive Order 13625. The inTransition program pairs trained mental health professionals with Service members transitioning to new care teams in VA or in the local community. It has wide utilization – with over 10,000 calls per month and more than 15,000 extended coaching cases since its inception in February 2010. This number will continue to grow as all Service Members who are receiving mental health care and leaving military service are now automatically enrolled into the inTransition program. By enhancing coordination between referring and gaining providers, inTransition reduced the number of Service Members who disengage from mental health care during a period of change.

In addition to the progress in PH and TBI treatment practices, our physical infrastructure has been expanded and improved over the past five years. The Defense and Veterans Brain Injury Center (DVBIC), National Intrepid Center of Excellence (NICoE), and other Intrepid Sites make up a network of treatment facilities across the world that focus on TBI care for Service

members and their families. Located on military installations, providers at these facilities diagnose and initiate the treatment for patients referred with complex, comorbid PH/TBI conditions; conduct focused research, and deliver expert treatments to improve TBI and PH outcomes. These centers leverage their collective reach and provide comprehensive TBI care throughout the MHS.. Additional DVBIC sites located in VA Polytrauma Rehabilitation Centers extend the scope of research, education and support of Service members and Veterans with TBI, and their families.

Future of TBI/PH Research, Treatment, and Therapies

Research has provided many answers and influenced improvements to care - however, gaps remain in the nation's scientific knowledge about PH and TBI, gaps that we are working diligently to address.

Coordinated research efforts to accelerate discovery of the mechanisms underlying behavioral health conditions, TBI, and other comorbidities remain a top priority. Understanding pathophysiology allows researchers to target treatment more efficiently and identify new targets for treatment. Our research plan outlines a timeline to work towards developing effective biomarkers that detect disorders early and accurately. Additionally, the NRAP work group is orchestrating better coordination of federal research strategies and investments. Major efforts include the Federal Interagency TBI Research (FITBIR) Registry to share research data, use of Federal RePORTER and other interagency databases to share research portfolio information, and a Joint Strategic Portfolio Reviews and Analyses to discuss current activities, priorities, and remaining gaps.

In 2001 the DoD initiated the largest longitudinal study of Service Members, Veterans, and their families in US military history - the Millennium Cohort Study. This epidemiological study includes more than 200,000 participants across the globe, with a planned follow-up for 21+ years to evaluate the long-term impact of military experiences during and after the time of military service. The Millennium Cohort Study offers a unique opportunity to define the challenges that Service Members, Veterans and military families experience. This will serve to advance the understanding of protective and vulnerability factors that can then be used to design training and treatment programs into the future.

Our partnership programs also provide us with important insights. Working with the National Collegiate Athletic Association (NCAA), DoD created the Concussion Assessment, Research and Education (CARE) Consortium to conduct a large-scale, multi-site study of the natural history of concussion in both sexes across multiple sports. The aim of the study is to address current gaps in our knowledge, and shed light on the neurobiological mechanisms of concussion symptoms and the trajectory of recovery. It will provide information on a cohort of individuals with SRC, and contribute to other datasets for public use and drive a more informed public discussion about concussion care and policy.

In addition to these advancements made in research, treatment, and therapies - the MHS is working internally to make PH and TBI efforts more effective, cost-efficient, and beneficial to Service Members, Veterans, and their families. DCoE estimates there are more than 200 programs receiving DoD funding to provide both clinical and non-clinical psychological health or TBI services for Service Members and family members. Such services account for more than $1 billion annually. DoD has begun a multifaceted approach to examine program effectiveness to

review the value of these programs, ensuring they both are non-duplicative and informed by clinical evidence.

Beginning in FY 2015, DCoE implemented onsite program evaluations with current DoD-funded PH and TBI programs to measure program effectiveness and meet the intent of NDAA directives. DCoE's program evaluation efforts are DoD's primary mechanism to comprehensively document program efficacy within the MHS.

Conclusion

Scientific progress is incremental and takes time, but Service Members and their families need solutions. The progress the Department – and the Nation -has made in the past 10 years has led to an expanded knowledge base and cutting-edge treatments that have improved the lives of our Service Members, Veterans, their families, and all Americans. Yet, we are neither complacent nor satisfied with our achievements. Our mission is urgent. We have a long-term plan to continue to improve our treatment of these very complex medical conditions. We are honored to represent the Department of Defense today on behalf of the men and women who conduct such vital research, and deliver care in support of such a special population. We are grateful for the ongoing support of this Committee and the Congress in supporting our efforts, and we look forward to answering your questions.