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DOD HEALTH CARE

Mental Health and Traumatic Brain Injury Screening Efforts Implemented, but Consistent Pre- Deployment Medical Record Review Policies Needed





Highlights of [GAO-08-615](#), a report to congressional addressees

Why GAO Did This Study

The John Warner National Defense Authorization Act for Fiscal Year 2007 included provisions regarding mental health concerns and traumatic brain injury (TBI). GAO addressed these issues as required by the Act. In this report GAO discusses (1) DOD efforts to implement pre-deployment mental health screening; (2) how post-deployment mental health referrals are tracked; and (3) screening requirements for mild TBI. GAO selected the Army, Marine Corps, and Army National Guard for the review. GAO reviewed documents and interviewed DOD officials and conducted site visits to three military installations where the pre-deployment health assessment was being conducted.

What GAO Recommends

GAO is recommending that DOD address the inconsistency in its policies by revising its Instruction on Deployment Health to require a review of medical records as part of the pre-deployment health assessment. DOD concurred with GAO's recommendation and said it will update its Instruction to require a medical record review at the time of the pre-deployment health assessment for servicemembers with a significant change in health status since their most recent annual health assessment. GAO believes that DOD's proposed action does not fully address the recommendation, and DOD should require a medical record review as part of the pre-deployment health assessment for all servicemembers.

To view the full product, including the scope and methodology, click on [GAO-08-615](#). For more information, contact Cynthia A. Bascetta at (202) 512-7114 or bascettac@gao.gov.

DOD HEALTH CARE

Mental Health and Traumatic Brain Injury Screening Efforts Implemented, but Consistent Pre-Deployment Medical Record Review Policies Needed

What GAO Found

DOD has taken positive steps to implement mental health standards for deployment and pre-deployment mental health screening. However, DOD's policies for providers to review medical records are inconsistent. DOD issued minimum mental health standards that servicemembers must meet in order to be deployed to a combat theater and identified the pre-deployment health assessment as a mechanism for ensuring their use in making deployment decisions. DOD's November 2006 policy implementing these deployment standards requires a review of servicemember medical records during the pre-deployment health assessment. However, DOD's August 2006 Instruction on Deployment Health, which implements policy and prescribes procedures for conducting pre-deployment health assessments, is silent on whether such a review is required. Because of this inconsistency, providers determining if Operation Enduring Freedom and Operation Iraqi Freedom servicemembers meet DOD's mental health deployment standards may not have complete medical information.

Health care providers at the installations GAO visited where the post-deployment health assessment (PDHA) is conducted manually track whether servicemembers who receive mental health referrals from the PDHA make or complete appointments with mental health providers. Because health care providers conducting the PDHA and making referrals from the PDHA may not have an ongoing relationship with referred servicemembers, health care providers responsible for tracking referrals at these installations have developed manual systems to track servicemembers to ensure that they made or kept their appointments for evaluations. Tracking is more challenging for Guard and Reserve units because their servicemembers generally receive civilian care. Guard and Reserve units do not know if servicemembers used civilian care to complete their PDHA referrals unless disclosed by the servicemembers, which they may be reluctant to do because of stigma concerns.

DOD is addressing the TBI requirement through implementing screening for mild TBI in its PDHA and prior to deployment. DOD has also provided guidance and training for health care providers. DOD in January 2008 added TBI screening to the PDHA, and plans to require screening of all servicemembers for mild TBI prior to deployment beginning in July 2008. The TBI screening questions on the PDHA assess the servicemember's exposure to events that may have increased the risk of a TBI and the servicemember's symptoms. The TBI screening questions to be used prior to deployment are similar to those on the PDHA. Prior to DOD's screening efforts, several installations had been screening servicemembers for mild TBI before or after deployment. An official from the Defense and Veterans Brain Injury Center told GAO that these initiatives would probably be replaced by the DOD-wide screening.

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Abbreviations

AHLTA	Armed Forces Health Longitudinal Technology Application
ANAM	Automated Neuropsychological Assessment Metrics
BTBIS	Brief Traumatic Brain Injury Screen
CHCS	Composite Health Care System
CPG	clinical practice guideline
DOD	Department of Defense
DSG	Deployment Support Group
DVBIC	Defense and Veterans Brain Injury Center
IDC	independent duty corpsman
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
MACE	Military Acute Concussion Evaluation
MHAT	Mental Health Advisory Team
MTF	military treatment facility
NDAA	National Defense Authorization Act
PDHA	post-deployment health assessment
PDHRA	post-deployment health reassessment
PHA	periodic health assessment
PTSD	post-traumatic stress disorder
TBI	traumatic brain injury
VA	Department of Veterans Affairs

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United States Government Accountability Office
Washington, DC 20548

May 30, 2008

Congressional Addressees

Since the initiation of military conflicts in Afghanistan—Operation Enduring Freedom (OEF)—and Iraq—Operation Iraqi Freedom (OIF)—servicemembers have engaged in intense and prolonged combat, placing them at risk for developing post-traumatic stress disorder (PTSD) or other mental health conditions. Those with PTSD often relive their stressful experiences, such as exposure to combat, through nightmares and flashbacks, and may have difficulty sleeping and feel detached or estranged. A 2006 Army mental health advisory team report found that 20 percent and 15 percent of Army and Marine Corps OIF servicemembers, respectively, screened positive for PTSD, depression, or anxiety.¹

Servicemembers who have engaged in combat are also at risk for experiencing a traumatic brain injury (TBI). TBI, which is a physical injury rather than a mental health condition, has emerged as the leading injury among OEF and OIF servicemembers. The nature of the current conflicts—in particular the use of improvised explosive devices—increases the likelihood that servicemembers will be exposed to incidents such as blasts that can cause a TBI. Based on data from 2004 to 2006 at selected military installations, the Department of Defense (DOD) estimates that about 10 to 20 percent of OEF/OIF Army and Marine Corps servicemembers have sustained a mild TBI, commonly known as a concussion.²

¹Office of the Surgeon, Multinational Force-Iraq and Office of The Surgeon General, United States Army Medical Command, *Mental Health Advisory Team (MHAT) IV Operation Iraqi Freedom 05-07 Final Report* (Nov. 17, 2006). The 2008 MHAT report (MHAT V) found that 18 percent of male Army enlisted servicemembers in OIF brigade combat teams screened positive for PTSD, depression, or anxiety. Office of the Surgeon, Multi-National Force-Iraq, Office of the Command Surgeon, and Office of the Surgeon General, United States Army Medical Command, *Mental Health Advisory Team (MHAT) V Operation Iraqi Freedom 06-08: Iraq Operation Enduring Freedom 8: Afghanistan* (Feb. 14, 2008).

²DOD states that these groups may not be representative of all Army and Marine Corps servicemembers returning from OEF/OIF.

DOD is required by law to have a system to assess the medical condition of servicemembers before and after deployment to locations outside the United States.³ The required elements of this system include the use of pre- and post-deployment medical examinations. To implement the system, DOD uses multiple health assessments to screen servicemembers for a variety of health concerns, including mental health concerns, both before and after their deployments to combat theaters. These assessments include the pre-deployment health assessment, the post-deployment health assessment (PDHA), and the post-deployment health reassessment (PDHRA). During these assessments, a servicemember completes a form that includes questions used to screen for mental health concerns. A health care provider reviews the completed form and may refer the servicemember for further evaluation if necessary.

Questions have been raised about DOD's mental health screening of servicemembers before and after their deployments to OEF/OIF.⁴ In 2007 a DOD Mental Health Task Force reported that DOD faced several challenges to effective mental health assessments, including eagerness to deploy or stigma, that may prevent servicemembers from disclosing mental health concerns on the pre-deployment health assessment or the PDHA respectively, and recommended that DOD coordinate the mental health screening questions that are used on the health assessment forms to ensure accuracy and consistency.⁵ In May 2006 we reported that DOD could not provide reasonable assurance that OEF/OIF servicemembers who need referrals for mental health following deployments receive them.⁶

³See 10 U.S.C. § 1074f.

⁴A 2006 series of articles in the *Hartford Courant* reported allegations that servicemembers with serious psychological problems were deployed to Iraq, and that DOD's pre-deployment health assessment was not identifying servicemembers for mental health concerns and that referrals for further evaluation were not being made. The articles also reported that servicemembers were reluctant to self-disclose mental health concerns during the PDHA and PDHRA because of stigma related to mental health issues. The concerns raised by the *Courant* were cited by members of Congress in the discussion of the provisions of the John Warner National Defense Authorization Act for Fiscal Year 2007, which included requirements related to screening servicemembers for mental health and TBI.

⁵DOD, *An Achievable Vision: Report of the Department of Defense Task Force on Mental Health* (Falls Church, VA: June 2007).

⁶GAO, *Post-Traumatic Stress Disorder: DOD Needs to Identify the Factors Its Providers Use to Make Mental Health Evaluation Referrals for Servicemembers*, [GAO-06-397](#) (Washington, D.C.: May 11, 2006). See also Related GAO Products at the end of this report.

There has also been interest in ensuring that servicemembers are screened for TBI, particularly mild TBI.⁷ Mild TBI can be difficult to identify in part because, unlike with more severe forms of TBI, there may be no observable head trauma and because some of its symptoms overlap with other conditions, such as PTSD.⁸ In May 2007 an Army TBI Task Force report identified gaps in TBI screening efforts across all levels of Army health care, such as few military installations that had been conducting TBI screening before deployment and a lack of policies requiring TBI screening after deployment.⁹

The John Warner National Defense Authorization Act for Fiscal Year 2007 (NDAA), enacted on October 17, 2006, included a provision that addressed DOD's efforts to screen servicemembers for mental health concerns and TBI.¹⁰ In particular, the Act required DOD to

- issue minimum mental health standards that servicemembers must meet in order to be deployed and take actions to ensure their utilization;
- use the pre-deployment health assessment and PDHA to screen servicemembers for treatment and medication use for a mental health condition;
- as part of its deployment health quality assurance program, document the effectiveness of DOD tracking mechanisms used to ensure that servicemembers who are referred for mental health evaluations from the PDHA receive them;

⁷Following a series of *Washington Post* articles in February 2007 that disclosed deficiencies in the provision of outpatient services at Walter Reed Army Medical Center and raised broader concerns about the care of returning servicemembers and veterans, three review groups were tasked with investigating the reported problems and making recommendations. Among the common areas of concern identified by the three review groups was the need to better understand and diagnose TBI. See GAO, *DOD and VA: Preliminary Observations on Efforts to Improve Health Care and Disability Evaluations for Returning Servicemembers*, GAO-07-1256T (Washington, D.C.: Sept. 26, 2007).

⁸A January 2008 article in *The New England Journal of Medicine* found that mild TBI is strongly associated with PTSD and physical health problems three to four months after return from a one-year deployment to Iraq. See Charles W. Hoge et al. "Mild Traumatic Brain Injury in U.S. Soldiers Returning From Iraq." *The New England Journal of Medicine*, 358(5) (Jan. 31, 2008).

⁹Traumatic Brain Injury Task Force, *Report to The Surgeon General* (May 15, 2007).

¹⁰Pub. L. No. 109-364, § 738, 120 Stat. 2083, 2303-04 (2006)(amending 10 U.S.C. § 1074f). In this report, we refer to this Act as the "2007 NDAA."

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- document the mental health training received by health care providers conducting the PDHA, as well as develop guidance for these health care providers to use in deciding whether to refer a servicemember for a mental health evaluation; and
 - screen servicemembers for TBI in the pre- and post-deployment health assessments, develop guidance, and ensure health care providers conducting the assessments receive training on TBI.

Furthermore, the 2007 NDAA required us to report on DOD's implementation of this provision, and 11 members of Congress also expressed interest in this work. In this report we discuss (1) DOD efforts to implement 2007 NDAA requirements related to mental health screening in the pre-deployment health assessment, including issuing mental health standards for deployment; (2) how mental health referrals made as a result of the PDHA are tracked to ensure that referred servicemembers receive evaluations; (3) the training and guidance on mental health issues received by health care providers conducting the PDHA; and (4) DOD efforts to implement 2007 NDAA requirements for TBI screening, including the guidance and training DOD makes available to health care providers for identifying mild TBI.

We reviewed DOD efforts involving active duty and reserve components of the Army and Marine Corps; we also included the Army National Guard in our review. As of September 2007, these components comprised about 88 percent of all OEF/OIF forces. Although Air Force and Navy personnel serve in OEF/OIF, Army and Marine Corps servicemembers generally serve in ground combat roles, and servicemembers involved in combat are more at risk for exposure to events that can lead to mental health conditions and physical injuries such as TBI. Our findings related to mental health and TBI screening that are military service- and component-specific cannot be generalized across other military services or across DOD.

To discuss DOD efforts to implement 2007 NDAA requirements related to mental health screening in the pre-deployment health assessment, including issuing mental health standards for deployment, we reviewed federal laws, DOD and military service-specific policies and guidance related to deployment health, deployment standards, and the pre-deployment health assessment. We conducted three site visits to military installations—one Army unit at Fort Campbell, Kentucky; one Marine Corps unit at Camp Lejeune, North Carolina; and one Army National Guard unit at Fort Richardson, Alaska. We selected these installations

based on their deployment schedules in order to observe the pre-deployment screening process.¹¹ During these site visits, we interviewed commanders about their role in making determinations of whether a servicemember may deploy, and DOD health care providers about their role in conducting the pre-deployment health assessments.

To discuss how mental health referrals made as a result of the PDHA are tracked to ensure that referred servicemembers receive evaluations, we defined tracking as the process in which a health care provider or other official monitors whether an individual servicemember referred from the PDHA makes or completes his or her appointment for a mental health evaluation. We reviewed DOD and military service-specific policies and guidance related to the PDHA. We interviewed DOD and military service officials about the types of electronic and manual systems that can be used to track referrals from the PDHA, and health care providers at Fort Campbell and Camp Lejeune about the electronic and manual systems that they use to track these referrals.¹²

To discuss the training and guidance on mental health issues received by health care providers conducting the PDHA, we reviewed DOD and Army, Navy, and Marine Corps health care provider education and training.¹³ We reviewed DOD clinical practice guidelines (CPG)¹⁴ related to mental health conditions associated with deployment, and other guidance related to the PDHA with respect to mental health issues. We also interviewed DOD and military service officials regarding these issues. We interviewed 4 health care supervisors and 15 physicians and independent duty corpsmen (IDC)

¹¹We were unable to conduct site visits to observe the PDHA because this assessment is generally conducted while the servicemember is in the combat theater.

¹²We did not conduct work related to the PDHA at Fort Richardson because it has not served as a location for conducting the PDHA. At Camp Lejeune, we interviewed health care providers from the Division, Air Wing, and Logistics Group. The 2nd Marine Division (referred to as the division in this report) is the ground combat element and consists primarily of Marine infantrymen. The Air Wing includes air combat Marines and aircrafts, such as attack jets and electronic countermeasures aircraft. The Logistics Group is responsible for receiving, storing, distributing, and managing supply materials and information.

¹³We looked at Navy-specific provider training because the Navy provides health care services to the Marine Corps.

¹⁴A CPG contains systematically developed recommendations, strategies, or information that help health care providers make decisions about appropriate health care for specific clinical circumstances.

at Fort Campbell and Camp Lejeune who were available during our visit about their training and qualifications related to mental health. Finally, we observed health care provider training at Fort Bragg, North Carolina for an Army program that trains primary care providers in identifying and treating servicemembers with depression and PTSD.

To discuss DOD efforts to implement 2007 NDAA requirements for TBI screening, including the guidance and training DOD makes available to health care providers for identifying mild TBI, we reviewed DOD policies and guidance, and military service-specific policies and guidance, including the January 2008 final report of the Army TBI Task Force. We also interviewed DOD and military service officials, including officials from the Defense and Veterans Brain Injury Center (DVBIC),¹⁵ on installation-specific processes used to screen servicemembers for mild TBI prior to or following deployment as well as DVBIC's training programs for health care providers. We discuss DOD's screening with respect to mild TBI rather than moderate to severe TBI because in general, mild TBI can be more difficult to identify than moderate to severe TBI. We conducted our work from July 2007 through May 2008 in accordance with generally accepted government auditing standards.

Results in Brief

DOD has taken steps to implement mental health standards for deployment and screen servicemembers for mental health conditions prior to deployment, but policies for providers to review medical records are inconsistent. To meet the requirements related to deployment mental health standards and screening, DOD issued a November 2006 policy to establish and implement minimum mental health standards for deployment. The policy identified the pre-deployment health assessment as a mechanism for screening servicemembers for mental health conditions and for ensuring that the standards are utilized in making deployment determinations. The policy also required a review of servicemember medical records as part of this assessment. Such a review serves to validate information servicemembers disclose about their mental

¹⁵DVBIC is a multi-site center that serves active duty servicemembers, their dependents and veterans with TBI through medical care, clinical research initiatives and educational programs. It is the product of collaboration among DOD, the Department of Veterans Affairs (VA), and two civilian partners, and is funded through DOD. In November 2007, DOD announced that the DVBIC had been integrated into DOD's new Defense Center of Excellence for Psychological Health and Traumatic Brain Injury, which began initial operations on November 30, 2007 and is expected to be fully functional by October 2009.

health. However, DOD's August 2006 Instruction on Deployment Health (DoDI 6490.03), which implements policy and prescribes procedures for deployment health activities, is silent on whether a review of medical records is required as part of the pre-deployment health assessment. During our site visits to three installations, we found that health care providers were unaware that a medical record review was required, and medical records were not always reviewed by providers conducting the pre-deployment health assessment. Because of DOD's inconsistent policies, providers determining if OEF and OIF servicemembers meet DOD's minimum mental health standards for deployment may not have complete medical information.

Health care providers at Fort Campbell and Camp Lejeune manually track PDHA mental health referrals to ensure that referred servicemembers make or complete their appointments for evaluations. For example, at Fort Campbell, mental health referrals from the PDHA are tracked by a health care provider using a database she created and updates manually with information from a DOD electronic system used to make referrals. At Camp Lejeune, servicemembers' PDHA referrals to the division psychiatrist are tracked by providers using hard-copy log books. A Fort Campbell health care provider we spoke with said that health care providers who make referrals from the PDHA may not have an ongoing relationship with the servicemembers they refer and, therefore, manual systems have been created to track whether referred servicemembers make their evaluations. In addition, some Reserve members' mental health referrals from the PDHA are manually tracked. However, referral tracking is difficult for Guard and Reserve units because their servicemembers generally receive care from civilian providers, which they do not have to disclose, and because servicemembers may be reluctant to disclose mental health encounters to military providers due to stigma concerns.

Health care providers who conduct the PDHA receive training in mental health issues that varies by the provider type, and DOD and the military services are implementing mental health training initiatives; furthermore, DOD offers guidance to health care providers on making mental health assessments. According to health care providers at two installations we visited, physicians, physician assistants, or IDCs generally conduct the PDHA. These health care providers receive varying levels of training on mental health issues, based on provider type, during their basic medical education. For example, physicians receive mental health training in medical school, while IDCs receive training in psychiatric disorders as part of a unit that covers several types of medical conditions. DOD also provides CPGs and other guidance for health care providers on conducting

mental health assessments. Familiarity with these CPGs varied among health care providers we spoke with, and some providers were comfortable with making mental health assessments, while others were less comfortable in conducting the assessments. The military services have implemented training initiatives for health care providers; for example, the Army has implemented a program that trains primary care providers in identifying PTSD and depression. In addition, DOD plans to develop and distribute a core curriculum for health care providers on mental health issues.

In response to the 2007 NDAA requirement for pre- and post-deployment TBI screening, guidance and training DOD has added screening questions for TBI to the PDHA, plans to require screening servicemembers for mild TBI prior to deployment, and has provided guidance and training to health care providers. In January 2008 DOD added TBI screening questions to the PDHA. The questions are in four series that assess the servicemember's exposure to events that may have increased the risk of a TBI and symptoms of a TBI the servicemember may have. DOD is also planning to require screening of all servicemembers for mild TBI prior to deployment beginning in July 2008. The screening questions to be used prior to deployment are similar to the screening questions on the PDHA, and are included in a cognitive assessment tool that will provide a baseline of cognitive function in areas such as memory and reaction time. Prior to DOD's efforts, several installations had been screening servicemembers for mild TBI before or after deployment. A DVBIC official told us that these initiatives probably would be replaced by the DOD-wide screening. In October 2007, DOD issued guidance for identifying mild TBI for providers screening, assessing, and treating servicemembers outside the combat theater, and DOD and the military services have trained health care providers on identifying possible mild TBI.

In order to address the inconsistency in DOD's policies related to the review of medical record information and to assure that health care providers have reviewed the medical record when screening servicemembers prior to deployment, we recommend that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness to revise the DOD Instruction on Deployment Health to require a review of medical records as part of the pre-deployment health assessment. In commenting on a draft of this report, DOD concurred with our recommendation. DOD said it will update its Instruction on Deployment Health to require a medical record review at the time of the pre-deployment health assessment for any servicemembers who have a significant change in health status since their most recent periodic health

assessment, which is a health assessment administered to all servicemembers annually. However, it is unclear how the health care provider conducting the pre-deployment health assessment will identify those with significant changes in health status. We believe that DOD's proposed action does not fully address our recommendation, and DOD should require a medical record review for all servicemembers as part of the pre-deployment health assessment in its updated Instruction in order to eliminate the inconsistency between its policy and the current Instruction on Deployment Health. DOD also provided technical comments, which we incorporated as appropriate.

Background

Substantial numbers of ground combat Army and Marine Corps servicemembers are exposed to combat experiences often associated with an increased risk of developing PTSD or other mental health conditions. Specifically, according to a 2004 study, more than half of Army or Marine Corps ground combat units in OEF or OIF report being shot at or receiving small-arms fire, seeing dead or seriously wounded Americans, or seeing ill or injured women or children who they were unable to help. More than half of Marine Corps servicemembers and almost half of Army servicemembers reported killing an enemy combatant in OIF.¹⁶ In addition to certain types of experiences, multiple deployments are also associated with mental health problems. For example, a 2006 Army mental health advisory team report found that Army servicemembers who had been deployed more than once were more likely to screen positive for PTSD, depression, or anxiety than those deployed only once.¹⁷ In a 2008 Army mental health advisory team report, 27 percent of Army male non-commissioned officers in their third or fourth deployment screened positive for PTSD, depression, or anxiety (compared to 12 percent of those on their first deployment).¹⁸

Servicemembers are also exposed to events such as blasts that increase their risk of experiencing a TBI. TBI occurs when a sudden trauma causes damage to the brain and can result in loss of consciousness, confusion,

¹⁶Charles W. Hoge et al. "Combat Duty in Iraq and Afghanistan, Mental Health Problems, and Barriers to Care." *The New England Journal of Medicine*, 351(1) (July 1, 2004).

¹⁷Office of the Surgeon et al, *Mental Health Advisory Team IV Operation Iraqi Freedom 05-07 Final Report*.

¹⁸Office of the Surgeon et al, *Mental Health Advisory Team V Operation Iraqi Freedom 06-08: Iraq Operation Enduring Freedom 8: Afghanistan*.

dizziness, trouble with concentration or memory, and seizures. Of particular concern are the after-effects of a mild TBI that may not have resulted in readily apparent symptoms at the time of the injury.¹⁹ A recent study found that mild TBI was associated with high combat intensity and multiple exposures to explosions in combat.²⁰ Identification of mild TBI is important, as treatment has been shown to mitigate the injury's effects, which can include difficulty returning to work or completing routine daily activities. DVBIC has issued a screening tool called the Military Acute Concussion Evaluation (MACE), which is based on a screening tool widely used in sports medicine and is intended to evaluate a servicemember within 48 hours of the suspected injury. In June 2007, the Army required health care providers to document a servicemember's blast exposure in theater using the MACE. DVBIC also issued in December 2006 a CPG for the management of mild TBI in theater.²¹ The guidance contains a structured series of questions that include certain "red flags," such as worsening headaches or slurred speech, that should trigger further evaluation for a possible mild TBI. Treatments for mild TBI may include education, medication, and physical and psychiatric therapy.²²

Deployment Cycles and DOD Health Assessments

There are multiple opportunities during the deployment cycle for screening and assessing servicemembers' health status. Specifically, DOD requires three health assessments during the deployment cycle: the pre-deployment health assessment, the PDHA, and the PDHRA. In addition, DOD requires an annual periodic health assessment (PHA). These assessments and their associated forms are described in Table 1.

¹⁹DOD issued a definition of TBI in October 2007. DOD defines TBI as a traumatically induced injury or disruption of brain function as a result of an external force, indicated by at least one of the following signs immediately following the event: (1) loss of consciousness; (2) memory loss; (3) confusion or any alteration in mental state; (4) weakness, loss of balance, or other neurological problems; or (5) intracranial lesion. A TBI is classified as "mild" if it involves a loss of consciousness of 30 minutes or less, an alteration of consciousness up to 24 hours, and post-traumatic amnesia of one day or less.

²⁰Charles W. Hoge et al. "Mild Traumatic Brain Injury in U.S. Soldiers Returning from Iraq." *The New England Journal of Medicine*, 358(5) (Jan. 31, 2008).

²¹The CPG was developed by a working group that included military and civilian experts.

²²See Centers for Disease Control and Prevention, http://www.cdc.gov/ncipc/publications/tbi_toolkit/physicians/mtbi/management.htm (accessed Feb. 7, 2008).

Table 1: DOD Deployment-Cycle-Based and Annual Health Assessments

Name and Form (if applicable)	Purpose and description	Timing
Pre-deployment health assessment (DD 2795)	<ul style="list-style-type: none">• To record general information about servicemembers' health for surveillance purposes and identify any health concerns that may need to be addressed prior to deployment• A health care provider is to review the DD 2795, which is completed by the servicemember. If any concerns are identified that may affect the servicemember's ability to deploy, the servicemember may be referred for further evaluation• Initiated in 1998	Within 60 days prior to deployment
Post-deployment health assessment (PDHA) (DD 2796)	<ul style="list-style-type: none">• To identify and refer servicemembers with health concerns as a result of deployment• A health care provider is to review the DD 2796, which is completed by the servicemember, and conduct an interview to discuss any deployment-related health concerns with the servicemember and if necessary refer him or her for further evaluation• Initiated in 1998	Within 30 days before or 30 days after return from deployment
Post-deployment health reassessment (PDHRA) (DD 2900)	<ul style="list-style-type: none">• To focus on servicemembers' health concerns that emerge over time after return from deployment• A health care provider is to review the completed DD 2900, which is completed by the servicemember, and conduct an interview to discuss any deployment-related health concerns with the servicemember and if necessary refer him or her for further evaluation• Initiated in 2005	Within 90 to 180 days after return from deployment
Periodic health assessment (PHA)	<ul style="list-style-type: none">• To assess changes in servicemembers' health status, especially changes that could affect ability to perform military duties• Assessment includes screening the servicemember for medical conditions (including screening for tobacco use, alcohol abuse and stress management), treatments, and medications; reviewing the medical record; and if necessary referring the servicemember for treatment of current health problems• Initiated in 2006	Annually

Source: DOD.

Pre-Deployment Health Assessment

DOD’s Instruction on Deployment Health²³, which implements policies and prescribes procedures for deployment health activities, requires deploying servicemembers to complete the pre-deployment health assessment form, the DD 2795, within 60 days prior to the expected deployment date. The DD 2795 is a brief form for servicemembers to self-report general health information in order to identify any health concerns that may limit deployment or need to be addressed prior to deployment, and consists of eight questions that each servicemember must complete (see fig. 1).

Figure 1: Pre-Deployment Health Assessment Questions (DD 2795)

	Excellent	Very good	Good	Fair	Poor
1. Would you say your health in general is					
2. Do you have any medical or dental problems?				Yes	No
3. Are you currently on a profile, or light duty, or are you undergoing a medical board?				Yes	No
4. Are you pregnant? [FEMALES ONLY]			Don't know	Yes	No
5. Do you have a 90-day supply of your prescription medication or birth control?			N/A	Yes	No
6. Do you have two pairs of prescription glasses (if worn) and any other personal medical equipment?			N/A	Yes	No
7. During the past year, have you sought counseling or care for your mental health?				Yes	No
8. Do you currently have any questions or concerns about your health?				Yes	No
Please list your concerns:					

Source: DOD.

DOD’s Instruction on Deployment Health states that after the servicemember completes the DD 2795, the form is to be reviewed by a health care provider, who can be a nurse, medical technician, medic, or corpsman. If the servicemember indicates a positive, or “yes,” response to any one of certain questions (2, 3, 4, 7, or 8) the servicemember is to be referred for an interview by a trained health care provider such as a physician, physician assistant, nurse practitioner, or advanced practice nurse. The provider signs the form indicating whether the individual is medically ready for deployment, and a copy of the DD 2795 is placed in the servicemember’s deployment health record. The deployment health record is a summary of the medical record that is to accompany the servicemember into theater. According to DOD’s Instruction on Deployment Health, this record should also contain a record of the servicemember’s blood type, allergies, corrective lens prescription,

²³DOD Instruction 6490.03, *Deployment Health*, Aug. 11, 2006.

Post-Deployment Health Assessment

immunization record, and a summary sheet listing past and current medical conditions, screening tests, and prescriptions.

DOD's Instruction on Deployment Health requires servicemembers returning from deployment to complete the post-deployment health assessment form, the DD 2796, within 30 days of leaving a combat theater or within 30 days of returning to home or a processing station. The DD 2796 is a form for servicemembers to self-report health concerns commonly associated with deployments. In January 2008, DOD released a new version of the DD 2796 that contains screening questions related to mental health, including questions used to screen for depression, suicidal thoughts, and PTSD.²⁴ The screening questions for depression, suicidal thoughts, and alcohol abuse are more detailed on the new form than on the previous version of the DD 2796 (See appendix I for a copy of the new version of the DD 2796). The DD 2796 must be reviewed, completed, and signed by a health care provider.²⁵ According to DOD's Instruction on Deployment Health, the health care provider conducting the assessment must be a physician, physician assistant, nurse practitioner, advanced practice nurse, independent duty medical technician or IDC,²⁶ or Special Forces medical sergeant.

According to DOD's Instruction on Deployment Health, the health care provider review is to take place in a face-to-face interview with the servicemember. The health care provider is to review the completed DD 2796 to identify any responses that may indicate a need for further medical evaluation. In addition, the new DD 2796 contains guidance intended to assist a provider in determining whether to make a referral for some mental health concerns. For example, the form prompts the provider to conduct a risk assessment for suicide depending on the servicemember's response to the suicide risk questions. Health care providers use a section

²⁴According to a DOD official, the Marine Corps began using the new DD 2796 on March 11, 2008, and the Army is performing selected pilot tests of the new form with full implementation expected after April 1, 2008.

²⁵The 2007 NDAA required DOD to include an assessment of a servicemember's current mental health conditions and treatment following deployment, as well as an assessment of a servicemember's use of medications for a mental health condition, in the PDHA. Servicemembers' use of medications for a mental health condition would be discussed during the provider interview based on the servicemembers' responses to the mental health-related questions on the DD 2796.

²⁶Independent duty medical technicians and IDCs are enlisted personnel who receive advanced training to provide treatment and administer medications.

of the DD 2796 to indicate when a servicemember needs a referral. The referral field specifies both the concern for which the servicemember is being referred, such as depression or PTSD symptoms, and the type of care or provider to whom the servicemember is being referred, such as primary care, mental health, specialty care, family support services, chaplains, or Military OneSource.²⁷ DOD requires that the DD 2796 be placed in the servicemember's medical record.²⁸

Periodic Health Assessment

DOD requires an annual health assessment, the PHA, for all servicemembers. The PHA is designed to ensure servicemember medical readiness through monitoring servicemember health status and helps DOD provide preventive care, information, counseling, or treatment if necessary. In February 2006, DOD required the military services to begin administering the PHA, which includes servicemember self-reporting of health status, conditions, treatments, and medications; provider review of the medical record and identification of and referral for any health issues. The PHA also includes efforts to identify and manage preventive needs, occupational risk and exposure as well as identifying and recommending a plan to manage risks. DOD requires its providers to record the results of the PHA in servicemembers' medical records. DOD has created an online tool to capture self-reported information from the PHA. A draft of this form contains several mental health questions, including PTSD and depression screening questions that are similar to the current PTSD and depression questions on the DD 2796.

²⁷Military OneSource is a service that provides information and community-based counseling resources for servicemembers and their families.

²⁸In this report, unless otherwise noted the pre-deployment health assessment and the PDHA refer to the entire health assessment process, which includes the servicemember's completion of the form, the review of the form by the health care provider, and, if applicable, the health care provider's interview with and referral of the servicemember for further evaluation. DD 2795 and DD 2796 refer, respectively, to the pre-deployment health assessment and PDHA forms themselves.

DOD Electronic Medical Records Systems Used to Make PDHA Referrals

While several DOD information systems contain servicemember medical information, the Composite Health Care System (CHCS) I and the Armed Forces Health Longitudinal Technology Application (AHLTA), formerly known as CHCS II, are the two electronic medical records systems generally used by DOD health care providers to make PDHA referrals.²⁹ Although the military services currently employ both systems, there are several differences between the two. For example, CHCS I is a localized system, meaning information contained within CHCS I is only available to medical facilities on a particular military installation; information is not available to military treatment facilities (MTFs) on other installations. In contrast, information in AHLTA is available to medical facilities at different installations and to providers in theater. Another distinction is that CHCS I sends health care providers an email alert when a servicemember they refer makes, completes, or cancels an appointment. If servicemembers do not make appointments within 30 days, their referral is terminated from CHCS I and the health care provider is notified by email. AHLTA does not have this capability. DOD has been expanding AHLTA's capabilities and plans on replacing certain CHCS I functions, such as laboratory tests, with AHLTA.

²⁹ AHLTA implementation began in January 2004 with the incorporation of servicemembers' outpatient encounters into AHLTA records. Enhancements to the current system are rolled out in phases. For example, DOD will begin incorporating servicemembers' dental and vision information into AHLTA records in 2008, and the last phase, scheduled in 2016, will add inpatient data. AHLTA, once fully implemented, is intended to store the servicemembers' complete electronic health record, including inpatient and outpatient information.

DOD Has Taken Steps to Implement Pre-Deployment Mental Health Screening, but Policies for Medical Record Reviews Are Inconsistent

DOD has taken steps to meet the 2007 NDAA requirements for pre-deployment mental health standards and screening. As required by the 2007 NDAA,³⁰ which was enacted in October 2006, DOD issued minimum mental health standards that servicemembers must meet in order to be deployed. In a policy issued in November 2006,³¹ DOD identified mental health disorders that would preclude a servicemember's deployment, including conditions such as bipolar disorder. DOD's policy also identified psychotropic medications that would limit or preclude deployment if used by servicemembers—including antipsychotic or anticonvulsant medications used to control bipolar symptoms and certain types of tranquilizers and stimulant medications.³² In addition to identifying the mental health conditions and medications that would preclude deployment, DOD's policy specified the circumstances under which servicemembers with other mental health conditions can be deployed. Specifically, according to DOD's policy, when a servicemember has been diagnosed with a mental health condition that does not preclude deployment, the servicemember should be free of "significant" symptoms associated with this condition for at least three months before he or she can be deployed. The policy also states that in making a deployability assessment, health care providers should consider the environmental and physical stresses of the deployment and whether continued treatment will be available in theater. Finally, the policy identified the pre-deployment health assessment as a mechanism for screening servicemembers for mental health conditions and for ensuring that the standards are utilized in making deployment determinations.

³⁰Pub. L. No. 109-364, § 738(c), 120 Stat. at 2303 (to be codified at 10 U.S.C. § 1074f(f)). The Act specified that (1) the Secretary of Defense was to prescribe in regulations minimum mental health standards for deployment to a combat operation or contingency operation; (2) the standards were to specify the mental health conditions, treatment, and medications that would preclude deployment and include guidelines for deployability and treatment of servicemembers with a mental health condition; and (3) the Secretary was to ensure the standards were utilized in making deployability determinations. According to a July 2007 DOD report on implementation of these provisions, a regulation is under development to identify medical standards for all deployers.

³¹Assistant Secretary for Defense, Health Affairs, "Policy Guidance for Deployment-Limiting Psychiatric Conditions and Medications," Nov. 7, 2006.

³²Psychotropic medications are those capable of affecting the mind, emotions, and behavior.

The 2007 NDAA also required DOD to use the pre-deployment health assessment to identify those who are under treatment or have taken psychotropic medications for a mental health condition.³³ The pre-deployment health assessment form, the DD 2795, includes a question asking servicemembers whether they have sought mental health counseling or mental health care in the past year. In a July 2007 report to Congress, DOD cited the pre-deployment health assessment in describing its implementation of the 2007 NDAA requirements for pre-deployment screening.³⁴ The report also identified a medical record review as a component of the pre-deployment health assessment process to help meet these mental health screening requirements. According to a senior DOD official,³⁵ because servicemembers may be reluctant to disclose symptoms or treatment that may prevent them from deploying, the provider review of the medical record should be done to verify the self-reported information on the DD 2795.

While medical records are an important part in making deployment determinations, DOD's deployment policies are not consistent with respect to their review. DOD's November 2006 policy on minimum mental health standards for deployment states that the pre-deployment health assessment includes a medical record review as part of ensuring the standards are utilized, and DOD officials confirmed that the policy requires such a review. However, DOD's August 2006 Instruction on Deployment Health, which implements policies and prescribes procedures for deployment health activities, is silent on whether a review of medical records is required as part of the pre-deployment health assessment. This Instruction states only that the pre-deployment health assessment form, DD 2795, must be completed by each deploying servicemember and the responses reviewed by a health care provider. A health care provider following DOD's Instruction may not conduct the medical record review during the pre-deployment health assessment required by DOD's policy on minimum mental health standards for deployment. Because of DOD's inconsistent policies, providers determining if OEF and OIF

³³Pub. L. No. 109-364, § 738(a) (to be codified at 10 U.S.C. § 1074f(b)(2)).

³⁴DOD, *Report on the Enhanced Mental Health Screening and Services for Members of the Armed Forces: In Response to Section 738 in the John Warner National Defense Authorization Act for Fiscal Year 2007* (June 2007).

³⁵Program Director for Mental Health Policy, Office of the Assistant Secretary of Defense (Health Affairs).

servicemembers meet DOD's minimum mental health deployment standards may not have complete medical information.

During our site visits, we found that practices varied with respect to pre-deployment mental health screening, and medical records were not routinely reviewed at the time of the pre-deployment health assessment by the provider reviewing the DD 2795. While a review of medical records can serve to validate information reported by servicemembers, the health care providers we spoke with during our site visits were unaware that it was required as part of the pre-deployment health assessment. At all three installations we visited, servicemembers completed the DD 2795 form. At two of the three installations all servicemembers were interviewed by a health care provider to review their responses on the DD 2795 and discuss any additional health concerns. At the third installation, providers interviewed servicemembers if they indicated any concerns on the DD 2795. While the deployment health record was available to providers at all three installations,³⁶ the medical record was routinely reviewed by the provider at only one of the three installations during the pre-deployment health assessment. At the other two installations, providers told us the record was reviewed only if servicemembers identified concerns on the DD 2795 or during the interview.

³⁶Providers at two installations also had access to the hard copy or electronic medical record during the pre-deployment health assessment.

Health Care Providers at Installations Visited Manually Track Mental Health Referrals from the PDHA

Health care providers at Fort Campbell and Camp Lejeune³⁷ manually track whether servicemembers who receive mental health referrals from the PDHA make or keep appointments for evaluations with mental health providers. DOD does not require that individual referrals from the PDHA be tracked; however, DOD has a quality assurance program that monitors the PDHA, including follow-up encounters.³⁸ In addition, because Guard and Reserve servicemembers generally receive civilian care, which they do not have to disclose, and because servicemembers may be reluctant to disclose mental health encounters due to stigma concerns, Guard and Reserve referrals are difficult to track.

Health Care Providers at Visited Installations Manually Track PDHA Mental Health Referrals

While DOD health care providers generally make PDHA referrals using one of two DOD information technology systems, AHLTA or CHCS I, health care providers at military installations we visited have developed different manual systems to track whether referred servicemembers made or kept appointments with mental health providers. DOD does not require these referrals to be tracked. However, a Fort Campbell health care provider we spoke with said that the health care providers who make referrals from the PDHA may not have an ongoing relationship with the referred servicemembers and, therefore, manual systems have been created to track whether referred servicemembers completed their evaluations. According to installation health care providers, manually tracking referrals is labor-intensive and time-consuming, and necessary to ensure that referred servicemembers receive their evaluations.

We found that health care providers at Fort Campbell and Camp Lejeune have developed manual tracking systems to ensure that servicemembers receive evaluations. At Fort Campbell, the installation's readiness processing manager, who is the health care provider who tracks PDHA referrals, created an Access database for this purpose. The manager

³⁷ Although we also conducted a site visit to Fort Richardson, Alaska, we were unable to include it in our discussion of PDHA mental health referral tracking because this installation does not conduct the PDHA.

³⁸ DOD has a Force Health Protection Quality Assurance Program. This program includes periodic reporting on referrals indicated on the PDHA, and follow-up medical visits accomplished. The program also includes military-service specific quality assurance program reports that are to include accomplishment of the PDHA and related requirements such as referrals. However, the program is not designed to track individual completion of referrals from the PDHA for the purpose of monitoring follow-up care for an individual servicemember.

checks CHCS I, the information technology system Fort Campbell healthcare providers use to make PDHA referrals, daily to obtain their status. Then, this individual manually enters the status of each referral into the Access database, which allows all PDHA referrals and their status to be viewed in one list. Servicemembers who fail to make or keep their appointments are contacted, and if a servicemember does not respond after two follow-up attempts, the unit commander is informed.

At Camp Lejeune, health care providers track division servicemembers' PDHA mental health referrals to the division psychiatrist using hard-copy logbooks. Because the division psychiatrist's clinic does not have access to AHLTA or CHCS I, health care providers make referrals by phoning the division psychiatrist and follow-up with the psychiatrist every two weeks to track whether servicemembers kept their appointments. Camp Lejeune officials told us that, unlike the division, the air wing's and logistics group's PDHA mental health referral tracking is facilitated by having greater access to AHLTA, which allows providers to check the status of appointments scheduled at the MTF.

Some Reserves' PDHA Mental Health Referrals Are Manually Tracked

We found that mental health PDHA referrals for Marine Reserve members who complete the PDHA at Camp Lejeune are tracked manually. Officials from the Marine Reserves' Deployment Support Group (DSG)³⁹ at Camp Lejeune inform the home units of Reserve member referrals and track their status. According to a Fort Campbell health care provider, Army Reserve members are not processed through Fort Campbell following deployment and, therefore, do not complete the PDHA at this installation.

According to Guard and Reserve officials, home units rely largely on servicemembers to disclose whether they receive care from a mental health provider. Tracking PDHA mental health referrals is challenging for the Guard and Reserves because their members generally receive civilian care. Military health care providers would be unaware of civilian care unless disclosed by the Guard and Reserve member. In addition, Military OneSource, which is operated by a vendor contracted by DOD, guarantees that it will not release the identity of servicemembers who receive counseling unless servicemembers are at risk of harming themselves or

³⁹The Deployment Support Group supports Marine Reserve members who complete the pre- and post-deployment health assessment process at Camp Lejeune. It was created in 2003 under the orders of the installation's Commanding General.

others. As a result, PDHA mental health referral tracking is challenging for Guard and Reserve units due to their reliance on servicemembers to disclose mental health encounters with civilian providers, which Guard and Reserve officials told us they may be reluctant to do because of stigma concerns.

Health Care Providers Receive Mental Health Training and Guidance; DOD and the Military Services Are Implementing New Training Initiatives

While DOD policy allows several types of health care providers to conduct the PDHA, health care providers at Fort Campbell and Camp Lejeune told us that health care providers actually conducting the assessments are generally physicians, physician assistants, or, in the case of the Marine Corps, IDCs. According to installation health care providers, most of the physicians conducting the assessments have specialties in primary care, which includes the specialties of family practice and internal medicine.

The health care providers conducting these health assessments receive varying levels of training in mental health issues based on provider type during their basic medical education.⁴⁰ For example, physician assistants complete a rotation in psychiatry and may elect an additional psychiatry rotation, while IDCs receive training in psychiatric disorders as part of a unit on medical diagnosis and treatment that covers several types of medical conditions. Physicians receive mental health training in medical school.⁴¹

DOD provides several types of guidance for health care providers to help them conduct mental health assessments and decide whether to make referrals for further evaluation. DOD maintains a Web site⁴² that contains CPGs and other guidance and training that can be accessed by health care providers conducting the assessments. For example, DOD provides a set of reference materials on the Web site that contains information on and

⁴⁰Health care providers such as physicians may receive their basic medical education prior to entering the military. DOD's medical school at the Uniformed Services University of the Health Sciences graduates approximately 150 physicians per year. The DOD medical corps had 11,516 physicians in fiscal year 2006. IDCs are trained at the Naval School of Health Sciences in San Diego, CA.

⁴¹Specifically, a 2006-2007 questionnaire completed by 125 U.S. medical schools found that the average length of psychiatry clerkships—education that includes working with patients in supervised clinical settings—was 7.1 weeks. See Barbara Barzansky and Sylvia I. Etzel, "Medical Schools in the United States, 2006-2007," *Journal of the American Medical Association*, vol. 298, no. 9 (2007), pp. 1071-1077.

⁴²Deployment Health Clinical Center, <http://www.pdhealth.mil> (accessed March 28, 2008).

steps to assess servicemembers for PTSD and major depressive disorder. According to DOD, hard copy versions of these reference materials were distributed to MTFs beginning in July 2004, and MTFs may order additional copies.

We found that health care providers conducting the PDHA had varying familiarity with the CPGs and levels of comfort in conducting assessments. For example, at Camp Lejeune, some of the physicians and IDCs we interviewed about DOD's guidance were not familiar with the CPGs for depression and PTSD. Some physicians and IDCs cited resource constraints, in the form of limited access to computers and internet connectivity, as barriers to accessing these CPGs posted on the Web site. At Fort Campbell, a brigade surgeon we spoke to who supervises providers conducting the PDHA said that these providers have varying knowledge of the CPGs. He stated that the guidance is distributed to email accounts that some health care providers may not check regularly. In addition, health care providers varied in their level of comfort in making mental health assessments. At Camp Lejeune, eight of the 15 physicians and IDCs we interviewed were comfortable making mental health assessments, while the remaining seven were less comfortable making these assessments and expressed interest in receiving more training on making mental health assessments. At Fort Campbell, the division mental health providers we spoke with stated that while physician assistants, for example, could identify a servicemember with mental health concerns, these providers were generally not comfortable in assessing servicemembers for mental health issues.

DOD and the military services have implemented and are in the process of implementing several new mental health training initiatives. DOD created the Center of Excellence for Psychological Health and Traumatic Brain Injury in November 2007 that will focus on research, education, and training related to mental health. According to DOD, the Center will develop and distribute a core mental health curriculum for health care providers, as well as implement policies to direct training in the curriculum across the services. DOD plans to begin training primary care providers in July 2008. The Army has created a program, RESPECT-MIL,⁴³ that trains primary care providers in identifying and treating servicemembers with depression and PTSD. By the end of 2008, the Army

⁴³RESPECT-MIL stands for Re-Engineering Systems for the Primary Care Treatment of Depression and PTSD in the Military.

plans to train providers at 15 installations. The Army also directed all servicemembers, including health care providers, to participate in a training program that includes information on PTSD by October 18, 2007. The training focused on the causes and physical and psychological effects of PTSD and provided information on how to seek subsequent treatment for this condition. As of January 31, 2008, 93 percent of Army servicemembers had received the training. The Army also requires commanders to include PTSD awareness and response training in pre- and post-deployment briefings. The Marine Corps has a training program for non-mental health providers, including those that conduct the PDHA, that includes training on PTSD. This training began in January 2008 and is scheduled to train 669 health care providers at 12 sites by August 2008. The Marine Corps also requires pre- and post-deployment briefings on identifying and managing combat stress for all Marine Corps servicemembers and unit leaders.

DOD Is Implementing Mild TBI Screening for All Servicemembers and Has Provided Guidance and Training for Health Care Providers

In response to the 2007 NDAA, DOD added TBI screening questions to the PDHA in January 2008 and plans in July 2008 to begin screening all servicemembers prior to deployment. Prior to these TBI screening efforts required by DOD, several installations had already implemented efforts to screen servicemembers before or after their deployments. To help health care providers screen servicemembers for mild TBI and issue referrals, DOD has issued guidance and provided various forms of training.

DOD Is Implementing Mild TBI Screening in Its PDHA and Prior to Deployment; Several Installation-Specific Mild TBI Screening Initiatives Are in Place

In response to the 2007 NDAA requirement for pre- and post-deployment screening for TBI, DOD has added TBI screening questions to the PDHA, and plans to require screening of all servicemembers beginning in July 2008 for mild TBI prior to deployment. These screening questions are similar to the screening questions on the PDHA. The questions are included in a cognitive assessment tool that will provide a baseline of cognitive function in areas such as memory and reaction time. In January 2008, DOD released a new version of the post-deployment health

assessment form, the DD 2796, that contains screening questions for TBI (See appendix I for a copy of the new version of the DD 2796).⁴⁴

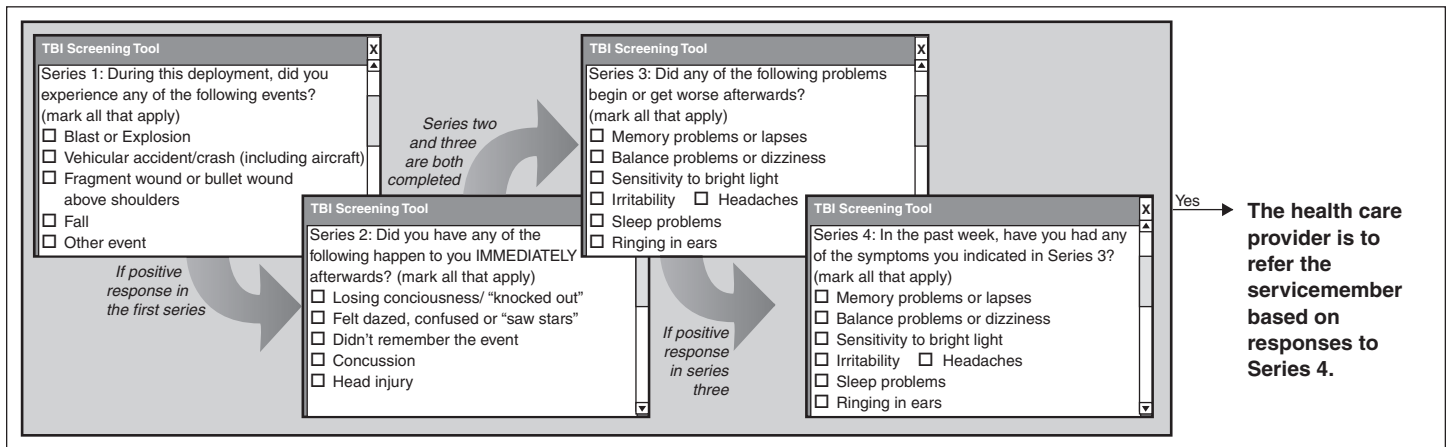
The TBI screening questions added to the PDHA are designed to be completed by the servicemember in four series.⁴⁵ The sequence of questions specifically assesses (a) events that may have increased the risk of a TBI, (b) immediate symptoms following the event, (c) new or worsening symptoms following the event, and (d) current symptoms. (See appendix I.) If there is a positive response to any question in the first series, the servicemember completes the second and third series; if there is a positive response to any question in the third series, the servicemember completes the fourth series about current symptoms. The DD 2796 directs the health care provider to refer the servicemember based on the servicemember's current symptoms.⁴⁶ See figure 2 for a description of these screening questions.

⁴⁴DOD has also included a screen for mild TBI to its PDHRA and DOD's electronic version of the PHA. The TBI screening questions on the PDHRA are identical to the questions on the PHA, and the screening questions on the PHA are slightly different from those on the PDHA because they do not refer to a servicemember's deployment.

⁴⁵Unlike typical clinical screening questions, which first screen for symptoms and then screen for the cause of the symptoms, the TBI screening questions first assess possible events that may have caused a mild TBI and then assess symptoms. According to a DOD official, DOD's TBI screening questions to be included in the PDHA were initially developed by the DVBIC, modified by VA, and refined and adopted by DOD. In April 2007, VA began implementing similar TBI screening questions for OEF/OIF veterans to be administered by health care providers at VA medical facilities.

⁴⁶A recent study cited in *The New England Journal of Medicine* suggests caution in interpreting responses to the TBI screening questions because PTSD and depression may be the primary cause of the servicemember's symptoms. See Charles W. Hoge et al. "Mild Traumatic Brain Injury in U.S. Soldiers Returning From Iraq." *The New England Journal of Medicine*, 358(5) (Jan. 31, 2008).

Figure 2: TBI Screening Questions on the PDHA



Source: GAO analysis of DOD screening questions.

Note: See appendix I for complete questions.

DOD is planning to require screening of all servicemembers for mild TBI prior to deployment using questions similar to those on the PDHA. This screening is planned to begin in July 2008 and these screening questions are included in a cognitive assessment, the Automated Neuropsychological Assessment Metrics (ANAM).⁴⁷ The ANAM will provide a baseline assessment of cognitive function in areas such as memory and reaction time, which may be affected by a mild TBI.⁴⁸ If a servicemember experiences an event in theater, the ANAM can be administered again and the differences in function assessed. Because the ANAM does not distinguish between impairments in cognitive function caused by events such as blasts and those caused by other factors such as fatigue, the ANAM needs to be used with screening questions to identify the event that may have caused a TBI. However, the ANAM can be used to identify changes in baseline cognitive function that may warrant further

⁴⁷The ANAM contains cognitive tests that have been developed by DOD, such as the Walter Reed Performance Assessment Battery, which measures the effect of sustained operations on memory, spatial processing, logical reasoning, attention, cognition, and mood. The University of Oklahoma holds the license for the ANAM and assures validation and quality assurance of the ANAM tests.

⁴⁸For a detailed description of the history of the ANAM and the tests included in the assessment tool, see Dennis L. Reeves, et al, "ANAM® Genogram: Historical perspectives, description, and current endeavors," *Archives of Clinical Neuropsychology*, vol. 22S (2007), pp. S15-S37.

evaluation. According to an Army official, since August 2007 about 50,000 Army servicemembers have been assessed using the ANAM.

Prior to DOD's plans to screen all servicemembers on the PDHA and prior to deployment, several installations had implemented, as early as 2000, initiatives for mild TBI screening to be used before or after units from those locations deployed. Generally, servicemembers participating in these initiatives are screened using a three-question screen developed by the DVBIC called the Brief Traumatic Brain Injury Screen (BTBIS).⁴⁹ The BTBIS is designed to identify servicemembers who may have had a mild TBI, and includes questions about events and symptoms that are similar to those used on DOD's PDHA. The first of these initiatives began at Fort Bragg, North Carolina in 2000. Since then, Fort Carson, Colorado; Fort Irwin, California; Fort McCoy, Wisconsin and Camp Pendleton, California have initiated screening for mild TBI either pre-deployment, post-deployment, or both.⁵⁰ A DVBIC official told us that these initiatives would probably be replaced by the DOD-wide screening.

DOD Has Issued Guidance on Identification of Mild TBI and Trained Some Health Care Providers on Identifying Mild TBI

DOD issued guidance for health care providers on the identification of mild TBI, trained some health care providers on identifying mild TBI, and plans additional health care provider training initiatives. In October 2007 DOD released guidance on identifying mild TBI for providers screening, assessing, and treating servicemembers outside the combat theater.⁵¹ The guidance contains information to help health care providers conducting

⁴⁹According to DVBIC, BTBIS was validated in a small, initial study conducted with active duty servicemembers who served in Iraq or Afghanistan between January 2004 and January 2005. A screen's validity is a measure of how effective it is in identifying those who are and are not at risk for mild TBI. The BTBIS is available at www.dvbic.org (accessed April 8, 2008). See also Karen A. Schwab et al., "The Brief Traumatic Brain Injury Screen (BTBIS): Investigating the validity of a self-report instrument for detecting traumatic brain injury (TBI) in troops returning from deployment in Afghanistan and Iraq," *Neurology*, vol. 66, no. 5 supp. 2 (2006), p. A235, and Karen A. Schwab, et al., "Screening for Traumatic Brain Injury in Troops Returning From Deployment in Afghanistan and Iraq: Initial Investigation of the Usefulness of a Short Screening Tool for Traumatic Brain Injury," *Journal of Head Trauma Rehabilitation*, vol. 22, no. 6 (2007), pp. 377-389.

⁵⁰Army officials stated that 10 to 20 percent of those screened had experienced a mild TBI, and that about 70 percent of those experiencing a mild TBI did not have TBI-related symptoms when they were screened. According to a DOD official, the rates of mild TBI appear to vary based on the location and intensity of combat to which the servicemember was exposed in theater.

⁵¹The guidance is designed to provide a preliminary basis for care of mild TBI until formal CPGs are published.

the PDHA, including follow-up questions that the provider can ask a servicemember based on the servicemember's responses to the TBI screening questions on the PDHA. The guidance contains structured series of questions that include certain "red flags," such as double vision or confusion, that suggest a need for referral for further evaluation for a possible mild TBI. The guidance recommends assessments and treatments for servicemembers with symptoms such as irritability and includes screening tools to help health care providers assess the severity of these symptoms. According to a DOD official, DOD also plans to provide the military services with guidance on using the new TBI screening questions on the PDHA.

In addition to issuing guidance, DOD and the military services also trained health care providers on identifying possible mild TBI. In September 2007 DOD held a tri-service conference in which more than 800 health care providers were trained. According to DVBIC officials, DVBIC staff provide training through workshops for health care providers at its 14 sites and travel to other installations to train health care providers. In addition, DOD's planned Defense Center of Excellence for Psychological Health and Traumatic Brain Injury, which began initial operations on November 30, 2007, and is expected to be fully functional by October 2009, will develop a national collaborative network to advance and disseminate TBI knowledge, enhance clinical and management approaches, and facilitate services for those dealing with TBI, according to DOD. According to Army officials, the Army is also initiating several health care provider training efforts for the summer of 2008 designed to train primary care providers on mild TBI. According to these officials, primary care providers are generally uncomfortable with treating mild TBI, preferring instead to refer these cases to specialty care. The Marine Corps' training program for non-mental health care providers, including those conducting the PDHA, also includes material on diagnosing mild TBI. With respect to the ANAM, DVBIC officials told us that wherever this assessment tool is used, DVBIC officials and officials responsible for the implementation of the ANAM train health care providers in its use.

Conclusions

DOD has taken positive steps to implement provisions of the 2007 NDAA related to screening servicemembers for TBI and mental health. For example, DOD has added mild TBI screening to its PDHA and will require screening prior to deployment. With respect to mental health, we found that health care providers' familiarity with DOD's CPGs and comfort in making mental health assessments varied. However, DOD and the military services have implemented or are implementing training initiatives, some

of which are specifically aimed at the primary care providers who generally conduct the PDHA. Furthermore, the installations we visited had developed manual systems for tracking those servicemembers who were referred from the PDHA to ensure that they made or completed their appointments. Referral tracking is difficult for the Guard and Reserves because their servicemembers generally receive civilian care.

DOD has taken steps to meet 2007 NDAA requirements related to mental health standards and screening, including issuing a policy on minimum mental health standards for deployment. A key component of DOD's efforts to meet these requirements is a review of medical records, and we agree that this should be done to verify information in a screening process that depends on self-reported information. Unfortunately, DOD's policies for reviewing medical records during the pre-deployment health assessment are inconsistent. During our site visits we found that health care providers were unaware a medical record review was required and that medical records were not always reviewed by providers conducting the pre-deployment health assessment. A health care provider following DOD's Instruction on Deployment Health, which is silent on whether medical record review is required during the pre-deployment health assessment, may not conduct the medical record review required by DOD's policy on minimum mental health standards for deployment. Until DOD resolves the inconsistency between its policies, its health care providers may not have complete mental health information when screening servicemembers prior to deployment.

Recommendation for Executive Action

In order to address the inconsistency in DOD's policies related to the review of medical record information and to assure that health care providers have reviewed the medical record when screening servicemembers prior to deployment, we recommend that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness to revise DOD's Instruction on Deployment Health to require a review of medical records as part of the pre-deployment health assessment.

Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD stated that our concerns regarding provider review of medical records are well-taken and that an assessment is only complete when it includes a medical record review. While DOD concurred with our recommendation and said that it will update its Instruction on Deployment Health to require a medical record review at the time of the pre-deployment health assessment, DOD is

limiting this medical record review requirement to servicemembers who have a significant change in health status since their most recent periodic health assessment. According to a senior DOD health official, it is anticipated that the updated Instruction will be published in one year. However, DOD does not explain how providers will be able to identify the subset of servicemembers who have had a significant change in health status. As a result, its response does not fully eliminate the inconsistency between its policy and current Instruction. To fully eliminate the inconsistency, as we recommended, DOD should require a medical record review for all servicemembers as part of the pre-deployment health assessment in its updated Instruction. We also encourage DOD to update its Instruction as quickly as possible so that providers have the complete information that we and DOD agree they need to make pre-deployment decisions. DOD also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the Secretary of Defense; the Secretaries of the Army, the Air Force, and the Navy; the Commandant of the Marine Corps; and appropriate congressional committees and addressees. We will also provide copies to others upon request. In addition, the report is available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or bascettac@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix III.



Cynthia A. Bascetta
Director, Health Care

List of Congressional Addressees

The Honorable Carl Levin
Chairman
The Honorable John McCain
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Ike Skelton
Chairman
The Honorable Duncan L. Hunter
Ranking Member
Committee on Armed Services
House of Representatives

The Honorable Daniel K. Akaka
United States Senate

The Honorable Wayne Allard
United States Senate

The Honorable Christopher S. Bond
United States Senate

The Honorable Barbara Boxer
United States Senate

The Honorable Tom Harkin
United States Senate

The Honorable Joseph I. Lieberman
United States Senate

The Honorable Claire C. McCaskill
United States Senate

The Honorable Patty Murray
United States Senate

The Honorable Barack Obama
United States Senate

The Honorable Ken Salazar
United States Senate

The Honorable Bernard Sanders
United States Senate

Appendix I: New Post-Deployment Health Assessment (DD 2796), January 2008

This form must be completed electronically. Handwritten forms will not be accepted.

POST-DEPLOYMENT HEALTH ASSESSMENT (PDHA)

PRIVACY ACT STATEMENT

AUTHORITY: 10 U.S.C. 136, 1074f, 3013, 5013, 8013 and E.O. 9397.

PRINCIPAL PURPOSE(S): To assess your state of health after deployment in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care you may need. The information you provide may result in a referral for additional healthcare that may include medical, dental or behavioral healthcare or diverse community support services.

ROUTINE USE(S): In addition to those disclosures generally permitted under 5 U.S.C. 552a(b) of the Privacy Act, to other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment. Responses may be used to guide possible referrals.

DISCLOSURE: Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before entering your response or marking your selection. **YOU ARE ENCOURAGED TO ANSWER EACH QUESTION. ANSWERING THESE QUESTIONS WILL NOT DELAY YOUR RETURN HOME.** Withholding or providing inaccurate information may impair a healthcare provider's ability to identify health problems and refer you to appropriate sources for additional evaluation or treatment. If you do not understand a question, please ask for help.

DEMOGRAPHICS

S A M P L E

Last Name _____ First Name _____ Middle Initial _____

Social Security Number _____ Today's Date (dd/mmm/yyyy) _____

Name of Your Unit during this Deployment _____ Date of Birth (dd/mmm/yyyy) _____ Gender
 Male Female

Service Branch	Component	Pay Grade	
<input type="radio"/> Air Force	<input type="radio"/> Active Duty	<input type="radio"/> E1	<input type="radio"/> O1
<input type="radio"/> Army	<input type="radio"/> National Guard	<input type="radio"/> E2	<input type="radio"/> O2
<input type="radio"/> Coast Guard	<input type="radio"/> Reserves	<input type="radio"/> E3	<input type="radio"/> O3
<input type="radio"/> Marine Corps	<input type="radio"/> Civilian Government Employee	<input type="radio"/> E4	<input type="radio"/> O4
<input type="radio"/> Navy	<input type="radio"/> Other	<input type="radio"/> E5	<input type="radio"/> O5
<input type="radio"/> GS Employee		<input type="radio"/> E6	<input type="radio"/> O6
<input type="radio"/> Other		<input type="radio"/> E7	<input type="radio"/> O7
		<input type="radio"/> E8	<input type="radio"/> O8
		<input type="radio"/> E9	<input type="radio"/> O9
			<input type="radio"/> O10

Date of arrival in theater (dd/mmm/yyyy) _____

Date of departure from theater (dd/mmm/yyyy) _____ Name of Operation: _____

Location of Operation. To what areas were you mainly deployed (land-based operations for more than 30 days)?
 (Please mark all that apply, including the number of months spent at each location.)

<input type="radio"/> Country 1	_____	Time at location (months)	_____
<input type="radio"/> Country 2	_____	Time at location (months)	_____
<input type="radio"/> Country 3	_____	Time at location (months)	_____
<input type="radio"/> Country 4	_____	Time at location (months)	_____
<input type="radio"/> Country 5	_____	Time at location (months)	_____

Occupational specialty during this deployment (MOS/AOC, NEC/NOBC, or AFSC): _____

Combat specialty: _____

Current Contact Information:

Phone: _____
 Cell: _____
 DSN: _____
 Email: _____
 Address: _____

Point of Contact who can always reach you:

Name: _____
 Phone: _____
 Email: _____
 Mailing Address: _____

Appendix I: New Post-Deployment Health Assessment (DD 2796), January 2008

This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number: _____

1. Overall, how would you rate your health during the PAST MONTH?
 - Excellent
 - Very Good
 - Good
 - Fair
 - Poor
2. Compared to before this deployment, how would you rate your health in general now?
 - Much better now than before I deployed
 - Somewhat better now than before I deployed
 - About the same as before I deployed
 - Somewhat worse now than before I deployed
 - Much worse now than before I deployed
3. During the past 4 weeks, how difficult have physical health problems (illness or injury) made it for you to do your work or other regular daily activities?
 - Not difficult at all
 - Somewhat difficult
 - Very difficult
 - Extremely difficult
4. During the past 4 weeks, how difficult have emotional problems (such as feeling depressed or anxious) made it for you to do your work, take care of things at home, or get along with other people?
 - Not difficult at all
 - Somewhat difficult
 - Very difficult
 - Extremely difficult
5. How many times were you seen by a healthcare provider (physician, PA, medic, corpsman, etc.) for a medical problem or concern during this deployment?

S A M P L E
6. Did you have to spend one or more nights in a hospital as a patient during this deployment?
 - No
 - Yes. Reason/dates: _____
7. Were you wounded, injured, assaulted or otherwise hurt during this deployment?
 - No
 - Yes
- 7a. IF YES, are you still having problems related to this event?
 - No
 - Yes
 - Unsure
8. For any of the following symptoms, please indicate whether you went to see a healthcare provider (physician, PA, medic, corpsman, etc.), were placed on quarters (Qtrs) or given light/limited duty (Profile), and whether you are still bothered by the symptom now.

Symptom	Sick Call?		Qtrs/Profile?		Still Bothered?		Symptom	Sick Call?		Qtrs/Profile?		Still Bothered?	
	No	Yes	No	Yes	No	Yes		No	Yes	No	Yes	No	Yes
Fever	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dizzy, light headed, passed out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cough lasting more than 3 weeks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Diarrhea	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trouble breathing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Vomiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bad headaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Frequent indigestion/heartburn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generally feeling weak	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Problems sleeping or still feeling tired after sleeping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muscle aches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trouble concentrating, easily distracted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Swollen, stiff or painful joints	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Forgetful or trouble remembering things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Back pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Hard to make up your mind or make decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Numbness or tingling in hands or feet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Increased irritability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trouble hearing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Skin diseases or rashes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ringing in the ears	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other (please list):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Watery, red eyes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							
Dimming of vision, like the lights were going out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							
Chest pain or pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							

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**Appendix I: New Post-Deployment Health
Assessment (DD 2796), January 2008**

This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number:

9.a. During this deployment, did you experience any of the following events? (Mark all that apply)

- (1) Blast or explosion (IED, RPG, land mine, grenade, etc.) No Yes
- (2) Vehicular accident/crash (any vehicle, including aircraft) No Yes
- (3) Fragment wound or bullet wound above your shoulders No Yes
- (4) Fall No Yes
- (5) Other event (for example, a sports injury to your head). Describe: No Yes

9.b. Did any of the following happen to you, or were you told happened to you, IMMEDIATELY after any of the event(s) you just noted in question 9.a.? (Mark all that apply)

- (1) Lost consciousness or got "knocked out" No Yes
- (2) Felt dazed, confused, or "saw stars" No Yes
- (3) Didn't remember the event No Yes
- (4) Had a concussion No Yes
- (5) Had a head injury No Yes

9.c. Did any of the following problems begin or get worse after the event(s) you noted in question 9.a.? (Mark all that apply)

- (1) Memory problems or lapses No Yes
- (2) Balance problems or dizziness No Yes
- (3) Ringing in the ears No Yes
- (4) Sensitivity to bright light No Yes
- (5) Irritability No Yes
- (6) Headaches No Yes
- (7) Sleep problems No Yes

9.d. In the past week, have you had any of the symptoms you indicated in 9.c.? (Mark all that apply)

- (1) Memory problems or lapses No Yes
- (2) Balance problems or dizziness No Yes
- (3) Ringing in the ears No Yes
- (4) Sensitivity to bright light No Yes
- (5) Irritability No Yes
- (6) Headaches No Yes
- (7) Sleep problems No Yes

10. Did you encounter dead bodies or see people killed or wounded during this deployment? (Mark all that apply)
 No Yes (Enemy Coalition Civilian)

11. Were you engaged in direct combat where you discharged a weapon?
 No Yes (land sea air)

12. During this deployment, did you ever feel that you were in great danger of being killed?
 No Yes

13. Have you ever had any experience that was so frightening, horrible, or upsetting that, IN THE PAST MONTH, you

- a. Have had nightmares about it or thought about it when you did not want to? No Yes
- b. Tried hard not to think about it or went out of your way to avoid situations that remind you of it? No Yes
- c. Were constantly on guard, watchful, or easily startled? No Yes
- d. Felt numb or detached from others, activities, or your surroundings? No Yes

14. Over the PAST MONTH, have you been bothered by the following problems?

- | | Not at all | Few or several days | More than half the days | Nearly every day |
|--|-----------------------|-----------------------|-------------------------|-----------------------|
| a. Little interest or pleasure in doing things | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Feeling down, depressed, or hopeless | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

15. Alcohol is occasionally available during deployments, e.g., R&R, port call, etc. Prior to deploying or during this deployment:

- a. Did you use alcohol more than you meant to? No Yes
- b. Have you felt that you wanted to or needed to cut down on your drinking? No Yes
- c. How often do you have a drink containing alcohol?
 Never Monthly or less 2 to 4 times a month 2 to 3 times a week 4 or more times a week
- d. How many drinks containing alcohol do you have on a typical day when you are drinking?
 1 or 2 3 or 4 5 or 6 7 to 9 10 or more
- e. How often do you have six or more drinks on one occasion?
 Never Less than monthly Monthly Weekly Daily

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**Appendix I: New Post-Deployment Health
Assessment (DD 2796), January 2008**

This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number:

16. Are you worried about your health because you were exposed to: (Mark all that apply)	No	Yes
Animal bites	<input type="radio"/>	<input type="radio"/>
Animal bodies (dead)	<input type="radio"/>	<input type="radio"/>
Chlorine gas	<input type="radio"/>	<input type="radio"/>
Depleted uranium (if yes, explain)	<input type="radio"/>	<input type="radio"/>
Excessive vibration	<input type="radio"/>	<input type="radio"/>
Fog oils (smoke screen)	<input type="radio"/>	<input type="radio"/>
Garbage	<input type="radio"/>	<input type="radio"/>
Human blood, body fluids, body parts, or dead bodies	<input type="radio"/>	<input type="radio"/>
Industrial pollution	<input type="radio"/>	<input type="radio"/>
Insect bites	<input type="radio"/>	<input type="radio"/>
Ionizing radiation	<input type="radio"/>	<input type="radio"/>
JPB or other fuels	<input type="radio"/>	<input type="radio"/>
Lasers	<input type="radio"/>	<input type="radio"/>
Loud noises	<input type="radio"/>	<input type="radio"/>
Paints	<input type="radio"/>	<input type="radio"/>
Pesticides	<input type="radio"/>	<input type="radio"/>
Radar/Microwaves	<input type="radio"/>	<input type="radio"/>
Sand/dust	<input type="radio"/>	<input type="radio"/>
Smoke from burning trash or feces	<input type="radio"/>	<input type="radio"/>
Smoke from oil fire	<input type="radio"/>	<input type="radio"/>
Solvents	<input type="radio"/>	<input type="radio"/>
Tent heater smoke	<input type="radio"/>	<input type="radio"/>
Vehicle or truck exhaust fumes	<input type="radio"/>	<input type="radio"/>
Other exposures to toxic chemicals or materials, such as ammonia, nitric acid, etc.: (if yes, explain)	<input type="radio"/>	<input type="radio"/>

S A M P L E

17. Were you exposed to any chemicals or other hazard (industrial, environmental, etc.) that required you to seek immediate medical care?
 No Yes

18. Did you enter or closely inspect any destroyed military vehicles?
 No Yes

19. Do you think you were exposed to any chemical, biological, or radiological warfare agents during this deployment?
 No Don't know Yes, explain with date and location _____

20. This question assesses your personal risk for exposure to tuberculosis or other local infectious diseases. Would you say your INDOOR contact with local or 3rd country nationals was:

None Minimal (less than 1 hour per week) Moderate (1 or more hours per week, but not daily) Extensive (at least 1 hour per day, every day)

21. Force Health Protection Measures. Please indicate which of the following items you used during this deployment and how often you used them.

	Daily	Most days	Some days	Never	Not available	Not required
DEET insect repellent applied to skin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pesticide-treated uniforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eye protection (not commercial sunglasses or prescription glasses)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hearing protection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
N-95 or other respirator (not gas mask)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pills to stay awake, like dexedrine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anti-NBC meds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pyridostigmine (nerve agent pill)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nerve agent antidote injector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seizure/convulsion antidote injector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NBC gas mask	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MOPP over garments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Appendix I: New Post-Deployment Health Assessment (DD 2796), January 2008

This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number:

Health Care Provider Only

Post-Deployment Health Care Provider Review, Interview, and Assessment

1. Do you have any medical or dental problems that developed during this deployment? Yes No
If yes, are the problems still bothering you now? Yes No

2. Are you currently on a profile (or LIMDU) that restricts your activities (light or limited duty)? Yes No
If yes: For what reason? _____ NA
Is your condition due to an injury or illness that occurred during the deployment? Yes No NA
Did you have similar problems prior to deployment? Yes No NA
If so, did your condition worsen during the deployment? Yes No NA

3. Ask the following behavioral risk questions. Conduct risk assessment as necessary.

a. Over the PAST MONTH, have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way? Yes No
IF YES, about how often have you been bothered by these thoughts? A few days More than half of the time Nearly every day

b. Over the PAST MONTH, have you had thoughts or concerns that you might hurt or lose control with someone? Yes No Unsure

4. If member reports YES or UNSURE responses to 3.a. or 3.b., conduct risk assessment.

a. Does member pose a current risk for harm to self or others? No, not a current risk Yes, poses a current risk Unsure

b. Outcome of assessment: Immediate referral Routine follow-up referral Referral not indicated

5. Alcohol screening result
 No evidence of alcohol-related problems
 Potential alcohol problem (positive response to either question 15.a. or 15.b. and/or AUDIT-C (questions 15.c.-e.) score of 4 or more for men or 3 or more for women).
Refer to PCM for evaluation. Yes No

6. During this deployment have you sought, or do you now intend to seek, counseling or care for your mental health? Yes No

7. Traumatic Brain Injury (TBI) risk assessment
 No evidence of risk based on responses to questions 9.a. - d.
 Potential TBI with persistent symptoms, based on responses to question 9.d.
Refer for additional evaluation. Yes No

8. Tuberculosis risk assessment, based on response to question 20.
 Minimal risk
 Increased risk
Recommend tuberculosis skin testing in 60-90 days Yes No

9. Depleted Uranium (DU) risk assessment, based on responses to question 16 (DU, Yes) or question 18 (Yes).
 No evidence of exposure to depleted uranium
 Potential exposure to depleted uranium
Refer to PCM for completion of DD Form 2872 and possible 24-hour urinalysis. Yes No

10. Do you have any other concerns about possible exposures or events during this deployment that you feel may affect your health? Yes No
Please list your concerns: _____

11. Do you currently have any questions or concerns about your health? Yes No
Please list your concerns: _____

S A M P L E

Appendix I: New Post-Deployment Health Assessment (DD 2796), January 2008

This form must be completed electronically. Handwritten forms will not be accepted.

Service Member's Social Security Number: _____

Health Assessment

After my interview/examination of the service member and review of this form, there is a need for further evaluation and follow-up as indicated below. (More than one may be noted for patients with multiple problems. Further documentation of the problem evaluation to be placed in service member's medical record.)

11. Identified Concerns	Minor Concern	Major Concern	Already Under Care		12. Referral Information	Within 24 hours	Within 7 days	Within 30 days
			Yes	No				
<input type="checkbox"/> Physical Symptom(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	a. Primary Care, Family Practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Exposure Symptom(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	b. Behavioral Health in Primary Care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Environmental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	c. Mental Health Specialty Care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Occupational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	d. Other specialty care:			
<input type="checkbox"/> Combat or mission-related	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Audiology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Depression symptoms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cardiology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> PTSD symptoms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dentistry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Anger/Aggression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dermatology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Suicidal Ideation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Social/Family Conflict	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Alcohol Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Internal Medicine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Neurology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Comments: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____					OB/GYN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					Ophthalmology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					Optometry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					Orthopedics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					Pulmonology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					Urology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					e. Case Manager, Care Manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					f. Substance Abuse Program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					g. Health Promotion, Health Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					h. Chaplain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					i. Family Support, Community Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					j. Military OneSource	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					k. Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				l. No referral made	<input type="checkbox"/>			

I certify that this review process has been completed.
Provider's signature and stamp.

This visit is coded by V70.5 _ E

Date (dd/mmm/yyyy) _____

S A M P L E

Ancillary Staff/Administrative Section

14. Member was provided the following:	15. Referral was made to the following healthcare or support system:
<input type="checkbox"/> Medical Threat Dobrief	<input type="checkbox"/> Military Treatment Facility
<input type="checkbox"/> Health Education and Information	<input type="checkbox"/> Division/Line-based medical resource
<input type="checkbox"/> Health Care Benefits and Resources Information	<input type="checkbox"/> VA Medical Center or Community Clinic
<input type="checkbox"/> Appointment Assistance	<input type="checkbox"/> Vet Center
<input type="checkbox"/> Service member declined to complete form	<input type="checkbox"/> TRICARE Provider
<input type="checkbox"/> Service member declined to complete interview/assessment	<input type="checkbox"/> Contract Support: _____
<input type="checkbox"/> Service member declined referral for services	<input type="checkbox"/> Community Service: _____
<input type="checkbox"/> LOD	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Post-deployment blood specimen collected (if required)	<input type="checkbox"/> None
<input type="checkbox"/> Other: _____	

Appendix II: Comments from the Department of Defense



THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

MAY 16 2008

HEALTH AFFAIRS

Ms. Cynthia A. Bascetta
Director, Health Care
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Ms. Bascetta:

This is the Department of Defense response to the Government Accountability Office (GAO) draft report, GAO-08-615, "DoD HEALTH CARE: Mental Health and Traumatic Brain Injury Screening Efforts Implemented, But Consistent Pre-Deployment Medical Record Review Policies Needed," dated April 18, 2008 (GAO Code 290634).

Thank you for the opportunity to review and comment on the draft report. I appreciate the collaborative, insightful, and thorough approach your team has taken with this important issue. I also appreciate your acknowledgement in the report of the efforts the Department is making to ensure the deployability of Service members, to afford follow-on care for Service members who indicate symptoms pre- or post-deployment, and to provide training of health care providers.

Your concerns regarding clinician review of medical records are well-taken. An assessment is only complete when it includes medical record review, and we require such reviews take place as a vital part of our annual periodic health assessment. I will update the Department of Defense Instruction 6490.03, "Deployment Health," to require a medical records review for any significant change in health status since the most recent periodic health assessment for each Service member undergoing a pre-deployment health assessment. The update will occur during the next regular update of this instruction.

Again, thank you for the opportunity to provide these comments. My points of contact for additional information are Colonel Joyce Adkins (Functional), who can be reached at (703) 845-3313, and Mr. Gunther Zimmerman (Audit Liaison), who can be reached at (703) 681-4360.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen L. Jones".
For S. Ward Casscells, MD

Enclosure:
As stated

GAO Draft Report Dated April 18, 2008
GAO-08-615 (GAO Code 290634)

**“DOD HEALTH CARE: Mental Health and Traumatic Brain Injury Screening
Efforts Implemented, but Consistent Pre-Deployment Medical Record Review
Policies Needed”**

**DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATION**

RECOMMENDATION: “In order to address the inconsistency in DoD’s policies related to the review of medical record information and to assure that health care providers have reviewed the medical record when screening Service members prior to deployment, we recommend that the Secretary of Defense direct the Under Secretary of Defense for Personnel and Readiness to revise the DoD Instruction on Deployment Health to require a review of medical records as part of the pre-deployment health assessment.”

DoD RESPONSE: The Department of Defense concurs with comment. Comprehensive clinician reviews of medical records take place as a vital part of our annual periodic health assessment. We will update the Department of Defense Instruction 6490.03, “Deployment Health,” to require a medical records review for any significant change in health status since the most recent periodic health assessment for each Service member undergoing a pre-deployment health assessment. The update will occur during the next regular update of this instruction.

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Cynthia A. Bascetta, (202) 512-7114 or bascettac@gao.gov

Acknowledgments

In addition to the contact named above, Marcia Mann, Assistant Director; Eric Anderson; Krister Friday; Lori Fritz; Adrienne Griffin; Amanda Pusey; and Jessica Cobert Smith made key contributions to this report.

Related GAO Products

VA Health Care: Mild Traumatic Brain Injury Screening and Evaluation Implemented for OEF/OIF Veterans, but Challenges Remain. [GAO-08-276](#). Washington, D.C.: February 8, 2008.

VA and DOD Health Care: Administration of DOD's Post-Deployment Health Reassessment to National Guard and Reserve Servicemembers and VA's Interaction with DOD. [GAO-08-181R](#). Washington, D.C.: January 25, 2008.

Defense Health Care: Comprehensive Oversight Framework Needed to Help Ensure Effective Implementation of a Deployment Health Quality Assurance Program. [GAO-07-831](#). Washington, D.C.: June 22, 2007.

Post-Traumatic Stress Disorder: DOD Needs to Identify the Factors Its Providers Use to Make Mental Health Evaluation Referrals for Servicemembers. [GAO-06-397](#). Washington, D.C.: May 11, 2006.

Military Personnel: Top Management Attention Is Needed to Address Long-standing Problems with Determining Medical and Physical Fitness of the Reserve Force. [GAO-06-105](#). Washington, D.C.: October 27, 2005.

Defense Health Care: Occupational and Environmental Health Surveillance Conducted during Deployments Needs Improvement. [GAO-05-903T](#). Washington, D.C.: July 19, 2005.

Defense Health Care: Improvements Needed in Occupational and Environmental Health Surveillance during Deployments to Address Immediate and Long-term Health Issues. [GAO-05-632](#). Washington, D.C.: July 14, 2005.

VA Health Care: VA Should Expedite the Implementation of Recommendations Needed to Improve Post-Traumatic Stress Disorder Services. [GAO-05-287](#). Washington, D.C.: February 14, 2005.

Defense Health Care: Force Health Protection and Surveillance Policy Compliance Was Mixed, but Appears Better for Recent Deployments. [GAO-05-120](#). Washington, D.C.: November 12, 2004.

Related GAO Products

VA and Defense Health Care: More Information Needed to Determine If VA Can Meet an Increase in Demand for Post-Traumatic Stress Disorder Services. [GAO-04-1069](#). Washington, D.C.: September 20, 2004.

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