This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

Jump down to document ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND
Browse Books & Publications
Make a charitable contribution

For More Information
Visit RAND at www.rand.org
Explore RAND Testimony
View document details

Limited Electronic Distribution Rights
This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see RAND Permissions.
Invisible Wounds of War

Recommendations for Addressing Psychological and Cognitive Injuries

TERRI TANIELIAN

CT-308
June 2008
Testimony presented before the House Committee on Veterans' Affairs on June 11, 2008
Chairman Filner, Representative Buyer, and distinguished members of the Committee, thank you for inviting me to testify today to discuss the findings and recommendations from our study of the Invisible Wounds of War. It is an honor and pleasure to be here.

My testimony will briefly discuss several recommendations for addressing the psychological and cognitive injuries among servicemembers returning from deployments to Operations Enduring Freedom and Iraqi Freedom. Dr. Jaycox shared with you our findings about the prevalence of post-traumatic stress disorder and depression, as well as the incidence of traumatic brain injury among servicemembers returning from Operations Enduring Freedom and Iraqi Freedom; the costs to society associated with these conditions and of providing care to those afflicted with these conditions, and the gaps in the care systems designed to treat these conditions among our nation’s servicemembers and veterans. Together, Dr. Jaycox and I co-directed more than 30 researchers at RAND in the completion of this study and our testimony is drawn from the same body of work. The purpose of these recommendations is to close the gaps in access and quality for our nation’s veterans that Dr. Jaycox briefly described in her testimony.

Background

Throughout its history, the United States has striven to recruit, prepare, and sustain an armed force with the capacity and capability to defend the nation. The Department of Defense (DoD), through the Secretary of Defense and the Services, bears the responsibility for ensuring that the force is ready and deployable to conduct and support military operations. The nation has committed not only to compensating military servicemembers for their duty but also to addressing and providing compensation, benefits, and medical care for any Service-connected injuries and disabilities.
those who suffer injuries but remain on active duty, benefits and medical care are typically provided through DoD, which remains their employer. Veterans who have left the military may be eligible for health care and other benefits (disability, vocational training), as well as memorial and burial services, through the Department of Veterans Affairs (VA).

Safeguarding mental health is an integral part of the national responsibility to recruit, prepare, and sustain a military force and to address Service-connected injuries and disabilities. Safeguarding mental health is also critical for compensating and honoring those who have served the nation. The Departments of Defense and Veterans Affairs are primarily responsible for these critical tasks; however, other federal agencies (e.g., the Department of Labor) and states also play important roles in ensuring that the military population is not only ready as a national asset but also valued as a national priority. Our research focused mainly on services available through DoD and the VA; however, where applicable, we also examined state programs and other resources.

**Addressing the Invisible Wounds of War**

With the United States still involved in military operations in Afghanistan and Iraq, psychological and cognitive injuries among those deployed in support of Operations Enduring Freedom (OEF) and Iraqi Freedom (OIF) are of growing concern. Most servicemembers return home from deployment without problems and successfully readjust to ongoing military employment or work in civilian settings. But others return with mental health conditions, such as post-traumatic stress disorder (PTSD) or major depression, and some have suffered a traumatic brain injury (TBI), such as a concussion, leaving a portion of sufferers with cognitive impairments. Our analyses found that approximately 18.5 percent of U.S. servicemembers who have returned from Afghanistan and Iraq currently have post-traumatic stress disorder or depression; and 19 percent report experiencing a probable traumatic brain injury while they were deployed. Based on the existing literature, our study found that these conditions can have negative, cascading consequences if left untreated. In addition, the economic costs to society associated with PTSD and depression among veterans are high, totaling an estimated $6.2 billion over two years following deployment. Our research demonstrated that delivering evidence based treatment to all of combat veterans afflicted with PTSD and depression would significantly reduce these costs to society.

Despite widespread policy interest and a firm commitment from the Departments of Defense and Veterans Affairs to address these injuries, fundamental gaps remain in the understanding of these conditions and the adequacy of the care systems to meet the mental health and cognitive needs of U.S. servicemembers returning from Afghanistan and Iraq. RAND undertook this comprehensive study to examine these conditions and make their consequences visible. Our study focused on three major conditions—post-traumatic stress disorder, major depression, and traumatic brain
injury—because there are obvious mechanisms that link each of these conditions to specific experiences in war. All three conditions affect mood, thoughts, and behavior, yet these conditions often go unrecognized or unacknowledged. In addition, the effects of traumatic brain injury are still poorly understood, leaving a substantial gap in knowledge about the extent of the problem and its effective treatment.

**Closing the Gaps**

Concern about the invisible wounds of war is increasing, and many efforts to identify and treat those wounds are already under way. Our data show that these mental health and cognitive conditions are widespread; in a cohort of otherwise-healthy, young individuals they represent the primary type of morbidity or illness for this population in the coming years. Unfortunately, only about half of those who need treatment for a mental health condition sought it in the past year. Servicemembers and veterans report several barriers to seeking care, including concerns about negative career repercussions if they seek help for a mental health problem.

What is most worrisome is that these problems are not yet fully understood, particularly TBI, and systems of care are not yet fully available to assist recovery for any of the three conditions. OEF and OIF veterans, depending on their current status, may be eligible to seek care through the Department of Defense or the Department of Veterans Affairs. Many may also seek care in the private sector. Our analyses found that while effective treatments for these conditions exist, they were not being implemented in all sectors that provide health care to OEF and OIF veterans. In addition, our survey found that only slightly more than half of those with PTSD and depression who receive treatment get what is defined as minimally adequate care. Our review of the systems of care also found that the use of performance and quality monitoring techniques was lacking in several of the sectors that serve OEF and OIF veterans. Our analyses also concluded that improving access to high quality care can be cost-effective and improve recovery rates. Improving access to high quality care for these veterans, however, will require closing the gaps in access and quality that our study identified.

Looking across the dimensions of our analysis and findings, our report offers four specific recommendations that would improve the understanding and treatment of PTSD, major depression, and TBI among military servicemembers and veterans. Below, I briefly describe each recommendation and then discuss some of the issues that would need to be addressed for its successful implementation. To the greatest extent possible efforts to address these recommendations should be standardized to the greatest extent possible within DoD (across Service branches, with appropriate guidance from the Assistant Secretary of Defense for Health Affairs), within the VA (across health care facilities and Vet Centers), and across these systems.
and extended into the community-based civilian sector. These policies and programs must be consistent within and across these sectors in order to have the intended effect on careseeking and improvements in quality of care for our nation’s veterans.

1. Increase the cadre of providers who are trained and certified to deliver proven (evidence-based) care, so that capacity is adequate for current and future needs.

There is substantial unmet need for treatment of PTSD and major depression among military servicemembers following deployment. Both DoD and the VA have had difficulty in recruiting and retaining appropriately trained mental health professionals to fill existing or new slots. With the possibility of more than 300,000 new cases of mental health conditions among OEF/OIF veterans, a commensurate increase in treatment capacity is needed. Increased numbers of trained and certified professionals are needed to provide high-quality care (evidence-based, safe, patient-centered, efficient, equitable, and timely care) in all sectors, both military and civilian, serving previously deployed personnel. Although the precise increase of newly trained providers is not yet known, it is likely to number in the thousands. These would include providers not just in specialty mental health settings but also embedded in settings such as primary care, where servicemembers are already served. Stakeholders consistently referred to challenges in hiring and retaining trained mental health providers. Determining the exact number of providers will require further analyses of demand projections over time, taking into account the expected length of evidence-based treatment and desired utilization rates. Additional training in evidence-based approaches for trauma will also be required for tens of thousands of existing providers. Moreover, since there is already an increased need for services, the required expansion in trained providers is already several years overdue.

This large-scale training effort necessitates substantial investment immediately. Such investment could be facilitated by several strategies, including the following:

- Adjustment of financial reimbursement for providers to offer appropriate compensation and incentives to attract and retain highly qualified professionals and ensure motivation for delivering quality care.
- Development of a certification process to document the qualifications of providers. To ensure that providers have the skills to implement high-quality therapies, substantial change from the status quo is required. Rather than relying on a system in which any licensed counselor is assumed to have all necessary skills regardless of training, certification should confirm that a provider is trained to use specific evidence-based treatments for specific conditions. Providers would also be required to demonstrate requisite knowledge of unique military culture, military employment, and issues relevant to
veterans (gained through their prior training and through the new training/certification our report recommends).

- Expansion of existing training programs for psychiatrists, psychologists, social workers, marriage and family therapists, and other counselors. Programs should include training in specific therapies related to trauma and to military culture.

- Establishment of regional training centers for joint training of DoD, VA, and civilian providers in evidence-based care for PTSD and major depression. The centers should be federally funded. This training could occur in coordination with or through the Department of Health and Human Services. Training should be standardized across training centers to ensure both consistency and increase fidelity in treatment delivery.

- Linkage of certification to training to ensure that providers not only receive required training but also are supervised and monitored to verify that quality standards are met and maintained over time.

- Retraining or expansion of existing providers within DoD and the VA (e.g., military community-service program counselors) to include delivery or support of evidence-based care.

- Evaluation of training efforts as they are rolled out, so that there is an understanding about how much training is needed and of what type, thereby ensuring delivery of effective care.

2. Change policies to encourage active duty personnel and veterans to seek needed care.

Creating an adequate supply of well-trained professionals to provide care is but one facet of ensuring access to care. Strategies must also increase demand for necessary services. Many servicemembers are reluctant to seek services for fear of negative career repercussions. Policies must be changed so that there are no perceived or real adverse career consequences for individuals who seek treatment, except when functional impairment (e.g., poor job performance or being a hazard to oneself or others) compromises fitness for duty. Primarily, such policies will require creating new ways for servicemembers and veterans to obtain treatments that are confidential, to operate in parallel with existing mechanisms for receiving treatment (e.g., command referral, unit-embedded support, or self-referral). We are not suggesting that the confidentiality of treatment should be absolute; both military and civilian treatment providers already have a legal obligation to report to authorities/commanders any patients that represent a threat to themselves or others. However, information about being in treatment is currently available to command staff, even though treatment itself is not a sign of dysfunction or poor job performance and may not have any relationship to deployment eligibility. Providing an option for confidential treatment has the potential to increase total-force readiness by encouraging individuals to seek needed health care before problems accrue to a critical level. In this way, mental health treatment would be appropriately used by the military as a tool to avoid or mitigate functional impairment, rather than as evidence of
functional impairment. Our analyses suggest that this option would ultimately lead to better force readiness and retention, and thus be a beneficial change for both the organization and the individual. This recommendation would require resolving many practical challenges, but it is vital for addressing the mental health problems of servicemembers who, out of concern for their military careers, are not seeking care. Specific strategies for facilitating careseeking include the following:

- Developing strategies for early identification of problems that can be confidential, so that problems are recognized and care sought early before the problems lead to impairments in daily life, including job function or eligibility for deployment.
- Developing ways for servicemembers to seek mental health care voluntarily and off-the-record, including ways to allow servicemembers to seek this care off-base if they prefer and ways to pay for confidential mental health care (that is not necessarily tied to an insurance claim from the individual servicemember). Thus, the care would be offered to military personnel without mandating disclosure, unless the servicemember chooses to disclose use of mental health care or there is a command-initiated referral to mental health care.
- Separating the system for determining deployment eligibility from the mental health care system. This may require the development of new ways to determine fitness for duty and eligibility for deployment that do not include information about mental health service use.
- Making the system transparent to servicemembers so that they understand how information about mental health services is and is not used. This may help mitigate servicemembers’ concerns about detriments to their careers.

3. Deliver proven, evidence-based care to servicemembers and veterans whenever and wherever services are provided.

Our extensive review of the scientific literature documented that treatments for PTSD and major depression vary substantially in their effectiveness. In addition, the recent report from the Institute of Medicine shows reasonable evidence for treatments for PTSD among military servicemembers and veterans (Institute of Medicine, 2007). Our evaluation shows that the most effective treatments are being delivered in some sectors of the care system for military personnel and veterans, but that gaps remain in system-wide implementation. Delivery of evidence-based care to all veterans with PTSD or major depression would pay for itself, or even save money, by improving productivity and reducing medical and mortality costs within only two years. Providing evidence-based care is not only the humane course of action but also a cost-effective way to retain a ready and healthy military force for the future. Providing one model, the VA is at the forefront of trying to ensure that evidence-based care is delivered to its patient population, but the VA has not yet fully evaluated the success of its efforts across the entire system. Our analysis suggests requiring all providers who
treat military personnel to use treatment approaches empirically demonstrated to be effective. This requirement would include uniformed providers in theater and embedded in active duty units; primary and specialty care providers within military and VA health care facilities and Vet Centers; and civilian providers. Evidence-based approaches to resilience-building and other programs need to be enforced among informal providers, including promising prevention efforts pre-deployment, noncommissioned officer support models in theater, and the work of chaplains and family-support providers. Such programs could bolster resilience before mental health conditions develop, or help to mitigate the long-term consequences of mental health conditions. The goal of this requirement is not to stifle innovation or prevent tailoring of treatments to meet individual needs, but to ensure that individuals who have been diagnosed with PTSD or major depression are provided the most effective evidence-based treatment available. Some key transformations may be required to achieve this needed improvement in the quality of care:

- The “black box” of psychotherapy delivered to veterans must be made more transparent, making providers accountable for the services they are providing. Doing so might require that TRICARE and the VA implement billing codes to indicate the specific type of therapy delivered, documentation requirements (i.e., structured medical note-taking that needs to accompany billing), and the like.
- TRICARE and the VA should require that all patients be treated by therapists who are certified to handle the diagnosed disorders of that patient.
- Veterans should be empowered to seek appropriate care by being informed about what types of therapies to expect, the benefits of such therapies, and how to evaluate for themselves whether they are receiving quality care.
- A monitoring system could be used to ensure sustained quality and coordination of care and quality improvement. Transparency, accountability, and training/certification, as described above, would facilitate ongoing monitoring of effectiveness that could inform policymaking and form the basis for focused quality improvement initiatives (e.g., through performance measurement and evaluation). Additionally, linking performance measurements to reimbursement and incentives for providers may also promote delivery of quality care.

4. Invest in research to close information gaps and plan effectively.

In many respects, this study raised more research questions than it provided answers. Better understanding is needed of the full range of problems (emotional, economic, social, health, and other quality-of-life deficits) that confront individuals with post-combat PTSD, major depression, and TBI. This knowledge is required both to enable the health care system to respond effectively and to calibrate how disability benefits are ultimately determined. Greater knowledge is needed to understand who is at risk for developing mental health problems and who is most vulnerable to
relapse, and how to target treatments for these individuals. Policymakers need to be able to accurately measure the costs and benefits of different treatment options so that fiscally responsible investments in care can be made. Better documentation how these mental health and cognitive conditions affect families of servicemembers and veterans is needed so that appropriate support services can be provided. Sustained research is also needed into the effectiveness of treatments, particularly treatments that can improve the functioning of individuals who do not improve from the current evidence-based therapies. Finally, more research is needed that evaluates the effects of policy changes implemented to address the injuries of OEF/OIF veterans, including how such changes affect the health and well-being of the veterans, the costs to society, and the state of military readiness and effectiveness. Addressing these vital questions will require a substantial, coordinated, and strategic research effort. Several types of studies are needed to address these information gaps. A coordinated federal research agenda on these issues within the veterans’ population is needed. Further, to adequately address knowledge gaps will require funding mechanisms that encourage longer-term research that examines a broader set of issues than can be financed within the mandated priorities of an existing funder or agency. Such a research program would likely require funding in excess of that currently devoted to PTSD and TBI research through DoD and the VA, and would extend to the National Institutes of Health, the Substance Abuse and Mental Health Services Administration, the Centers for Disease Control and Prevention, and the Agency for Healthcare Research and Quality. These agencies have limited research activities relevant to military and veteran populations, but these populations have not always been prioritized within their programs.

Initial strategies for implementing this national research agenda include the following:

- Launch a large, longitudinal study on the natural course of these mental health and cognitive conditions among OEF/OIF veterans, including predictors of relapse and recovery. Ideally, such a study would gather data pre-deployment, during deployment, and at multiple time points post-deployment. The study should be designed so that its findings can be generalized to all deployed servicemembers while still facilitating identification of those at highest risk, and it should focus on the causal associations between deployment and mental health conditions. A longitudinal approach would also make it possible to evaluate how use of health care services affects symptoms, functioning, and outcomes over time; how TBI and mental health conditions affect physical health, economic productivity, and social functioning; and how these problems affect the spouses and children of servicemembers and veterans. These data would greatly inform how services are arrayed to meet evolving needs within this population of veterans. They would also afford a better understanding of the costs of these conditions and the benefits of treatment so that the nation can make fiscally responsible investments in treatment and prevention programs. Some ongoing studies are examining these issues (Smith et al., 2008;
Vasterling et al., 2006); however, they are primarily designed for different purposes and thus can provide only partial answers.

- Continue to aggressively support research to identify the most effective treatments and approaches, especially for TBI care and rehabilitation. Although many studies are already under way or under review (as a result of the recent congressional mandate for more research on PTSD and TBI), an analysis that identifies priority-research needs within each area could add value to the current programs by informing the overall research agenda and creating new program opportunities in areas in which research may be lacking or needed. More research is also needed to evaluate innovative treatment methods, since not all individuals benefit from the currently available treatments.

- Evaluate new initiatives, policies, and programs. Many new initiatives and programs designed to address psychological and cognitive injuries have been put into place, ranging from screening programs and resiliency training, to use of care managers and recovery coordinators, to implementation of new therapies. Each of these initiatives and programs should be carefully evaluated to ensure that it is effective and is improving over time. Only programs that demonstrate effectiveness should be maintained and disseminated.

**Treating the Invisible Wounds of War**

Addressing PTSD, depression, and TBI among those who deployed to Afghanistan and Iraq should be a national priority. But it is not an easy undertaking. The prevalence of these injuries is relatively high and may grow as the conflicts continue. And long-term negative consequences are associated with these injuries if they are not treated with evidence-based, patient-centered, efficient, equitable, and timely care. The systems of care available to address these injuries have been improved significantly, but critical gaps remain.

The nation must ensure that quality care is available and provided to its military veterans now and in the future. As a group, the veterans returning from Afghanistan and Iraq are predominantly young, healthy, and productive members of society. However, about a third are currently affected by PTSD or depression, or report exposure to a possible TBI while deployed. Whether the TBIs will translate into any lasting impairments is unknown. In the absence of knowing, these injuries cause great concern for servicemembers and their families. These veterans need our attention now, to ensure a successful adjustment post-deployment and a full recovery.

Meeting the goal of providing quality care for these servicemembers will require system-level changes, which means expanding our focus to consider issues not just within DoD and the VA, from which the majority of veterans will receive benefits, but across the overall U.S. health care system, where veterans may seek care through other, employer-sponsored health plans and in the
public sector (e.g., Medicaid). System-level changes are essential if the nation is to meet not only its responsibility to recruit, prepare, and sustain a military force but also its responsibility to address Service-connected injuries and disabilities.

Thank you again for the opportunity to testify today and to share the results of our research. Additional information about our study findings and recommendations can be found at http://veterans.rand.org.
References Cited


