

## PTSD Compensation and Military Service

Committee on Veterans' Compensation for Posttraumatic Stress Disorder, Institute of Medicine and National Research Council

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# PTSD COMPENSATION AND MILITARY SERVICE

Committee on Veterans' Compensation for Posttraumatic Stress Disorder

Board on Military and Veterans Health

Board on Behavioral, Cognitive, and Sensory Sciences

INSTITUTE OF MEDICINE *AND*  
NATIONAL RESEARCH COUNCIL  
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**T**his report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the National Research Council's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the deliberative process. We wish to thank the following individuals for their review of this report:

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Although the reviewers listed above have provided many constructive comments and suggestions, they were not asked to endorse the conclusions or recommendations nor did they see the final draft of the report before its release. The review of this report was overseen by **Dan G. Blazer, M.D., Ph.D.**, Duke University Medical Center, and **Edward B. Perrin, Ph.D.**, University of Washington School of Public Health. Appointed by the National Research Council and Institute of Medicine, they were responsible for making certain that an independent examination of this report was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this report rests entirely with the authoring committee and the institution.

## Acknowledgments

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Sincere thanks go to all the participants at the public meetings convened on May 2 and July 6, 2006. The intent of the workshops was to gather information regarding issues related to posttraumatic stress disorder (PTSD) compensation; in particular, the conduct of compensation and pension examinations, the evaluation of PTSD claims, and the granting of compensation by the Department of Veterans Affairs (VA). The speakers, who are listed in Appendix A, gave generously of their time and expertise to help inform and guide the committee's work. The committee also acknowledges the help of the staff of the Veterans' Disability Benefits Commission, who shared the information they gathered in the course of their work; and Tom Pamperin, Sandie Harms-Taylor, and Dan Cunningham of the Veterans Benefits Administration, who provided the committee with compensation and pension data.

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ghanistan as an individual mobilization augmentee, helped the committee understand the realities of war and service from his perspective as a Vietnam veteran and Medal of Honor recipient. Thanks are also due to Janice Krupnick, who served as liaison from the Institute of Medicine's Committee on Gulf War and Health—Physiologic, Psychologic, and Psychosocial Effects of Deployment-Related Stress.

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Finally, the committee would like to thank the chair, Nancy Andreasen, for her outstanding work, leadership, and dedication to this project.

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## Summary

The scars of war take many forms: the limb lost, the illness brought on by a battlefield exposure, and, for some, the psychological toll of encountering an extreme traumatic event. The mission of the Department of Veterans Affairs (VA) “to care for him who shall have borne the battle” is met through a series of benefits programs for veterans and their dependents. One of these programs—the provision of compensation to veterans whose disability is deemed to be service-connected—has risen in public prominence over the past few years. While several factors have contributed to this development, three that have received particular notice are the increase in the number of veterans seeking and receiving benefits, the concomitant increase in benefits expenditures, and the prospect of a large number of veterans of Operation Iraqi Freedom and Operation Enduring Freedom entering the system.

Compensation claims for posttraumatic stress disorder (PTSD) have attracted special attention. PTSD, in brief, is a psychiatric disorder that can develop in a person who experiences, witnesses, or is confronted with a traumatic event, often one that is life-threatening. PTSD is characterized by a cluster of symptoms that include:

- reexperiencing—intrusive recollections of a traumatic event, often through flashbacks or nightmares;
- avoidance or numbing—efforts to avoid anything associated with the trauma and numbing of emotions; and

- hyperarousal—often manifested by difficulty in sleeping and concentrating and by irritability.

A 2005 investigation by the VA Office of the Inspector General found that the number of beneficiaries receiving compensation for PTSD increased significantly during Fiscal Years 1999–2004, growing by 79.5 percent, from 120,265 to 215,871 cases (DVA, 2005). The report of that investigation noted:

During the same period, PTSD benefits payments increased 148.8 percent from \$1.72 billion to \$4.28 billion. Compensation for all other disability categories only increased by 41.7 percent. While veterans being compensated for PTSD represented only 8.7 percent of all claims, they received 20.5 percent of all compensation benefits.

Against this backdrop, VA's Veterans Benefits Administration (VBA) asked the National Academies to convene a committee of experts to address several issues surrounding its administration of veterans' compensation for PTSD.

## INTENT AND GOALS OF THE STUDY

The committee was charged with reviewing:

1. VA's compensation practices for PTSD, including examining the criteria for establishing severity of PTSD as published in the Schedule for Rating Disabilities;
2. the basis for assigning a specific level of compensation to specific severity levels and how changes in the frequency and intensity of symptoms affect compensation practices for PTSD;
3. how VA's compensation practices and reevaluation requirements for PTSD compare with those of other chronic conditions that have periods of remission and return of symptoms; and
4. strategies used to support recovery and return to function in patients with PTSD<sup>1</sup> (Szybala, 2006).

These four general charges were operationalized into a series of issues that VA identified as being of particular interest. The committee organized these into three general categories: those related to the PTSD compensation

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<sup>1</sup>A separate National Academies committee is addressing PTSD treatment issues; its report will be released later in 2007. This report limits its review of the topic to the effect of compensation on strategies used to support recovery and return to function in patients with PTSD.

and pension (C&P) examination, the evaluation of PTSD disability claims, and other PTSD compensation issues.

## REPORT SYNOPSIS

The committee reached a series of findings and conclusions that form the foundation for its recommendations for action and further research. In addition, it drew some general observations from its examination of VA's PTSD disability compensation system. The sections below are synopses of the content of Chapters 4–7 and highlight their major points.

### The PTSD Compensation and Pension Examination

For veterans presenting for PTSD compensation, the C&P examination provides a clinical evaluation by a mental health professional where information is gathered to:

- establish the presence or absence of a diagnosis of PTSD,
- determine the severity of PTSD symptoms, and
- establish a logical relationship between exposure to military stressors and current PTSD symptomatology (VBA, 2002).

While it develops much of the same information as a conventional mental-health examination, the intent of the C&P examination is to generate documentation for disability evaluation purposes rather than to inform a treatment strategy.

VA identified several issues related to the conduct of C&P exams that were of particular interest: the role of the Global Assessment of Functioning (GAF) score<sup>2</sup> in evaluating PTSD, the division of symptoms among PTSD and comorbid disorders, the value of standardized testing in the conduct of examinations, and the scientific literature regarding the length of time between the occurrence of the stressor thought to be associated with an applicant's PTSD and the appearance of symptoms.

The committee concluded that the GAF score has limited usefulness in the assessment of the level of disability for PTSD compensation. The score is only marginally applicable to PTSD because of its emphasis on the symptoms of mood disorder and schizophrenia and its limited range of symptom content. The social and functional domains of the score provide some information, but if these are the sole domains of interest, better measures of

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<sup>2</sup>The GAF score is a standardized measure of symptoms and psychosocial function, with 100 representing superior mental health and psychosocial function and 0 representing the worst possible state.

them exist. Importantly, the GAF has not to date been shown to have good psychometric properties (i.e., good reliability) within the VA system and, particularly, within samples of veterans suffering from PTSD.

Because the GAF is widely used within VA, it may not be possible to quickly implement changes regarding it without disrupting the delivery of PTSD services. Given this, the committee recommends that, in the short term, VA ensure that its mental-health professionals are well informed about the uses and limitations of the GAF and—to the extent possible—are trained to implement the GAF in a consistent and uniform manner. VA should also provide periodic, mandatory retraining to minimize drift and variation in scoring over time and between facilities. In the longer term, the committee recommends that VA identify and implement an appropriate replacement for the GAF: one or more measures that focus on the symptoms of PTSD used to define the disorder and on the other domains of disability assessment.

PTSD is marked by high rates of comorbidity. Some studies have found that more than 80 percent of people who have a diagnosis of PTSD also have major depressive disorder or some other psychiatric disorder. This presents a challenge for the VA disability system, which is built around the separate evaluation and compensation of each diagnosed service-connected disorder. The committee did not identify any scientific literature on separating the symptoms of PTSD from those of another existing mental disorder. Such separation—while required by the C&P system—is seldom useful from a clinical perspective. Clinicians are often able to offer an informed opinion on this question, but this is a professional judgment and not an empirically testable finding. To ameliorate the difficulties encountered in dealing with situations where PTSD co-exists with other mental disorders, the committee recommends that a standardized training program be developed for clinicians conducting compensation and pension psychiatric evaluations. This training program should emphasize diagnostic criteria for PTSD and comorbid conditions with overlapping symptoms as delineated in the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* and include example cases that illustrate appropriate documentation of exam results for C&P purposes.

A number of psychological tests have been developed to assess PTSD; some have been designed specifically for veterans and subjected to research to assess their psychometric properties. The committee responsible for the 2006 Institute of Medicine (IOM) report *PTSD: Diagnosis and Assessment* concluded that while standardized testing of veterans presenting with possible PTSD may be useful in identifying individuals who might benefit from further assessment, it was not a substitute for a thorough clinical evaluation by an experienced mental health professional. This committee concludes that this is also true of testing for compensation and pension

purposes. It understands the appeal of an administratively straightforward requirement that certain psychological tests be applied across the board in PTSD C&P examinations. However, this strategy does not recognize the diversity of the claimant population, and it imbues test results with an inappropriate level of certainty. Malingering—an issue that has received some public attention—cannot be reliably identified through testing alone. The committee believes that testing may be a useful adjunct to the PTSD C&P examination but recommends that the choice of whether to test and which tests are appropriate be left at the discretion of the clinician, the person who is best able to evaluate the individual circumstances of the case.

Because some veterans who have been separated from service for an extended period of time have filed first-time claims for PTSD compensation, interest has arisen in issues concerning the time between exposure to a stressor and the appearance of symptoms related to it. The committee's review found abundant scientific evidence indicating that PTSD can develop at any time after exposure to a traumatic stressor, including cases where there is a long time interval between the stressor and the recognition of symptoms. Some of these cases may involve the initial onset of symptoms after many years of symptom-free life, while others may involve the manifestation of florid symptoms in persons with previously undiagnosed sub-clinical or subsyndromal PTSD. The determinants of delayed-onset PTSD are not well understood. It is hypothesized that the impact of the aging process on neurologic and mental state, changes in social circumstances (retirement, loss of spouse, and the like), changes in health circumstances (disease onset or exacerbation), and exposure to other stressors may all play roles. The scientific literature does not identify any differences material to the consideration of compensation between these delayed-onset or delayed-identification cases and those chronic PTSD cases where there is a shorter time interval between the stressor and the recognition of symptoms.

### *Summary Findings and Conclusions*

**The GAF score has limited usefulness in the assessment of the level of disability for PTSD compensation.**

**There is no scientific guidance addressing the separation of symptoms of comorbid mental disorders for the purpose of identifying their relative contributions to a subject's condition.**

**Standardized psychological testing of claimants may be a useful adjunct to the PTSD C&P examination but it is not a substitute for a thorough clinical evaluation.**

PTSD can develop at any time after exposure to a traumatic stressor. The scientific literature does not identify any differences material to the consideration of compensation between delayed-onset or delayed-identification cases and those chronic PTSD cases where there is a shorter time interval between the stressor and the recognition of symptoms.

### *Summary Recommendations*

In the short term, VA should ensure that its mental-health professionals are well informed about the uses and limitations of the GAF and trained to implement it in a consistent and uniform manner. In the longer term, VA should identify and implement an appropriate replacement for the GAF. The research needed to accomplish this effort should be facilitated.

A standardized training program should be developed for clinicians conducting C&P evaluations for PTSD. Training should emphasize diagnostic criteria and comorbid conditions with overlapping symptoms, and include example cases that illustrate appropriate documentation of exam results for C&P purposes.

The choice of whether to conduct psychological testing of claimants and of which tests are appropriate should be left at the discretion of the examining clinician.

### The Evaluation of PTSD Disability Claims

Information developed in the C&P claims and examination process is used by VBA personnel informally referred to as *raters* to determine whether an identified disability is connected to a claimant's military service and, if it is, what level of impairment is associated with it. Raters use criteria and decision rules set out in the VA Schedule of Rating Disabilities (VASRD) to make their decisions.

VA asked the committee to address several issues related to the rating criteria currently used to rate disability for veterans with service-connected PTSD. These included whether the current rating schedule—which applies to all mental disorders—is appropriate for evaluating PTSD and what criteria should be included in any revised schedule. The committee also offered comments on the training of raters.

38 CFR §4.130 sets out a single set of rating criteria for all mental disorders except eating disorders. The committee found that these criteria are at best a crude and overly general instrument for the assessment of

PTSD disability, and it recommends that rating criteria specific to PTSD and based on the *DSM* be developed. It is beyond the scope of this committee to specify the criteria and disability levels, but the committee does offer a framework for establishing them. The primary element that distinguishes this framework from the current rating criteria is that it takes a multidimensional approach. In the current scheme, occupational impairment drives the determination of the rating level. Under the committee's framework, the psychosocial and occupational aspects of functional impairment would be separately evaluated, and the claimant would be rated on the dimension on which he or she is more affected. The committee believes that the emphasis on occupational impairment in the current criteria unduly penalizes veterans who may be symptomatic or impaired in other dimensions but capable of working, and thus it may serve as a disincentive to both work and recovery.<sup>3</sup> While impairment of earning capacity is specified as the criterion for establishing ratings and this would seem to suggest that a focus on occupational function is appropriate, there is abundant evidence that both VA and the Congress take other criteria into account when setting ratings policy. The committee believes that it is appropriate to apply this broader approach to PTSD ratings.

While the committee was able to obtain some data on the characteristics of PTSD beneficiaries and the details of their compensation over time, other information that would have helped inform the committee's evaluations were not available. To address these data gaps, the committee recommends that data fields recording the application and reevaluation of benefits should be preserved over time, rather than being overwritten when final determinations are made, and that they be gathered and coded at two points in the process where there is currently little information available: before claims are made, and after compensation decisions are rendered. Data such as these will facilitate more informed future analyses of PTSD disability compensation issues.

PTSD can be a chronic condition that may exhibit periods of remission and return of symptoms. It and other conditions characterized by remitting and relapsing symptoms present a challenge for raters because it can be difficult to assign a level of disability to them. Moreover, the absence of disabling symptoms does not mean that the subject is free from the effects of the disorder. The committee found that the criteria used for rating remitting/relapsing conditions vary in how the frequency and effect of symptoms are factored, in whether response to treatment is considered, in the level of disability assigned to various degrees of impairment, and in whether nonoccupational impacts are addressed. As noted above, PTSD is

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<sup>3</sup>A *21st Century System for Evaluating Veterans for Disability Benefits* (IOM, 2007) addresses the more general issues of how VA should conceptualize disability for rating purposes and how system-wide revisions to the rating schedule should be implemented.

managed differently from other conditions in that it is subject to the general mental disorders ratings schedule rather than a specific set of criteria, and the committee recommends that this be changed.

Determining ratings for mental disabilities in general and for PTSD specifically is more difficult than for many other disorders because of the inherently subjective nature of symptom reporting. In order to promote more accurate, consistent, and uniform PTSD disability ratings, the committee recommends that VA establish a specific certification program for raters who deal with PTSD claims, with the training to support it, as well as periodic recertification. PTSD certification requirements should be regularly reviewed and updated to include medical advances and to reflect lessons learned. The program should provide specialized training on the psychological and medical issues (including common comorbidities) that characterize the claimant population, and guidance on how to appropriately manage commonly encountered ratings problems. The committee believes that rater certification will foster greater confidence in ratings decisions and in the decision-making process. Requiring certification may also necessitate that some ratings be done at a facility other than the one closest to the veteran in order to ensure that a qualified rater performs the evaluation in a timely manner. VA therefore needs to manage reviews by certified raters in a manner that facilitates open communications between clinicians, remote raters, and other dispersed personnel and ensures that the claimants and those who help them are not disadvantaged.

### *Summary Findings and Conclusions*

**The VASRD criteria for rating mental disorders disability levels are at best a crude and overly general instrument for the assessment of PTSD disability.**

**The VASRD does not use consistent criteria for rating remitting/relapsing conditions. PTSD is managed differently from other remitting/relapsing conditions because it is subject to a general ratings schedule rather than a specific set of criteria.**

### *Summary Recommendations*

**New VASRD rating criteria specific to PTSD and based on the DSM should be developed and implemented. A multidimensional framework for characterizing PTSD disability—detailed in the body of this report—should be considered when formulating these criteria.**

VA should establish a specific certification program for raters who deal with PTSD claims, with the training to support it and periodic recertification.

Data fields recording the application and reevaluation of benefits should be preserved over time rather than being overwritten when final determinations are made. Data should also be gathered at two points in the process where there is currently little information available: before claims are made and after compensation decisions are rendered.

### Other PTSD Compensation Issues

The committee also addressed some compensation issues that were not specific to the C&P examination or the rater's evaluation but instead entailed broader considerations. These broader considerations include barriers or disincentives to recovery, the effect of disability compensation on recovery, the advisability of periodic reexamination of PTSD compensation beneficiaries, and gender and military assault.

Research reviewed by the committee indicates that compensation does not in general serve as a disincentive to seeking treatment. Because PTSD may follow a remitting/relapsing course, the definition of "recovery" is problematic. The literature on recovery indicates that it is influenced by several factors, and the independent effect of compensation on recovery is difficult to disentangle from these. As noted above, the committee believes that the rating criteria for PTSD should be changed to remove the focus on occupational impairment from the definition of the higher levels of disability because this may remove a disincentive for some to engage in work. The committee recommends that VA consider instituting a set long-term minimum level of benefits<sup>4</sup> that would be available to any veteran with service-connected PTSD at or above some specified rating level without regard to that person's state of health at a particular point in time after the C&P examination. Providing a guaranteed minimum level of benefits would take explicit account of the remitting/relapsing nature of chronic PTSD by providing a safety net for those who might be asymptomatic for periods of time. A properly designed set of benefits could eliminate uncertainty over future timely access to treatment and financial support in times of need and would in part remove the incentive to "stay sick" that some suggest is a flaw of the current system. However, any such change in policy would require careful study of a number of factors, including the needs of the beneficiaries, the new incentives that it would create, its possible effect on

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<sup>4</sup>In this context, "benefits" comprise the full range of services provided by VA, including forms of assistance such as preferred access to VA medical facilities. It does not necessarily mean a long-term minimum rating or level of compensation.

compensation outlays and demand for other VA resources, the maintenance of fairness with other conditions that have a remitting/relapsing nature, and the program details—which benefits were made available and under what circumstances—that would be most likely to promote wellness.

Neither federal regulation nor published VA materials offers advice to raters on how often or under what circumstances reevaluations of PTSD disability should take place. The committee recommends that this determination be made on a case-by-case basis using information developed in a clinical setting, such as a C&P examination. It recommends that specific guidance on the criteria for setting case-specific VA-initiated reevaluations be established so that the reevaluations can be administered in a fair and consistent manner; furthermore, VBA should collect and analyze data on VA and veteran-initiated reevaluations so that the system can be improved in the future. The committee does not believe it is appropriate to mandate across-the-board periodic reexaminations for beneficiaries already being compensated for PTSD. Such a strategy would not take the diversity of the beneficiary population into account and would unduly single out veterans with PTSD for scrutiny. Within the context of VA's limited resources, the committee believes that it would be best to invest in thorough C&P evaluations for new applicants—including the clinician's determination noted above—rather than in the blanket review of past decisions.

Available research suggests that female veterans are less likely to receive service connection for PTSD and that this may be a consequence of the relative difficulty of substantiating exposure to noncombat traumatic stressors—notably, military sexual assault (MSA). The committee believes that it is important to gain a better understanding of the sources of this disparity and to better facilitate the substantiation of MSA-related traumas in both women and men when they do occur. It therefore recommends that VBA gather more detailed data on the determinants of service connection and ratings level for MSA-related PTSD claims, including the gender-specific coding of MSA-related traumas for analysis purposes, and develop and disseminate reference materials for raters that more thoroughly address the management of MSA-related claims. Training and testing on MSA-related claims should be a part of the certification program recommended above for raters who deal with PTSD claims.

### *Summary Findings and Conclusions*

**Research reviewed by the committee indicates that PTSD compensation does not, in general, serve as a disincentive to seeking treatment.**

**It is not appropriate to require across-the-board periodic reexaminations for veterans with PTSD service-connected disability.**

### *Summary Recommendations*

VA should consider instituting a fixed long-term minimum level of benefits that would be available to any veteran with service-connected PTSD at or above some specified rating level without regard to that person's state of health at a particular point in time after the C&P examination.

The determination of whether and when reevaluations of PTSD beneficiaries are carried out should be made on a case-by-case basis using information developed in a clinical setting. Specific guidance on the criteria for such decisions should be established so that these can be administered in a fair and consistent manner.

VBA should collect and analyze data on reevaluations so that the system can be improved in the future.

VA should conduct more detailed data gathering on determinants of service connection and rating levels for MSA-related PTSD claims and develop and disseminate reference materials for raters that more thoroughly address the management of such claims. More research is also needed on gender differences in vulnerability to PTSD.

### **General Observations**

In addition to answering the specific questions posed in the charge, the committee made some general observations that flowed from its examination of VA's PTSD disability compensation system. These deal with the overall conduct of the system.

There are three general observations that capture the committee's thinking on the issue of PTSD disability compensation practices.

**1. The key to proper administration of VA's PTSD compensation program is a thorough C&P clinical examination conducted by an experienced professional.** This echoes the conclusion of an earlier IOM committee that examined issues regarding the diagnosis and assessment of PTSD, which found that:

[A]n optimal assessment of a patient consists of a face-to-face interview in a confidential setting with a health professional experienced in the diagnosis of psychiatric disorders. It is critical that adequate time be allocated for that assessment. Depending on the mental and physical health of the veteran, the veteran's willingness and capacity to work with the health professional, and the presence of comorbid disorders, the process of diagnosis

and assessment will likely take at least an hour or could take many hours to complete (IOM, 2006).

Many of the problems and issues identified in the report can be addressed by consistently allocating and applying the time and resources needed for a thorough PTSD C&P clinical examination. This measure will facilitate:

- more comprehensive and consistent assessment of veteran reports of exposure to trauma;
- more complete assessment of the presence and impact of comorbid conditions;
- the conduct of standardized psychological testing where appropriate;
- more accurate assessment of the social and vocational impacts of identified disabilities;
- evaluation of any suspected malingering or dissembling using multiple strategies including standardized tests, if appropriate, and clinical face-to-face assessment;
- more detailed documentation of the claimant's condition to inform the rater's decision (and thus potentially lead to better and more consistent decisions); and
- an informed, case-specific determination of whether reexamination is appropriate and, if so, when.

VA may well incur increased up-front costs by implementing more consistently detailed examinations for all veterans who present for initial and review C&P evaluations for PTSD. It is not possible, though, to make an informed estimate of what the additional costs may be because the total will depend on many variables whose values are not available or are difficult to derive from public sources—notably, the time currently spent on examinations and the costs associated with those examinations. Further uncertainty is introduced by the fact that a change in policies regarding the exams may lead to changes in the number and characteristics of claimants.

**2. An informed evaluation of the PTSD compensation system will not be possible until VA implements a comprehensive data collection, analysis, and publication effort.** The report identifies a number of instances where there are gaps in the data and in the research literature regarding PTSD disability compensation issues and offers some specific recommendations to address them. Some data sought by the committee were not available because they were in various cases not collected, not coded, collected but not retained, annotated only in hardcopy files rather than placed in a da-

tabase, or spread among the VBA and the Veterans Health Administration (VHA) databases in ways that made retrieval and integration difficult or impossible. The data are handled this way because they are being collected for disparate purposes—the VBA data being primarily associated with the documentation of the delivery of compensation while the VHA data are used to fulfill its mission as a health care delivery network.

The committee believes that an informed evaluation of the PTSD compensation system will not be possible until VA implements a comprehensive and integrated data collection, analysis, and publication effort. This effort should be focused on data useful to research, policy, and planning purposes. It will allow VA to:

- evaluate inter-rater reliability and generate information that can be used to promote the accuracy and validity of ratings;
- more easily determine whether examinations and benefits are being properly and consistently managed throughout the VA system;
- establish whether there are subsections of the population that differ in ways that require the particular attention of the system (such as the elderly, certain racial or ethnic groups, female veterans, those just returning from combat, those with relatively low or with high levels of disability, those with particular comorbidities, and the like); and, most importantly,
  - evaluate what is working and what isn't and determine where resources should be focused.

More widely and systematically collecting data for research, policy, and planning purposes and assembling these data in more user-friendly forms will allow VA to better conduct the kinds of analyses needed to make informed decisions about the scope and magnitude of the problems that exist within the PTSD disability compensation system and the best approaches to addressing them, as well as to better project the resources needed to serve future veteran populations.

**3. One cannot look at the effect of compensation in isolation.** VA offers a range of benefits to veterans with service-related disabilities that is unmatched by civilian benefits systems, including compensation, pension, comprehensive medical care, vocational rehabilitation, employment counseling, education and training, home loans, housing assistance, and other supports to veterans and their families.<sup>5</sup> It is beyond the scope of this committee to make recommendations regarding the general conduct of the VA benefits and services program. However, the committee notes

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<sup>5</sup>More severely disabled veterans are eligible for additional and greater benefits, depending on the nature of their disability.

that a complete evaluation of the strategies for reducing disincentives and maximizing incentives for achieving optimal mental functioning would include the examination of the role of all of these services as well as of the coordination among them. Currently, coordination between VBA- and VHA-administered services is limited, and there is no process in place for individual case planning and management, for integration of services, or for evaluation of opportunities for providing incentives for improvements in health and function. VA has the opportunity to adopt this broader vision of benefits provision, and the committee believes that PTSD may be a good test case for an integrated benefits approach. As one component of this approach, VA should evaluate the feasibility of decoupling the seeking of PTSD disability through the C&P system from some form of priority access to VHA-provided mental-health services.

The committee is acutely aware that resource constraints—on both funds and staff—limit the ability of VA to deliver services and force difficult decisions on allocations among vital efforts. It believes that increases in the number of veterans seeking and receiving disability benefits for PTSD, the prospect of a large number of veterans of Operation Iraqi Freedom and Operation Enduring Freedom entering the system, and the profound impact of the disorder on the nation's veterans make changes in PTSD C&P policy a priority deserving of special attention and action by VA and the Congress.

## REFERENCES

- DVA (Department of Veterans Affairs). 2005. *Review of State Variances in VA Disability Compensation Payments*. Report No. 05-00765-137. Washington, DC: VA Office of the Inspector General. [Online]. Available: <http://www.va.gov/oig/52/reports/2005/VAOIG-05-00765-137.pdf> [accessed November 9, 2006].
- IOM (Institute of Medicine). 2006. *Posttraumatic Stress Disorder: Diagnosis and Assessment*. Washington, DC: National Academies Press. [Online]. Available: <http://newton.nap.edu/openbook/0309102073/html/> [accessed November 9, 2006].
- IOM. 2007. *A 21st Century System for Evaluating Veterans for Disability Benefits*. Washington, DC: The National Academies Press.
- Szybala RL. 2006. *Statement of Renée L. Szybala, Director, Compensation and Pension Service, to the National Academy of Sciences' Institute of Medicine Committee on VA Compensation for Posttraumatic Stress Disorder, May 2, 2006*. [Online]. Available: <http://www.iom.edu/File.aspx?ID=34556> [accessed October 12, 2006].
- VBA (Veterans Benefits Administration). 2002. *C&P Service Clinician's Guide—March 2002*. [Online]. Available: <http://www.warms.vba.va.gov/admin21/guide/cliniciansguide.doc> [accessed November 28, 2006].

# 1

## Introduction

This chapter lays the foundation for understanding the committee's work on this project. The chapter begins with an overview of the Department of Veterans Affairs (VA), focusing on its mission and structure and on the role of compensation within that mission. Next is a synopsis of the major issues regarding VA's compensation of veterans with posttraumatic stress disorder (PTSD). Then a summary of the committee's charge is presented, and the chapter concludes with brief summaries of related National Academies research efforts and a description of the report's organization.

### VA'S MISSION AND STRUCTURE

“To care for him who shall have borne the battle and for his widow, and his orphan.” Those words—an affirmation of the government's obligation to veterans and their families made by President Lincoln at his second inaugural address in 1865—constitute the mission statement of what is today called the Department of Veterans Affairs.

The present-day VA provides three primary services: health care, benefits and related social services, and cemetery management. Each of these services is provided by one of VA's three line organizations: the Veterans Health Administration (VHA), the Veterans Benefits Administration, and the National Cemetery Administration. The scope of these operations is vast. VHA, for instance, manages the single largest integrated health care system in the United States. In 2005, at its 156 hospitals, 877 outpatient

clinics, 136 nursing homes, 43 residential rehabilitation treatment programs, and 207 readjustment counseling centers, it provided care to approximately 5 million individual patients and hosted 54 million outpatient visits (DVA, 2006b).

Overall, VA has the second-largest<sup>1</sup> number of employees among the federal departments, more than 235,000 in 2006 (DVA, 2006b), and its estimated FY 2006 outlays were the fifth largest<sup>2</sup> among all federal agencies (OMB, 2006a), with total FY 2006 appropriations of approximately \$73.15 billion.

### THE COMPENSATION LEGISLATION MANDATE AND RATIONALE IN PRACTICE

As detailed in Chapter 2, the U.S. government has long recognized a need to provide compensation to veterans for health problems associated with military service. The current legislative mandate, contained in Title 38 of the U.S. Code, specifies a single criterion for determining the level of compensation:

The Secretary shall adopt and apply a schedule of ratings of reductions in earning capacity from specific injuries or combination of injuries. The ratings shall be based, as far as practicable, upon the average impairments of earning capacity resulting from such injuries in civil occupations (38 USC §1155).

However, there is abundant evidence that both the VA and the Congress take other criteria into account. The 1956 Bradley Commission report on veterans' benefits observed:

In the Veterans' Administration system, the law specifies that the percentage awards are to be based on average impairment of earning capacity. This recognizes that the fundamental purpose of disability compensation is to assure the disabled veteran and his family the essential means for economic maintenance. In actual administration, however, it is clear that the Veterans' Administration has not been able to adhere to this basic criterion as set forth in the law (Bradley Commission, 1956).

A 2002 GAO report noted that VA had rejected a GAO recommendation to revise the ratings schedule based on economic factors. VA's June 24,

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<sup>1</sup>The Department of Defense (DoD) is the largest.

<sup>2</sup>The Department of Health and Human Services, Social Security Administration, DoD, and Department of the Treasury had greater outlays.

2002 response to the report,<sup>3</sup> signed by then-Secretary Prinicipi, stated the reasons for this rejection:

- (a) the Schedule for Rating Disabilities from its beginnings in the early 20th Century has been medically based, as are all other major disability compensation systems;
- (b) the Schedule represents a consensus among Congress, VA, and the veteran community; and
- (c) the current medically-based schedule has been a valid basis for equitably compensating America's disabled veterans for [a long time] and VA sees no reason to validate the ratings solely from an economic perspective (GAO, 2002).

The response further noted that VA had conducted an economic validation of the ratings schedule in 1973 but had not adopted any changes “because of widespread dissatisfaction in Congress, the veterans community, and VA.”

A 2004 report commissioned by VA asserts that the Congress intended that the determination of compensation level include considerations outside of impairment of earnings capacity, stating:

[Compensation] legislation does not explicitly state that intent of the disability program is to compensate for reduction in quality of life due to service-connected disability. However, this intent is implicit because Congress has set forth certain presumptions of eligibility for disability compensation and higher benefit levels for certain disabling conditions such as loss of a limb that reflect humanitarian concern about quality of life. The quality of life factor may be a more critical issue than employability for amputees given advances in medical technology and emphasis on occupations not requiring physical labor (DVA, 2004).

The report goes on to cite specific circumstances—such as disability compensation for the loss of one or both breasts<sup>4</sup>—that it asserts reflect Congress' intent to factor quality of life in addition to economic impairment.

## THE PLACE OF DISABILITY COMPENSATION IN VA'S OPERATION

The VA estimates that “[a]bout a quarter of the nation's population—approximately 70 million people—are potentially eligible for VA benefits and services because they are veterans, family members or survivors of

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<sup>3</sup>The response notes that these observations echo those offered by VA in response to a similar recommendation by GAO in 1997 (GAO, 1997).

<sup>4</sup>Legislative authority for VA compensation for the loss of one or both breasts is contained in the Veterans Benefits and Health Care Improvement Act of 2000 (Public Law 106-419).

veterans” (DVA, 2006a). These benefits and services take many forms, including disability compensation to veterans, survivor compensation to their dependants, pensions, education programs, home loan guarantees, subsidized insurance, vocational rehabilitation, and employment counseling.

Benefits disbursements account for more than half of the VA’s budget. A May 2006 VA publication reported that approximately \$38.5 billion was allocated for benefits in FY 2006 (DVA, 2006b). Disability compensation makes up about 80 percent of this allocation. It is awarded as a monetary payment to veterans whose disability is deemed to be service-connected.

According to the Code of Federal Regulations, Title 38 (38 CFR), there are several ways to established service connectedness, the most common being:

- the “injury or disease resulting in disability was incurred coincident with service in the Armed Forces” (38 CFR §3.303);
- a preexisting injury or disease was aggravated by active service (38 CFR §3.306);
- a presumptive service connection was established by law or VA policy (38 CFR §§3.307, 3.308, 3.309); and
- the condition occurred as a result of an injury or disease incurred coincident with service (38 CFR §3.310).

The compensation amount is based on a determination of the degree of disability, which is ranked from 10 to 100 percent according to guidance contained in 38 CFR Part 4. “Individual unemployability” (IU) provisions in the regulation (38 CFR §4.16a) allow certain veterans who cannot be gainfully employed due to service-connected disabilities to be compensated at the 100 percent level even though their rating does not reach 100 percent.<sup>5</sup>

Where a veteran is a rated with more than one disability, a cumulative rating is calculated according to rules contained in 38 CFR §4.25. It states that the combined rating:

. . . results from the consideration of the efficiency of the individual as affected first by the most disabling condition, then by the less disabling condition, then by other less disabling conditions, if any, in the order of severity. Thus, a person having a 60 percent disability is considered 40 percent efficient. Proceeding from this 40 percent efficiency, the effect of a further 30 percent disability is to leave only 70 percent of the efficiency remaining after consideration of the first disability, or 28 percent efficiency altogether. The individual is thus 72 percent disabled. . . .

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<sup>5</sup>The IOM report *A 21st Century System for Evaluating Veterans for Disability Benefits* addresses VA’s administration of the IU program at length (IOM, 2007a).

The final rating—70 percent in the example above—is determined by rounding the calculated figure to the nearest number divisible by 10, with combined values ending in 5 adjusted upward.

The base amount determined by this protocol is then, where appropriate, supplemented for beneficiaries with a spouse, dependent children, or parents. Certain service-connected conditions that require special accommodations such as loss (or loss of use) of a limb are also granted supplements. Some veterans are eligible for additional monies via “special monthly compensation” for the loss or loss of use of certain capacities—loss of a reproductive organ, for example. However, the decision to grant or maintain disability compensation is made on the basis of statutory or regulatory requirements alone and these do not include consideration of individual economic need. Rates are adjusted for inflation on a yearly basis.

The scope of VA benefits available to veterans and—in some circumstances—their families is dependent on the rating assigned to his or her disabilities. Access to hospital care and outpatient care services at VA medical center services, for example, is prioritized based on criteria set down in Public Law 104-262, the Veterans’ Health Care Eligibility Reform Act of 1996. This law grants the highest priority (priority 1) to veterans with service-connected disabilities rated 50 percent or more, or who are determined by VA to be unemployable due to service-connected conditions. These veterans, along with veterans receiving care for a service-connected disability, also receive preferred access in scheduling of hospital or outpatient medical appointments. Veterans with service-connected disabilities rated 30 percent or 40 percent are priority 2; those with service-connected disabilities rated 10 percent or 20 percent, priority 3.<sup>6</sup> Higher priority access to medical centers is important because system constraints may greatly restrict timely access to some services for veterans.

A spectrum of other benefits also uses disability rating as at least one of the criteria for eligibility.<sup>7</sup> Vocational rehabilitation and employment (VR&E) assistance is available to veterans with a VA service-connected disability rated at least 20 percent with an employment handicap, or rated 10 percent with a “serious handicap.” Veterans whose service-connected disabilities are rated 30 percent or more are eligible for reimbursement for certain travel costs to receive VA medical care. The Concurrent Retirement and Disability Payments program provides a 10-year phase-out of an offset

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<sup>6</sup>Other criteria, such as status as a former POW, also qualify a veteran for priority 3 status.

<sup>7</sup>The rules governing eligibility for benefits are complex and this brief summary does not in any way represent the entirety of the requirements. The summary is based on information presented in the 2007 edition of *Federal Benefits for Veterans and Dependents* (DVA, 2007).

to military retired pay due to receipt of VA disability compensation for veterans whose single or combined disability rating is 50 percent or greater.

If a veteran is rated as 100 percent disabled or is deemed eligible for IU benefits, the veteran and his or family are entitled to a number of additional benefits. These include access to VA outpatient dental treatment, unlimited exchange and commissary store privileges in the United States, and eligibility to receive a waiver of some premiums for VA life insurance. In some circumstances, the surviving spouses and children of such veterans may receive so-called Dependency and Indemnity Compensation, are eligible for support for some education and training, and may participate in CHAMPVA—the Civilian Health and Medical Program of VA—which provides reimbursement for most medical expenses: inpatient, outpatient, mental health, prescription medication, skilled nursing care, and durable medical equipment. Under a special program currently in place, veterans awarded 100 percent disability compensation based upon unemployability may still request a vocational rehabilitation evaluation and, if eligible, participate in a VR&E program and receive help in getting a job. VA will continue to pay 100 percent disability compensation to a veteran who secures employment under this program until the veteran has worked continuously for at least 12 months (DVA, 2005a). An Aid and Attendance allowance is available for some veterans, veterans' spouses, surviving spouses, and parents who are in need of regular assistance to dress themselves or take care of other needs of everyday living (38 CFR §3.352).

Thus, even a 10 percent rating for a service-connected disability grants a potentially significant increase in access to VA benefits in addition to monetary compensation.

Chapter 2 of this report, which provides background on disability compensation, contains additional information regarding the federal government's benefits programs for veterans. Chapters 4 and 5 address two major components of most PTSD compensation and pension (C&P) evaluations: the clinical examination and the rater's decision.

## WHY PTSD COMPENSATION IS AN ISSUE TODAY

Issues regarding the provision of benefits to veterans have risen in public prominence over the past few years. While a number of factors have contributed to this increased prominence, the three that have received particular notice are the increase in the number of veterans seeking and receiving benefits, the concomitant increase in benefits expenditures, and the prospect of a large number of veterans of Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF) entering the system. In particular, compensation claims for PTSD have attracted attention because of the increasing numbers of claims in recent years and because diagnosing PTSD is

more subjective than is the case with many of the other disorders that VA administers benefits for.

A 2005 report by the VA Office of the Inspector General summarizes the trends in PTSD claims and compensation over the past five years (DVA, 2005b):

During FYs 1999–2004, the number and percentage of PTSD cases grew significantly. While the total number of all veterans receiving disability compensation grew by only 12.3 percent, the number of PTSD cases grew by 79.5 percent, increasing from 120,265 cases in FY 1999 to 215,871 cases in FY 2004. During the same period, PTSD benefits payments increased 148.8 percent from \$1.72 billion to \$4.28 billion. Compensation for all other disability categories only increased by 41.7 percent. While veterans being compensated for PTSD represented only 8.7 percent of all claims, they received 20.5 percent of all compensation benefits.

The Office of Management and Budget noted that the 59.5 percent growth in VA's budget authority from 2001 to 2007 was the second-highest increase of any agency in the federal government (OMB, 2006b).

While the growth in claims has come largely from veterans of earlier conflicts, the VA benefits system will experience continued growth because of the coming wave of veterans of OIF/OEF. As of late 2006, approximately 1.5 million members of the military had been part of at least one of these operations, and more than a third of those 1.5 million were separated from their service and eligible for veterans' benefits at that time. An analysis reported in the *New York Times* in October 2006 found that nearly one in five OIF/OEF veterans had been granted disability benefits and that 35 percent of that group had been granted benefits for a mental disorder (Shane, 2006).

## INTENT AND GOALS OF THE STUDY

The VA charged the committee responsible for this study with reviewing:

1. compensation practices for PTSD, including examining the criteria for establishing severity of PTSD as published in the VA Schedule for Rating Disabilities;
2. the basis for assigning a specific level of compensation to specific severity levels and how changes in the frequency and intensity of symptoms affect compensation practices for PTSD;
3. how compensation practices and reevaluation requirements for PTSD compare with those of other chronic conditions that have periods of remission and return of symptoms; and

4. strategies used to support recovery and return to function in patients with PTSD<sup>8</sup> (Szybala, 2006).

These four general charges were operationalized into a series of issues identified as being of particular interest. These included the appropriateness of the criteria used for rating PTSD severity, the management of comorbidities in the C&P evaluation process, the role of the Global Assessment of Functioning (GAF) score in evaluating PTSD, the scientific literature regarding the length of time between the occurrence of the stressor thought to be associated with an applicant's PTSD and the appearance of symptoms, the value of standardized testing in C&P examinations, the advisability of periodic reexamination of PTSD compensation beneficiaries, and whether compensation might influence recovery and, if so, in what ways.

The remaining chapters of this report address these topics to the extent permitted by currently available science.

## RELATED INSTITUTE OF MEDICINE REPORTS

The Institute of Medicine (IOM) has published several reports that address issues directly related to this study. These are cited and in some cases summarized below.

### Reports on Disability Issues

The IOM and its sister organization, the National Research Council, have written a number of reports on topics related to disability compensation. These reports have, for the most part, focused on programs administered by the Social Security Administration (SSA).

Three reports released since 2000 have particular relevance. *The Dynamics of Disability* (IOM and NRC, 2002) responds to an SSA request for an independent review of the agency's research plan for the redesign of its disability-decision process. It includes a working paper that puts forth a research agenda for SSA's disability determination for mental impairments (Kennedy, 2001). Among its findings, the report noted that there was no agreement on the definition and measurement of disability, and it indicated that there was a need to develop objective measures of both the physical and the social environment.

*Improving the Social Security Disability Decision Process*, which was released first as an interim report (IOM, 2006a) and then as a final report

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<sup>8</sup>As noted below, a separate IOM committee is addressing PTSD treatment issues. This report limits its review of the topic to the effect of compensation on strategies used to support recovery and return to function in patients with PTSD.

(IOM, 2007b), offers recommendations to the SSA on how to facilitate access and use appropriate medical expertise to support the Social Security disability adjudication process as well as on how to improve the Listing of Impairments, a screening tool that the SSA uses as part of its process of determining eligibility for disability payments under the Social Security Disability Insurance and Supplemental Security Income programs.

### Reports on Veterans Health and Stress Issues

As part of a larger research effort on veterans' health issues, committees of the IOM have been working on a series of reports on the effect of psychological stress on present and former members of the military. One of those reports has been published, while the rest are still forthcoming.

The 2006 report *Posttraumatic Stress Disorder: Diagnosis and Assessment* (IOM, 2006b) was the first of these reports to be released. It provided responses to ten questions posed by the VA, the report's sponsor. Seven of these questions related directly to PTSD diagnosis and assessment:

- What are the accepted diagnostic criteria for PTSD?
- What would an evidence-based criteria set for diagnosis of PTSD include?
  - What are the components of an evidence-based diagnosis of PTSD?
  - What would diagnostic criteria be, based on best evidence, either based on or apart from official standards?
  - What are useful biomarkers [for diagnosis]?
  - What neuropsychological evaluation or other testing should be included in an optimal evaluation of a patient for PTSD?
  - What constitutes optimal evaluation of a patient for PTSD?

The other three questions were related to the more general subject of psychological stressors:

- What constitutes a stressor?
- How should stressful events be diagnosed and documented?
- How can and should a patient document a stressful event?

This report is the second in the series. A third report, expected to be released later in 2007, will focus on PTSD treatment for veterans, reviewing the literature on various treatment modalities and treatment goals for individuals with PTSD. As part of its assessment, the committee responsible for the treatment report will review the strength of the evidence on the efficacy of pharmacotherapy and psychotherapy interventions for PTSD,

identify research gaps, make suggestions for future research, and address some related issues identified by the VA.

Two other IOM committees are currently addressing subjects that are closely associated with this research effort. A committee organized under the auspices of the *Gulf War and Health* series of congressionally mandated studies is conducting a comprehensive review, evaluation, and summary of the peer-reviewed scientific and medical literature regarding the association between deployment-related physiologic, psychological, and psychosocial stress and long-term health effects in Gulf War veterans.<sup>9</sup> The report on this topic will be issued in late 2007. A second effort, being conducted at the behest of the Veterans' Disability Benefits Commission,<sup>10</sup> is examining broader issues regarding the medical evaluation of veterans for disability compensation. The committee responsible for this work has produced the report *A 21st Century System for Evaluating Veterans for Disability Benefits* (IOM, 2007a), which will be released in the summer of 2007.

Earlier IOM reports have noted that PTSD is an issue for former prisoners of war in World War II and the Korean conflict (IOM, 1992), for Vietnam veterans (IOM, 1994), and for Persian Gulf veterans (IOM, 1995, 1996) in the course of broader discussions of the health of these groups.

## ORGANIZATION OF THE REPORT

The remainder of this report is organized into six other chapters plus supporting appendices. Chapter 2 provides background information on disability compensation, with a focus on mental health and veterans issues. Chapter 3 outlines the characteristics, etiology, and course of PTSD and also provides information on comorbidities, risk factors, and special considerations for veterans. Chapter 4 provides an overview of the VA's PTSD compensation process and the conduct of PTSD compensation and pension examinations. These examinations generate the information used by raters to evaluate compensation claims and, where appropriate, determine the level of disability—a process that is set forth in Chapter 5. Chapter 6 discusses other issues that the committee was asked to consider, including the

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<sup>9</sup>The study's findings will not be limited to veterans of the 1991 Gulf War conflict but will be applicable to veterans of the other conflicts, including OIF/OEF.

<sup>10</sup>The Veterans' Disability Benefits Commission is an independent advisory body created by a mandate contained in the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136). Its charter states that the purpose of the Commission "is to carry out a study of the benefits under the laws of the United States that are provided to compensate and assist veterans and their survivors for disabilities and deaths attributable to military service" (VDBC, 2006). The enabling legislation directs the Commission to "consult with the Institute of Medicine of the National Academy of Sciences with respect to the medical aspects of contemporary disability compensation policies" (Sec. 1502(d)).

literature regarding the effect of compensation on recovery and reexamination of veterans already receiving compensation. Chapter 7 offers general observations and recommendations.

Agendas from all the public meetings held by the Committee on Veterans' Compensation for Post Traumatic Stress Disorder are provided in Appendix A. Appendix B contains a digest of the sections of the U.S. federal regulation relating to VA compensation of PTSD and other mental disorders (38 CFR Part 4, Subpart B). Appendix C displays the worksheets that VA provides clinicians to guide the conduct of PTSD C&P examinations. A listing of the acronyms and abbreviations used in the report is contained in Appendix D. And Appendix E provides biographic information on the committee members, consultants, and staff responsible for this study.

## REFERENCES

- Bradley Commission (The President's Commission on Veterans' Pensions). 1956. A Report to the President, *Veterans' Benefits in the United States*. 84th Congress, 2nd Session, House Committee Print No. 236. Washington, DC: U.S. Government Printing Office.
- DVA (U.S. Department of Veterans Affairs). 2004. *VA Disability Compensation Program: Legislative History*. Report prepared by Economic Systems Inc. for the VA Office of Policy, Planning and Preparedness. December 2004. [Online]. Available: [www1.va.gov/op3/docs/Disability\\_Comp\\_Legislative\\_Histor\\_Lit\\_Review.pdf](http://www1.va.gov/op3/docs/Disability_Comp_Legislative_Histor_Lit_Review.pdf) [accessed October 2, 2006].
- DVA. 2005a. *Chapter 1. Vocational Rehabilitation*. M21-1MR, Part IX, Subpart i. [Online]. Available: [http://www.warms.vba.va.gov/admin21/m21\\_1/mr/part9/subparti/ch01.doc](http://www.warms.vba.va.gov/admin21/m21_1/mr/part9/subparti/ch01.doc) [accessed December 19, 2006].
- DVA. 2005b. *Review of State Variances in VA Disability Compensation Payments*. Report No. 05-00765-137. Washington, DC: VA Office of the Inspector General. [Online]. Available: <http://www.va.gov/oig/52/reports/2005/VAOIG-05-00765-137.pdf> [accessed November 9, 2006].
- DVA. 2006a. *About VA—Home*. [Online]. Available: [http://www.va.gov/about\\_va/](http://www.va.gov/about_va/) [accessed October 13, 2006].
- DVA. 2006b. *Department of Veterans Affairs Organizational Briefing Book. May 2006*. [Online]. Available: <http://www.va.gov/ofcadmin/ViewPDF.asp?fType=1> [accessed October 12, 2006].
- DVA. 2007. *Federal Benefits for Veterans and Dependents—2007 Edition*. [Online]. Available: <http://www1.va.gov/opa/vadocs/fedben.pdf> [accessed February 27, 2007].
- GAO (Government Accountability Office). 1997. *VA Disability Compensation: Disability Ratings May Not Reflect Veterans' Economic Losses*. GAO/HEHS-97-9. January 7, 1997. [Online]. Available: <http://www.gao.gov/cgi-bin/getrpt?GAO/HEHS-97-9> [accessed October 2, 2006].
- GAO. 2002. *SSA and VA Disability Programs: Re-Examination of Disability Criteria Needed to Help Ensure Program Integrity*. GAO-02-597. August 2002. [Online]. Available: <http://www.gao.gov/cgi-bin/getrpt?GAO-02-597> [accessed October 2, 2006].
- IOM (Institute of Medicine). 1992. *The Health of Former Prisoners of War: Results from the Medical Examination Survey of Former POWs of World War II and the Korean Conflict*. Washington, DC: National Academy Press.
- IOM. 1994. *Veterans and Agent Orange: Health Effects of Herbicides Used in Vietnam*. Washington, DC: National Academy Press.

- IOM. 1995. *Health Consequences of Service During the Persian Gulf War: Initial Findings and Recommendations for Immediate Action*. Washington, DC: National Academy Press.
- IOM. 1996. *Health Consequences of Service During the Persian Gulf War: Recommendations for Research and Information Systems*. Washington, DC: National Academy Press.
- IOM. 2006a. *Improving the Social Security Disability Decision Process: Interim Report*. Washington, DC: The National Academies Press.
- IOM. 2006b. *Posttraumatic Stress Disorder: Diagnosis and Assessment*. Washington, DC: The National Academies Press.
- IOM. 2007a. *A 21st Century System for Evaluating Veterans for Disability Benefits*. Washington, DC: The National Academies Press.
- IOM. 2007b. *Improving the Social Security Disability Decision Process: Final Report*. Washington, DC: The National Academies Press.
- IOM and NRC (National Research Council). 2002. *The Dynamics of Disability: Measuring and Monitoring Disability for Social Security Programs*. Washington, DC: National Academy Press.
- Kennedy C. 2001. SSA's disability determination of mental impairments: A review toward an agenda for research. Pp. 241-280 in Institute of Medicine and National Research Council. *The Dynamics of Disability: Measuring and Monitoring Disability for Social Security Programs*. Washington, DC: National Academy Press.
- OMB (Office of Management and Budget, Executive Office of the President). 2006a. *Budget of the United States, FY 2006, Department of Veterans Affairs*. [Online]. Available: <http://www.whitehouse.gov/omb/budget/fy2006/veterans.html> [accessed October 13, 2006].
- OMB. 2006b. *Fiscal Year 2007 Mid-session Review. Budget of the United States*. [Online]. Available: <http://www.whitehouse.gov/omb/budget/fy2007/pdf/07msr.pdf> [accessed October 12, 2006].
- Shane S. 2006. Data suggests vast costs loom in disability claims. *The New York Times*. October 11, 2006.
- Szybala RL. 2006. *Statement of Renée L. Szybala, Director, Compensation and Pension Service, to the National Academy of Sciences' Institute of Medicine Committee on VA Compensation for Posttraumatic Stress Disorder, May 2, 2006*. [Online]. Available: <http://www.iom.edu/File.aspx?ID=34556> [accessed October 12, 2006].
- VDBC (Veterans' Disability Benefits Commission). 2006. *Website Home Page*. [Online]. Available: <http://www.vetscommission.org/> [accessed August 4, 2006].

## Background—Disability Compensation

**D**isability-compensation systems vary by myriad factors, reflecting the social, political, and economic conditions of their formative periods. The legislators who create these policies and the executives who carry them out are influenced by key stakeholders and constituents as well as by the state of the relevant science and law at the time of their actions. Thus the major disability-compensation systems that exist in the United States today—veterans’ disability compensation, Social Security disability programs, workers’ compensation, and, to some extent, private disability insurance programs—are multifactorial legacy systems. This committee was charged with addressing veterans’ compensation policy and, specifically, veterans’ compensation for posttraumatic stress disorder (PTSD), but committee members agreed that examining the intent and conduct of other compensation systems would be useful in fulfilling that task.

The first part of this chapter provides a historical background on veterans’ disability compensation, focusing on the period up to and including World War II. A brief review of veterans programs in the United Kingdom and Canada is also included. The chapter’s second part presents an overview of other disability-compensation systems in the United States. Together, these sections serve as a contextual foundation for the material presented in subsequent chapters.

### EARLY COMPENSATION FOR MENTAL DISABILITIES

Early American colonial law regarding the care and responsibility for mentally or otherwise disabled persons reflected existing English law to

a great extent, with the disposition of a particular case dependent upon such factors as whether a disabled person was considered to be violent or nonviolent, was mentally or intellectually disabled, was able to maintain gainful employment or had access to familial material support, and was accepted as a charge of the local community<sup>1</sup> (Braddock and Parish, 2001). From a public welfare perspective, a great deal of overlap exists between the early support systems for the mentally and physically disabled and for the indigent and the criminal. The residents of early asylums, workhouses, almshouses, and houses of correction were a heterogeneous mixture of the criminal, the poor, the orphaned, the elderly, and the sensorily, physically, and mentally impaired (Braddock and Parish, 2001).

The earliest legislation that specifically included a provision for the care and maintenance of persons with mental disabilities was authorized in 1751 in the Pennsylvania colony as part of the law establishing the first general hospital in America (Braddock and Parish, 2001). The petition associated with that legislation cited the growing number of “Lunaticks or Persons dis-tempered in Mind and deprived of their rational Faculties” as justification for the new provision. A 1776 judicial decision in Pennsylvania established what seems to have been the first municipally mandated institutional provision for the mentally ill in the colonies. The Pennsylvania court ordered that “a small Levy be Laid to pay for the buildings of ye house and the maintaining of ye said madman according to the laws of ye government” (Braddock and Parish, 2001).

Throughout the early 1800s counties often dealt with the mentally ill with a practice known as *bidding out* or *auctioning out*. When a disabled person was auctioned out, the county paid a stipend to the lowest bidder for the provision of one year of care (Breckenridge, as cited in Braddock and Parish, 2001). Auctioning out would not necessarily have been an improvement over the “beatings of the head [that] were employed to treat people with many mental diseases, including depression, paralysis, and intellectual disability” during the 1700s, as many auctioning-system-related abuses occurred with little or no official monitoring of the care of these wards (Braddock and Parish, 2001). Over time the practice of auctioning out fell out of favor, as local municipalities found its continued implementation to be cost prohibitive.

Fishback, in his essay on public assistance during the American colonial period (Fishback et al., 2006), notes that the Philadelphia Almshouse,

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<sup>1</sup>Under England’s Poor Law of 1601—also known as the Elizabethan Poor Law—the local community was required to provide certain maintenance through compulsory taxation when a family was unable to provide for a mentally ill member. This provision, and its associated economic burden, often led to a person with mental disability being forcibly driven from local communities (Braddock and Parish, 2001).

like most almshouses of the period before the Revolutionary War, “was a miscellaneous receptacle for human distress. One almshouse could serve as a hostel, a hospice, and a home for the disabled.” Little research has been conducted on rates of receipt of public assistance during the colonial period, and any such quantitative research on that period that attempted to segregate the physically from mentally disabled—or even the disabled from the poor and criminal—would need to carefully consider the operational definitions for *recipient* and *assistance*, as the lines between penal action and welfare administration are barely distinguishable in the few early records that do exist, and “the auctioning system of the 1800s or the whippings of the 1700s . . . hardly deserve the word ‘assistance’” (Fishback et al., 2006).

While vicissitudinous, the near-400-year history of public assistance for the disabled in the United States evolved with successive policy changes, generally shifting from a collection of disparate systems of localized administration and funding to a series of programs of increasingly uniform standards and more centralized control. An exception to this pattern is the system of public assistance for the veteran, as a centralized policy for the maintenance of disabled soldiers was established very early on, during the Revolutionary War period.

### VETERANS’ DISABILITY COMPENSATION

The Pilgrims at Plymouth are credited with passing the first pension law in America (Burke, 1899).<sup>2</sup> In 1636 the Pilgrims “enacted in their Court that any man who should be sent forth as a soldier and return maimed should be maintained competently by the colony during his life” (Plymouth Colony Records, as cited in Burke, 1899). This policy was retained when Massachusetts Bay and Plymouth colonies formed a union in 1691 (Burke, 1899). Virginia, Maryland, and New York passed their own colonial statutes providing compensation for disabled military members in 1678 (Burke, 1899). Maryland’s statute went beyond compensation for disabled soldiers and provided pensions for widows and dependent orphans (Rockoff, 2006). While today the compensation of those disabled through service to their country might be seen by many as an obvious social obligation,<sup>3</sup> during the

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<sup>2</sup>In 1624 colonial legislation with provisions for the compensation of disabled soldiers was passed in Virginia. Had it not failed to receive ratification in London, it would have been the earliest compensation legislation in the colonies (Rockoff, 2006). The British had a 200-year history of compensation for disabled military veterans at the time the first pension laws were passed in the Colonies (Bradley Commission, 1956).

<sup>3</sup>Veterans in England were maintained through the charitable support of the monastic system until 1592, when legislation providing government compensation to disabled veterans was enacted. A sense of national responsibility for the disabled veteran that was part of their British heritage remained among the early colonists of America (Bradley Commission, 1956).

Colonial era a major impetus for veterans' disability compensation was actually the need to build and maintain militia strength during the first Indian Wars, most notably the Pequot War in New England (Rockoff, 2006).

### Revolutionary War

The first federal disability-compensation program in the United States was provided to the veterans of the Revolutionary War. From the onset of the war the Continental Congress was inundated with "claims for relief" submitted by disabled servicemen. Officers in the field warned the Congress that if it did "not give better encouragement to the privates than at present is held forth to them, you will have no winter army" (Powell, as cited in Bodenger, 1971). Largely in response to growing pressure from military leaders, plans for the relief of disabled veterans were formulated and ratified, becoming what is known as the Military Pension Law of 1776 (Bradley Commission, 1956). Pursuant to the Pension Laws,<sup>4</sup> half-pay was to be given "for life to every officer, soldier, or sailor losing a limb in any engagement or being so disabled in the service of the United States as to render him incapable of earning a livelihood," and a portion of this was paid to the partially disabled (Bodenger, 1971). The promise of monetary compensation for war-related disability served not only to attract enlistments in the Colonies—where popular support for the war was far from unanimous (Bradley Commission, 1956)—but also to prevent desertions from an Army fighting in conditions that were abjectly cruel:

[T]he emaciated, louse-infested . . . half-naked exhausted men, broken in spirit and discipline, crowded into the camps and hospitals . . . [where] sickness, suffering, and death from communicable diseases intensified the devastating effects of the ferociously cold weather upon soldiers who were short of clothes, shoes, blankets, fuel, and food, and existed in dismal, frigid, filthy huts (Bayne-Jones, 1968).

Further incentives were provided for military service when land grants became a standard part of enlistment contracts, and by the War's end more than 9.5 million acres had been awarded to veterans of the Revolution (Rockoff, 2006).

These compensation policies continued to be modified in the decades following the Revolutionary War. Benefits were made increasingly comprehensive, for instance. Initially limited to members of the Continental Army, benefits were soon provided to "all disabled men who fought in

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<sup>4</sup>What is known today as disability *compensation* was formerly known as a pension. It was not until 1919 that all awards related to service-connected disability and death were referred to as compensation (DVA, 2006a).

the common defense”<sup>5</sup> (Bradley Commission, 1956). Throughout the late eighteenth and the early nineteenth centuries, as the federal government attempted to develop acceptable disability policies for veterans, the distinction between recipients of disability compensation and of veterans’ pensions<sup>6</sup> became less clear, as some veterans on the compensation rolls discovered they could receive greater monetary benefits by shifting to the pension rolls and many veterans received compensation and pension concurrently. During the early part of this period the locus of benefits administration, with often protracted and circuitous modification, shifted away from state-level jurisdiction to adjudication at various offices at the federal level. While Congress retained final authority over claims, the Secretary of War generally assumed the responsibilities of compensation administration in 1789 (Bradley Commission, 1956).

In 1802, the Secretary of War asked the U.S. Attorney General for an interpretation of the Military Pension Law in order to clarify the issue of service connection for claimed conditions. According to the Attorney General,

the connexion [sic] between the inflicting agent and consequent disability need not always be so direct and instantaneous. It will be enough if it be derivative, and the disability be plainly, though remotely, the incident and the result of the military profession. . . . Such are the changes and uncertainties of the military life . . . that the seeds of disease, which finally prostrate the constitution, may have been hidden as they were sown, and thus be in danger of not being recognized as first causes of disability in a meritorious claim [Opinion of Richard Rush (U.S. Attorney General) April 15, 1815] (DVA, 1993).

This finding indicates that by early in the nineteenth century policy makers were already recognizing delayed-onset cases as pensionable.

In 1808 the states’ remaining compensation responsibilities<sup>7</sup> were transferred to the federal government. During the period when the state and federal governments had shared responsibility for administration, monetary awards had varied by the individual state’s ability to fulfill the federally mandated program. One of the results of the 1808 transfer of overall compensation administration to the newly established Bureau of Pensions<sup>8</sup> was to establish greater consistency in awards payments (DVA, 2006a).

Despite the existence of a dedicated federal bureau to oversee compen-

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<sup>5</sup>Pensions were provided to local militia, etc.

<sup>6</sup>Refers to service pensions and not retirement pensions.

<sup>7</sup>Claims had been qualified at the state level and awards were paid by the states and the “sums thus paid [were] . . . deducted from the requisitions levied on the states for the support of the Confederation government” (Bodenger, 1971).

<sup>8</sup>The Bureau operated under the authority of the Department of War.

sation, a number of major issues remained that both complicated policy development and hampered the administration of veterans' benefits programs. These included:

- service records that were of poor quality or nonexistent;
- pay that was substandard and that was provided in currency that rapidly devaluated during the course of the war;
- the existence of pension disparities—officers received half-pay for life, while grants for enlisted personnel were far more modest and of limited duration—which in turn led to demands by enlisted personnel for compensation later; and
- limited-duration enlistments, which further compromised the quality of enlistment records (Bradley Commission, 1956).

In the uncertainty created by the postwar government fragility, veterans began organizing to push for timely receipt of their promised benefits. The Commutation Act of 1783 had provided government-issued securities—at 6 percent interest—equal in value to five years' pay for officers who had served during the War of Independence. Securities were not provided to enlisted personnel; they received instead a service pension of one year's pay (Rockoff, 2006). But the Confederation could not afford to pay the pensions that had been awarded or even to cover the interest on issued bonds (DVA, 2006a). Fears that the country would fail to fulfill its obligations to its veterans led to the formation of the Society of Cincinnati, considered to be the first veterans' service organization in the United States (Rockoff, 2006). The Society was composed of officers of the Revolutionary War, and its express purpose in the years following the war's end was to “pressure the government to fulfill the pledges made to the officers” (Rockoff, 2006). The Society's early activities marked the beginning of a long history in which veterans' service organizations have been engaged quite influentially in the development of benefits' policy in the United States.

Early compensation legislation did not specifically refer to mental disabilities, but the language of the following Continental Congress pronouncement would indicate that policy makers intended more than a simple physical-injury-driven pension program for veterans:

[P]ermit not him, who, in the pride and vigor of youth, wasted his health and shed his blood in freedom's cause, with desponding heart and palsied limbs to totter from door to door, bowing yet his untamed soul, to meet the frozen bosom of reluctant charity (Glasson, 1900, as cited in Braddock and Parish, 2001).

Furthermore, eighteenth-century experts in military medicine had already recognized that the health of the soldier extended beyond infectious disease

and injury. Baron van Swieten, in his 1776 volume *The Diseases Incident to Armies with the Method of Cure*, notes that “the soldier fresh lifted, and torn at once from his family, no sooner loses sight of his village, but he becomes melancholy; and tho, [sic] a robust husbandman, finds himself scarce able to bear the fatigues and inconveniences of a military life” (Bayne-Jones, 1968).

### The War of 1812 Through the Civil War Period

Between the Revolutionary War and the Civil War veterans’ disability policy went through a series of changes (Rockoff, 2006). At the beginning of that period, eligibility was strictly contingent upon the existence of a disability, but 1818 saw the introduction of a needs-based service pension for veterans of the Revolutionary War.<sup>9</sup> As a result, between 1816 and 1820 the number of veterans receiving a pension increased by 805 percent from 2,200 to 17,730, and the total cost of compensation increased by 1,167 percent from \$120,000 to \$1,400,000 (Bradley Commission, 1956). There was no means test associated with the 1818 act, and pensions were considered to be “an expression of gratitude and an act of charity which did not subject indigent veterans to the humiliating necessity of searching for evidence of the precise quantum of their property, or producing surgeons’ certificates of the state of their bodily strength” (DVA, 1993). In 1820, however, budgetary constraints led to the purging of all pension recipients from the rolls, pending proof of poverty. Pensions for the majority of these veterans were restored in 1823 when the economy was more robust.

Veterans of the War of 1812, the Mexican-American War, and the Indian Wars were given monetary pensions similar to those provided to veterans of the Revolutionary War, with eligibility restricted to invalids and the dependents of deceased soldiers (Rockoff, 2006). Veterans of these wars did get warrants for tracts of western land, although that program was thought to have been motivated at least in part by the government’s need to secure hostile regions. By 1860 warrants for more than 73 million acres of land had been issued to veterans (Rockoff, 2006).<sup>10</sup> By the time service pensions were established for veterans of these wars, so much time had elapsed—pensions for veterans of the War of 1812 were not established

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<sup>9</sup>While the first major study of veterans’ earnings was not reported until 1956 (President’s Commission on Veterans’ Pensions), the sharp increase in the number of veterans qualifying for pensions on a means or income basis might imply that veterans were not thriving in post-war occupational settings, assuming that the eligibility cutoff for income was derived from valid economic indices.

<sup>10</sup>It has been estimated that roughly 40 percent of the total arable acreage in Iowa was transferred via veterans’ warrants (Rockoff, 2006).

until 1871, for example (Rockoff, 2006)—that they were the equivalent of old-age pensions for those veterans who had survived to receive them.<sup>11</sup>

Much as was the case with the Revolutionary War pension laws, Congress's passage of the Civil War pension system in 1861 has been attributed in large part to the need to raise an army (Blanck, 2001). The pension program was further expanded in 1862 into the so-called General Law System. One of the changes ushered in under the General Law System was a requirement that veterans applying for disability compensation be given a medical evaluation. This evaluation would rate the disabilities found to be attributable to wartime activities according to the veteran's relative ability to perform "manual labor requiring severe and continuous exertion." The rating protocol was later amended to include nonmanual labor skills (Blanck, 2001). Under the new system, a veteran<sup>12</sup> declared totally disabled was entitled to a monthly annuity of \$8. Physicians were responsible for the medical screening and rating of claimed disabilities. Disabilities rated as less than total were awarded in fractions of the maximum \$8 grant. Blanck (2001) notes that the "war-related lost finger or small toe was compensated by a prescribed rating of 2/8 totally disabled" or a \$2 per month annuity. Amendments to the General Law System in 1862 and 1866 expanded the list of compensable conditions and "increased the rate of compensation for severe disabilities that were neither self-evident nor easily ascertainable by the existing medical practices" (Blanck, 2001). Many of the newly compensable conditions were rated based on their "equivalence" to injury or wound-related disability.

The veterans' compensation system became more complex as it continued to be amended throughout the 1870s. In 1873 the Consolidation Act was passed by Congress. Under the act, levels of severity were assigned to ratings for war-related disabilities, and compensation was for the first time linked to impairment and not to rank (Blanck, 2001; Bradley Commission, 1956). The act also allowed for the compensation of disabilities shown to have "originating causes" during military service. Thus while a veteran may not have been disabled for years following military service, if a claimed condition was etiologically related to service, then the condition was pensionable (Blanck, 2001).

Due to the crude nature of many of the diagnostic techniques of the day and to changes in the national economy, controversy soon arose regarding the equitable application of medical evaluations and disability rat-

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<sup>11</sup>Rockoff (2006) also notes that in the 39-year period while Northern veterans of the Civil War were waiting for service pensions, their numbers decreased from 1,830,000 to 821,000.

<sup>12</sup>Only Union soldiers were eligible for pensions. Some southern states provided pensions to Confederate soldiers (Rockoff, 2006). It was not until 1958, when the Confederacy was pardoned, that the single living survivor of the Civil War was awarded a pension.

ings (Blanck, 2001). Not long after the liberalization of eligibility criteria brought about by the General Law System, newspapers were publishing stories of alleged corruption in the veterans' disability pension system, and the system was portrayed largely as a corrupt process in which biased surgeons were substantiating exaggerated and faked claims of disability (Glasson, 1901, as cited in Blanck, 2001).

While comprehensive statistics were not recorded at the time, an 1888 report made to Congress by the Commission of Pensions indicated that between 1862 and mid-1888 a greater number of awards were granted for delayed-onset diseases than for service-incurred injuries (Blanck, 2001). Among the Commission's reported statistics were 5,320 pensions for nervous prostration and 1,098 pensions for "disease of the brain, including insanity" (Blanck, 2001). As well, 25,994 cases of "diseases of the heart" were reported.

It was during the Civil War era that military physicians first attempted to isolate the causes of an increasing number of heart disorders of unclear etiology (Meagher, 1919). Jacob Da Costa, an Army surgeon, hypothesized that the syndrome variously referred to as *irritable heart*, *soldier's heart*, *effort syndrome*, *neurocirculatory asthenia*, and *disordered action of the heart*<sup>13</sup> was actually an organic response to battle stress (Lasiuk and Hegadoren, 2006; Meagher, 1919). Da Costa's analysis of 200 cases revealed that 38.5 percent had been exposed to "hard field service and excessive marching," and 30.5 percent had a history of diarrhea (Meagher, 1919). Being able to attribute soldier's heart to a physical cause provided an "honorable solution" to all vested parties, as it left the self-respect of the soldier intact and it kept military authorities from having to explain the "psychological breakdowns in previously brave soldiers" or to account for "such troublesome issues as cowardice, low unit morale, poor leadership, or the meaning of the war effort itself" (Van der Kolk et al., as cited in Lasiuk, 2006).

Physicians in Britain were also grappling with "disorders of the heart" among their veteran populations. In 1865, based in large part on the studies conducted during the Crimean War by W.C. MacLean at the Army Medical School at Netley, British physicians attributed the syndrome previously investigated by Da Costa to soldiers' equipment (Jones, 2006a; Jones and Wessely, 2005). Redesign of the equipment was recommended because government-issued rucksacks and waist-belts were thought to restrict circulation "through the heart, lungs, and great vessels," and it was observed that in "well-disciplined regiments the practice of falling out at drill or on the line of march is discouraged, and [that] men will bear and suffer much, rather than incur the imputation of being 'soft'" (Jones and Wessely, 2005).

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<sup>13</sup>Later, the name *Da Costa's syndrome* was added to the list.

Throughout various British campaigns (Afghanistan, Egypt, and Sudan) between 1882 and 1902, concerns grew in the military medical community as the reengineered field gear failed to reduce incident cases of “irritable heart” (Jones and Wessely, 2005).

By the time World War I approached, at least two patterns in veterans’ disability policy had emerged: benefits were established at the start of wars, despite considerable protest of many legislators and other stakeholders; and, as time passed, the amount of time between death or onset of disability and receipt of compensation awards was gradually reduced (Bradley Commission, 1956). Throughout this period, pension lawyers and veterans service organizations like the Grand Army of the Republic (GAR) became influential lobbyists for the expansion and delivery of benefits (Rockoff, 2006). President Grover Cleveland’s 1888 reelection defeat was said to be due in large part to his unpopularity with the GAR subsequent to his 1887 veto of legislation supported by the GAR that would have provided service-based pensions to “deserving” veterans (Blanck, 2001). In vetoing the bill, Cleveland had expressed concerns over the potential difficulties posed by a situation where the “establishment of facts [resting] largely within the knowledge of the claimant alone . . . would not only stimulate weakness and pretended incapacity for labor, but put a further premium on dishonesty and mendacity” (Blanck, 2001).

The economic prosperity that the nation enjoyed in the years following the Civil War contributed to the liberalization of veterans’ benefits. Enabled by a federal budget that had for many years been in a surplus state—and following a pattern that was very similar to the evolution of Revolutionary War-era benefits—the Dependent Pension Act of 1890 broadened pension eligibility to include any veteran who was “incapable of manual labor” (Rockoff, 2006; DVA, 2006a). The lifting of the requirement that disabilities be service-connected led to a 203 percent increase in the number of veterans on the pension rolls by 1893 (DVA, 2006a), by which time veteran-related spending represented 43 percent of the total federal budget (Rockoff, 2006).

### The World Wars

Micale and Lerner (2001) assert that by 1918 there existed “vigorous public and academic debate in the U.S. over the care and treatment of shell shocked veterans.” *Shell shock* was an expression used first in 1915 in the *Lancet* by Charles Samuel Meyers, a military psychiatrist, to describe the escalating number of psychiatric cases of unknown etiology among British soldiers (Meagher, 1919). Meyers hypothesized that the observed syndrome—seen in hospitalized combatants and characterized by anxiety and “distressing dreams of battle, bombing aeroplanes, etc.” (Meagher,

1919)—was caused by cerebral concussion and rupture of the vasculature resulting from exposure to exploding shells (Lasiuk and Hegadoren, 2006). Later, Meyers recognized that there existed an analogous condition with the same set of symptoms that appeared in patients that had not been exposed to exploding shells. He then used the expression *shell concussion* to describe the condition associated with exposure to the physical blast from exploding ordinance and *shell shock* for psychological morbidity resulting from the stress of war (Lasiuk and Hegadoren, 2006).

An analysis of historic data on British World War I veterans revealed that among the soldiers who were awarded disability compensation there existed a subset to whom awards had been granted for the effects of poison gas exposure who showed no signs of damage to the skin, lungs, or eyes but did demonstrate a constellation of unexplained symptoms (Jones and Wessely, 2005). Jones and Wessely note that attending physicians had recategorized these cases as “disordered action of the heart” in recognition of the emergence of a distinct second class of disability for gas-exposed veterans—psychological cases instead of organic ones. In 1917, 20 percent of the 200,000 veterans on the British pension rolls were being compensated for “war neuroses” (Bailey, 1929). This number more than doubled by 1921 but was still considered a gross underestimate due to the large numbers of veterans who were experiencing combat-related functional impairment but who had been pensioned under other diagnoses. In 1921 the British were paying 35,000 pensions for “effort syndrome” alone (Zarbriski and Brush, 1941).

Among the approximately 4.7 million members of the U.S. military who served during World War I (WWI),<sup>14</sup> 60 percent entered through the Selective Service System (DVA, 2006a; SSS, 2006). This large influx of citizen soldiers was associated with several developments in veterans’ benefits policy. One of the basic principles of veterans’ compensation in the United States had always been the responsibility of the government to “mend any damage which it has inflicted as a result of calling a citizen from his usual occupation to serve with the colors” (Wolfe, 1918). Wartime service has a variety of costs for members of the armed forces: They lose the opportunity to advance in their peacetime occupations while they are serving, for instance, and they miss out on the potential financial gains afforded to other citizens during wartime economic booms (Siegel and Taylor, 1948). The War Risk Insurance Act of 1914, originally intended to insure the assets of the American shipping industry, was amended in 1917 not only to provide

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<sup>14</sup>For purposes of veterans’ benefits in the United States, WWI service is defined as service after April 5, 1917, and before November 12, 1918, except for U.S. service members serving in Russia, for whom the WWI service window is November 12, 1918, to July 1, 1920, inclusive (CRS, 2006).

indemnity against loss of life but also to expand benefits in anticipation of U.S. involvement in WWI—a move suggesting that policy makers recognized that active military service destroyed a man’s “normal insurability” (Wolfe, 1918). The activities of the Bureau of War Risk Insurance after the passage of the Vocational Rehabilitation Law included insurance, health care services, vocational rehabilitation, and compensation for death and disability (Bodenger, 1971).

In 1918 Curtis Lakeman, then Assistant to the Director General of Civilian Relief of the American Red Cross, asked the question, “Will the United States be as successful in making civilians out of its soldiers as it has been in making soldiers of its civilians?” Lakeman (1918) noted that the Vocational Rehabilitation Law of 1918 was modeled to a large degree after the Canadian system, in the sense that readjustment was viewed as national responsibility and that civilians should play a major role in the administration of readjustment programs. Under the Vocational Rehabilitation Law, “the whole range of medical and surgical treatment” was the responsibility of the military but the “vocational and professional training” of the disabled soldier was to be the responsibility of the Federal Board for Vocational Education. The Board was charged with placing the reeducated veteran in an occupation of choice. Vocational rehabilitation was subject to economic compulsion only if a veteran willfully refused to complete training; in this case, all or a portion of his compensation could be withheld by the Bureau of War Risk Insurance (Lakeman, 1918). Even after a veteran was placed in a stable occupational setting, he still received monetary compensation for injuries incurred in the line of duty. This compensation could not be reduced as a result of a veteran “overcoming his handicap.”

Planning for the disbursement of vocational-rehabilitation resources required that the distribution and severity of disabilities be evaluated. The original estimate was that 1 of every 100 men at the frontlines would be disabled and in need of readjustment assistance and that half of these cases would be medical cases (nonsurgical cases), including cases of shell shock (Lakeman, 1918). In 1918, however, it turned out that 24.4 percent of the World War I soldiers and sailors who were returned from the European theater were sent back to the States “on account of nervous or mental disorders” (Lakeman, 1918). During that year the United States cared for approximately 20,000 veterans in nine federally funded homes for disabled soldiers, and an additional 12,000 veterans were cared for in state-run homes.

The War Risk Insurance Law, in addition to furnishing low-cost life and disability insurance to officers and enlisted personnel, provided a pension system with a compensation schedule for partial disability that was fashioned after the workers’ compensation system and based on the “average impairment of earning capacity.” Awards were not reduced if a veteran was

able to increase his earning capacity by overcoming his disability (Lakeman, 1918). In addition, the United States Public Health Service was charged, in conjunction with the Bureau of War Risk Insurance, with providing no-cost examinations and treatment to entitled soldiers and sailors (Lakeman, 1918).

One issue that had an eventual effect on veterans disability policy for mental disorders was compensation of tuberculosis cases. By mid-1918 tuberculosis had led to the discharge of roughly 10,000 men from the army (Lakeman, 1918). Before the War Risk Insurance Law, these discharges would have been for a condition considered not to have been incurred in the line of duty. The government's position on these cases had hitherto been that the tuberculosis had existed prior to service but had merely escaped detection, and thus, the care and readjustment of these veterans was not the responsibility of the government. Men discharged with tuberculosis were sent to Army hospitals with tuberculosis wards for the duration of treatment. State public health authorities were provided with lists of those discharged from military service for tuberculosis, and state agencies provided any necessary medical care. The Red Cross provided financial assistance to affected families until "the burden of care and relief [was] transferred to the appropriate civilian community agency" (Lakeman, 1918).

Analogous arrangements were being made to manage the care of the more than 20,000 men discharged in the first year of WWI due to "nervous or mental defect" (Lakeman, 1918). By WWI, experts had estimated that "the insanity rate of men in the Army increases nearly 300 percent in time of war" (Lakeman, 1918), and it was during this time that a center for the specialized treatment of war neuroses was established at the Army hospital in Plattsburg, New York. Service members who were categorized as insane were treated separately at Fort Porter (N.Y.) medical facilities. Soldiers and sailors deemed incurable were discharged from military hospitals when family members or the state hospitals for the home of record took over their care. In cases where neither the family nor the state took charge, service members were moved to St. Elizabeth's Home in Washington, D.C.<sup>15</sup> (Lakeman, 1918).

In cases of neuropsychiatric disorders, as in cases of tuberculosis, the establishment of an in-service onset for purposes of compensation was problematic. The Act of March 3, 1885, had established a presumption of soundness at enlistment (Davenport, 1913). The presumption was retained

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<sup>15</sup>The facility was established in 1855 as the *Government Hospital for the Insane* to provide inpatient care of the psychiatric casualties of the Army and Navy and the residents of the District of Columbia. Civil War veterans receiving treatment at the hospital, fearful of being stigmatized, euphemistically referred to the institution as *St. Elizabeth's*, and Congress made the name official in 1916 (DMH, 2006; NLM, 2006).

in the 1917 War Risk Insurance Act, but the act was amended in 1921 to exclude conditions documented prior to or at the time of enlistment (DVA, 1993). In a separate chapter of the 1921 amendment to the act, however, the presumption of service connection was specifically added for active tuberculosis and neuropsychiatric diseases developing within 2 years of discharge from active duty (DVA, 1993). During floor debate on the amendment, its sponsor, Senator David I. Walsh, stated that putting the burden of proof on veterans to establish service connection was a “sharp and an altogether unjustifiable annoyance . . . [and] that we ought not continue this requirement of endless affidavits, necessarily involving long delay,” adding that “[t]he delays resulting from this affidavit requirement have often resulted in men dying before they ever got their compensation” (DVA, 1993). A compromise version of the amendment eventually passed, shifting the burden of proof from the veteran to the government for cases of tuberculosis and mental disorders (DVA, 1993).

But while policy makers had become more responsive to the needs of disabled veterans, support from the public at large was recognized as being vital to the success of the WWI veterans’ readjustment programs:

An hysterical tendency on the part of the community to pamper the returned soldier with trivial entertainment, or the offer of immediate employment, really resting on a basis of charity or exploitation, may have the most untoward effect in demoralizing the ex-soldier’s will and character. In a few years when the too-ephemeral desire to help the wounded hero has been forgotten, and the man faces the competition of able-bodied workmen in a labor market again over-supplied, he may have good reason to blame the public which gave him the wrong kind of reception (Lakeman, 1918).

Delivering benefits to WWI veterans in need of assistance was a daunting bureaucratic task, but the existence of a standard schedule for rating disabilities eased the process (ESI, 2004). According to this schedule, compensation awards were tied to estimated losses in earning capacity, with the calculated amounts based on the average earnings in all occupations performing manual labor (ESI, 2004). In 1924 the schedule was amended so that a veteran’s pre-service occupational status was considered in estimating the loss of earning capacity (ESI, 2004). However, because of the lack of pre-war occupational history for many veterans of the First World War, the government soon reverted back to the “average impairment” formula (ESI, 2004). The rating schedule was codified in 1939 (Public Law 76-257). Benefit amounts were scaled linearly in increments of 10 percent;<sup>16</sup> war

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<sup>16</sup>Thus, the 10 percent level was a tenth of the amount granted to someone rated at 100 percent; the 50 percent level, half; and so forth.

veterans were provided higher amounts than those who had served during peacetime (ESI, 2004).<sup>17</sup> Congress wrote exceptions into the schedule that granted higher amounts to veterans with certain specific disabilities—loss of an eye, hand, or foot, for example—which was a decision that some have interpreted as compensation for loss of quality of life (ESI, 2004). Another clarification occurred in 1919, when all claims of service-connected death or disability were officially referred to as *compensation* rather than—and separate from—the traditional term, pension (DVA, 2006a).

Experience with WWI service members contributed to a growing knowledge base about military psychiatry issues. Swank and Marchand observed that among WWI U.S. infantry soldiers in the northwest European theater with 60 consecutive days of combat, 98 percent were likely to have “become psychiatric casualties of some kind, whether of combat exhaustion, acute anxiety state or depression,” and that among the remaining 2 percent “a predisposition to an ‘aggressive psychopathic personality’” (Swank and Marchand, 1946) was observed (Jones, 2006b). U.S. military physicians were aware of the enormous threat to unit strength posed by combat neuroses. Major Thomas W. Salmon, senior psychiatric advisor for the U.S. forces in France, established a protocol for the treatment of neuroses that was administered as close to the front lines as possible (Scott, 1990). With a period of respite and the “firm expectation that the soldier return to duty” as secondary intervention, Salmon’s plan necessitated the assignment of psychiatrists to each division. Sixty-five percent of soldiers treated under the protocol were returned to the front lines (Scott, 1990). What percentage of these cases of neuroses experienced long-term remission cannot be known in the absence of follow-up data.

While many WWI-era clinicians believed that humiliation and punishment would remedy combat neuroses and viewed breakdown during battle as a manifestation of flawed character (Anonymous, 2005), there were others who offered more enlightened assessments and opted for more humane treatment approaches. Ernest Jones, president of the British Psychoanalytic Association, in his explanation of war neuroses, stated that war amounted to “an official abrogation of civilized standards . . . [which necessitated] behavior of a kind that is throughout abhorrent to the civilized mind . . . [and therefore] a soldier who suffered a neurosis had not lost his reason but was labouring under the weight of too much reason” (Bourke, 2002; Meagher, 1919). During WWI a schism formed in the scientific community over the causes of neuroses, with supporters of physical explanations (i.e., injury to the nervous system) and supporters of psychological theories at odds with one another (Bourke, 2002). Thus a variety of therapeutic options were used on the 80,000 cases of shell shock returned to British hospitals. Electric

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<sup>17</sup>Rates for peacetime veterans were set at 75 percent of their wartime counterparts.

shock treatment, massage, respite, and special diets were employed by those subscribing to the “organic school,” while talking cures, hypnotherapy, and various other psychological treatments were the preferred therapies of the proponents of psychological trauma (Bourke, 2002). Neither type of therapeutic strategy was efficacious, however, as “four-fifths of shell shock cases were never able to return to military duty” (Bourke, 2002).

At a Veterans’ Bureau clinic in New York, psychiatrist Abraham Kardiner was working with WWI veterans suffering from war neuroses. His experience with these veterans formed the foundation of his book *The Traumatic Neuroses of War* (1941). In the book Kardiner described the constellation of symptoms surrounding war neuroses, providing an early clinical foundation for what is now known as posttraumatic stress disorder (PTSD) (Anonymous, 2005). His characterization of war neuroses included:

- exposure to traumatic events;
- trauma fixation and distorted perception of self, others, events, and environment;
- nightmares;
- limited ability to engage in normal activities;
- chronic irritability; and
- susceptibility to aggressive outbursts (Anonymous, 2005).

Some of the pre-WWI predictions of likely neuropsychiatric rates among those who served in the war (Lakeman, 1918) were realized, and by February, 1927, “ex-service men with neuropsychiatric disabilities constituted 46.7 percent of all patients receiving hospital treatment as beneficiaries of the U.S. Veterans Bureau” (Bailey, 1929). By the end of the following decade the U.S. government had invested nearly one billion dollars in benefits for veterans with “war neuroses” (Dwyer, 2006).

As had occurred after the Civil War, veterans of WWI organized, seeking to ensure the delivery of promised benefits. In 1919 the American Legion was formed. By 1920 the group, founded by only 20 officers, had attained a membership of over 800,000 (Rockoff, 2006). The American Legion’s position was that “it asks for no bonuses . . . it merely asks the government to assist the ex-serviceman in overcoming some of the financial disadvantages incidental to his military or naval service” (Siegel and Taylor, 1948). Congress was responsive to the growing veteran constituency and passed the World War Adjustment Compensation Act in 1924. The Act authorized a bonus—on average, \$550, payable in 20 years—to WWI veterans based on the length and location of their service, which made it a form of *adjusted compensation* (Rockoff, 2006; Siegel and Taylor, 1948). With veterans returning to a volatile postwar economy, with inadequate separation pay and no readjustment services, as many as 20 states provided

additional benefits to WWI veterans—and not just to disabled veterans (Siegel and Taylor, 1948). The Legion is credited with paying an influential role in the determination of “benefits and treatment for war neurotics” (Bodinger, 1971).

In 1921, the Veterans’ Bureau was established (Public Law 67-47). Under the law establishing it, all functions of the Bureau of War Risk Insurance and the Federal Board of Vocational Rehabilitation as well as all functions of the U.S. Public Health Service related to veterans were transferred to this single entity. The director of the Veterans Bureau had the authority to establish up to 140 regional offices to carry out the functions of “rating and awarding compensation claims, granting medical, surgical, dental, and hospital care, convalescent care, and necessary and reasonable aftercare, making insurance awards, [and] granting vocational training” (Public Law 67-47). Responsibility for delivering services to veterans was still spread among three agencies, though: the Veterans’ Bureau, the Bureau of Pensions of the Interior Department, and the National Homes (DVA, 2006a). A second round of consolidation took place in 1930, combining these entities to create the Veterans Administration (VA).

The hospital-care needs of veterans increased substantially throughout the Depression. During the 1930s the number of VA hospitals increased from 64 to 91, and the number of beds nearly doubled to just under 62,000 (DVA, 2000b). Tuberculosis was initially the most commonly treated condition among WWI veterans at VA hospitals, but by the middle of the 1930s, neuropsychiatric conditions accounted for more than half of the patients. Seventy-two thousand men had been discharged from the Army during and after WWI with neuropsychiatric disorders, and 40,000 had applied for benefits as neuropsychiatric cases (DVA, 2006b).

Concerned by the rates at which men in combat were lost to neuropsychiatric disorders during WWI and by the difficulties involved in treating these cases of combat neurosis, military psychiatric experts during World War II (WWII) focused much effort on screening out at-risk inductees during entrance physical examinations and early in the military training phases. More than 1 million “psychologically unfit” men were screened out by draft boards during WWII (Scott, 1990). During WWII the expressions “shell shock” and “shell concussion” were replaced by *combat fatigue* and *operational fatigue* (Hanson, 1943). Army psychiatrist Colonel Frederick Hanson (1943) described the cases of combat neuroses seen in the war:

They walked dispiritedly from the ambulance to the receiving tent, with drooping shoulders and bowed heads. Once in the tent they sat on the benches or the ground silent and almost motionless. Their faces were expressionless, their eyes blank and unseeing, and they tended to go to sleep wherever they were. The sick, injured, lightly wounded, and psychiatric cases were usually indistinguishable on the basis of their appearance.

Even casual observation made it evident that these men were fatigued to the point of exhaustion. Most important of the factors that produced this marked fatigue was lack of sleep. Under almost all combat conditions the infantryman gets too little sleep. The conditions of his existence—the almost continuous shelling, the strange night noises, flares, sentry and patrol duties, rain, snow, cold, heat, insects, and the ever-present threat of the enemy—conspire to make his sleep at best intermittent and scanty. In spite of this lack of sleep he must undergo long periods of severe exertion, more often than not on a diet that is at best deficient in calories. Often the food is there for him but he either cannot carry enough of it with him, or is too frightened to eat the proper amount. Sometimes the type available has become distasteful through its monotony (Hanson, 1943).

Frontline management of “war neuroses” during WWII was extensively documented. The military medical community did a poorer job of documenting the breakdown of soldiers far from the field of battle, and this reporting bias resulted in a major gap in the scientific literature addressing the long-term outcomes of exposure to battlefield trauma (Dwyer, 2006). As Dwyer notes (2006), the psychiatric histories of troubled soldiers from the early wars are commonly disparate and inaccessible. Military psychiatrists observed that among “noncommissioned officers who were old in combat experience, . . . well-motivated [and] previously efficient,” prolonged exposure to the horrors of combat created a consistent constellation of symptoms, including anxiety and “concomitant impairment of judgment” (Sobel, 1948). The breakdown of devoted and highly decorated soldiers came to be known in the military psychiatric community as “old sergeant syndrome” (Sobel, 1948). Because of the way psychiatric professionals were put on the front line to interact with affected service members (the Salmon plan), WWII has been credited for facilitating the migration of psychiatrists from the asylum to the community (Dwyer, 2006).

Despite the implementation of induction screening standards, the rate of psychiatric casualties in Europe was 102 per 1,000 troops. The Salmon program was reinstated with psychiatrists working out of mobile army hospitals close to the front lines (Lasiuk and Hegadoren, 2006), and the loss of troops due to psychiatric breakdown was significantly reduced (Scott, 1990). Grinker and Spiegel observed in 1945 that among WWII soldiers many cases of “gross stress reaction” did not manifest on the field but rather emerged much later, and could persist for several months or even several years (Scott, 1990). Over 500,000 U.S. Army soldiers—a population great enough to outfit 50 combat divisions—were discharged for psychiatric disorders during WWII (Wanke, 1999). An estimated 1.3 million members of the U.S. forces suffered from debilitating neuropsychiatric conditions during the war (Wanke, 1999).

The Serviceman’s Readjustment Act of 1944, which came to be known

as the “G.I. Bill of Rights,” was intended to be a less costly solution to readjustment than the bonuses awarded to WWI-era veterans (Siegel and Taylor, 1948). The G.I. Bill included a wide range of benefits: health care, separation pay, home and business loans, reemployment rights and hiring preferences, and education benefits (Rockoff, 2006). While the nation did not want to see its war veterans go from the “battle lines to the bread lines” (Rockoff, 2006), policy makers were also concerned with preventing the national economy from slumping into a postwar recession or even depression (ESI, 2004).

The total number of veterans receiving benefits through VA during the post-WWII era would have included a considerable number of veterans from WWI,<sup>18</sup> so it is difficult to get a good estimate of the number of WWII veterans suffering from psychiatric problems, but the number was certainly large. By 1950 there were 136 hospitals in the VA system, of which 34 were neuropsychiatric hospitals, and of the 106,287 hospital beds, 54,084 beds were in neuropsychiatric wards (Magnuson, 1951). In 1943 VA health care was extended to all WWII veterans, even for non-service-connected conditions, but inpatient care was limited to only those veterans with service-connected conditions (CRS, 2005), so the 50,000-plus beds in neuropsychiatric wards would have been dedicated to the service-connected veterans. Still, this statistic represents only those cases severe enough to require hospitalization, and the combat neuroses are counted among other compensable psychiatric conditions. Additionally, VA operated “home-town” programs through which veterans received clinical care in their own communities (Magnuson, 1951). Roughly 75,000 physicians participated in the program.

In 1945 the rating schedule was updated to what is, in essence, the foundation for the rating schedule that exists today: the VA Schedule for Rating Disability (VASRD).<sup>19</sup> Included in the 1945 schedule was a detailed index of diagnostic codes as well as protocols for compensation, examination, and reporting (ESI, 2004). Compensation has been adjusted according to cost-of-living indices. The linear compensation scheme was abandoned in the 1950s when veterans with higher ratings began receiving awards greater than would have been predicted by a linear trend (ESI, 2004). This change has been attributed, in part, to the earnings-related findings of the President’s Commission on Veterans’ Benefits (Bradley Commission, 1956).

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<sup>18</sup>As of 1951 nearly 50 percent of veterans of WWI with psychoses had been hospitalized in the VA system for more than 10 years (Magnuson, 1951).

<sup>19</sup>A more detailed discussion of issues regarding the administration of the VA is contained in the IOM report *A 21st Century System for Evaluating Veterans for Disability Benefits* (2007).

### Korean and Vietnam Wars

Early in the Korean War psychiatric casualty rates were 50 per 1,000 (Scott, 1990). After the reimplementing of the Salmon plan, the rate was reduced by 40 percent (Scott, 1990). It was during the Korean War that the original *Diagnostic and Statistical Manual of Mental Disorders (DSM-I)* was published by the American Psychiatric Association (APA). *DSM-I* included the combat-related disorder *gross stress reaction*, the definition of which was developed in part from work conducted by military psychiatric personnel like Abram Kardiner (Scott, 1990). The VA subsequently amended the VASRD to reflect the *DSM* nomenclature. The introduction to the *Mental Disorders* section of the VASRD instructed rating personnel to “familiarize themselves thoroughly” with the *DSM* and stated explicitly that “[f]ormal psychometric tests are essential in the diagnosis of mental deficiency” (VA, 1957). The inability to adapt socially was cited as “one of the best evidences” of the state of a subject’s mental health. Social functioning was to be considered, for rating purposes, only in the context of industrial adaptability with the understanding that “a person who has regained competency may still be unemployable” (VA, 1957). The rating schedule for mental disorders in 1957 was so strongly linked with the *DSM* that specific page numbers were cited in the primary text as supplemental guidelines for adjudicators. However, rating boards were instructed *not* to apply the APA’s classification scheme for degrees of impairment. The VASRD was modified in 1996 so that levels of disability for all mental disorders were arranged under common categories of impairment.

The psychiatric breakdown rate for U.S. troops in Vietnam between 1965 and 1967 was one-tenth of what it had been early in the Korean Conflict, a success that was attributed to the implementation of an updated version of the Salmon plan at the onset of the war (Scott, 1990). When the second edition of the *DSM* was published in 1968 during the height of the Vietnam War, gross stress reaction was one of the diagnoses omitted from the index (Scott, 1990). Speculation surrounded the reasons for the omission, and Scott (1990) stated that psychiatrist Chaim Shatan had told him in a personal interview that he “suspected that gross stress reaction was omitted to reduce the financial liability of the VA following the Vietnam War.” Scott, in the absence of corroborating evidence, offered an alternate explanation: none of the members of the APA committee that authored the update were experts in military psychiatry.

Based on a careful review of the extensive descriptions of stress reactions in combat and noncombat settings (for example, natural disasters and death camps), the *DSM-III* committee concluded that it was appropriate to reintroduce the concept of gross stress reaction from *DSM-II*, to rename it as “post-traumatic stress disorder,” and to base the diagnostic criteria on

those symptoms most frequently described in the research literature on both combat and noncombat stress reactions.

### Summary Observations

The veterans' compensation and pension system that exists today is a legacy system with a nearly 400-year history (summarized in Table 2-1). It has been subject to the influences and agendas of many stakeholders—politicians, military leaders, and veterans—and to its share of accusations of bureaucratic mismanagement. Changes in compensation policy over the years have been driven by several diverse factors. They are sometimes attempts to correct for past shortcomings in the system or adapt to changes in the social, political, or economic climate. On other occasions, they appear to be efforts to recognize in a tangible way the horrific conditions under which wars are fought and the life opportunities missed or compromised by those who participated in them. The state of the relevant science has also played a role in determining how health problems are perceived and what people think about whether those problems are compensable. While in the strictly technical sense PTSD has existed for less than three decades,<sup>20</sup> when all of its earlier incarnations are considered—irritable heart, soldier's heart, neurasthenia, shell shock, combat fatigue, operational fatigue, combat stress reaction, post-traumatic neurosis, and so on—the syndrome has a history as long as veterans' compensation itself.

### Veterans' Disability Compensation in Other Countries

Some foreign governments have veterans' compensation policies for PTSD. The committee briefly reviewed the systems in the United Kingdom and Canada. While these systems share some common attributes with the VA benefits system, it is difficult to perform direct comparisons between the systems in those two countries and in the United States because of the existence of universal health care and other social support mechanisms in the United Kingdom and Canada.

Veterans Affairs Canada takes a broad view of the intent of its disability benefits system:

To put on the uniform of one's country—and this is as true today as it was in 1914—is to make an extraordinary commitment: to put oneself at risk, as required, in the interests of the nation. It is this commitment that explains and justifies veterans' benefits. . . . Canada has a comprehensive program of these benefits because of its long and distinguished military

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<sup>20</sup>The disorder called PTSD was first defined in the third edition of the *Diagnostic and Statistical Manual*, which was published in 1980.

**TABLE 2-1** Disability and Veterans' Compensation Policy Time Line

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1636	To encourage service in the Pequot War, the Plymouth colony provides for the maintenance of disabled soldiers; the first veterans' benefits in an English-speaking colony
1776	The Continental Congress promises pensions to officers and soldiers disabled in the course of service; land grants ranging from 100 to 1,100 acres based on rank were considered part of the contract of enlistment
1778	The Continental Congress promises half-pay for seven years for officers who serve until the end of the war
1780	The Continental Congress promises half-pay for life to officers and for seven years to the widows and orphans of officers who die in service; this is the first national provision for widows and orphans
1783	Washington addresses his officers at Newburgh, New York, counseling patience in pursuing demands for past pay and pensions; the Commutation Act is passed; the Society of Cincinnati, the nation's first veterans' organization is founded
1808	Control of military pensions transferred from the states to the federal government
1818	Service Pension Law passed; means-based; disability not a requirement
1828	Full pay for life is granted to surviving officers, noncommissioned officers, and soldiers who had served until the end of the war
1862	General Law Pension System implemented; Arrears Act passed
1865	National Home for Disabled Volunteer Soldiers established (not just a single facility—various branches were constructed nationwide); veterans' preference for civil service legally established
1866	The Grand Army of the Republic formed
1879	The Arrears of Pension Act passed
1885	Act of March 3, presumption of soundness at time of enlistment for all pension applicants, although soundness could be rebutted
1890	Dependent Pension Act is passed
1913	The Veterans of Foreign Wars is formed from the merger of smaller organizations of veterans of the Spanish–American War and the Philippine Insurrection
1917	War Risk Insurance Act authorizes the issuance of life-insurance policies to members of the armed services; a standard schedule for rating service-connected disabilities is created based on average impairment
1918	A vocational rehabilitation program is established for veterans
1919	American Legion founded in Paris by American Expeditionary Force members
1920	Disabled American Veterans formed
1921	The Veterans Bureau is established to consolidate veterans' services into one agency
1924	Pre-service occupation is considered in the determination of disability rating
1930	Creation of the Veterans Administration
1933	Repeal of the pre-service consideration in rating determination; valuation of ratings correlated with the consumer price index
1936	Congress passes legislation (over President Roosevelt's veto) providing for immediate payment of the World War I bonus
1937	The category "totally disabled" is established for veterans with certain disabilities
1938	Service members injured in the line of duty are guaranteed disability benefits in light of a potential draft
1939	Rating schedule is revised

TABLE 2-1 Continued

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1944	President Roosevelt signs the “Servicemen’s Readjustment Act of 1944,” commonly known as the G.I. Bill of Rights (Public Law 346); it provides home loans, education assistance, and other readjustment services to veterans
1952	American Psychiatric Association publishes the first edition of the <i>Diagnostic and Statistical Manual for Mental Disorders (DSM-I)</i> ; the volume includes an entry for the combat-related disorder “gross stress reaction”
1956	Report of the President’s Commission on Veterans’ Benefits released
1956	Social Security Disability Insurance is established to cover disability-related “involuntary retirement”
1957	Veterans Benefits Act of 1957
1958	All laws concerning veterans’ benefits updated
1965	Service members’ Group Life Insurance—subsidized term life insurance purchased from private insurers—is made available
1962	Second edition of the <i>Diagnostic and Statistical Manual for Mental Disorders (DSM-II)</i> published, gross stress reaction dropped from the index, “adjustment disorder to adult life” is added instead
1973	The United States institutes an all-volunteer armed forces; veteran’s benefits become an important incentive for recruitment
1980	Posttraumatic stress disorder appears in the third edition of the <i>Diagnostic and Statistical Manual of Mental Disorders (DSM-III)</i>
1987	A revision to the third edition of the <i>Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R)</i> is published (PTSD is retained as a diagnosis)
1989	The cabinet-level Department of Veterans Affairs (VA) is established
1994	The fourth edition of the <i>Diagnostic and Statistical Manual for Mental Disorders (DSM-IV)</i> published
2000	A revision to the fourth edition of the <i>Diagnostic and Statistical Manual for Mental Disorders (DSM-IV-TR)</i> is published

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SOURCES: Adapted from Rockoff, 2006; Fishback et al., 2006; ESI, 2004; Scott, 1990; Bud-din and Kapur, 2005; Bradley Commission, 1956; Davenport, 1913.

history. By the same token, a well-thought-out and up-to-date scheme of veterans’ benefits—one that links recruitment, retention, and recognition—is essential to the well-being and operational effectiveness of today’s Canadian Forces. . . . Between those in uniform and the country they serve there is an implicit social covenant that must be honoured. All this was well understood by previous generations of Canadians, as evidenced by the fact that veterans’ benefits as such have never been an issue in party politics (VAC, 2004).

Both the United Kingdom and Canada pay monthly annuities to compensate for a disability’s effect on earning potential and lump sum payments to compensate for the effect of a disability on quality of life. The programs are young in both countries, having been in place less than 5 years in each (VDBC, 2006). In Canada, veterans’ compensation is based in large part on the policies of the U.S. Department of Veterans Affairs, with compensation

for controversial conditions such as Agent Orange and PTSD being based explicitly on the research and policy decisions in the United States (VAC, 2005). Functional impairments that lead to a loss of income are compensated through a system of annuity payments, with amounts calculated using a standard schedule (Table 2-2) analogous to the VASRD (MOD, 2005). Loss of quality of life is compensated separately and is paid as a lump sum based on standard formulae. In the United Kingdom monetary benefits are issued in both lump sum payments (for loss of quality of life) and guaranteed income payments (for earnings impairment) (MOD, 2005).

The committee did not locate any studies specifically addressing the effect of the availability of universal health care on compensation-seeking patterns in these countries. It is likely that some proportion of disabled veterans may have their therapeutic needs met though available health care systems and consequently forgo the disability application process, especially for conditions, such as PTSD, to which a stigma is attached. These countries do not have what is sometimes referred to as a *24-hours-7-days-per-week*

**TABLE 2-2 UK Rating Table for Mental Disorders**

Level	Injury
8	Permanent mental disorder, causing severe functional limitation and restriction
10	Permanent mental disorder, causing moderate functional limitation and restriction
11	Mental disorder, which is functionally limiting and restricting, and has continued, or is expected to continue, for 5 years
12	Mental disorder, which has caused or is expected to cause functional limitation and restriction at 2 years, from which the claimant has made or is expected to make substantial recovery within 5 years
13	Mental disorder, which has caused, or is expected to cause, functional limitation and restriction, at 26 weeks, from which the claimant has made, or is expected to make, a substantial recovery within 2 years
14	Mental disorder, which has caused, or is expected to cause, functional limitation and restriction at 6 weeks, from which the claimant has made, or is expected to make, a substantial recovery within 26 weeks

NOTES:

1. In assessing functional limitation and restriction for mental disorders, account shall be taken of psychological, social, and occupational function.
2. Functional limitation and restriction is likely to be severe where symptoms of behaviours include mania, delusions, hallucinations, severe depression with suicidal preoccupations, or abnormal rituals.
3. Mental disorders must be diagnosed by a relevant accredited medical specialist.
4. Any reference to duration of effects in column B are from the date of injury or onset of illness.

SOURCE: Ministry of Defence, UK, 2005. Crown Copyright/MOD.

policy, which provides for compensation in the case of injuries and diseases incurred in off-duty hours during active service.

## OTHER MENTAL DISABILITY COMPENSATION PROGRAMS

A number of other disability-compensation programs provide financial and other types of support to persons diagnosed with mental disorders in general and with PTSD in particular. As part of its work, the committee examined the literature describing these other programs. Below the information collected about compensation programs for mental disorders and PTSD provided by the U.S. federal government, state and local governments, the private sector (via workers' compensation schemes), and selected foreign military services is summarized.

### Philosophy of U.S. Disability Systems

Compensation for disability is in large part based on principles of social justice. Generally speaking, *social justice* refers to the principle that a society should provide fair treatment and a just share of the benefits (wealth and resources) to individuals and groups. The term is used in numerous ways and represents many ideas, problem definitions, and ways of finding solutions to problems. It is used in this report because ideas of social justice are often used as a rationale for disability compensation.

A society's social-justice system reflects the social, economic, and political views that its members hold concerning what a society should be. In most societies, individuals are thought to have a responsibility to work and support themselves. Societies do generally accept, however, that some people will not be able to work (or work at full capacity) and therefore may be granted an exemption from work and be granted funds in lieu of wages. There are various categories of reasons that excuse a person from the obligation to work, and a society's particular sense of social justice can be seen in the way that that society identifies and defines these categories: "Each category must be based on a culturally legitimate rationale for nonparticipation in the labor system. . . . The definitions are also tied to underlying cultural notions about work" (Stone, 1986).

Disability is a commonly accepted category for exemption from work and receipt of compensation. As already noted, its use can be traced back to the so-called Poor Laws first instituted in England in the mid- to late 1500s. Additionally, disability is sometimes used to qualify persons for medical care at reduced or no cost. In the United States, the Social Security Disability Insurance/Supplemental Security Income (SSDI/SSI) programs and the benefits programs administered by VA are often cited as representing the prevailing American social-justice views for persons with disability.

The ongoing public policy debate about these programs often implicitly contains disputes about social justice.

For compensation purposes, disability is a socially created administrative category. Each disability-compensation system has a rule base as well as an assessment process. Most systems require medical documentation of a physical or mental medical condition and also an administrative rating of the severity of that condition in terms of impairment of function in relationship to work. Compensation is most often proportional to loss of potential earnings and dependant on the level of funding set aside for the specific program.

When some people are legitimately exempted from work, others in the society may have to help fund their “substitute wages.” Funding sources for disability compensation include the individuals themselves (social and private insurance programs and individual savings, for example), public taxation, employers, or charity. Again, ideas of social justice will underlie the decisions about what proportion of contribution should be expected from each of these various sources.

VA disability benefits, including compensation, reflect a somewhat different set of principles of social justice. Persons who serve in the military and who have a disability related to military service<sup>21</sup> are eligible for benefits. One of the reasons that societies form is to provide safety and security for their members, so when individuals put themselves at risk to preserve a society’s security, social justice implies that they should be compensated for losses resulting from taking that risk. VA benefits are not contingent on work status (except for the individual unemployability benefit and 100 percent mental disorders disability status), but the VA disability rating is based on average earnings loss attributable to the disability. Rehabilitation, both medical and vocational, is part of the VA benefit system. Disability ratings also play an important role in determining access to ongoing medical care.

Western societies overwhelmingly view disability compensation as a type of income-redistribution policy. Just as strongly and widely held is the view that persons with disabilities should be encouraged to work and should not be discriminated against in the workplace. On the other hand, there have also been universal concerns about the potential overuse or misuse of the disability exemption to work. Some commentators argue that disability is more complex than just establishing and rating the severity of a medical condition and that placing someone in a disability category requires con-

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<sup>21</sup>Note that the VA standard is that disabilities are compensable if they occur or originate during service, a more broad conception than “as a result of service.” Other nations, including Australia, Canada, and the United Kingdom, use “as a result of,” but they also have national health programs that see to the needs of their veterans.

sidering personal, social, and environmental factors as well (IOM, 1991). Economists worry that persons with disabilities who can satisfy their needs through disability compensation may not be motivated to enter the labor market, especially in view of other environmental and employment barriers (Berkowitz and Hill, 1986; Weaver, 1991). Fears of deception, abuse, symptom exaggeration, or malingering have generated vigorous programmatic abuse-monitoring tactics and a concomitant demand for objective evidence of impairment and degree of functional loss. Time-limited benefits with frequent reevaluation are used for selected conditions.

Civilian disability-compensation systems in the United States include services to assist persons in gaining or remaining in employment. People who qualify for compensation may be required to follow prescribed medical treatment and to participate in rehabilitation in order to continue receiving payment. If a person does work, benefits may be gradually reduced, depending on the amount of earnings. In some systems people who receive work income still remain eligible for health care, with their health care expenditures related to their income. Increasingly, compensation is discussed as only one part of a social-justice system for supporting persons with disabilities. The performance of accepted social roles, including work, is cited as the most desirable outcome (IOM, 1997).

In discussing pro-work support policies, Burkhauser and Stapleton maintain that:

[h]istorically, the federal government's approach to providing economic security for people with disabilities has been dominated by a caretaker approach, reflect[ing] the outdated view that disability is solely a medical issue. A main premise of this model is that people with severe medical conditions are unable to work (Burkhauser and Stapleton, 2003).

These authors go on to mention such social policy instruments as the Americans with Disabilities Act, the 1998 Individuals with Disabilities Education Act, the 1999 Ticket to Work and Work Incentives Improvement Act, and administration initiatives such as the Clinton administration's Presidential Task Force on the Employment of Adults with Disabilities and the Bush administration's New Freedom Initiative. Burkhauser and Stapleton also maintain that pro-work social-justice policy requires "investment in 'the human capital' of people with disabilities." They cite evidence from a survey of private and government employers that indicates that lack of training and lack of related experience are the main barriers to employment and advancement of people with disabilities (Bruyère, 2000).

Thus the dominant social-justice rationale for disability compensation is grounded in the view that people have the right and the responsibility to support themselves and to share equally in the goods, services, and benefits of the society, commensurate with their own effort and abilities. Persons

with disabilities may or may not have the ability to work. Nonetheless, contemporary society recognizes when these people have the ability to work; allowing—and expecting—they to work serves the interest of both individuals and the group. In the United States, social-justice beliefs include the idea that people who cannot work should be taken care of by the greater society and also the idea that people should be encouraged to work whenever possible. Social justice also requires that people who take risks supporting the common good be entitled to compensation and services if they become disabled in that pursuit, and it is this that would appear to be the primary rationale for the VA disability program.

### U.S. Government Programs

#### *Social Security Administration*

Two programs administered by the Social Security Administration (SSA) are the federal government's primary means of assisting disabled individuals who are unable to work. SSI is a means-tested income-assistance program for aged, blind, or disabled individuals who have little or no income and are unable to engage in substantial gainful activity because of a physical or mental impairment that is expected to last for at least 12 months or result in death (SSA, 2006a). SSDI is a social-insurance program providing monthly benefits to disabled individuals who qualify for cash payments based on their prior contribution to the system through a compulsory tax on earnings. These individuals must be unable to work because of a medical condition that is expected to last at least one year or result in death (SSA, 2006a). Those individuals who participate in both programs—that is, they receive SSDI cash benefits on the basis of their tax contributions and have monthly income low enough to also qualify them for SSI cash benefits under the means test—are known as “dual beneficiaries” (SSA, 2006a).

People who are disabled because of psychiatric conditions are overrepresented on both the SSI and SSDI rolls, making up the largest working-age disability group receiving public income support (Cook, 2006). Furthermore, for more than a decade the number of SSI beneficiaries with psychiatric disabilities has been increasing faster than the total program (Mashaw and Reno, 1996a). From 1988 to 2001 the number of SSI recipients with psychiatric disabilities more than tripled, from 411,800 to 1.5 million; during the same period, the total number of SSI recipients rose by a factor of something over two and one-half (Jans et al., 2004). The percentage of SSDI recipients with disabling mental disorders has also increased over time, but not as rapidly. Few SSDI recipients join the workforce—less than 0.5 percent of beneficiaries leave the rolls because they have found suitable employment (Berkowitz, 2003; Newcomb et al., 2003)—and people with

disabling mental illness are no exception. Indeed, SSI beneficiaries with psychiatric disabilities are significantly less likely to work than those with other disabilities (Muller et al., 1996), and SSDI beneficiaries with disabling mental disorders remain on the rolls significantly longer than those with other diagnoses (Hennessey and Dykacz, 1989). Although SSDI was originally designed for male workers in their 50s and 60s with common work-related disabilities such as back pain, policy analysts have noted that the program has evolved to meet a growing number of social welfare needs and new congressional mandates; at the same time, SSI has become a large cash-benefit program for a population that is younger and less attached to the labor force than it was originally intended to support (Mashaw and Reno, 1996a).

SSDI disability eligibility is based on the following criteria: First, an individual must not be working or, if working, must have monthly earnings below a certain threshold. Second, the person's medical condition must significantly limit his or her ability to perform basic work activities, such as walking, sitting, or remembering, for a period of at least one year. Third, the medical condition must be on a list of impairments considered "severe" by SSA or be determined to be as severe as that of a listed impairment, or else the medical condition must prevent the individual from being able to do the same work that had been performed before the onset of the medical condition. Fourth, the individual must not be able to perform some other work that would be appropriate to his or her medical condition, age, education, past work experience, and work skills. To receive SSDI, individuals do not need to be poor or to have few economic assets or resources, but they may not have earnings above the monthly threshold.

SSI eligibility is based on a somewhat different set of criteria. The individual must be elderly, blind, or disabled, must not be working or else must not be earning more than a mandated monthly threshold, must have very low income, and must have few economic assets or other resources, such as real estate, stocks, or bonds. Disability is determined in the same manner as for SSDI, as described above.

In summary, the rationales for eligibility of these two programs are similar yet subtly different. SSI is a means-tested income-assistance program, while SSDI is a social-insurance program. This is reflected in the fact that the average monthly benefits are higher for SSDI (\$943.40 per month in June 2006) than for SSI (\$470.30 per month in June 2006), although many states supplement SSI cash payments to varying degrees (SSA, 2006b).

Both programs assume that any beneficiaries who need it should also receive access to health care via two federal systems. Individuals on SSI qualify for the federal Medicaid program, while those on SSDI qualify for Medicare after a mandatory waiting period of up to two years (Stapleton et al., 2006).

SSI and SSDI beneficiaries are assumed to be totally and permanently disabled. Because of this, federal regulations mandate an administrative review of the individual's disability status, called the continuing disability review, upon the individual's return to work (Newcomb et al., 2003). If the individual is deemed "recovered," then cash payments and associated benefits cease. This has the effect of discouraging many individuals who are capable of working from returning to work (Burkhauser and Wittenberg, 1996).

Both programs also assume that individuals who earn above a certain monthly threshold for a specified period of time should have their cash benefits reduced. In the case of SSI, the reduction in benefits varies according to the amount earned above the threshold, while in the SSDI program the reduction is absolute. SSDI beneficiaries can earn up to SSA's substantial gainful activity level each month (\$830 in 2006) with no loss of benefits, but once earnings exceed that amount for nine nonconsecutive months plus a three-month grace period, all SSDI cash benefits cease. This is referred to as the "earnings cliff" (Stapleton et al., 2006). By contrast, once an SSI beneficiary's earnings reach \$65 per month, his or her cash payment is reduced by one dollar for every two dollars of additional earnings. Some have noted that this marginal tax rate of 50 percent far exceeds that paid by the wealthiest individuals (Stapleton et al., 2006).

Additional work disincentives in the SSA system include an "implicit tax" on disabled workers whose labor force participation causes them to lose additional benefits, such as health insurance, housing subsidies, utility supplements, transportation stipends, and food stamps (Polak and Warner, 1996). And, finally, SSDI beneficiaries who return to work in the first 24 months of eligibility become ineligible for health coverage under Medicare, regardless of whether their jobs provide medical benefits (White et al., 2005). Research has indicated that people with psychiatric disabilities are aware of these disincentives and report that they plan their labor force participation accordingly (MacDonald-Wilson, 2003; Polak and Warner, 1996).

Both SSI and SSDI are systems for people with long-term, total disability, unlike other programs that provide money to individuals with partial disability or short-term disability. While the assumption is that beneficiaries are totally disabled, the system also includes an assumption that productive employment, when practical, is preferable to a reliance on cash benefits for the individuals with disabilities, their families, and society as a whole. Even when individuals with disabilities cannot be fully economically self-sufficient, the program assumes that allowing for some paid work by the beneficiaries will lead to important gains in the economic welfare of the family as well as contributing to the society's aggregate productivity (Mashaw and Reno, 1996b). Beginning in the 1990s, the SSA instituted a

number of programs that offered free special services to blind or disabled SSI or SSDI beneficiaries with the goal of helping them work. The services included counseling, job training, and help in finding a job (Cook et al., 2006). These work-incentive programs also allowed individuals to retain their eligibility for health insurance even after they were no longer eligible for cash benefits under SSI or SSDI.

Those receiving SSI or SSDI have “presumptive eligibility” for state-federal vocational rehabilitation services, unless they are deemed too significantly impaired to benefit (U.S. Department of Education, 2006). By federal legislative mandate, the Rehabilitation Services Administration, an agency of the U.S. Department of Education, uses federal and state dollars to fund vocational-rehabilitation programs in each state which provide job placement and training services to people with disabilities (Kaye, 1998). Eligibility does not guarantee receipt of services, however, and state programs are required to serve those individuals with the most severe disabilities when there are not enough resources to serve everyone who is eligible (Andrews et al., 1992). Furthermore, there are no formal referral pathways between the SSI/SSDI and the state-federal vocational-rehabilitation systems, so SSA beneficiaries with disabilities typically do not receive vocational-rehabilitation services.

### *Federal Employees’ Compensation Act*

Federal civilian and private-sector workers may also receive compensation for PTSD under the Federal Employees’ Compensation Act (FECA) (5 U.S.C. §§ 8101-8193). FECA, which has its origins in the Compensation Act of 1916 (39 Stat. 743), provides for compensation “for the disability or death of an employee resulting from personal injury sustained while in the performance of his duty” [§ 8102(a)].<sup>22</sup> This includes on-the-job mental or emotional injuries. In order to substantiate a claim, the applicant must

. . . submit factual evidence of employment factors or incidents alleged to have caused or aggravated the psychiatric condition, medical evidence establishing the existence of a mental disorder or emotional condition, and “rationalized medical opinion evidence establishing that his emotional condition is causally related to the identified compensable employment factors” (Turner, 2004).

The circumstances under which compensation is granted for PTSD are a regular subject of litigation and cannot be easily summarized. Compensation disbursement is managed by the Department of Labor’s Office

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<sup>22</sup>The Longshoremen and Harbor Workers Compensation Act provides similar benefits coverage for so-called nonappropriated fund employees.

of Workers' Compensation Programs. FECA also includes a rehabilitation component. Periodic Roll Management units monitor cases to assess claimants' ability to return to work after awards are granted.

## State and Local Government and Private Sector (Workers' Compensation)

### *Workers' Compensation*

In the United States, workers' compensation provides compensation for injuries and illnesses sustained while on the job. Workers' compensation in the United States originated in a theoretical "bargain" between labor and employers in the early twentieth century (Clayton, 2003/2004). Workers traded the ability to sue employers for damages in civil court in exchange for a no-fault system based only on economic losses. In 1911, Wisconsin, California, Illinois, Kansas, Massachusetts, New Hampshire, New Jersey, Ohio, and Washington adopted workers' compensation statutes, and programs spread to most other states within a decade, although Mississippi did not establish a program until 1948 (Fishback et al., 2006). Today every state except Texas requires employers to provide insurance to employees against the health and economic impacts of occupational injuries and illnesses. With a few exceptions—some employees in Texas, agricultural employees in some states, and workers at firms with fewer than five employees—workers' compensation covers all occupational injuries and illnesses in the country.

This no-fault bargain has implications for the amount of compensation that is paid for occupational injuries and illnesses. Compensation in civil court may include an amount for noneconomic damages, such as pain and suffering, that is often some multiple of the size of the award for economic damages. The no-fault bargain has been interpreted as meaning that, in exchange for being assured of receiving a certain payment without the need for proving fault, the employee will give up the right to receive compensation for noneconomic losses.

Sixty different programs, each with its own definition of disability, constitute the workers' compensation system in the United States (Barron, 2001). In every jurisdiction, the benefits paid under workers' compensation include all medical care for the specific injury or illness, temporary disability benefits for days out of work as a result of the injury, death benefits, and permanent disability benefits for residual disability (or impairment) after the worker has recovered from the injury or illness as much as will be possible (Clayton, 2003/2004). The point at which the worker becomes eligible for permanent disability benefits is variously referred to as "maximum medical improvement" or "permanent and stationary" status, depending upon the state. There are two general approaches to paying out workers'

compensation benefits: New York, Pennsylvania, and certain other states use a “wage loss” approach, paying injured workers over time, given evidence that they are unable to work; a second group of states pays according to “loss of wage-earning capacity” or “impairment” (Barth, 2003/2004), basing payments upon a disability schedule (Berkowitz and Burton, 1987; Reville et al., 2005). The permanent disability benefits provided in workers’ compensation and, in particular, the approach of paying according to the loss of wage-earning capacity is most similar to the VA approach.

As a basis for disability compensation, though, the VASRD is unique to the VA. In determining workers’ compensation, most states—42 of them—use the American Medical Association (AMA) impairment-rating guides in various editions, depending upon the state (Barth, 2003/2004). The AMA system is based on “whole body impairment” and not upon occupational disability or loss of earnings capacity.

The AMA impairment-rating guides do not rate psychiatric conditions. The latest edition of these guides (AMA, 2001) does include a chapter on psychiatric conditions, but the information is not converted into a whole-body impairment rating.

Many states have policies that address the treatment of psychiatric injuries and illnesses in workers’ compensation, but there is no centralized data source that summarizes this information. In general, a distinction is made in workers’ compensation between psychiatric conditions that are adjunct to physical injuries (so-called physical-mental) and stand-alone psychiatric conditions (so-called mental-mental). PTSD is an example of a mental-mental claim. While it is difficult to determine exactly how the different states treat physical-mental claims, there are no states that seem to exclude them explicitly. However, many states do have explicit policies regarding “mental-mental” claims. According to Neuhauser, at least 13 states explicitly exclude all “mental-mental” claims (Connecticut, Florida, North and South Dakota, Georgia, South Carolina, Kentucky, Minnesota, Montana, New Hampshire, Washington, Wyoming, and West Virginia) and thus would not allow compensation for PTSD without attendant physical injury (Neuhauser, 2007). Conversely, a number of states (Alaska, Arizona, Colorado, Idaho, Louisiana, Massachusetts, Missouri, Nevada, New Mexico, Oregon, Rhode Island, and Utah) explicitly allow compensation for “traumatic stress claims” when they arise out of “extraordinary or unusual” events, such as robberies and other violent acts, or else meet some similar standard.

An important distinction between the compensation paid to workers of private employers and the benefits paid by the VA is that veterans acquire their disabilities while taking risks on behalf of the public. In this sense, veterans have more in common with police officers, firefighters, and other public-safety employees of states, counties, and municipalities around the

country than they do with employees of private companies. As noted by Seabury (2002), public-safety workers' compensation benefits are often set by statute at higher levels than the benefits required to be paid by private employers or even than the benefits paid by public employers to their employees that are not involved in public safety. In addition, many states, counties, and municipalities provide lower eligibility thresholds and higher benefits for disability retirement to public safety employees.

### *Short- and Long-Term Disability*

Protection against income loss because of disability is often available to employees through their workplace. The annual U.S. Department of Labor survey that tracks employee benefits found in 2006 that 39 percent of all employees in the private sector had access to short-term disability (STD) benefits and 30 percent had access to long-term disability (LTD) benefits. By comparison, 71 percent of private-sector employees had access to health insurance through their employers (BLS, 2006).

STD programs cover absences from illness and accidents that are not sustained in the course of employment and most often specifically exclude work-related accidents or injuries. Employees must typically be out of work five days before they get benefits, and this waiting period will usually be covered by a paid-absence plan. The usual disability definition is "unable to perform the required tasks of the usual and customary occupation by reason of a medically established mental or physical condition" (IOM, 1999). Wage-replacement ratios range from 50 to 70 percent of pre-disability earnings, with 50 percent replacement being the norm. STD compensation is paid for up to 26 weeks.

Most plans apply specific guidelines for how long a particular impairment should prevent a person from working, given his or her age and the demands of the particular job. Return-to-work dates may be established as part of the initial award of benefits. For persons whose impairments indicate that they will be unable to work over the long term, case-management techniques such as assuring proper medical treatment, vocational rehabilitation, and job accommodation or modification may begin during the STD payment period.

LTD programs cover work absences caused by illnesses and accidents that are not sustained in the course of employment. For employees in higher income brackets, LTD may supplement workers' compensation and SSDI benefits. Before persons are eligible for LTD payments, they are required to be unable to work for 30-120 days as a result of their disability.

When an employer offers both STD and LTD, the eligibility periods are coordinated. For the first 6-12 months of disability, the eligibility requirement is that a person be "unable to perform the required tasks of the usual

and customary occupation” by reason of a medically established mental or physical impairment. After one year, a stricter definition, inability to do “any occupation,” applies. The benefit period may be for a specific length of time or else until retirement age. Wage-replacement rates vary from 50 to 70 percent of pre-disability earnings, with 60 percent being the most common. Most LTD plans require that a person be receiving appropriate medical treatment for the disabling condition. These plans require systematic follow-up with both the person and their physician to assess ongoing disability status. LTD programs include appropriate return-to-work services.

### *Mandatory Temporary Disability Benefits*

Five states—California, Hawaii, New Jersey, New York, and Rhode Island—plus the Commonwealth of Puerto Rico have mandated temporary disability compensation. Employees contribute to these plans in all five states. Employers contribute in Hawaii, New Jersey, and New York. Wage replacement is usually 50 percent of prior pay with certain dollar maximums and minimums. Most states require that a person be out of work for seven days before payment. In 2006 the maximum duration of benefits was 26 weeks in Hawaii, New York, and New Jersey, and 52 weeks in California.

### *Rationale for Private-Sector Work Disability Programs*

The underlying principle for private-sector work disability programs can be traced to the ideas of social justice discussed above. In the United States, people have the responsibility to support themselves through work. There is general public acceptance that the risk of being unable to work because of a disability is legitimate. Definitions of work disability are more or less objectively defined and managed. There is an underlying presumption that persons would rather work than be unable to work because of disability.

### *Insurance Principles*

Social insurance—SSDI being the prime example—spreads the risk of being unable to work because of a disability across the working population. Payroll taxes from all covered workers and their employers are pooled to create a fund for making payments to those found disabled under the established definition. Everyone pays according to a wage-related formula applicable to the entire population. A younger person with less risk of becoming disabled pays the same rate as an older person with greater risk as long as they earn the same amount.

A central principle of private-sector disability-compensation programs is that the risk of an insurable event can be determined by actuarial predictions. The predictability of risk makes it possible to place a price tag on risk protection that is based on projected disability incidence and duration for individuals and groups in similar risk categories. Risk categories for work disability are sorted out by individual characteristics such as age, work skills, and health as well as by the type of work performed (classified by industries and occupations). The insurance industry's rationale is that assumption of a risk can be done profitably through proper risk assessment, risk management, and pricing.

Both insurance approaches—the social and the private—assume that what economists and insurers call “moral hazard” can be managed. The term moral hazard is used to describe the effect that insurance can have on the behavior of the person being insured. Malcolm Gladwell, a noted social commentator, highlighted the relevance of moral hazard in a 2005 *New Yorker* public-policy article: “Insurance can have the paradoxical effect of producing risky and wasteful behavior.” Gladwell indicated that economists spend a great deal of time thinking about such moral hazards, and for good reason:

Insurance is an attempt to make human life safer and more secure. But, if those efforts can backfire and produce riskier behavior, providing insurance becomes a much more complicated and problematic endeavor (Gladwell, 2005).

### *The Perception of the Risk*

The risk of being unable to work for a considerable period of time because of disability is high. An often-cited figure, attributed to the 1987 Group Long-Term Disability Valuation Tables published by the Society of Actuaries, is that at some point between the ages of 35 and 65, three out of ten people are unable to work for a period of 90 days or longer because of disability (Society of Actuaries, 1987). Employees and self-employed workers are often made aware of this risk and the need for income protection by insurance companies, labor, and professional organizations.

### *Payment Sources*

Part or all of the cost of disability protection may be paid by employers. Employers can pay insurance companies to cover the risk and pay benefits. Large employers may self-insure, which means that they pay the benefit costs and costs of administration themselves instead of passing them off to an insurance company. Disability protection may be offered in a benefit

plan that gives an employee a certain amount of money to spend on various benefit options. Insurance companies offer group coverage to employees in selected industries, and employees pay the entire cost. Professional and other associations may offer their members group coverage through insurance companies.

Workers and self-employed persons may qualify to buy individual protection against the risk of earnings loss because of disability. In these cases, the risks of disability are assessed and priced based on individual characteristics such as age, occupation, and health.

### *Program Goals*

Disability protection can be part of a larger menu of employment-based benefits constituting a total compensation package. Historically, such benefits have been made available in lieu of wage increases, and collective-bargaining has played a large role in making these benefits available. Employers recognize that protection from the risk of work-related disability can be an important part of an overall employee-compensation package and can help attract and retain employees.

Employers often use these benefits as part of a larger absence-management program. Managed-disability programs can save costs by reducing absence and increasing productivity by returning employees to work in transitional or modified work roles. Some research suggests that managed-disability programs reduce medical costs (Chelius et al., 1992).

### *Assessment of Work Disability*

Private-sector programs require the presence of a medically established condition. The inability to work is judged according to how that condition impairs work-related functions for a particular person. Functional assessments determine what a person can and cannot do because of the medical condition. Depending on the definition of work disability being used, the person's functional assessment is then compared to the functions required for either a particular occupation or for any occupation in the economy. This means that both medical and vocational evaluations form a part of the overall disability evaluation.

### *Disability Management*

Employees, employers, and insurers all bear part of the costs of private-sector disability compensation. Managing costs and assuring adequate protection are goals of a workplace disability-compensation system. *Disability management* is a concept that took hold in private-sector disability-

compensation systems in the 1990s. Disability-management programs are designed to prevent or minimize the costs of disability to both employers and employees. The goals of a disability-management program include (1) disability prevention through health promotion and health care, (2) encouraging employees to remain at work or return to work whenever possible, (3) early intervention, (4) medical and vocation rehabilitation, and (5) case management. The most successful of these programs involve employees in their design and assure a proper mix of work incentives and appropriate benefit payments (Akabas et al., 1992; Shrey, 1998).

### BOX 2-1 Characteristics of Best-Practice Programs

On the basis of a review of the relevant literature and the expertise of its own members, the committee responsible for the report *Integrating Employee Health: A Model Program for NASA* derived the following characteristics that may be considered as “best practice”:

- Program plans are linked to organizational business objectives.
- Top management supports the program.
- Effective communication programs are implemented.
- Effective incentive programs are used.
- Evaluation is an integral part of the program and is
  - o systematic;
  - o shared with top management;
  - o shared with employees; and
  - o valued by top management.
- The creation of a supportive environment is strongly pursued.
- The program is appropriately resourced with a sufficient budget.
- The program design is based on best practice management and behavioral theory (APQC, 1999; also addressed in Chapter 5 of IOM, 2005), including:
  - o goal setting;
  - o stages of readiness to change, the central construct of the Transtheoretical Model of Behavior Change;
  - o define theories (Prochaska et al., 1997)
  - o self-efficacy as a recognized predictor for successful behavior change among employees;
  - o incentives to optimize program participation;
  - o social norms and social support features;
  - o programs tailored to the needs of individuals; and
  - o multi-level program design that addresses awareness, behavior change, and supportive environments.

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SOURCE: Adapted from Box 4-1 (IOM, 2005).

Integration of disability compensation with health care and health-promotion programs is an important and evolving practice. Such integration assures that all workplace health-promotion and disability programs work together under like principles to encourage a healthy workforce and reduce disability. A previous Institute of Medicine committee produced a report that addresses the characteristics of a best-practice program for an integrated health system (IOM, 2005), and a summary of their findings is reproduced here as Box 2-1.

## REFERENCES

- Akabas SH, Gates LB, Galvin DE. 1992. *Disability Management: A Complete System to Reduce Cost, Increase Productivity, Meet Employee Needs, and Ensure Legal Compliance*. New York: American Management Association.
- AMA (American Medical Association). 2001. *AMA: The Guides to the Evaluation of Permanent Impairment*. 5th ed. Chicago, IL: American Medical Association.
- Andrews H, Barker J, Pittman J, Mars L, Struening E, LaRocca N. 1992. National trends in vocational rehabilitation: a comparison of individuals with physical disabilities and individuals with psychiatric disabilities. *Journal of Rehabilitation* 51:7–16.
- Anonymous. 2005. *Historical Perspectives in PTSD*. [Online]. Available: [https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/August\\_2005/va\\_ptsd\\_8-26-2005.pdf](https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/August_2005/va_ptsd_8-26-2005.pdf) [accessed February 1, 2007].
- Bailey P. 1929. *Neuropsychiatry in the American Expeditionary Forces, Detection and Elimination of Individuals with Nervous or Mental Disease*. [Online]. Available: <http://history.amedd.army.mil/booksdocs/wwi/Neuropsychiatry/frameindex.html> [accessed December 14, 2006].
- Barron BA. 2001. Disability certifications in adult workers: a practical approach. *American Family Physician* 64:1579–1586.
- Barth PS. 2003/2004. Compensating workers for permanent partial disabilities. *Social Security Bulletin* 65(4):16–23.
- Bayne-Jones S. 1968. *United States Army, 1607-1939*. Office of the Surgeon—Office of Medical History. [Online]. Available: <http://history.amedd.army.mil/booksdocs/misc/evprev/frameindex.html> [accessed November 28, 2006].
- Berkowitz M. 2003. The ticket to work program: the complicated evolution of a simple idea. Background information and baseline data. In Rupp K, Bell SH, eds., *Paying for Results in Vocational Rehabilitation: Will Provider Incentives Work for Ticket to Work*. Washington, DC: The Urban Institute.
- Berkowitz M, Burton JF. 1987. *Permanent Disability Benefits in Workers' Compensation*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Berkowitz M, Hill A. 1986. *Disability and the Labor Market: Economic Problems, Policies, and Programs*. Ithaca, NY: ILR Press.
- Blanck P. 2001. Civil War pensions and disability. *Ohio State Law Journal* 62:109–238.
- BLS (U.S. Bureau of Labor Statistics). 2006. *2006 National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2006*. U.S. Department of Labor, U.S. Bureau of Labor Statistics, August 2006. Summary June 2005. [Online]. Available: <http://www.bls.gov/ncs/ebs/sp/ebsm0004.pdf> [accessed September 20, 2006].
- Bodenger RE. 1971. *Soldiers' Bonuses: A History of Veterans' Benefits in the United States, 1776–1967*. Doctoral thesis. The Pennsylvania State University.

- Bourke J. 2002. *Shell Shock During World War One*. [Online]. Available: [http://www.bbc.co.uk/history/worldwars/wwone/shellshock\\_03.shtml](http://www.bbc.co.uk/history/worldwars/wwone/shellshock_03.shtml) [accessed January 16, 2007].
- Braddock DL, Parish SL. 2001. An institutional history of disability. In: KD Seelmann, GL Albrecht, M Bury, eds. *Handbook of Disability Studies*. Thousand Oaks, CA: Sage Publications.
- Bradley Commission (The President's Commission on Veterans' Pensions). 1956. A Report to the President, *Veterans' Benefits in the United States*. 84th Congress, 2nd Session, House Committee Print No. 236. Washington, DC: U.S. Government Printing Office.
- Bruyère SM. 2000. *Disability Employment Policies and Practices in Private and Federal Sector Organizations*. Ithaca, NY: Cornell University, School of Industrial and Labor Relations Extension Division, Program on Employment and Disability. [Online]. Available: <http://digitalcommons.ilr.cornell.edu/edicollect/63> [accessed February 16, 2007].
- Buddin R, Kapur K. 2005. *An Analysis of Military Disability Compensation*. Santa Monica, CA: Rand Corporation.
- Burke WM. 1899. *History and Functions of Central Labor Unions*. New York: MacMillan.
- Burkhauser RV, Stapleton DC. 2003. A review of the evidence and its implications for policy change. In: DC Stapleton and RV Burkhauser, eds. *The Decline in Employment of People with Disabilities: A Policy Puzzle*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 369–403.
- Burkhauser RV, Wittenburg D. 1996. How current disability transfer policies discourage work: analysis from the 1990 SIPP. *Journal of Vocational Rehabilitation* 7:9–27.
- Chelius J, Galvin D, Owens P. 1992. Disability: it's more expensive than you think. *Business and Health* 11(4):78–84.
- Clayton A. 2003/2004. Workers' compensation: a background for social security professionals. *Social Security Bulletin* 64(4):7–15.
- Cook JA. 2006. Employment barriers for persons with psychiatric disabilities: update of a report for the President's Commission. *Psychiatric Services* 57(10):1391–1405.
- Cook JA, Leff HS, Blyler CR, Gold PB, Goldberg RW, Clark RE, Onken SJ, Shafer MS, Blankertz LE, McFarlane WR, Razzano LA, Burke-Miller JK. 2006. Estimated payments to employment service providers for persons with mental illness in the Ticket to Work Program. *Psychiatric Services* 57(4):465–471.
- CRS (Congressional Research Service). 2005. *Veterans Health Care Issues in the 109th Congress*. Updated June 24, 2005. Washington, DC: The Library of Congress.
- CRS. 2006. *Periods of War*. Updated May 1, 2006. Washington, DC: The Library of Congress.
- Davenport JL (Commissioner of Pensions). 1913. *Laws of the United States Governing the Granting of Army and Navy Pensions Together with the Regulations Relating Thereto*. Government Printing Office: Washington, DC. 3-1571. [Online]. Available: <http://books.google.com/books?id=uVQFAAAAMAAJ&pg=RA1-PR9&lpg=RA1-PR9&dq=act+of+march+3+1885&source=web&ots=qAV45h3qth&sig=JGf7jOmW9Prjs4S0KDbRs3SUY1w#PRA1-PR9,M1> [accessed January 2, 2007].
- DMH (Department of Mental Health, District of Columbia). 2006. *St. Elizabeths Hospital's Expanded Role During the Civil War*. [Online]. Available: <http://dmh.dc.gov/dmh/cwp/view,a,3,q,636030.asp> [accessed January 4, 2007].
- DVA (Department of Veterans Affairs). 1993 (December 23). *Analysis of Presumptions of Service Connection*. Report to the Senate Committee on Veterans' Affairs. Washington, DC: Government Printing Office.
- DVA. 2006a. *VA History in Brief*. [Online]. Available: <http://www1.va.gov/opa/feature/history/index.asp> [accessed December 12, 2006].
- DVA. 2006b. *History of the Department of Veterans Affairs, Part 4*. [Online]. Available: <http://www1.va.gov/opa/feature/history/docs/history4.pdf> [accessed April 18, 2007].

- Dwyer E. 2006. Psychiatry and race during World War II. *Journal of the History of Medicine and Allied Sciences* 61(2):117–143.
- ESI (Economic Services Incorporated). 2004. *VA Disability-Compensation Program: Legislative History*. [Online]. Available: [https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/Reference\\_Materials/LegislativeHistory\\_12-2004.pdf](https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/Reference_Materials/LegislativeHistory_12-2004.pdf) [accessed February 6, 2007].
- Fishback PV, Hannon JU, Thomasson MA, Ziliak ST. 2006. Chapter Bf: social insurance and public assistance. *Historical Statistics of the United States. Millennial Edition*. [Online]. Available: [http://www.cambridge.org/us/americanhistory/hsus/toc\\_b.htm](http://www.cambridge.org/us/americanhistory/hsus/toc_b.htm) [accessed November 29, 2006].
- Gladwell M. 2005. The moral-hazard myth. *The New Yorker* (August 29, 2005). [Online]. Available: [www.newyorker.com/fact/content/articles/050829fa\\_fact](http://www.newyorker.com/fact/content/articles/050829fa_fact) [accessed September 20, 2006].
- Glasson WH. 1900. *History of Military Pension Legislation in the United States*. New York: Columbia University Press.
- Glasson WH. 1901. The state military pension system of Tennessee. *Annals of the American Academy of Political and Social Science* 18:95–98.
- Hanson FR. 1943. *The Factor of Fatigue in Neuroses of Combat. Office of the Surgeon General—Office of Medical History*. [Online]. Available: <http://history.amedd.army.mil/booksdocs/wwii/combatpsych/frameindex.html> [accessed November 28, 2006].
- Hennessey JC, Dykacz JM. 1989. Projected outcomes and length of time in disability insurance program. *Social Security Bulletin* 52(September):2–41.
- IOM (Institute of Medicine). 1991. *Disability in America: Toward a National Agenda for Prevention*. Washington, DC: National Academy Press.
- IOM. 1997. *Enabling America: Assessing the Role of Rehabilitation Science and Engineering*. Washington, DC: National Academy Press.
- IOM. 1999. *Measuring Functional Capacity and Work Requirements: Summary of a Workshop*. Washington, DC: National Academy Press.
- IOM. 2005. *Integrating Employee Health: A Model Program for NASA*. Washington, DC: The National Academies Press.
- IOM. 2007. *A 21st Century System for Evaluating Veterans for Disability Benefits*. Washington, DC: The National Academies Press.
- Jans L, Stoddard S, Kraus L. 2004. *Chartbook on Mental Health and Disability in the United States. An InfoUse Report*. Washington, DC: U.S. Department of Education, National Institute on Disability and Rehabilitation Research.
- Jones E. 2006a. Historical approaches to post-combat disorders. *Philosophical Transactions of the Royal Society B* 361:533–542.
- Jones E. 2006b. The psychology of killing: the combat experience of British soldiers during the First World War. *Journal of Contemporary History* 41(2):229–246.
- Jones E, Wessely S. 2005. War syndromes: the impact of culture on medically unexplained symptoms. *Medical History* 49:55–78.
- Kaye HS. 1998. Vocational rehabilitation in the United States. *Disability Statistics Abstract* 20:1–4.
- Lakeman CE. 1918. The after-care of our disabled soldiers and sailors. *Annals of the American Academy of Political and Social Science, War Relief Work* 79:114–129.
- Lasiuk GC. 2006. Posttraumatic stress disorder part I: historical development of the concept. *Perspectives in Psychiatric Care* 42(1):13–20.
- Lasiuk GC, Hegadoren KM. 2006. Posttraumatic stress disorder part I: historical development of the concept. *Perspectives in Psychiatric Care* 42(1):13–20.

- MacDonald-Wilson KL, Rogers ES, Ellison ML, Lyass A. 2003. A study of the social security work incentives and their relation to perceived barriers to work among persons with psychiatric disability. *Rehabilitation Psychology* 48:301–309.
- Magnuson PB. 1951. Medical care for veterans. *Annals of the American Academy of Political Science* 273:76–83.
- Mashaw JL, Reno VP, eds. 1996a. *Disability, Work, and Cash Benefits*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Mashaw JL, Reno VP. 1996b. *Balancing Security and Opportunity: The Challenge of Disability Income Policy. Final Report of the Disability Policy Panel*. Washington, DC: National Academy of Social Insurance.
- Meagher JF. 1919. Prominent features of the psychoneuroses in the war. *American Journal of the Medical Sciences* 158(3):344–354.
- Micale MS, Lerner P, eds. 2001. *Traumatic Past: History, Psychiatry, and Trauma in the Modern Age, 1870–1930*. New York: Cambridge University Press, p. 281.
- MOD (Ministry of Defense; United Kingdom). 2005. *The Armed Forces Compensation Scheme for Injury, Illness and Death Due to Service*. [Online]. Available: <http://www.mod.uk/NR/rdonlyres/361040A7-DF84-4E43-BD48-CC384F58760C/0/JSP765.pdf> [accessed December 14, 2005].
- Muller LS, Scott CG, Bye BV. 1996. Labor-force participation and earnings of SSI disability recipients: A pooled cross-sectional time series approach to the behavior of individuals. *Social Security Bulletin* 59(Spring):22–42.
- Neuhauser F. 2007. *Mental Stress and Workers Compensation—Variation in the Application of Compensability Across States*. Unpublished working paper. UC DATA/Survey Research Center. University of California, Berkeley.
- Newcomb C, Payne S, Waid MD. 2003. What do we know about disability beneficiaries' work and use of work incentives prior to ticket? Background information and baseline data. In: K Rupp, and SH Bell, eds. *Paying for Results in Vocational Rehabilitation: Will Provider Incentives Work for Ticket to Work*. Washington, DC: The Urban Institute.
- NLM (National Library of Medicine). 2006. *Historic Medical Sites in the Washington, DC Area: Saint Elizabeths Hospital*. [Online]. Available: <http://www.nlm.nih.gov/hmd/medtour/elizabeths.html> [accessed January 4, 2007].
- Polak P, Warner R. 1996. The economic life of seriously mentally ill people in the community. *Psychiatric Services* 47:270–274.
- Reville RT, Seabury SA, Neuhauser FW, Burton JF Jr., Greenberg MD. 2005. *An Evaluation of California's Permanent Disability Rating System*. Santa Monica, CA: Rand Corporation.
- Rockoff H. 2006. Chapter Ed: National defense, wars, armed forces, and veterans. *Historical Statistics of the United States: Millennial Edition*. [Online]. Available: [http://www.cambridge.org/us/americanhistory/hsus/toc\\_e.htm](http://www.cambridge.org/us/americanhistory/hsus/toc_e.htm) [accessed November 29, 2006].
- Scott WJ. 1990. PTSD in DSM-III: A case in the politics of the diagnosis of disease. *Social Problems* 37(3):294–310.
- Seabury SA. 2002. *Three Essays on Workers' Compensation*. Dissertation (PhD Economics, Labor). Columbia University. [Online]. Available: <http://www.lib.umi.com/dissertations/fullcit/3048234> [accessed February 19, 2007].
- Shrey D. 1998. Effective worksite-based disability management programs. In: P King, ed. *Concepts and Practices of Occupational Rehabilitation*. New York: Plenum Press, pp. 389–409.
- Siegel IH, Taylor MF. 1948. Public expenditures for veterans' assistance. *The Journal of the Political Economy* 56(6):572–532.

- Sobel R. 1948. *The Battalion Surgeon as Psychiatrist*. [Online]. Available: <http://history.amedd.army.mil/booksdocs/wwii/combatpsych/frameindex.html> [accessed January 16, 2007].
- Society of Actuaries. 1987. Group Long-Term Disability (GLTD) Valuation Tables. *Transactions of the Society of Actuaries* 39:393–458. [Online]. Available: <http://new.soa.org/library/research/transactions-of-society-of-actuaries/1987/january/tsa87v3913.pdf> [accessed April 18, 2007].
- SSA (Social Security Administration). 2006a. Disability planner: what we mean by disability. [Online]. Available: <http://www.ssa.gov/dibplan/dqualify4.htm> [accessed August 12, 2006].
- SSA. 2006b. *Monthly Statistical Snapshot, June 2006*. [Online]. Available: [http://www.ssa.gov/policy/docs/quickfacts/stat\\_snapshot/index.html](http://www.ssa.gov/policy/docs/quickfacts/stat_snapshot/index.html) [accessed August 12, 2006].
- SSS (Selective Service System). 2006. *Induction Statistics*. [Online]. Available: <http://www4.sss.gov/induct.htm> [accessed January 16, 2007].
- Stapleton DC, O'Day B, Livermore GA, Imperato AJ. 2006. Dismantling the poverty trap: disability policy for the 21st century. *Milbank Quarterly* 84(4):701–732.
- Stone D. 1986. *The Disabled State*. Philadelphia, PA: Temple University Press.
- Swank RL, Marchand WE. 1946. Combat neuroses. *Archives of Neurology and Psychiatry* 55:236–247.
- Turner, MW. 2004. Psychiatric disabilities in the federal workplace: employment law considerations. *Air Force Law Review* 313.
- U.S. Department of Education: Office of Special Education and Rehabilitative Services. 2006. *Frequently Asked Questions (FAQs) About RSA*. [Online]. Available: <http://www.ed.gov/about/offices/list/osers/rsa/faq.html#vrp> [accessed July 22, 2006].
- VA (U.S. Veterans Administration). 1957. *Schedule for Rating Disabilities, Loose Leaf Edition*. Washington, DC: Veterans Administration.
- VAC (Veterans Affairs Canada). 2004. *Honouring Canada's Commitment: "Opportunity with Security" for Canadian Forces Veterans and Their Families in the 21st Century*. Prepared by Veterans Affairs Canada–Canadian Forces Advisory Council, March 2004. [Online]. Available: <http://www.vac-acc.gc.ca/providers/sub.cfm?source=councils/vaccfac/discussionpaper> [accessed February 19, 2007].
- VAC. 2005 (November). *Salute! (Special Issue: Mental Health/Agent Orange)*. [Online]. Available: [http://www.vac-acc.gc.ca/clients/sub.cfm?source=salute/fall2005/special\\_fall2005&CFID=7190955&CFTOKEN=12355287](http://www.vac-acc.gc.ca/clients/sub.cfm?source=salute/fall2005/special_fall2005&CFID=7190955&CFTOKEN=12355287) [accessed November 17, 2006].
- VDBC (Veterans' Disability Benefits Commission). 2006 (September 3). *Report on Lump Sum Alternatives*. PowerPoint Presentation before commission. Washington, DC.
- Wanke P. 1999. American military psychiatry and its role among ground forces in World War II. *The Journal of Military History* 63:127–146.
- Weaver CL, ed. 1991. *Disability at Work: Incentives, Rights, and Opportunities*. Washington, DC: AEI Press.
- White JS, Black WE, Ireys HT. 2005. *Explaining Enrollment Trends and Participant Characteristics of the Medicaid Buy-In Program, 2002–2003*. Washington, DC: Mathematica Policy Research Inc.
- Wolfe SH. 1918. Eight months of War Risk Insurance work. *Annals of the American Academy of Political and Social Science* 79:68–79.
- Zarbriski EG, Brush AL. 1941. Psychoneuroses in war time. *Psychosomatic Medicine* 3(3):295–329.

## 3

# Background—PTSD and Impairment

This chapter briefly outlines the characteristics, etiology, and course of posttraumatic stress disorder (PTSD). It provides information on comorbidities, risk factors, and special considerations for veterans.<sup>1</sup> A companion report, *Posttraumatic Stress Disorder: Diagnosis and Assessment* (IOM, 2006), also addresses these topics and deals with some of them in greater detail. The discussion here is focused on issues that are relevant to the committee's charge, specifically the impairment caused by PTSD and its comorbid disorders. Material in the chapter is intended to serve as a foundation for some of the findings, conclusions, and recommendations in later chapters that address the disability associated with PTSD.

### PTSD CHARACTERISTICS, ETIOLOGY, AND COURSE

PTSD is one of an interrelated and overlapping set of possible mental health responses to combat exposures and trauma. The illness of PTSD—illness meaning the interaction of a disease with an individual in a particular social context—creates four different types of burdens in those who are affected: suffering, altered functional capacity, impairment, and disability. These four types of PTSD burdens can in turn each play out in four different domains: the cognitive, emotional, social, and occupational. PTSD is classically a waxing and waning illness. While recovery from the acute

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<sup>1</sup>Chapter 2 of this report presents an extended discussion of the history of stress-related mental disorders, centered on U.S. military populations.

form may occur in the months following onset, most studies suggest that PTSD is more likely to manifest in the chronic form with effects that are enduring. Military-related PTSD may be more complex and more persistent than other subtypes of the disease.

PTSD can be diagnosed as early as one month after exposure to a traumatic event.<sup>2</sup> The text revision of the fourth edition of the *Diagnostic and Statistical Manual for Mental Disorders (DSM-IV-TR)* specifies six criteria (Criterion A through Criterion F) that must be satisfied for a diagnosis; these are summarized in Table 3-1 (APA, 2000). PTSD is designated as either acute or chronic, depending on its duration. *Acute* PTSD is diagnosed between one to three months after a traumatic exposure and has symptoms that last fewer than three months. PTSD that is present beyond three months after the traumatic event is termed *chronic*. When PTSD does not appear until six months or more after the exposure to the traumatic event, it is termed *delayed onset*.

The symptoms of PTSD and the accompanying impaired function may be continuous or sporadic (Schnurr et al., 2003) and are often exacerbated by the presence of adversity or new life stressors. In a 20-year follow-up of Israeli combat casualties, among those who had PTSD one year after a combat stress reaction, 22.6 percent did not have PTSD at the end of the second year. However, among the group with PTSD at the end of the first year but not at the end of the second year, by the end of the third year 36.8 percent once again had PTSD (Solomon and Mikulinver, 2006). Stressors associated with age-related changes in familial structure as well as with job and health status can contribute to the exacerbation of symptoms and to a subsequent variation in the degree of impairment. Some data indicate that aging and its accompanying loss of cognitive executive function<sup>3</sup> may increase the severity and frequency of PTSD symptoms in later life.

### COMORBIDITY AND FUNCTIONAL IMPAIRMENT OR DISABILITY

As *Posttraumatic Stress Disorder—Diagnosis and Assessment* (IOM, 2006) notes, determining comorbidity is an essential component of assessing a patient with PTSD. In that report, comorbidity was defined as the presence of at least one disorder in addition to the presenting diagnosis; that is, in addition to the PTSD. The rates of comorbidity are high among

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<sup>2</sup>Acute stress disorder may be diagnosed in circumstances where “[t]he disturbance lasts for a minimum of 2 days and a maximum of 4 weeks and occurs within 4 weeks of the traumatic event” (*DSM IV-TR*; APA, 2000).

<sup>3</sup>*Executive function* refers to processes involving the prefrontal cortex related to decision making, memory, and learning (Koso and Hansen, 2005; Shors, 2006).

TABLE 3-1 DSM-IV-TR Diagnostic Criteria for PTSD

Criterion	Description
A	The person has been exposed to a traumatic event in which both of the following have been present: <ol style="list-style-type: none"><li>1. The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.</li><li>2. The person's response involved intense fear, helplessness, or horror.</li></ol>
B	The traumatic event is persistently reexperienced in one (or more) of the following ways: <ol style="list-style-type: none"><li>1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions.</li><li>2. Recurrent distressing dreams of the event.</li><li>3. Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated).</li><li>4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.</li><li>5. Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.</li></ol>
C	Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three or more of the following: <ol style="list-style-type: none"><li>1. efforts to avoid thoughts, feelings, or conversations associated with the trauma;</li><li>2. efforts to avoid activities, places, or people that arouse recollections of the trauma;</li><li>3. inability to recall an important aspect of the trauma;</li><li>4. markedly diminished interest or participation in significant activities;</li><li>5. feeling of detachment or estrangement from others;</li><li>6. restricted range of affect (e.g., unable to have loving feelings); and</li><li>7. sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).</li></ol>
D	Persistent symptoms of increased arousal (not present before the trauma), as indicated by two or more of the following: <ol style="list-style-type: none"><li>1. difficulty falling or staying asleep;</li><li>2. irritability or outbursts of anger;</li><li>3. difficulty concentrating;</li><li>4. hypervigilance; and</li><li>5. exaggerated startle response.</li></ol>
E	Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.
F	The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

SOURCE: Reprinted with permission from APA (2000).

PTSD patients (Kessler et al., 1995, for example). In general, the more illnesses an individual has, the more functional impairment and disability one might expect, so diagnosing a given illness with associated comorbidities would lead one to predict greater problems with functioning than a diagnosis of that illness alone. A study of medically hospitalized veterans found that comorbid psychiatric disorders were associated with “substantial and significant” impairment in multiple dimensions of functioning (Booth et al., 1998). Belzer and Schneier (2004) report that there is substantial comorbidity among generalized anxiety disorder, social anxiety disorder, and depressive disorders and that this comorbidity is associated with clinically significant impairment in social and occupational functioning.

### Psychiatric Comorbidity with PTSD

The effect that psychiatric comorbidity with PTSD has on functional outcomes following catastrophic trauma was illustrated by a study of 182 survivors of the 1995 bombing of the Oklahoma City Murrah Federal Building (North et al., 1999). These survivors had been directly exposed to the bombing. Of those with no postdisaster psychiatric diagnosis, only 16 percent reported problems in functioning after the bombing, compared with 27 percent of those diagnosed with a non-PTSD psychiatric disorder, 52 percent of those diagnosed with PTSD only, and 87 percent of those diagnosed with both PTSD and another psychiatric disorder. Although a number of reports have described functional impairment in association with PTSD and other psychiatric disorders in combat veterans (Bleich and Solomon, 2004; Frayne et al., 2004; Zatzick et al., 1997), there has been little research on the incremental effects of other psychopathologies comorbid with combat PTSD. In one relevant study, Evans and colleagues reported that posttraumatic symptoms and depressive symptoms independently predicted difficulties in family functioning, as self-reported by Australian military veterans in PTSD treatment (Evans et al., 2003). However, in another study, Bleich and Solomon (2004) could discern no incremental effects of psychiatric comorbidity with PTSD on the level of disability among a sample of Israeli military veterans seeking disability compensation. Some studies of primary-care patients and domestic-violence victims have similarly failed to find incremental functional impairment in those with PTSD who had comorbid depression, compared to those without comorbid depression (Rapaport et al., 2005; Stein and Kennedy, 2001). On the other hand, a study of suicidality in Vietnam veterans showed that veterans with a diagnosis of PTSD plus depression or dysthymia were more likely to report suicidal thinking and behaviors, including suicide attempts, than were veterans with only one of the diagnoses (Kramer et al., 1994). The mixed findings across studies suggest that there may be differences in how great

an effect psychiatric comorbidity with PTSD has on functional outcomes, depending on the population and the type of trauma. PTSD is clearly associated with impairment, and adding other disorders to PTSD does not always produce incremental impairment. It is possible that this may be due to the fact that there is a stronger link between PTSD and impairment than there is between other disorders and impairment, as noted by North and colleagues (1999) (52 percent for PTSD versus 27 percent for other disorders), but the research on this question is indeterminate.

### Nonpsychiatric Medical Comorbidity with PTSD

Although much research has focused on the effect of comorbidity among various psychiatric disorders, only recently has research begun to pay attention to the synergy between psychiatric disorders, particularly PTSD, and medical conditions and to how that interaction can affect health status or disability. In a large study based on data from the National Comorbidity Survey, men and women with PTSD were more than twice as likely to experience a nonpsychiatric condition as those without PTSD, even after controlling for age, socioeconomic status, and major depression (Kimerling, 2004). Indeed, literature reviews have documented that people who have been exposed to trauma experience more adverse health outcomes in a number of domains: self-reported health, morbidity, mortality, and health care utilization (Schnurr and Green, 2004a). The same authors have proposed an integrative model that relates trauma to physical health through psychological, biological, behavioral, and attentional mechanisms, and that supports PTSD as the key mechanism for this link (Schnurr and Green, 2004b).

While the relationship between PTSD and health outcomes is well established, it is less clear how PTSD with medical comorbidity might lead to increased impairment of functioning. It might be expected that, as with comorbid psychiatric disorders, having more disorders would predict worse functional impairment, but the findings on the incremental functional risk associated with PTSD plus other disorders is mixed (see above). Some authors have examined the interrelationships among PTSD, other psychiatric disorders, and physical health. For example, Norris and colleagues (2003) found that among respondents from Mexico, those who had PTSD symptoms that lasted more than a year showed elevated depression scores and also more physical problems, as compared with those whose PTSD lasted less than one year. Research also shows that relative both to nonpsychiatric control subjects and to subjects with psychiatric disorders other than PTSD, individuals with PTSD showed elevated rates of role-functioning impairment due to physical morbidity (Zayfert et al., 2002).

Thus while there are few studies that examine how psychiatric comor-

bidity and physical plus psychiatric comorbidity affect impairment and disability, a picture does emerge that ties PTSD strongly to other psychiatric disorders, to impairment, and to poor medical outcomes. These outcomes and their effects on functional disability are more than likely all interrelated. PTSD may have a larger effect on impairment and on health than other psychiatric disorders, perhaps in part because of the biological and physiological burden it places on those with chronic disorders (Friedman and McEwen, 2004).

### RISK FACTORS, PROTECTIVE FACTORS, MEDIATORS, AND MODERATORS

A great deal has been written about risk factors for the development and persistence of PTSD, both for war trauma and for more general trauma (Brewin et al., 2000; Heinrichs et al. 2005; Yehuda, 1999; King et al., 1998; IOM, 2006). These authors and others have proposed categories of risk factors that appear to predict the development of PTSD following traumatic events. In war or combat populations, these categories include premilitary/historical factors such as demographics, genetics, and family factors; combat stressors specifically and war-zone stressors more generally; homecoming environment; and other life stressors and postmilitary circumstances (Green et al., 1985; Yehuda, 1999). Studies have shown variables in all of these categories to predict PTSD.

According to a meta-analysis by Brewin and colleagues (2000), the most consistent predictors of PTSD are childhood abuse, personal psychiatric history, and family psychiatric history. Greater trauma severity, low socioeconomic status, low education, low intelligence or cognitive capacity, prior trauma, other adverse childhood circumstances, life stressors, and lack of social support are all significant predictors of developing PTSD, although they vary in the extent of predictiveness. In some studies, female gender, younger age, and minority status are also significant predictors of developing PTSD (Brewin et al., 2000). A meta-analysis of the role of gender in PTSD concluded that gender is consistently a predictive factor (Tolin and Foa, 2006); this topic is discussed in greater detail in the Chapter 6 section entitled Gender and Military Sexual Assault.

Restricting attention to military populations specifically, PTSD predictors include the severity and type of combat or other war experience, other aspects of the military environment, the homecoming environment, and various other demographic and personal factors. Table 3-2, adapted from the *Diagnosis and Assessment* report (IOM, 2006), provides citations to this literature. These factors may sometimes operate independently of each other, but they can also have complex interrelationships that can only be captured with relatively sophisticated models (King et al., 1998). As Yehuda

**TABLE 3-2 Risk Factors for PTSD in Military Populations**

Risk Factor	References
<b>Combat exposure</b>	
Combat and its severity	Black et al., 2004; Goldberg et al., 1990; Hoge et al., 2004; Kang et al., 2003; Kulka et al., 1990; O'Toole et al., 1998; Roy-Byrne et al., 2004; Wolfe et al., 1999.
Being wounded or injured	Koren et al., 2005; North et al., 1999; Schreiber and Galai-Gat, 1993.
Witnessing death	Breslau et al., 1999; Ford, 1999.
Witnessing grotesque death	Green et al., 1990.
Serving on graves-registration duty	Sutker et al., 1994.
Being tortured or being taken captive	de Jong et al., 2001; Mollica et al., 1998; Speed et al., 1989; Sutker et al., 1993.
Unpredictable and uncontrollable stressful exposure	Foa et al., 1992; Southwick et al., 1993.
<b>Military environment</b>	
Sexual trauma, including assault	Fontana et al., 1997b; Kang et al., 2005.
Combat preparedness	Asmundson et al., 2002.
Deployment to war zone without combat	Ikin et al., 2004.
<b>Homecoming environment</b>	
Lack of social support	Fontana and Rosenheck, 1994; Fontana et al., 1997a; Green et al., 1990; Johnson et al., 1997; Koenen et al., 2003; Stretch, 1985; Stretch et al., 1985.
<b>Personal factors</b>	
Cumulative life stress before or after the traumatic event	Breslau et al., 1999; Brewin et al., 2000; King et al., 1998; Maes et al., 2001; North et al., 1999.
Being a member of a racial or ethnic minority	Beals et al., 2002; Friedman et al., 2004; Kulka et al., 1990; Loo et al., 2005; Ruef et al., 2000.
More resource loss, lower income or education, older age	Norris et al., 2002.
Being female	Kang et al., 2003; Wolfe et al., 1999.

SOURCE: Adapted from IOM (2006) and expanded.

and Hyman (2005) have pointed out, most of the research on this question has been done retrospectively. There is relatively little prospective research on how these factors operate.

Few studies have looked at how this array of factors might predict the development of impairment or disability, especially in military samples, and the committee was unable to locate any articles that used these risk factors to predict impairment or disability in those who had a diagnosis of PTSD, although many studies report associations between disability and PTSD.

Some authors have defined disability as poor physical health status and have investigated the role of risk factors in the development of physical health problems. Mollica and colleagues (1999) studied Bosnian refugees in Croatia and found that 25 percent reported a physical disability. They found that a number of factors were predictive of physical disability, including having comorbid depression and PTSD symptoms, older age, cumulative trauma, and chronic medical illness. Leserman and colleagues (1998) studied female patients from a gastroenterology clinic, assessing risk factors that were associated with poor health status, including pain, bed disability days, and functional disability. The four stressors that predicted poor health status were abuse history, lifetime trauma, turmoil in childhood family, and recent stressful life events. Interestingly, this study did not find that social support buffered the effects of these stressors on health.

In a prospective study, van der Ploeg and Kleber (2003) studied 123 ambulance drivers and predicted both symptom outcomes and fatigue and burnout, controlling for symptoms present at the time that the measurements were first taken. A tenth of their sample reported fatigue and burnout symptoms that put them at high risk for sick leave and work disability. The primary predictor of these functional outcomes was lack of social support from the supervisor and from colleagues. In addition to lack of social support, poor communication with colleagues was an important predictor in this sample of individuals stressed in the course of their job assignments.

Another study looked at social and occupational functioning as they related to a history of parental problem drinking (Greenfield et al., 1993), taking other variables into account as well. Marital instability, in the form of hitting and throwing things at one's spouse, was associated with a history of child abuse, and both childhood physical and sexual abuse predicted occupational problems. Early economic deprivation predicted both educational achievement and occupational functioning.

In a sample of Vietnam combat veterans, Green and colleagues (1990) predicted combinations of outcomes, including drug abuse and alcohol abuse. They found that premilitary factors (particularly having a pre-war diagnosis) predicted both types of substance abuse, while military (combat) factors predicted alcohol abuse but not drug abuse. Postmilitary factors predicted both, with the strongest association being between drug abuse

and current lack of social support. Fischer (1991) examined a national random sample of Vietnam veterans surveyed by Lou Harris and Associates and compared those who reported postdischarge problems with drugs or drinking with those who did not report such problems. The factors that correlated with having more problems were greater extent of combat (as measured with the Combat Exposure Scale), lower age at assignment, having completed a tour of duty or received a medical discharge, a greater length of time between discharge and first job, and a shorter length of time in the first postdischarge job.

Fontana and Rosenheck (2005) used data from the National Vietnam Veterans Readjustment Study (NVVRS) to develop and evaluate etiological models of postwar antisocial behavior (ASB), predicting it from premilitary risk factors, military traumas and disciplinary actions, homecoming reception, postmilitary PTSD and substance abuse, and postmilitary ASB. PTSD and substance abuse were included in one analysis and excluded from another. The models suggested that black ethnicity, family instability and similar premilitary experiences, and conduct disorder and similar behaviors were the factors that were most predictive of postwar ASB. Disciplinary action taken against the soldier while in the military also predicted this variable. Traumatic military exposure and a rejecting and nonsupportive homecoming relationship were related to ASB only through their relationship with PTSD and substance abuse, both of which predicted ASB.

Homelessness is a factor that suggests major functional impairment. Rosenheck and Fontana (1994) examined premilitary, military, homecoming (readjustment), and postmilitary factors that might predict homelessness among male veterans of the Vietnam War generation, using the NVVRS sample. All of the factors they examined except minority status and parental mental illness predicted homelessness, which they defined as spending at least one one-month period with no place to live. When all variables were analyzed together, the variables with the strongest associations with homelessness were lack of postmilitary social support and being unmarried, both of which are measures of social isolation. Interestingly, PTSD was not a predictor of homelessness. Premilitary factors that predicted homelessness directly or indirectly were birth year, physical and sexual abuse, other traumatic experiences, and placement in foster care. Other psychiatric disorders and substance abuse also had direct effects, while conduct disorder and war-zone traumas had only indirect effects. The authors offered a complex path model to explain these various relationships.

There are some more general aspects of military conflicts and the circumstances that surround them that also influence the nature of the stressors experienced and the risk and protective factors for PTSD—or at least the perception of these factors. Long separation from the only homes they had known led to the diagnosis of “nostalgia” in U.S. Civil War combat-

ants, a condition with the symptoms of PTSD (Hyams et al, 1996). The nature of trench warfare, with frequent artillery bombardments, resulted in the term “shell shock” being applied to World War I veterans who experienced symptoms that were only later attributed to psychological factors. Some World War II veterans were said to suffer from “battle fatigue” or “combat exhaustion” due to the intensity and duration of fighting that characterized that conflict. However, WWII veterans also “returned to a generally supportive, appreciative society whose federal government provided many immediate unemployment, housing, and educational benefits, thus facilitating rapid reintegration into civilian life” (McCranie and Hyer, 2000; citing Adams, 1994, and Fleming, 1985). In contrast, the Korean and Vietnam wars saw relatively lower combat intensity<sup>4</sup> but their veterans came home to less robust economies and indifferent or hostile public receptions. The Gulf War and Operation Iraqi Freedom/Operation Enduring Freedom conflicts have seen several changes from earlier hostilities, including technological advances in body armor and medical interventions for injuries, opponents who tend to use explosive devices rather than bullets, far greater gender integration of the force, and large numbers of reservists seeing active duty. These will undoubtedly influence PTSD rates in the cohorts in the coming years.

It is thus difficult to summarize the literature on risk and protective factors for PTSD-related impairment and the mediators and moderators of this impairment. Part of this difficulty stems from the fact that functional impairment and disability can be defined in many different ways, including physical illness, fatigue, burnout, problems in social and occupational functioning, substance abuse, ASB, and even homelessness. While different studies have examined various constellations of risk factors, some consistent themes have emerged. Some of the consistent risk factors for impairment—in line with studies of the predictors of developing the diagnosis of PTSD—include childhood sexual or physical abuse, and instability or turmoil in childhood families (for example, foster care, early economic deprivation, or parental alcohol consumption). Psychiatric disorders present before military service also appear to play an important role, along with other types of trauma and exposure to stressful events. Lack of social support upon homecoming or later was a consistent predictor of poor outcome. These variables may be important to examine in the course of determining the impairment or disability status of a veteran with PTSD.

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<sup>4</sup>As measured by the ratio of casualties to the number serving (DoD, 2004).

## REFERENCES

- Adams MCC. 1994. *The Best War Ever: America and World War II*. Baltimore, MD: Johns Hopkins University Press.
- APA (American Psychiatric Association). 2000. *Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR, Fourth Edition (Text Revisions)*. Washington, DC: American Psychiatric Association.
- Asmundson GJ, Stein MB, McCreary DR. 2002. Posttraumatic stress disorder symptoms influence health status of deployed peacekeepers and nondeployed military personnel. *Journal of Nervous and Mental Disease* 190(12):807–815.
- Beals J, Manson SM, Shore JH, Friedman M, Ashcraft M, Fairbank JA, Schlenger WE. 2002. The prevalence of posttraumatic stress disorder among American Indian Vietnam veterans: disparities and context. *Journal of Traumatic Stress* 15:89–97.
- Belzer K, Schneier FR. 2004. Comorbidity of anxiety and depressive disorders: issues in conceptualization, assessment, and treatment. *Journal of Psychiatric Practice* 10(5):296–306.
- Black DW, Carney CP, Peloso PM, Woolson RF, Schwartz DA, Voelker MD, Barrett DH, Doebbeling BN. 2004. Gulf War veterans with anxiety: prevalence, comorbidity, and risk factors. *Epidemiology* 15(2):135–142.
- Bleich A, Solomon Z. 2004. Evaluation of psychiatric disability in PTSD of military origin. *Israel Journal of Psychiatry and Related Sciences* 41:268–276.
- Booth BM, Blow FC, Cook CA. 1998. Functional impairment and co-occurring psychiatric disorders in medically hospitalized men. *Archives of Internal Medicine* 158:1551–1559.
- Breslau N, Chilcoat HD, Kessler RC, Davis GC. 1999. Previous exposure to trauma and PTSD effects of subsequent trauma: results from the Detroit Area Survey of Trauma. *American Journal of Psychiatry* 156(6):902–907.
- Brewin CR, Andrews B, Valentine JD. 2000. Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology* 68(5):748–766.
- de Jong JT, Komproe IH, Van Ommeren M, El Masri M, Araya M, Khaled N, van De Put W, Somasundaram D. 2001. Lifetime events and posttraumatic stress disorder in 4 postconflict settings. *Journal of the American Medical Association* 286(5):555–562.
- DoD (Department of Defense). 2004. *Principal Wars in Which the United States Participated: U.S. Military Personnel Serving and Casualties*. [Online]. Available: <http://siadapp.dior.whs.mil/personnel/CASUALTY/WCPRINCIPAL.pdf> (accessed March 7, 2007).
- Evans L, McHugh T, Hopwood M, Watt C. 2003. Chronic posttraumatic stress disorder and family functioning of Vietnam veterans and their partners. *The Australian and New Zealand Journal of Psychiatry* 37:765–772.
- Fischer VJ. 1991. Combat exposure and the etiology of postdischarge substance abuse problems among Vietnam veterans. *Journal of Traumatic Stress* 4:251–277.
- Fleming RH. 1985. Post-Vietnam syndrome: neurosis or sociosis? *Psychiatry* 48(2):122–139.
- Foa EB, Zinbarg R, Rothbaum BO. 1992. Uncontrollability and unpredictability in posttraumatic stress disorder: an animal model. *Psychological Bulletin* 112(2):218–238.
- Fontana A, Rosenheck R. 1994. Posttraumatic stress disorder among Vietnam Theater Veterans: a causal model of etiology in a community sample. *Journal of Nervous and Mental Disease* 182(12):677–684.
- Fontana A, Rosenheck R, Horvath T. 1997a. Social support and psychopathology in the war zone. *Journal of Nervous and Mental Disease* 185(11):675–681.
- Fontana A, Schwartz LS, Rosenheck R. 1997b. Posttraumatic stress disorder among female Vietnam veterans: a causal model of etiology. *American Journal of Public Health* 87(2):169–175.

- Fontana A, Rosenheck RA. 2005. The role of war-zone trauma and PTSD in the etiology of antisocial behavior. *Journal of Nervous and Mental Disease* 193(3):203–209. Erratum in: *Journal of Nervous and Mental Disease* 193(9):584.
- Ford JD. 1999. Disorders of extreme stress following war-zone military trauma: associated features of posttraumatic stress disorder or comorbid but distinct syndromes? *Journal of Consulting & Clinical Psychology* 67(1):3–12.
- Frayne SM, Seaver MR, Loveland S, Christiansen CL, Spiro A III, Parker VA, Skinner KM. 2004. Burden of medical illness in women with depression and posttraumatic stress disorder. *Archives of Internal Medicine* 164:1306–1312.
- Friedman MJ, McEwen BS. 2004. PTSD, allostatic load, and medical illness. Pp. 157–188 in PP Schnurr and BL Green, eds. *Trauma and Health: Physical Health Consequences of Exposure to Extreme Stress*. Washington, DC: American Psychological Association.
- Friedman MJ, Schnurr PP, Sengupta A, Holmes T, Ashcraft M. 2004. The Hawaii Vietnam Veterans Project: is minority status a risk factor for posttraumatic stress disorder? *Journal of Nervous and Mental Disease* 192:42–50.
- Goldberg J, True WR, Eisen SA, Henderson WG. 1990. A twin study of the effects of the Vietnam War on posttraumatic stress disorder. *Journal of the American Medical Association* 263(9):1227–1232.
- Green BL, Wilson JP, Lindy JD. 1985. Conceptualizing post-traumatic stress disorder: a psychosocial framework. Pp. 53–69 in CR Figley, ed. *Trauma and its Wake. Vol. I: The Study and Treatment of Post-traumatic Stress Disorder*. New York: Brunner/Mazel.
- Green BL, Grace MC, Lindy JD, Gleser GC, Leonard AC. 1990. Risk factors for PTSD and other diagnoses in a general sample of Vietnam veterans. *American Journal of Psychiatry* 147(6):729–733.
- Greenfield SF, Swartz MS, Landerman LR, George LK. 1993. Long-term psychosocial effects of childhood exposure to parental problem drinking. *American Journal of Psychiatry* 150(4):608–613.
- Heinrichs M, Wagner D, Schoch W, Soravia LM, Hellhammer DH, Ehlert U. 2005. Predicting posttraumatic stress symptoms from pretraumatic risk factors: a 2-year prospective follow-up study in firefighters. *American Journal of Psychiatry* 162(12):2276–2286.
- Hoge CW, Castro CA, Messer SC, McGurk D, Cotting DI, Koffman RL. 2004. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine* 351(1):13–22.
- Hyams KC, Wignall FS, Roswell R. 1996. War syndromes and their evaluation: from the U.S. Civil War to the Persian Gulf War. *Annals of Internal Medicine* 125(5):398–405.
- Ikin JE, Sim MR, Creamer MC, Forbes AB, McKenzie DP, Kelsall HL, Glass DC, McFarlane AC, Abramson MJ, Ittak P, Dwyer T, Blizzard L, Delaney KR, Horsley KWA, Harrex WK, Schwarz H. 2004. War-related psychological stressors and risk of psychological disorders in Australian veterans of the 1991 Gulf War. *British Journal of Psychiatry* 185:116–126.
- IOM (Institute of Medicine). 2006. *Posttraumatic Stress Disorder: Diagnosis and Assessment*. Washington, DC: The National Academies Press.
- Johnson DR, Lubin H, Rosenheck R, Fontana A, Southwick S, Charney D. 1997. The impact of homecoming reception on the development of posttraumatic stress disorder: the West Haven Homecoming Stress Scale (WHHSS). *Journal of Traumatic Stress* 10(2):259–277.
- Kang H, Dalager N, Mahan C, Ishii E. 2005. The role of sexual assault on the risk of PTSD among Gulf War veterans. *Annals of Epidemiology* 15(3):191–195.
- Kang HK, Natelson BH, Mahan CM, Lee KY, Murphy FM. 2003. Post-traumatic stress disorder and chronic fatigue syndrome-like illness among Gulf War veterans: a population-based survey of 30,000 veterans. *American Journal of Epidemiology* 157(2):141–148.

- Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson C. 1995. Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry* 52:1048–1060.
- Kimerling R. 2004. An investigation of sex differences in nonpsychiatric morbidity associated with posttraumatic stress disorder. *Journal of the American Medical Women's Association* 59:43–47.
- King LA, King DW, Fairbank JA, Keane TM, Adams GA. 1998. Resilience-recovery factors in post-traumatic stress disorder among female and male Vietnam veterans: hardiness, postwar social support, and additional stressful life events. *Journal of Personality & Social Psychology* 74(2):420–434.
- Koenen KC, Stellman JM, Stellman SD, Sommer JF Jr. 2003. Risk factors for course of post-traumatic stress disorder among Vietnam veterans: a 14-year follow-up of American Legionnaires. *Journal of Consulting and Clinical Psychology* 71(6):980–986.
- Koren D, Norman D, Cohen A, Berman J, Klein EM. 2005. Increased PTSD risk with combat-related injury: a matched comparison study of injured and uninjured soldiers experiencing the same combat events. *American Journal of Psychiatry* 162(2):276–282.
- Koso M, Hansen S. 2006. Executive function and memory in posttraumatic stress disorder: a study of Bosnian war veterans. *European Psychiatry* 21(3):167–173.
- Kramer TL, Lindy JD, Green BL, Grace MC, Leonard AC. 1994. The comorbidity of post-traumatic stress disorder and suicidality in Vietnam veterans. *Suicide and Life-Threatening Behavior* 24(1):58–67.
- Kulka RA, Schlenger WE, Fairbank JA, Hough RL, Jordan BK, Marmar CR, Weiss DS. 1990. *Trauma and the Vietnam War Generation: Report of Findings from the National Vietnam Veterans Readjustment Study*. New York: Brunner/Mazel.
- Leserman J, Li Z, Hu YJ, Drossman DA. 1998. How multiple types of stressors impact on health. *Psychosomatic Medicine* 60(2):175–181.
- Loo CM, Fairbank JA, Chemtob CM. 2005. Adverse race-related events as a risk factor for posttraumatic stress disorder in Asian American Vietnam veterans. *Journal of Nervous and Mental Disease* 193(7):455–463.
- Maes M, Mylle J, Delmeire L, Janca A. 2001. Pre- and post-disaster negative life events in relation to the incidence and severity of post-traumatic stress disorder. *Psychiatry Research* 105(1–2):1–12.
- McCranie EW, Hyer LA. 2000. Posttraumatic stress disorder symptoms in Korean conflict and World War II combat veterans seeking outpatient treatment. *Journal of Traumatic Stress* 13(3):427–439.
- Mollica RF, McInnes K, Pham T, Smith Fawzi MC, Murphy E, Lin L. 1998. The dose-effect relationships between torture and psychiatric symptoms in Vietnamese ex-political detainees and a comparison group. *Journal of Nervous and Mental Disease* 186(9):543–553.
- Mollica RF, McInnes K, Sarajlic N, Lavelle J, Sarajlic I, Massagli MP. 1999. Disability associated with psychiatric comorbidity and health status in Bosnian refugees living in Croatia. *Journal of the American Medical Association* 282(5):433–439.
- Norris FH, Friedman MJ, Watson PJ, Byrne CM, Diaz E, Kaniasty K. 2002. 60,000 disaster victims speak: part I. An empirical review of the empirical literature, 1981–2001. *Psychiatry* 65(3):207–239.
- Norris FH, Murphy AD, Baker CK, Perilla JL. 2003. Severity, timing, and duration of reactions to trauma in the population: an example from Mexico. *Biological Psychiatry* 53:769–778.
- North CS, Nixon SJ, Shariat S, Mallonee S, McMillen JC, Spitznagel EL, Smith EM. 1999. Psychiatric disorders among survivors of the Oklahoma City bombing. *Journal of the American Medical Association* 282:755–762.

- O'Toole BI, Marshall RP, Schureck RJ, Dobson M. 1998. Posttraumatic stress disorder and comorbidity in Australian Vietnam veterans: risk factors, chronicity and combat. *Australian and New Zealand Journal of Psychiatry* 32(1):32–42.
- Rapaport MH, Clary C, Fayyad R, Endicott J. 2005. Quality-of-life impairment in depressive and anxiety disorders. *American Journal of Psychiatry* 162(6):1171–1178.
- Rosenheck R, Fontana A. 1994. A model of homelessness among male veterans of the Vietnam War generation. *American Journal of Psychiatry* 151(3):421–427.
- Roy-Byrne P, Arguelles L, Vitek ME, Goldberg J, Keane TM, True WR, Pitman RK. 2004. Persistence and change of PTSD symptomatology—a longitudinal co-twin control analysis of the Vietnam Era Twin Registry. *Social Psychiatry and Psychiatric Epidemiology* 39(9):681–685.
- Ruef AM, Litz BT, Schlenger WE. 2000. Hispanic ethnicity and risk for combat-related posttraumatic stress disorder. *Cultural Diversity and Ethnic Minority Psychology* 6(3):235–251.
- Schnurr PP, Green BL, eds. 2004a. *Trauma and Health: Physical Health Consequences of Exposure to Extreme Stress*. Washington, DC: American Psychological Association.
- Schnurr PP, Green BL. 2004b. Understanding relationships among trauma, PTSD, and health outcomes. Pp. 247–275 in PP Schnurr and BL Green, eds. *Trauma and Health: Physical Health Consequences of Exposure to Extreme Stress*. Washington, DC: American Psychological Association.
- Schnurr PP, Lunny CA, Sengupta A, Waelde LC. 2003. A descriptive analysis of PTSD chronicity in Vietnam veterans. *Journal of Traumatic Stress* 16(6):545–553.
- Schreiber S, Galai-Gat T. 1993. Uncontrolled pain following physical injury as the core-trauma in post-traumatic stress disorder. *Pain* 54(1):107–110.
- Shors TJ. 2006. Stressful experience and learning across the lifespan. *Annual Review of Psychology* 57:55–85.
- Solomon S, Mikulinver M. 2006. Trajectories of PTSD: a 20-year longitudinal study. *American Journal of Psychiatry* 163(4):659–666.
- Southwick SM, Krystal JH, Morgan CA, Johnson D, Nagy LM, Nicolaou A, Hening GR, Charney DS. 1993. Abnormal noradrenergic function in posttraumatic stress disorder. *Archives of General Psychiatry* 50(4):266–274.
- Speed N, Engdahl B, Schwartz J, Eberly R. 1989. Posttraumatic stress disorder as a consequence of the POW experience. *Journal of Nervous and Mental Disease* 177(3):147–153.
- Stein MB, Kennedy C. 2001. Major depressive and post-traumatic stress disorder comorbidity in female victims of intimate partner violence. *Journal of Affective Disorders* 66(2–3):133–138.
- Stretch RH. 1985. Posttraumatic stress disorder among U.S. Army Reserve Vietnam and Vietnam-era veterans. *Journal of Consulting and Clinical Psychology* 53(6):935–936.
- Stretch RH, Vail JD, Maloney JP. 1985. Posttraumatic stress disorder among Army Nurse Corps Vietnam veterans. *Journal of Consulting & Clinical Psychology* 53(5):704–708.
- Sutker PB, Allain AN Jr, Winstead DK. 1993. Psychopathology and psychiatric diagnoses of World War II Pacific theater prisoner of war survivors and combat veterans. *American Journal of Psychiatry* 150(2):240–245.
- Sutker PB, Uddo M, Brailey K, Allain AN, Errera P. 1994. Psychological symptoms and psychiatric diagnoses in Operation Desert Storm troops serving graves registration duty. *Journal of Traumatic Stress* 7(2):159–171.
- Tolin DF, Foa EB. 2006. Sex differences in trauma and posttraumatic stress disorder: a quantitative review of 25 years of research. *Psychological Bulletin* 132:959–992.
- van der Ploeg E, Kleber RJ. 2003. Acute and chronic job stressors among ambulance personnel: predictors of health symptoms. *Occupational and Environmental Medicine* 60(Suppl. 1):i40–i46.

- Wolfe J, Erickson DJ, Sharkansky EJ, King DW, King LA. 1999. Course and predictors of posttraumatic stress disorder among Gulf War veterans: a prospective analysis. *Journal of Consulting and Clinical Psychology* 67(4):520–528.
- Yehuda R. 1999. Biological factors associated with susceptibility to posttraumatic stress disorder. *Canadian Journal of Psychiatry—Revue Canadienne de Psychiatrie* 44(1):34–39.
- Yehuda R, Hyman SE. 2005. The impact of terrorism on brain, and behavior: what we know and what we need to know. *Neuropsychopharmacology* 30(10):1773–1780.
- Zatzick DF, Marmar CR, Weiss DS, Browner WS, Metzler TJ, Golding JM, Stewart A, Schlenger WE, Wells KB. 1997. Posttraumatic stress disorder and functioning and quality of life outcomes in a nationally representative sample of male Vietnam veterans. *American Journal of Psychiatry* 154:1690–1695.
- Zayfert C, Dums AR, Ferguson RJ, Hegel MT. 2002. Health functioning impairments associated with posttraumatic stress disorder, anxiety disorders, and depression. *Journal of Nervous and Mental Disease* 109:233–240.

## 4

# The PTSD Compensation and Pension Examination

This chapter provides an overview of the Veteran's Administration (VA's) posttraumatic stress disorder (PTSD) compensation process and the conducting of PTSD compensation and pension (C&P) examinations. These examinations generate the information used by raters to evaluate compensation claims and, where appropriate, to determine the level of disability—a process that is described in Chapter 5. The chapter also offers the committee's response to several elements of the charge that related to these evaluations.

### COMPENSATION AND PENSION EXAMINATION OVERVIEW

A C&P examination is a very important and nearly universal step<sup>1</sup> in the process of obtaining disability benefits from VA. Initial examination requests are typically initiated by VA after a veteran files an application<sup>2</sup> with the Veterans Benefits Administration (VBA) and all pertinent evidence has been obtained. The application, at minimum, requires a veteran to submit evidence of a disability or disabilities and to indicate how it or they may be connected to the veteran's military service. There are several ways

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<sup>1</sup>There are limited circumstances where a C&P exam is not necessary in order to obtain benefits from the VA. These include situations where a veteran is able to provide sufficient medical and disability documentation and evidence of a service connection to allow VBA to make its determination without the need for further evaluation.

<sup>2</sup>VA Form 21-526, which can be submitted on paper or electronically, is used to initiate the process.

to established service-connectedness, the most common being to prove one of the following:

- the “injury or disease resulting in disability was incurred coincident with service in the Armed Forces” (38 CFR §3.303);
- a preexisting injury or disease was aggravated by active service (38 CFR § 3.306);
- a presumptive service connection was established by law or VA policy (38 CFR §§3.307, 3.308, or 3.309); or
- the condition occurred as a result of an injury or disease that was incurred during the time of service (38 CFR §3.310).

After an application is received, the VBA reviews it for completeness and is responsible—under the so-called *duty to assist*<sup>3</sup>—to help a claimant “who files a substantially complete application in obtaining evidence to substantiate his or her claim before making a decision on the claim” (DVA, 2006). Once all of the relevant evidence has been collected and all of the requested (and available) information has been received, depending on the conditions that have been identified a VBA Veterans Service Representative (VSR) or a Rating Veterans Service Representative (RVSR) will request that the Veterans Health Administration (VHA) set up and conduct one or more examinations. These examinations will be conducted either by staff clinicians or by contracted health professionals, depending on the facility used and the need for specialists.

Examinations may also be conducted in other circumstances. These include when:

- it is required by regulations;
- it is necessary to resolve an uncertainty related to a diagnosis;
- there is a need to establish a nexus between an already-diagnosed condition and military service;
- a veteran who has a disability that has already been established as being service connected indicates that this disability has worsened or that the level of the disability rating does not accurately reflect his or her condition; or
- it is required as part of an adjudication to resolve a compensation-related issue.

According to a procedural handbook, “VHA has a time standard of 35

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<sup>3</sup>The tasks falling under VA’s duty-to-assist responsibility are set forth in the Veterans Claims Assistance Act of 2000, Public Law 106-475.

**TABLE 4-1** Most Frequently Conducted C&P Examinations

Examination	% Conducted	Examination	% Conducted
General medical	19	Eye	4
Joints	12	PTSD initial	3
Audio	9	Feet	3
Spine	8	PTSD review	3
Mental disorders*	6	Skin	2

\*Other than PTSD.  
 SOURCE: CPEP (2006).

calendar days, after receipt of the examination request, to complete the examinations and required tests” (VHA, 2006).

A presentation in June 2006 by the Compensation and Pension Examination Program Office (CPEP) indicated that VHA performs approximately 800,000 C&P exams per year at approximately 135 examination sites (CPEP, 2006). The ten most frequently conducted examinations—which collectively make up 67 percent<sup>4</sup> of all examinations—are listed in Table 4-1.

In the 1990s, the VHA began to outsource some C&P examinations or portions thereof. At the end of 2006, QTC Management Inc. (QTC) was performing nearly all VBA-contracted examinations (QTC, 2006); during the 2005 fiscal year, the company had conducted approximately 82,000 examinations for the VA (VBA, 2006). VHA also employs contracted examiners who work both onsite and offsite.

C&P examinations are designed to obtain fundamental information that will be necessary for the final adjudication of a claim, including (where appropriate) the application of the VA Schedule for Rating Disabilities (VASRD). Two sections of the Code of Federal Regulations define the purpose of these examinations:

For the application of [the VASRD], accurate and fully descriptive medical examinations are required, with emphasis upon the limitation of activity imposed by the disabling condition. Over a period of many years, a veteran’s disability claim may require reratings in accordance with changes in laws, medical knowledge and his or her physical or mental condition. It is thus essential, both in the examination and in the evaluation of disability, that each disability be viewed in relation to its history (38 CFR §4.1).

The basis of disability evaluations is the ability of the body as a whole, or of the psyche, or of a system or organ of the body to function under the

<sup>4</sup>This number does not correspond to the sum of the numbers in the table because of independent rounding.

ordinary conditions of daily life including employment. . . . This imposes upon the medical examiner the responsibility of furnishing, in addition to the etiological, anatomical, pathological, laboratory and prognostic data required for ordinary medical classification, full description of the effects of disability upon the person's ordinary activity (38 CFR §4.10).

C&P examinations for PTSD consist of a review of medical history; an assessment of the traumatic exposure or exposures; evaluations of mental status and of social and occupational function; and a diagnostic examination, which may include psychological testing or a determination of a Global Assessment of Functioning (GAF) score.

Family may play in to the C&P process in several different ways. The evaluation of the claimant's functional state explicitly includes his or her relationships with others, including the spouse, children, and parents. While direct input from the family is not required, family members may participate directly in parts of the clinician's examination. Such participation may be a useful source of additional information since claimants are not necessarily aware of the symptoms they manifest. However, as would be true for any clinical evaluation, involvement by others raises confidentiality issues and could engender conflict with the claimant. Family members and others can also submit written statements for consideration.<sup>5</sup> PTSD evaluations may be stressful because they involve discussion of the traumatic event. A training video produced for VA clinicians therefore suggests that claimants be advised to bring a family member to the C&P examination to provide support before and after the assessment (VA Employee Education System, 2004). This support may be particularly important in circumstances where the veteran must travel long distances to get to a facility for examination.

To help focus the examinations, the VBA provides the VHA with Automated Medical Information Exchange (AMIE) worksheets that set forth what an examination should cover according to the conditions being claimed. In particular, these worksheets are designed to ensure that a rating specialist receives all the information necessary to rate a claim. At the end of 2006 there were 57 AMIE worksheets available. The worksheets that were in use for initial and review PTSD examinations at the time this report was completed are reproduced in Appendix C. A newer system of computerized templates intended to improve the C&P process was recently put into place at some VA regional offices as part of the Compensation and Pension Examination Program. Instead of having to work from an AMIE text document, a clinician can pull up an equivalent examination template on a computer screen.

Examiners are not required to use the AMIE worksheets, and, when

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<sup>5</sup>VA Form 21-4138—*Statement in Support of Claim*—is used for this purpose (<http://www.vba.va.gov/pubs/forms/21-4138.pdf>).

they do use them, they do not have to fill out all the fields, as the fields are not necessarily all relevant to every case. Furthermore, a rater may ask an examiner to develop specific information for particular examinations, and, where appropriate, examiners have the ability to provide information not specified in an AMIE worksheet. In addition to the examination templates, VSRs are encouraged to provide the veteran's claim folder and to tab pertinent evidence in it for the benefit of the examiner.

Thus C&P examinations differ in both scope and purpose from standard clinical examinations, as their core function is to provide VBA staff with the evidentiary foundation with which a claim for a service-connected disability can be rated or denied. Among the fundamental details necessary to decide a C&P disability claim are a determination that the veteran has a disabling condition or conditions, a determination of whether each disability is service-connected, and an evaluation of the level of disability (10 percent, 20 percent, etc.) to be assigned for each service-connected disability.

While C&P exams generate information that is useful in offering referrals or making medical decisions, they are not made part of a veteran's clinical record and do not play a role in the delivery of VA clinical services. Treatment referrals may be offered as part of a separate diagnostic evaluation made in a clinical (typically, VHA) context. As the *C&P Service Clinician's Guide* states:

The purpose of the C&P exam is to provide very specific information in order to ensure a proper evaluation of the claimed disability rather than to provide medical treatment. A treatment examination is written for clinicians to understand, but a compensation and pension examination is written for RVSRs, lawyers, and judges to understand (DVA, 2002, p. 10).

Examinations for disability compensation present special challenges for clinicians no matter what the setting. At the core of these is the potential for conflict between the clinician's role as a patient advocate and his or her responsibility as an examiner to render an impartial evaluation of a claimant's condition. Forensic examination requires a fundamentally different relationship with the subject than is formed in a therapeutic situation. Greenberg and Shuman (1997) identify several salient distinctions:

The therapist is a care provider and usually supportive, accepting, and empathic; the forensic evaluator is an assessor and usually neutral, objective, and detached as to the forensic issues (p. 53).

[A] therapist must be competent in the clinical assessment and treatment of the patient's impairment. In contrast, a forensic evaluator must be competent in forensic evaluation procedures and psycholegal issues relevant to the case (p. 53).

In most instances, it is not realistic, nor is it typically the standard of care, to expect a therapist to be an investigator to validate the historical truth of what a patient discusses in therapy. . . . In contrast, the role of a forensic examiner is, among other things, to offer opinions regarding historical truth and the validity of the psychological aspects of . . . claims. The accuracy of this assessment is almost always more critical in a forensic context than it is in psychotherapy (p. 53).

[T]he psychotherapeutic process is rarely adversarial. . . . Forensic evaluation, although not necessarily unfriendly or hostile, is nonetheless adversarial in that the forensic evaluator seeks information that both supports and refutes the [claimant's] assertions (p. 54).

Therapy is intended to aid the person being treated. . . . Forensic examiners strive to gather and present objective information that may ultimately aid a trier of fact . . . to reach a just solution . . . (p. 54).

The VASRD process introduces additional complicating factors. Examination parameters are set by raters who are required to tailor claims to meet VASRD criteria and requirements. However, these may not represent the current state of the medical science<sup>6</sup> and may thus compel clinicians to use tools or techniques that they consider to be substandard. Further, C&P examinations may be conducted by clinicians who have a prior or future therapeutic relationship with the claimant. In a 2004 VA instructional video on the PTSD C&P process, a senior VA medical officer indicated that this created a potential conflict of interest and might lead veterans to be less than forthcoming with clinicians providing care to them (VA ESS, 2004).

### C&P EXAMINATION ISSUES

VA identified several issues related to the conduct of C&P exams that were of particular interest: the use of the GAF in examinations, the separation of symptoms among PTSD and comorbid disorders, the time between the stressor and the appearance of symptoms related to it, and the value of standardized testing in the conduct of examinations. These are addressed below.

#### Use of the GAF in Compensation and Pension Examinations

The charge to the committee indicated that the role of the GAF score in evaluating PTSD was an area of great interest (Szybala, 2006). It noted that some advocates have argued for an increased dependence on the GAF score

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<sup>6</sup>One example of this—the use of the GAF in C&P examinations—is discussed later in this chapter.

in evaluating PTSD and requested input on the issue. Raters may request that a clinician provide a GAF score for use in claims evaluation and the Board of Veterans' Appeals<sup>7</sup> may require one as part of a remand of a rating decision. In addition, VHA Directive 97-059 requires clinicians to record "at least one GAF score . . . reflecting the 'current level of functioning' for each veteran patient seen at any VHA mental health inpatient or outpatient setting" (VHA, 1997).

The GAF was developed for Axis V of the *Diagnostic and Statistical Manual of Mental Disorders III, Revised (DSM-III-R)*<sup>8</sup> in order to provide a general measure of symptomatic and psychosocial function. It was derived by making minor modifications to the Global Assessment Scale (GAS), which itself was developed in 1976 by Endicott and colleagues as a component of the *Schedule for Affective Disorders and Schizophrenia*, a structured interview designed for research studies of those disorders. Since the GAF was introduced to the DSM system through *DSM-III-R*, it has been carried forward to the most recent edition, *DSM-IV-TR* (APA, 2000). The *Best Practice Manual* developed by VA practitioners identified five issues concerning its use:

1. GAF reliability and training;
2. GAF accuracy and clinician-rater biases;
3. resolution of the GAF scale;
4. GAF accuracy with respect to PTSD and comorbidity; and
5. assigning separate GAFs by condition<sup>9</sup> (Watson et al., 2002).

One of the many problems with the GAF is that because it was derived from a scale used for the study of affective disorders and schizophrenia, it is very difficult to use as a general measure of symptomatic and psychosocial function across a broad range of psychiatric conditions. The scale ranges from 1 to 100, with 100 representing superior mental health and psychosocial function and 0 representing the worst possible, and with individual anchors defined at 10-point increments. The anchors for the most severe levels (0-40) are almost universally drawn from the symptoms of mood disorder or schizophrenia, reflecting the influence of the GAS. Only in the 40-50 range are symptoms from other disorders mentioned (suicidal ideation, severe obsessional rituals, frequent shoplifting). In the 50-60 range,

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<sup>7</sup>The Board of Veterans' Appeals—a part of the VA—is responsible for reviewing challenges to benefit claims determinations made by local VA offices and issuing decisions on appeals. Their decisions can be appealed to the U.S. Court of Veterans' Appeals. Figure 5-2 delineates the steps in the benefits application and appeals process.

<sup>8</sup>The DSM uses a multiaxial approach to diagnosis. Axis V is the level of functioning.

<sup>9</sup>The last two of these issues are addressed more generally in the following section on separation of symptoms of comorbid disorders.

symptoms from schizophrenia reemerge, along with a reference to panic disorder to give the appearance of breadth (flat affect and circumstantial speech, occasional panic attacks). In the 60-70 range, the symptoms are those of mood disorder (depressed mood and mild insomnia). In short, the GAF anchors are conceptually relatively weak. They attempt to offer some breadth of coverage, but in fact they lack adequate reference to the broad range of psychiatric symptoms.

Several studies have examined the psychometric properties of the GAF, and results indicate that reliability is a major concern. A review of the literature on nonveteran psychiatric samples concluded that the reliability of the GAF ranges from weak to exceptional (Burlingame et al., 2005). Among a sample of patients with diagnoses of depression and anxiety, for example, reliability was better for depression than for anxiety ( $r=0.69-0.73$  versus  $r=0.41-0.57$ ) (Svanborg and Asberg, 1994).

Ideally, if a scale such as the GAF is to be used as a benchmark for making disability evaluations in veteran populations, it should first demonstrate good interrater and test-retest reliability across VA health-care settings and also across diagnoses that commonly present for compensation evaluation. However, data establishing these characteristics are not available. The fact that disability compensation awards for mental disorders vary markedly<sup>10</sup> suggests, in part, that the reliability of the GAF in the VA health system is very weak. And reliability is a basic instrument property that the GAF should exhibit before one can have confidence in its use in assessing functional impairment specific to PTSD.

Another weakness of the GAF is that it combines symptom levels with assessment of function and does not allow for a separation of these two areas. Furthermore, the GAF does not address some areas of functioning for which evaluation is required in order to obtain a full assessment of disability, including activities of daily living (physical restrictions), quality of life, symptom burden, and self-assessed health. Among the widely used scales designed to assess these areas<sup>11</sup> are:

- Sheehan Stress Vulnerability Scale (symptom burden);
- the Impact of Events Scale-Revised, PTSD Checklist (PCL)-17, and Short PTSD Rating Interview (symptom levels);

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<sup>10</sup>A 2005 report on compensation by the VA Office of the Inspector General found that mental disorders had the fourth highest variability rate of the 15 body systems studied and that the difference in the proportion of PTSD cases rated at 100 percent was “a primary factor contributing to the variance in average annual compensation payments by state” (DVA, 2005).

<sup>11</sup>PTSD: *Diagnosis and Assessment* (IOM, 2006) and various review articles (e.g., Connor et al., 2006) examine screening tools and diagnostic instruments in greater detail. Lerner (2006) has provided a compilation of the instruments used in studies indexed in the Published International Literature on Traumatic Stress (PILOTS) database.

- Clinician-Administered PTSD Scale (symptoms and diagnosis);
  - SF-36 and its shorter versions (function across several domains);
- and
- WHODAS<sup>12</sup> 6-, 12-, or 36-item versions (assessment of function).

*PTSD: Diagnosis and Assessment* (IOM, 2006) and various review articles (e.g., Connor et al., 2006) examine screening tools and diagnostic instruments in greater detail. Lerner (2006) has provided a compilation of the instruments used in studies indexed in the PILOTS database.

The committee concludes that the GAF score has limited usefulness in the assessment of the level of disability for PTSD compensation. The score is only marginally applicable to PTSD because of its emphasis on the symptoms of mood disorder and schizophrenia and its limited range of symptom content. The social and functional domains of the score provide some information, but if these are the sole domains of interest, better measures of them exist. Importantly, the GAF has not to date been shown to have good psychometric properties (i.e., good reliability) within the VA system and, particularly, within samples of veterans suffering from PTSD.

### *Summary Observations and Recommendations*

The committee is aware that the GAF is widely used within the VBA and VHA systems and that it may not be possible to quickly implement changes regarding it without disrupting the delivery of PTSD services. It thus recommends that—in the short term—VA seek to make certain that its mental health professionals are well informed about the uses and limitations of the GAF. This includes, at minimum, system-wide training aimed to ensure that GAF scoring is conducted in a consistent and uniform manner and periodic, mandatory retraining to minimize drift and variation in scoring over time and between facilities.

In the longer term, the committee recommends that VA identify and implement an appropriate replacement for the GAF in disability ratings of PTSD: one or more measures that focus on the symptoms of PTSD used to define the disorder and on the other domains of disability assessment. As noted above, there are several scales that have useful properties and should be considered.

The committee does not believe it is appropriate to offer any recommendations regarding which measure or measures should be adopted instead of or, potentially, in addition to the GAF. The scientific literature offers no firm guidance on this topic and it is beyond the scope of this com-

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<sup>12</sup>The World Health Organization Disability Assessment Schedule, information on which is available at <http://www.who.int/icidh/whodas/index.html>.

mittee to perform the detailed evaluation needed. Any recommendations should be based on a careful consideration of reliability and validity data gathered from VA's applicant and beneficiary populations. The committee recommends that VA facilitate the evaluation of alternatives and formulation of recommendations.

### Separation of Symptoms of Comorbid Disorders

The VA requested that the committee address whether there is a scientific basis for separating out symptoms of PTSD from those of another existing mental disorder and, if so, how this is done and how reliable such a separation is. The VA stated that clinicians conducting C&P exams have indicated that it can be difficult and speculative to try to separate the symptoms of PTSD from those of others disorders, such as major depression.

Separating symptoms of comorbid disorders is required under the Schedule for Rating Disabilities (38 CFR Part 4). According to the schedule, a combined rating is to be assigned when more than one service-connected disability is diagnosed. Disabilities should "be arranged in the exact order of their severity, beginning with the greatest disability," and the combined rating is determined according to a specified protocol (§4.25).<sup>13</sup> The clinician's role is to provide the information used by the rater to make these assignments, and this information may include the partitioning of an overall GAF score into disorder-specific scores. The details about partitioning the GAF score may be requested by a rater or required under a Board of Veterans' Appeals remand of a rating decision.

As discussed in Chapter 3 and in *PTSD: Diagnosis and Assessment* (IOM, 2006), PTSD is subject to high rates of psychiatric comorbidity, with some studies finding that more than 80 percent of people who have been diagnosed with PTSD also have a major depressive or other psychiatric disorder (Black et al., 2004; Kessler et al., 1995). Common comorbid conditions include a range of mood, dissociative, anxiety, substance-related, and personality disorders (APA, 2004).

Making psychiatric diagnoses can be difficult because certain types of symptoms—particularly those involving depression and anxiety—are very common and are even on a continuum with normality. It is the clinician's responsibility to distinguish between the presence of symptoms and the presence of a discrete disorder and to properly account for the fact that some symptoms overlap across disorders, such as when mood and anxiety symptoms co-occur in PTSD and depression.

When diagnostic criteria were first developed within the *DSM* system,

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<sup>13</sup>The topic of combined ratings is also discussed in *A 21st Century System for Evaluating Veterans for Disability Benefits* (IOM, 2007).

the system was designed to avoid multiple diagnoses and instead foster the identification of the one or two disorders that were most prominent. This approach was implicitly, and often explicitly, hierarchical, and intentionally prevented the diagnosis of some disorders as comorbid. If a patient had prominent symptoms of schizophrenia, for example, but also had some symptoms of mood disorder, only one diagnosis would be made. This changed with *DSM-III*, as it recognized that some conditions were likely to be comorbid with other conditions. In such cases, clinicians were encouraged to make both diagnoses.

When PTSD was introduced as a “new” diagnosis in *DSM-III* (actually not new, since it was in *DSM-I* as gross stress reaction), it was one of the diagnoses recognized as likely to be comorbid with other disorders, particularly depression. *DSM-III* explicitly stated that if depressive disorder occurs in conjunction with PTSD, multiple diagnoses should be made. This recommendation was carried forward in all subsequent editions of *DSM* and is present in the most recent, *DSM-IV-TR* (APA, 2000). Therefore, the current American nosological system explicitly recognizes that PTSD may be comorbid with other conditions and indicates that when this occurs, two or more diagnoses should be made. This is completely consistent with the VA disability system.

There is a scientific—that is, empirically studied—basis for defining PTSD and depression (or other conditions that may be comorbid with PTSD) as discrete disorders. Evidence for this basis can be found, for instance, in Volume IV of the *DSM-IV Sourcebook* (Widiger et al., 1998), which reports much of the supporting data for the reliability and validity of the various diagnostic categories in *DSM-IV*. The diagnosis of lifetime PTSD, for example, has a kappa coefficient of 0.85, indicating good reliability (Kilpatrick et al., 1998).

Although clinicians conducting C&P examinations have described having difficulty in dealing with comorbid mental disorders such as PTSD and depression, a review of the current *DSM* diagnostic criteria indicates that only a few symptoms of these two disorders overlap. In particular, the three symptoms listed in Table 4-2 below are similar but not identical in PTSD and major depression, and they are generally different within the context of the other symptoms of the disorder.

In general, the criteria for major depression set a higher threshold than the similar criteria for PTSD.

The difficulty for clinicians lies in the additional step that the C&P process may require them to take: attribute some portion of the common symptoms of the disorders to one diagnosis and some to another, and—in particular—to assign specific GAF scores to each. The difficulty arises from the fact that clinicians don’t parse symptoms, they parse diagnoses—and there is no precedence for parsing symptoms. The *Best Practice Manual*

**TABLE 4-2** Comparison of Similar PTSD and Major Depression Symptoms

PTSD	Major Depressive Episode
Markedly diminished interest or participation in significant activities	Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day
Difficulty falling or staying asleep	Insomnia or hypersomnia nearly every day
Difficulty concentrating	Diminished ability to think or concentrate, or indecisiveness, nearly every day

SOURCE: *DSM-IV-TR* (APA, 2000).

summarizes these challenges and the current state of the literature regarding them:

No published information associated with the *DSM-IV* instructs users in a valid method for partitioning the GAF score. . . . In PTSD, depression and substance abuse frequently coexist and attempting to attribute a portion of the functional problems to depression and another to substance use and another to PTSD, as if they were independent of each other, is beyond the intended purpose and capability of the GAF scale. This is an instance of incompatibility between the capabilities of the GAF scale and the compensation review process. While the logic of separate ratings by disorder may make sense from an adjudication perspective, it is not clinically validated, and [partial GAFs] assigned in this manner should be seriously questioned for their validity as evidence in the disability determination proceedings (Watson et al., 2002, pp. 10–11; a more detailed discussion of the same issues appears on pp. 76–77).

### *Summary Observations*

The committee’s review of the literature found no scientific guidance addressing the separation of symptoms of comorbid mental disorders for the purpose of identifying their relative contributions to a subject’s condition. There is no parallel in other disability support efforts, such as the federal Social Security Disability Insurance/Supplemental Security Income programs or state, local, or private worker compensation schemes. The parsing is instead an artifact of a VA system built around the harsh realities of polytraumatic injuries encountered in warfare. Partitioning of symptoms among comorbid conditions is not useful from a clinical perspective, and research on it has therefore not been given any priority. Clinicians are often able to offer an informed opinion on this question, but this is a professional judgment, not an empirically testable finding.

The committee believes that it is possible to reduce the difficulties encountered in dealing with situations where PTSD co-exists with other mental disorders. The committee recommends that a national standardized training program be developed for clinicians who conduct compensation and pension psychiatric evaluations. This training program should emphasize diagnostic criteria for PTSD and comorbid conditions with overlapping symptoms, as set forth in the *DSM*. A model training program would consist of a set of video-recorded interviews—including both simple and complex cases—with standardized evaluations of the severity of criterion symptoms for PTSD and common comorbid conditions, identification of the appropriate diagnosis or diagnoses, delineation of how to prepare and present findings in a manner useful to the rating process, and justification for the decisions made. Mental health professionals could be required to complete a training program of this type before they are permitted to conduct C&P examinations. Training on the uses and limitations of the GAF as discussed above should be a part of this initiative.

### Value and Appropriateness of Standardized Testing

The Committee was charged with addressing whether standardized psychometric testing would be valuable and appropriate in the conduct of PTSD examinations for compensation purposes.<sup>14</sup> Three basic types of instruments have been used to assess PTSD. The first type consists of self-report tests that are designed to measure PTSD symptoms as defined according to *DSM-IV-TR* criteria. The second includes PTSD scales that are derived from self-report tests developed for other purposes. The third type involves the use of reliability or validity scales from standardized tests to estimate the respondent's response set toward test-taking, that is, evaluating such things as whether the subject is giving socially desirable answers, minimizing or exaggerating symptomatology, or malingering.

A book by Wilson and Keane (2004) has four chapters that provide excellent reviews of extant measures for PTSD (Keane et al., 2004; Kimerling et al., 2004; Norris and Hamblen, 2004; Weiss, 2004). These reviews concluded that all the tests for PTSD, including those derived from other scales (see below), have good to excellent reliability and validity. The chapter by Keane and colleagues (2004) is most germane because it specifically addresses assessment of military-related PTSD. However, because the prevalence of exposure to sexual assault and sexual harassment is high among

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<sup>14</sup>The VA's National Center for PTSD maintains a listing of assessment instruments used to measure trauma exposure and PTSD. The listing, which includes information on how qualified mental health professionals and researchers can obtain access to the instrument, may be found at the following URL: <http://www.ncptsd.va.gov/ncmain/assessment/>.

female military recruits, female active duty personnel, and female veterans (Merrill et al., 1999; Sadler et al., 2004; Yaeger et al., 2006), it is important to also examine PTSD tests and scales that have been developed to measure PTSD in response to those types of potentially traumatic events.

### *Self-Report Tests Measuring PTSD Symptoms*

As noted in a number of sources (Keane et al., 2004; Kimerling et al., 2004; Norris and Hamblen, 2004; Weiss, 2004), the PTSD tests that have the strongest reliability and validity data, that have good sensitivity and specificity, and that have been used most frequently are the PTSD Checklist (Weathers et al., 1992), the Impact of Event Scale–Revised (Weiss and Marmar, 1997), the Posttraumatic Stress Diagnostic Scale (Foa et al., 1997), and the Davidson Trauma Scale (Davidson et al., 1997). Other measures of this type include the Modified PTSD Symptom Scale (Falsetti et al., 1993) and the Distressing Life Events Questionnaire (Kubany et al., 2000). All of these tests include items that measure each PTSD symptom, and all provide some scaling of the score based on the frequency or intensity of recently experienced PTSD symptoms. These tests can be useful in screening for PTSD because of the correspondence of test items with PTSD symptoms, and they can also be useful in providing an estimate of PTSD symptom severity or frequency. The Mississippi Scale for Combat-Related PTSD (Keane et al., 1988) is a Likert-scaled questionnaire that provides a scaled measure of PTSD symptom severity and has good reliability and validity data (Keane et al., 1988; McFall et al., 1990). It has been used frequently among veterans, but a version for civilians has also been developed (Keane et al., 2004).

Still, as noted in the Institute of Medicine *Diagnosis and Assessment* report, “none of these instruments alone can provide a comprehensive diagnosis and assessment of PTSD patient or replace a health care professional trained in diagnosing psychiatric disorders” (IOM, 2006, p. 36).

### *PTSD Scales Derived from Other Standardized Tests*

In addition to tests that measure PTSD symptoms per se, investigators have derived PTSD scales from extant standardized tests. One of the most frequently used scales was derived from the Minnesota Multiphasic Personality Inventory (MMPI). The PK scale (Keane et al., 1984) was derived from the original MMPI but was updated when the MMPI-2 was released and is now referred to as the MMPI-2 PK scale (Lyons and Keane, 1992). The PK scale has good reliability and validity, particularly when the diagnostic criterion of PTSD is measured using rigorous clinician-administered structured interviews for PTSD at the diagnostic level (Keane et al., 2004).

The Symptom Checklist-90 (SCL-90; Derogatis, 1977) is a self-report test that has nine subscales measuring somatization, depression, anxiety, phobic anxiety, hostility, and four other characteristics using a 5-point rating scale for each of the 90 items. The SCL-90 has been used extensively, has excellent reliability and validity, and has extensive norms. Two research groups have developed PTSD scales from the SCL-90. Saunders and colleagues (1990) developed a Crime-Related PTSD (CR-PTSD) scale using a representative sample of female crime victims. The CR-PTSD scale has excellent reliability and also has been found to equal or exceed the Impact of Event Scale in detecting PTSD as measured by diagnostic interview (Arata et al., 1991; Dutton et al., 1994). Ursano and colleagues (Ursano et al., 1995; Fullerton et al., 2000) used a different strategy to construct a PTSD scale from the MMPI by using SCL-90 items supplemented by new items to tap PTSD symptoms not captured by the SCL-90. This scale has good reliability as well as good sensitivity and specificity in samples of disaster and motor accident victims.

The MMPI-2 and SCL-90 are used widely in clinical assessment for posttraumatic stress reactions, and both these tests yield clinically useful information (Elhai et al., 2005). Thus, the PTSD scales derived from these tests can provide information about probable PTSD status. However, the same caveat exists about these scales as was true for the other tests measuring PTSD symptoms: they should not be used to make a PTSD diagnosis in a clinical assessment situation.

### *Tests That Evaluate Malingering*

The *DSM-IV* defines malingering as “the intentional production of false or grossly exaggerated physical or psychological symptoms motivated by external incentives . . . such as obtaining financial compensation” (APA, 1994, p. 683). Resnick (1997) notes that there are actually three types of malingering: (1) *pure malingering*, for example, complete fabrication of symptoms of traumatic events that are alleged to produce symptoms; (2) *partial malingering*, such as exaggeration of symptoms or embellishing traumatic events; and (3) *false imputation*, an intentionally inaccurate attribution of symptoms to a traumatic event. Obviously, each of these three types of malingering could apply not just to symptoms but also to other areas of impaired functioning or disability. Rogers and Cruise highlight the high stakes involved in misclassification of malingering cases in forensic settings:

The devastation to defendants or plaintiffs of being falsely accused of malingering by forensic experts is unimaginable. Conversely, undetected

cases of malingering wreak their own havoc (Rogers and Cruise, 1998, p. 281).

In the context of assessment for service-connected disability status for PTSD, the consequences of falsely accusing a veteran of malingering are no less devastating. It is thus important to use the best methods possible to detect real cases of malingering.

Notwithstanding the need for a reliable, valid way to detect malingering, experts agree that there is no magic bullet or gold standard for doing so (Guriel and Fremouw, 2003; Resnick, 1997; Rogers, 1997; Wilson and Moran, 2004). In the type of clinical assessments used to determine service-connected compensation for PTSD, there is rarely clear, definitive evidence that pure malingering as defined by Resnick has occurred. For that reason, in the research literature on malingering for PTSD there are no ecologically valid studies that have carefully ascertained pure malingering status criterion groups (that is, malingering cases versus true cases) using real-world assessment situations (Guriel and Fremouw, 2003). Several investigators have used response set or validity scales from self-report measures such as the MMPI and MMPI-2 to indirectly infer the possibility of malingering (Guriel and Fremouw, 2003; Taylor et al., 2007; Wilson and Moran, 2004). Most of those MMPI or MMPI-2 PTSD malingering studies used simulation designs or analogue settings in which individuals are provided a small incentive to respond to assessment materials in a certain fashion (for example, to respond as if they had depression or PTSD). Test responses are then compared to responses from comparison groups or to responses from groups of people known to have the disorder in question. By comparing the response set or validity scale scores of the group simulating the disorder with those of the comparison group, researchers attempt to infer malingering. But simulation designs fall short of real-life forensic-assessment situations in several ways that severely limit external validity or generalizability (Guriel and Fremouw, 2003; Rogers and Cruise, 1998).

Known-group-comparison designs involve comparing the test responses of individuals who are known to be malingering a specific disorder versus those who actually have the disorder, but studies using this design are plagued by the difficulty in identifying which individuals are actually responding dishonestly (Guriel and Fremouw, 2003).

A third basic type of study design has been called *differential prevalence* (Rogers and Cruise, 1998). It compares test scores (including validity scales measuring response sets) of groups that are presumed to differ in response sets. For example, such studies generally compare groups of veterans who are seeking service-connected compensation for PTSD versus those who are not, under the assumption that applying for disability increases the likelihood that malingering will occur.

Some have argued that the MMPI and MMPI-2 are objective measures of psychopathology and that the validity scales provide objective evidence of whether respondents are likely to be malingering (for example, Arbisi et al., 2004). The MMPI and MMPI-2 are excellent standardized tests with an extremely well-developed research base. However, the MMPI and MMPI-2 are self-report measures, and they are “objective” tests only in the sense that they are not projective tests. Clearly, their validity scales can be useful in providing some information about response set, but scores on these scales cannot provide definitive objective information on whether a respondent is malingering. Reviewers who have examined the research literature on PTSD malingering conclude that there are major limitations with simulation designs, known-groups-comparison designs, and differential-prevalence designs (Guriel and Fremouw, 2003; Rogers and Cruise, 1998).

These limitations suggest that it is insufficient to use response-set validity scale scores from the MMPI, MMPI-2, or any other test as the sole basis for alleging that a veteran is malingering with respect to PTSD status. The MMPI and MMPI-2 are identified in the *Best Practice Manual* (Watson et al., 2002) as useful in identifying the test-taking style of veterans (including over- and underendorsing) and as having value in a comprehensive assessment of service-connected PTSD status. The committee agrees but cautions that as reliable, valid, and sensitive measures of malingering, the MMPI-2 and other standardized tests have serious limitations that should be recognized.

The topic of testing to evaluate malingering is addressed in greater detail in Chapter 6, in the section entitled “The Effect of Compensation on Recovery.”

### *Summary Observations*

The committee concludes that psychological testing may be a useful adjunct to the PTSD C&P examination but recommends that the decision of whether to test and of which tests are appropriate should be left to the discretion of the clinician—the person who is best able to evaluate the individual circumstances of the case.

### **Timing Between a Stressor and the Appearance of Symptoms**

The VA charged the committee to address whether the scientific literature supports the existence of a form of PTSD where there is a long time interval between the stressor and the onset of symptoms. This is a question that has received considerable research attention. However, the issues related to the duration between exposure to a stressor and

- the onset of symptoms (each of which—intrusion, avoidance, and arousal—may have its own trajectory);
- the meeting of all criteria for a diagnosis of PTSD;
- the seeking of care; and
- the obtaining of a diagnosis

are complex, and while they are related, they present distinct clinical and research obstacles.

Determining whether an apparent case of delayed-onset PTSD is actually delayed poses challenges in both clinical and research settings. The difficulty can be attributed to several factors. Foremost, it is rare that a careful longitudinal assessment has been conducted, with data collection beginning soon after exposure to a stressor and continuing long enough to establish (1) the developmental trajectory of PTSD symptoms, (2) the documentation of diagnostic criteria, and (3) the full diagnostic assessment itself. Such information is needed to determine with some degree of confidence how long after exposure symptoms occurred, which and when individual diagnostic criteria manifested, and when and under which version of the *DSM* all diagnostic criteria for the PTSD diagnosis were met. Additionally, there exists a subpopulation of veterans with PTSD who do not seek mental health treatment services or compensation from the Department of Veterans Affairs at the time of the onset of the disease. When such veterans present with PTSD symptoms for treatment or compensation evaluation long after their military service, what appears to be “delayed-onset” PTSD may actually be a delayed diagnosis of a disorder that has been present for a substantial period of time.

Some individuals exposed to potentially traumatic events, including war-zone stressors, develop subthreshold PTSD—that is, they meet some of the B, C, and D criteria for PTSD (see Table 3-1) but not all, or they fall one or two symptoms short of meeting full diagnostic criteria. Such individuals may not have a history of full PTSD, but with slight increases in symptomatology these cases can cross the diagnostic threshold to become full PTSD. Thus, what appears to be a new, delayed-onset case may actually be someone who for years has experienced symptoms just short of the benchmark criteria required for PTSD diagnosis and who becomes a case due to a small increase in symptomatology.

There are numerous risk and protective factors that influence how exposure to war-zone and other traumatic stressors leads to the development of PTSD and thus play a role in the timing of PTSD onset. Protective factors, such as high IQ, intact cortical functioning, and strong social support networks, may originally act to suppress or mitigate PTSD symptoms but then later erode with advancing age, reducing their protective value against PTSD. Or some people with chronic PTSD and related loss of function may

seek compensation later in life, as their capacity for resiliency diminishes. The often-seen consequences and comorbidities of PTSD, such as substance abuse, depression, panic, and somatic symptoms, may heighten PTSD-related loss of function as they manifest and make a person more likely to seek help as time goes on. And substance abuse can represent attempts at self-medication, which may lead some to delay seeking care or compensation until much later than the actual trauma occurred. However, it should be recognized that seeking care or compensation for PTSD years after an inciting event does not necessarily mean that the disorder was of delayed onset *per se*. A delay in symptom-related loss of function or in an individual's focus on and attention to symptoms and functional loss may simply be the result of various contextual life changes that occur over time.

It is also the case that risk factors, such as exposure to a new traumatic stressor or vicarious exposure to stressors via extensive media coverage of new wars, can increase over time. Just as in the case of a decrease in protective factors, an increase in risk factors might be expected to produce cases of PTSD that were apparently of delayed onset but that would be more correctly viewed as subthreshold cases that were exacerbated by events that occurred long after exposure to war-zone stressors.

A study of temporal trends, PTSD, and depression among combat injured soldiers (Grieger et al., 2006) found that, among a group of soldiers from the Iraq war followed for one year postinjury, the signs and symptoms of PTSD waxed and waned over that year—present at some times and not at others. Approximately 40 percent of those diagnosed with PTSD in the first seven months after serious combat injury—having been screened at one, four, and seven months—did not have the diagnosis until seven months after combat injury (Grieger et al., 2006). There are also many documented cases of even longer delays in PTSD onset. Among Israeli veterans of the 1982 Lebanon War who were followed for 20 years after the war, approximately 5 percent of those who had a combat stress reaction but no PTSD in the first three years postcombat met PTSD criteria at the 20-year follow-up. Even more striking, of those who had neither a combat stress reaction nor a diagnosis of PTSD at 1, 2, or 3 years postcombat, approximately 9 percent had PTSD 20 years postcombat (Solomon and Mikulincer, 2006).

While delayed-onset PTSD was not observed in some studies of war veterans (Bremner et al., 1996; Kluznik et al., 1986), the results of other studies do support the existence of delayed-onset (onset six months or more after the traumatic event) PTSD and suggest that delayed onset may be more likely in cases caused by combat trauma than in cases caused by other traumatic exposures (Gray et al., 2004). About 22 percent of men studied in the National Comorbidity Study who had combat-related PTSD had delayed-onset PTSD (Prigerson et al., 2001). Those with PTSD related to combat trauma were about 4.5 times more likely to have a delayed type

of PTSD than were men with PTSD related to other types of trauma. A study of Vietnam veterans using data from the National Vietnam Veterans Readjustment Study and the Hawaii Vietnam Veterans Project (Schnurr et al., 2003) found 40 percent of the PTSD cases were delayed onset with symptoms occurring 2 or more years after entering Vietnam.

Delayed-onset PTSD has also been reported among noncombat trauma-exposed populations (North et al., 2002, 2004; North, 2001). In a two-year study of 103 motor-vehicle-accident survivors, 25 had PTSD at two years (Bryant and Harvey, 2002). Of those 25, 5 of them, or 20 percent, had not met the criteria for PTSD at six months and thus had delayed-onset PTSD. In addition, of the five patients with delayed-onset PTSD, four of them had not been diagnosed with acute stress disorder in the first month after the accident (although in general they did have higher symptom levels at one month than those who never had PTSD during the period of follow-up). Roughly half (47 percent) of the PTSD cases seen in a cohort of injury admissions to the trauma service of a hospital were delayed-onset cases, where PTSD was observed at 12 months but not at 3 months (Carty et al., 2006). One study of delayed-onset PTSD after motor-vehicle accidents reported that 20 percent of the cases of the PTSD diagnosed during one year of follow-up after the accident were delayed-onset cases (Ehlers et al., 1998). Other studies of motor-vehicle-accident cohorts have reported from 8 percent (Koren et al., 2001) to 50 percent (Mayou, 1997) of the cases of PTSD being delayed onset—having been detected at four to five years after the accident but not at one year. In a long-term follow-up study of a ship disaster (Yule et al., 2000), 10 percent of PTSD cases had delayed onset of PTSD.

Delayed-onset PTSD is consistently observed, albeit in a fraction of the overall PTSD cases, and data indicate that delayed-onset PTSD is perhaps more common among those exposed to war-related trauma than among those exposed to other kinds of trauma. Some cases of delayed-onset PTSD are symptomatic individuals who do not meet all the criteria of PTSD. It has been reported that subsyndromal cases often fail to meet the avoidance criteria of PTSD (McMillen et al., 2000; Dirkwagner et al., 2001; Carty et al., 2006). A number of factors have been found to be associated with the delayed onset of PTSD in previously undiagnosed individuals, including the occurrence of negative life events, decline in self-esteem, ethnicity, and negative health changes. These factors have been shown to exacerbate symptoms in those with existing PTSD as well (Port et al., 2002; Adams and Boscarino, 2006; Holloway et al., 1984; Ruzich et al., 2005).

Late life brings additional challenges to the assessment, diagnosis, and trajectory of war-related PTSD (Davison et al., 2006; Owens et al., 2005). Cognitive decline, life losses, medical illness, increased feelings of powerlessness, and the psychological changes related to decreased autonomy and

decreased feelings of control and efficacy have all been reported as possible explanations for the increases in PTSD symptoms observed with aging. However, little empirical research addresses these issues directly. Issues related to the variation in the battlefield environment (such as the nature of threats and trauma types experienced) across different war cohorts (World War II, Korea, Vietnam, and Operation Enduring Freedom/Operation Iraqi Freedom) compound the difficulty of assessing any changes in rates of PTSD in the aging veteran.

### *Summary Observations*

Based on its review, the committee concludes that the scientific literature supports the existence of a form of PTSD that manifests long after the occurrence of the stressor upon which the diagnosis is based. In addition, clinical experience indicates that some persons who are exposed to traumatic events may develop PTSD that is not recognized for an extended period of time and that others may develop some symptoms of PTSD that do not cross the diagnostic threshold to become incident cases of full PTSD until long after exposure to the stressor. The scientific literature does not identify any differences material to the consideration of compensation between these delayed-onset or delayed-identification cases and those chronic PTSD cases where there is a shorter time interval between the stressor and the onset of symptoms. The committee did not address the issue of whether there may be differences relevant to treatment decisions.

## FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

On the basis of the review of the papers, reports, and other information presented in this chapter, the committee has reached the following findings, conclusions, and recommendations, and identified the following research needs.

### Findings and Conclusions

- The GAF score has limited usefulness in the assessment of the level of disability for PTSD compensation. The score is only marginally applicable to PTSD because of its emphasis on the symptoms of mood disorder and schizophrenia and its limited range of symptom content.
- There is no scientific guidance addressing the separation of symptoms of comorbid mental disorders for the purpose of identifying their relative contributions to a subject's condition.
- The scientific literature supports the existence of a form of PTSD that manifests long after the occurrence of the stressor upon which the

diagnosis is based. In addition, clinical experience indicates that some persons who are exposed to traumatic events may develop PTSD that is not recognized for an extended period of time and that others may develop some symptoms of PTSD that do not cross the diagnostic threshold to become incident cases of full PTSD until long after exposure to the stressor. The scientific literature does not identify any differences material to the consideration of compensation between these delayed-onset or delayed-identification cases and those chronic PTSD cases where there is a shorter time interval between the stressor and the onset of symptoms.

### Recommendations

- In the short term, VA should ensure that its mental-health professionals are well informed about the uses and limitations of the GAF, that it make certain—to the extent possible—that these professionals are trained to implement the GAF in a consistent and uniform manner, and that it provide periodic, mandatory retraining to minimize drift and variation in scoring over time and across facilities.
- In the longer term, VA should identify and implement an appropriate replacement for the GAF: one or more measures that focus on the symptoms of PTSD used to define the disorder and on the other domains of disability assessment. The research needed to accomplish this effort should be facilitated.
- A national standardized training program should be developed for VA and VA-contracted clinicians who conduct compensation and pension psychiatric evaluations. This training program should emphasize diagnostic criteria for PTSD and comorbid conditions with overlapping symptoms, as set forth in the *DSM*.
- Psychological testing may be a useful adjunct to the PTSD compensation and pension examination, but the committee recommends that the decision of whether to test and of which tests are appropriate should be left to the discretion of the clinician—the person who is best able to evaluate the individual circumstances of the case.

### REFERENCES

- Adams RE, Boscarino JA. 2006. Predictors of PTSD and delayed PTSD after disaster: the impact of exposure and psychosocial resources. *Journal of Nervous and Mental Disorders* 194:485–493.
- APA (American Psychiatric Association). 1994. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*. Washington, DC: APA.
- APA. 2000. *Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR, Fourth Edition (Text Revisions)*. Washington, DC: APA.

- APA. 2004. *Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*. Work Group on ASD and PTSD (RJ Ursano, chair) and Steering Committee on Practice Guidelines (JS McIntyre and SC Charles, co-chairs). [Online]. Available: [http://www.psych.org/psych\\_pract/treat/pg/PTSD-PG-PartsA-B-C-New.pdf](http://www.psych.org/psych_pract/treat/pg/PTSD-PG-PartsA-B-C-New.pdf) [accessed January 13, 2007].
- Arata CM, Saunders BE, Kilpatrick DG. 1991. Concurrent validity of a crime-related Post-Traumatic Stress Disorder scale for women within the Symptom Checklist-90-Revised. *Violence and Victims* 6(3):191-199.
- Arbisi PA, Murdoch M, Fortier L, McNulty J. 2004. MMPI-2 validity and award of service connection for PTSD during the VA compensation and pension evaluation. *Psychological Services* 1(1):56-67.
- Beckham JC, Moore SD, Feldman ME, Hertzberg MA, Kirby AC, Fairbank JA. 1998. Self-report and physician-rated health in combat veterans with posttraumatic stress disorder. *American Journal of Psychiatry* 155:1565-1569.
- Black DW, Carney CP, Peloso PM, Woolson RF, Schwartz DA, Voelker MD, Barrett DH, Doebbeling BN. 2004. Gulf War veterans with anxiety: prevalence, comorbidity, and risk factors. *Epidemiology* 15(2):135-142.
- Bremner JD, Southwick SM, Darnell A, Charney DS. 1996. Chronic PTSD in Vietnam combat veterans: course of illness and substance abuse. *American Journal of Psychiatry* 153(3):369-375.
- Bryant RA, Harvey AG. 2002. Delayed-onset posttraumatic stress disorder: a prospective evaluation. *Australian and New Zealand Journal of Psychiatry* 36:205-209.
- Burlingame GM, Dunn TW, Chen S, Lehman A, Axman R, Earnshaw D, Rees FM. 2005. Special section on the GAF: selection of outcome assessment instruments for inpatients with severe and persistent mental illness. *Psychiatric Services* 56(4):444-451.
- Carlson JG, Chemtob CM, Rusnak K, Hedlund NL, Muraoka MY. 1998. Eye movement desensitization and reprocessing (EMDR) treatment for combat-related posttraumatic stress disorder. *Journal of Traumatic Stress* 11(1):3-24.
- Carty J, O'Donnell ML, Creamer M. 2006. Delayed-onset PTSD: a prospective study of injury survivors. *Journal of Affective Disorders* 90:257-261.
- CBO (Congressional Budget Office, Congress of the United States). 1982. *Disability Compensation: Current Issues and Options for Change*. [Online]. Available: <http://www.cbo.gov/ftpdocs/51xx/doc5143/doc21b-Entire.pdf> [accessed June 23, 2007].
- Connor KM, Foa EB, Davidson JR. 2006. Practical assessment and evaluation of mental health problems following a mass disaster. *Journal of Clinical Psychiatry* 67(Suppl. 2):26-33.
- CPEP (Compensation and Pension Examination, Program Office). 2006. *CPEP Overview for the Veterans' Disability Benefits Commission, June 21, 2006*. Presentation before the Veterans Disability Benefits Commission. [Online]. Available: [https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/June\\_2006/CPEPBriefing\\_June2006.pdf](https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/June_2006/CPEPBriefing_June2006.pdf) [accessed February 11, 2007].
- Davison EH, Pless AP, Gugliucci MR, King LA, King DW, Salgado DM, Spiro A, Bachrach P. 2006. Late-life emergence of early-life trauma: The phenomenon of Late-Onset Stress Symptomatology among aging combat veterans. *Research on Aging* 28:84-114.
- Davidson JRT, Book SW, Colket JT, Tupler LA, Roth S, David D, Hertzberg M, Mellman T, Beckham JC, Smith RD, Davison RM, Katz R, Feldman ME. 1997. Assessment of a new self-rating scale for post-traumatic stress disorder. *Psychological Medicine* 27(1):153-160.
- Derogatis LR. 1977. *SCL-90-R Version Manual: Scoring Administration and Procedures for the SCL-90*. Baltimore, MD: Johns Hopkins University School of Medicine.

- Dirkzwagner AJ, Bransen I, van der Ploeg HM, 2001. The longitudinal course of posttraumatic stress disorder symptoms among aging military veterans. *Journal of Nervous and Mental Disorders* 189:846–853.
- Dutton MA, Burghardt KJ, Perrin SG, Chrestman KR, Halle PM. 1994. Battered women's cognitive schemata. *Journal of Traumatic Stress* 7(2):237–255.
- DVA (U.S. Department of Veterans Affairs). 2002. *C&P Service Clinician's Guide*. Version 3.0. LR Coulson, ed. [Online]. Available: <http://www.warms.vba.va.gov/admin21/guide/cliniciansguide.doc> [accessed February 11, 2007].
- DVA. 2005. *Review of State Variances in VA Disability Compensation Payments*. DVA Office of the Inspector General. Report No. 05-00765-137. Washington, DC.
- DVA. 2006. *VA Adjudication Procedure Manual M21-1MR, Part I, Chapter 1, Section A*. [Online]. Available: [http://www.warms.vba.va.gov/admin21/m21\\_1/mr/part1/ch01/ch01\\_seca.doc](http://www.warms.vba.va.gov/admin21/m21_1/mr/part1/ch01/ch01_seca.doc) [accessed February 11, 2007].
- Ehlers A, Mayou RA, Bryant, B. 1998. Psychological predictors of chronic posttraumatic stress disorder after motor vehicle accidents. *Journal of Abnormal Psychology* 107:508–519.
- Elhai JD, Gray MJ, Kashdan TB, Franklin CL. 2005. Which instruments are most commonly used to assess traumatic event exposure and posttraumatic effects? A survey of traumatic stress professionals. *Journal of Traumatic Stress* 18:541–545.
- Endicott J, Spitzer RL, Fleiss JL, Cohen J. 1976. The global assessment scale: a procedure for measuring overall severity of psychiatric disturbance. *Archives of General Psychiatry* 33(6):766–771.
- Falsetti SA, Resnick HS, Resick PA, Kilpatrick DG. 1993. The modified PTSD symptom scale: a brief self-report measure of posttraumatic stress disorder. *Behavior Therapist* 16:161–162.
- Foa EB, Cashman L, Jaycox L, Perry, K. 1997. The validation of a self-report measure of posttraumatic stress disorder: the posttraumatic stress disorder scale. *Psychological Assessment* 9(4):445–451.
- Fontana A, Rosenheck R. 2006. Treatment of female veterans with posttraumatic stress disorder: the role of comfort in a predominantly male environment. *Psychiatric Quarterly* 77(1):55–67.
- Fullerton CS, Ursano RJ, Epstein RS, Crowley B, Vance K, Kao T, Baum A. 2000. Peritraumatic dissociation following motor vehicle accidents: relationship to prior trauma and prior major depression. *Journal of Nervous and Mental Disease* 188:267–272.
- Gray MJ, Bolton EE, Litz BT. 2004. A longitudinal analysis of PTSD symptom course: delayed-onset PTSD in Somalia peacekeepers. *Journal of Consulting and Clinical Psychology* 72:909–913.
- Greenberg SA, Shuman DW. 1997. Irreconcilable conflict between therapeutic and forensic roles. *Professional Psychology: Research and Practice* 28(1):50–57.
- Grieger TA, Cozza SJ, Ursano RJ, Hoge C, Martinez PE, Engel CC, Wain HJ. 2006. Posttraumatic stress disorder and depression in battle-injured soldiers. *American Journal of Psychiatry* 163(10):1777–1783.
- Guriel J, Fremouw W. 2003. Assessing malingered posttraumatic stress disorder: a critical review. *Clinical Psychology Review* 23(7):881–904.
- Holloway HC, Ursano RJ. 1984. The Vietnam veteran: memory, social context, and metaphor. *Psychiatry: Journal of Interpersonal and Biological Processes* 47(2):103–108.
- IOM (Institute of Medicine). 2006. *Posttraumatic Stress Disorder: Diagnosis and Assessment*. Washington, DC: The National Academies Press.
- IOM. 2007. *A 21st Century System for Evaluating Veterans for Disability Benefits*. Washington, DC: The National Academies Press.

- Keane TM, Malloy PF, Fairbank JA. 1984. Empirical development of an MMPI subscale for the assessment of combat-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology* 52(5):888–891.
- Keane TM, Caddell JM, Taylor KL. 1988. Mississippi scale for combat-related posttraumatic stress disorder: Three studies in reliability and validity. *Journal of Consulting and Clinical Psychology* 56(1):85–90.
- Keane TM, Street AE, Stafford J. 2004. The assessment of military-related PTSD. Pp. 262–288 in JP Wilson and TM Keane, eds. *Assessing Psychological Trauma, Second Edition*. New York: Guilford.
- Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. 1995. Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry* 52(12):1048–1060.
- Kilpatrick DG, Resnick HS, Freedy JR, Pelcovitz D, Resick P, Roth S, van der Kolk B. 1998. Posttraumatic stress disorder field trial: evaluation of the PTSD construct—Criteria A through E. Pp. 803–844 in T Widiger, A Frances, H Pincus, R Ross, M First, W Davis, M Kline., eds. *DSM-IV Sourcebook. Volume 4*. Washington, DC: American Psychiatric Press.
- Kimerling R, Prims A, Westrup D, Lee T. 2004. Gender issues in the assessment of PTSD. Pp. 565–602 in JP Wilson and TM Keane, eds. *Assessing Psychological Trauma, Second Edition*. New York: Guilford.
- Kluznik JC, Speed NH, Van Valkenburg C, Magraw R. 1986. Forty-year follow-up of United States prisoners of war. *American Journal of Psychiatry* 143:1443–1446.
- Koren D, Arnon I, Klein E. 2001. Long-term course of chronic posttraumatic stress disorder in traffic accident victims: a three-year prospective follow-up study. *Behavior Research and Therapy* 39:1449–1458.
- Kubany ES, Leisen MB, Kaplan AS, Kelly MP. 2000. Validation of a brief measure of post-traumatic stress disorder: the Distressing Life Events Questionnaire (DEQ). *Psychological Assessment* 12(2):197–209.
- Lerner F. 2006. *PILOTS Database Instruments Authority List, June 2006*. National Center for Post-Traumatic Stress Disorder, VA Medical Center, White River Junction, VT. [Online]. Available: <http://www.ncptsd.va.gov/publications/pilots/Instruments.PDF> [accessed January 17, 2007].
- Lyons JA, Keane TM. 1992. Keane PTSD scale: MMPI and MMPI-2 update. *Journal of Traumatic Stress* 5(1):111–117.
- MacDonald-Wilson K, Rogers ES, Anthony W A. 2001. Unique issues in assessing work function among individuals with psychiatric disabilities. *Journal of Occupational Rehabilitation* 11(3):217–232.
- Mayou R, Tyndel S, Bryant B. 1997. Long-term outcome of motor vehicle accident injury. *Psychosomatic Medicine* 59:578–584.
- McFall ME, Smith DE, Roszell DK, Tarver DJ, Malas KL. 1990. Convergent validity of measures of PTSD in Vietnam combat veterans. *American Journal of Psychiatry* 147(5): 645–648.
- McMillen JC, North CS, Smith EM. 2000. What parts of PTSD are normal: intrusion, avoidance, or arousal? Data from the Northridge, California, earthquake. *Journal of Traumatic Stress* 13(1):57–75.
- Merrill LL, Newell CE, Thomsen CJ, Gold SR, Milner JS, Koss MP, Rosswork SG. 1999. Childhood sexual abuse and sexual revictimization in a female navy recruit sample. *Journal of Traumatic Stress* 12:211.
- Murdoch M, van Ryn M, Hodges J, Cowper D. 2005. Mitigating effect of Department of Veterans Affairs disability benefits for post-traumatic stress disorder on low income. *Military Medicine* 170(2):137–140.

- Norris FH, Hamblen JL. 2004. Standardized self-report measures of civilian trauma and PTSD. Pp. 63–102 in JP Wilson and TM Keane, eds. *Assessing Psychological Trauma and PTSD, Second Edition*. New York: Guilford.
- North C. 2001. The course of post-traumatic stress disorder after the Oklahoma City bombing. *Military Medicine* 166(12 Suppl):51–52.
- North CS, McCutcheon V, Spitznagel EL, Smith EM. 2002. Three-year follow-up of survivors of a mass shooting episode. *Journal of Urban Health* 79(3):383–391.
- North CS, Pfefferbaum B, Tivis L, Kawasaki A, Reddy C, Spitznagel EL. 2004. The course of posttraumatic stress disorder in a follow-up study of survivors of the Oklahoma City bombing. *Annals of Clinical Psychiatry* 16(4):209–215.
- Owens GP, Baker DG, Kasckow J, Ciesla JA, Mohamed S. 2005. Review of assessment and treatment of PTSD among elderly veterans. *International Journal of Geriatric Psychiatry* 20(12):1118–1130.
- Polak P, Warner R. 1996. The economic life of seriously mentally ill people in the community. *Psychiatric Services* 47(3):270–274.
- Port CL, Engdahl B, Frazier P, Eberly R. 2002. Factors related to the long-term course of PTSD in older ex-prisoners of war. *Journal of Clinical Geropsychology* 8(3):203–214.
- Prigerson HG, Maciejewski PK, Rosenheck RA. 2001. Combat trauma: trauma with highest risk of delayed onset and unresolved posttraumatic stress disorder symptoms, unemployment, and abuse among men. *Journal of Nervous and Mental Disease* 18(2):99–108.
- QTC (QTC Management, Inc.). 2006 (June 21). QTC—electronic examination service. [PowerPoint presentation]. Washington, DC: Veterans' Disability Benefits Commission. [Online]. Available: [https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/June\\_2006/QTCOverview\\_June2006.pdf](https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/June_2006/QTCOverview_June2006.pdf) [accessed September 7, 2006].
- Resnick PJ. 1997. Malingering of posttraumatic stress disorders. Pp. 130–152 in R Rogers, ed. *Clinical Assessment of Malingering and Deception, Second Edition*. New York: Guilford.
- Rogers R (Ed.). 1997. *Clinical Assessment of Malingering and Deception* (2nd ed.). New York: Guilford Press.
- Rogers R, Cruise KR. 1998. Assessment of malingering with simulation designs: threats to external validity. *Law and Human Behavior* 22(3):273–285.
- Ruzich MJ, Looi JC, Robertson MD. 2005. Delayed onset of posttraumatic stress disorder among male combat veterans: a case series. *American Journal of Geriatric Psychiatry* 13(5):424–427.
- Sadler AG, Booth BM, Mengeling MA, Doebbeling BN. 2004. Life span and repeated violence against women during military service: effects on health status and outpatient utilization. *Journal of Women's Health* 13(7):799–811.
- Saunders BE, Arata CM, Kilpatrick DG. 1990. Development of a crime-related posttraumatic stress disorder scale for women within the Symptom Checklist-90-Revised. *Journal of Traumatic Stress* 3(3):439–448.
- Schechter ES. 1999. Industry, occupation, and disability insurance beneficiary work return. *Social Security Bulletin* 62(1):10–22.
- Schnurr PA, Lunny CA, Sengupta A, Waelde LC. 2003. A descriptive analysis of PTSD chronicity in Vietnam veterans. *Journal of Traumatic Stress* 16(6):545–553.
- Solomon Z, Mikulincer M. 2006. Trajectories of PTSD: A 20-year longitudinal study. *American Journal of Psychiatry* 163(4):659–666.
- Stichman BF. 2006. *Problems Faced by Veterans in Obtaining Disability Compensation from the Department of Veteran's Affairs for Post Traumatic Stress Disorder*. Presentation before the Committee on Veterans' Compensation for Posttraumatic Stress Disorder. June 6, 2006. Washington, DC.

- Svanborg P, Asberg M. 1994. A new self-rating scale for depression and anxiety states based on the comprehensive psychopathological rating scale. *Acta Psychiatrica Scandinavica* 89(1):21–28.
- Szybala RL. 2006. *Statement of Renée L. Szybala, Director, Compensation and Pension Service, to the National Academy of Sciences' Institute of Medicine Committee on VA Compensation for Posttraumatic Stress Disorder, May 2, 2006*. [Online]. Available: <http://www.iom.edu/File.aspx?ID=34556> [accessed October 12, 2006].
- Taylor S, Frueh BC, Asmundson GJ. 2007. Detection and management of malingering in people presenting for treatment of posttraumatic stress disorder: methods, obstacles, and recommendations. *Journal of Anxiety Disorders* 21(1):22–41.
- Thornton C, Fraker T, Livermore G, Stapleton D, O'Day B, Silva T, Martin ES, Kregel J, Wright D. 2006. *Evaluation of the Ticket to Work Program: Implementation Experience During the Second Two Years of Operations (2003-2004)*. Washington, DC: Mathematica Policy Research, Inc. and Cornell University Institute for Policy Research.
- Tolin DF, Maltby N, Weathers FW, Litz BT, Knight J, Keane TM. 2004. The use of the MMPI-2 Infrequency-psychopathology scale in the assessment of posttraumatic stress disorder in male veterans. *Journal of Psychopathology and Behavioral Assessment* 26(1):23–29.
- Ursano RJ, Fullerton CS, Kao TC, Bhartiya VR. 1995. Longitudinal assessment of posttraumatic stress disorder and depression after exposure to traumatic death. *Journal of Nervous and Mental Disease* 183(1):36–42.
- VA Employee Education System (EES). 2004. *Understanding the C&P PTSD Examination Process*. Video. [Online]. Available: [http://www.ncptsd.va.gov/ncmain/ncdocs/videos/emv\\_cpexam\\_mhcp.html](http://www.ncptsd.va.gov/ncmain/ncdocs/videos/emv_cpexam_mhcp.html) [accessed March 2, 2007].
- VBA (Veterans Benefits Administration). 2005. *Handbook for Veterans Service Representatives*. Washington, DC: Department of Veterans Affairs.
- VBA. 2006 (June 21). *VBA Compensation and Pension Service—Overview of Disability Compensation and Pension Examinations*. Presentation to the Veterans Disability Benefits Commission by Tom Pamperin, assistant director for policy, and Bonnie Miranda, assistant director for training. [Online]. Available: [https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/June\\_2006/VBAPresentation\\_6-21-06.pdf](https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/June_2006/VBAPresentation_6-21-06.pdf) [accessed September 7, 2006].
- VDBC (Veteran's Disability Benefits Commission). 2006. *Meeting Minutes, September 13-15, 2006*. [Online]. Available: [https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/October - 2006/SeptemberMinutes\\_final.pdf](https://www.1888932-2946.ws/vetscommission/e-documentmanager/gallery/Documents/October - 2006/SeptemberMinutes_final.pdf) [accessed June 23, 2007].
- VHA (Veterans Health Administration). 1997. *VHA Directive 97-059. Instituting Global Assessment of Function (GAF) Scores in Axis V for Mental Health Patients*. Dated November 25, 1997. Washington, DC: VHA.
- VHA. 2006 (April 3). *Compensation and Pension (C&P) Examinations*. VHA Handbook 1601E.01. Washington, DC: VHA.
- Watson P, McFall M, McBrine C, Schnurr PP, Friedman MJ, Keane T, Hamblen JL. 2002. *Best Practice Manual for Posttraumatic Stress Disorder (PTSD) Compensation and Pension Examinations*. [Online]. Available: <http://www.avapl.org/pub/PTSD%20Manual%20final%206.pdf> [accessed January 13, 2007].
- Weathers FW, Blake DD, Krinsley KE, Haddad WH, Huska JA, and Keane TM. 1992. *The Clinician-Administered PTSD Scale: Reliability and Construct Validity*. Paper presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Boston Mass.
- Weiss DS. 2004. Structured clinical interview techniques for PTSD. Pp. 103–121 in JP Wilson and TM Keane, eds. *Assessing Psychological Trauma, Second Edition*. New York: Guilford.

- Weiss DS, Marmar CR. 1997. Impact of event scale—revised. Pp. 399–411 in JP Wilson and TM Keane, eds. *Assessing Psychological Trauma and PTSD*. New York: Guilford.
- Widiger T, Frances A, Pincus H, Ross R, First M, Davis W, Kline M, eds. 1998. *DSM-IV Sourcebook. Volume 4*. Washington, DC: American Psychiatric Press.
- Wilson JP, Keane TM, eds. 2004. *Assessing Psychological Trauma and PTSD, Second Edition*. New York: Guilford.
- Wilson JP, Moran TA. 2004. Forensic/clinical assessment of psychological trauma and PTSD in legal settings. Pp. 603–636 in JP Wilson and TM Keane, eds. *Assessing Psychological Trauma, Second Edition*. New York: Guilford.
- Yaeger D, Himmelfarb N, Cammack A, Mintz J. 2006. DSM-IV diagnosed posttraumatic stress disorder in women veterans with and without military sexual trauma. *Journal of General Internal Medicine* 21(S3):S65–S69.
- Yule W, Bolton D, Udwin O, Boyle S, O’Ryan D, Nurrish J. 2000. The long-term psychological effects of a disaster experienced in adolescence: I: The incidence and course of PTSD. *Journal of Child Psychology and Psychiatry, and Allied Disciplines* 41:503–511.

## The Evaluation of PTSD Disability Claims

**T**his chapter addresses the evaluation of posttraumatic stress disorder (PTSD) compensation and pension (C&P) claims by the Veterans Benefits Administration (VBA) of the Department of Veterans Affairs (VA). It contains a brief summary of the means by which veterans may obtain compensation for service-related disabilities, background on the claims evaluation process, and the committee's response to elements of the charge related to these evaluations.

### VETERANS' DISABILITY COMPENSATION

Veterans receive disability compensation related to their military service via three basic processes: (1) through the Department of Defense (DOD) Disability Evaluation System (DES); (2) through the federal Transition Assistance Program; and (3) by filing a claim with the VA subsequent to separation from service. Figure 5-1 illustrates the pathways to disability compensation afforded by the programs.

#### The Department of Defense Disability Evaluation System

The core functions of the DOD DES are to ensure that the military force remains fit and to provide compensation for those service members on regular active duty, in the Reserve, or in the National Guard whose military careers are cut short by illness or injury before they meet time-in-service requirements for retirement benefits eligibility. DOD disability benefits are

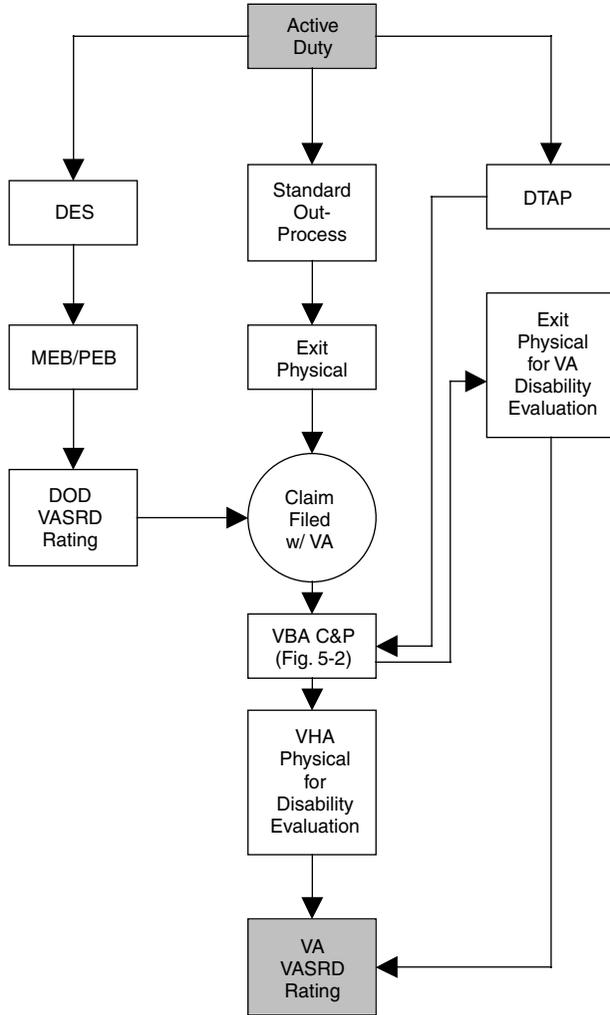


FIGURE 5-1 Military disability compensation pathways.

NOTE: The TAP is left out of this flowchart but is part of all three pathways.

granted to “compensate for the loss of a military career” (DOD, 2006). To qualify for DOD disability compensation, a service-incurred or service-aggravated illness or injury must render a service member permanently unfit to perform the “duties of office, grade, rank, or rating” and must not be the result of “misconduct or willful neglect” (Howard, 2006). Disability is determined according to the effects that a condition has on a service member’s ability to perform according to military occupational specialty.

As a rule,<sup>1</sup> a disability rating is based solely on the “unfitting” condition (DOD, 1996).

DOD compensation awards are based both on disability ratings and on time in service. The compensation may be awarded as a lump-sum severance payment or as monthly payments<sup>2</sup> (GAO, 2006). The standard for the determination of DOD disability ratings—DOD Instruction 1332.39; Title 10, United States Code Chapter 61—is the Department of Veterans Affairs’ Schedule for Rating Disabilities (VASRD) (DOD, 1996). But while the VASRD, as described in the U.S. Code of Federal Regulations, Title 38, Part 4 (38 CFR, Part 4), provides the standard for DOD disability ratings, the DOD considers absolute application of VASRD provisions incompatible with its mission. Thus, the DOD differs from the VA both in how it views the purpose of disability compensation and in how it implements the VASRD. Furthermore, within the DOD variation exists among service branch DESs. DOD regulations are consistent across the different branches, in that they require each DES to have a medical evaluation board and a physical evaluation board, but both the boards and the appeals processes are constituted differently from branch to branch (GAO, 2006).

### *Concurrent Receipt*

When a service member is granted monthly DOD disability compensation, officially referred to as *permanent disability retirement*, he or she is also entitled to be considered for disability compensation through the VA. Until January 2004 permanent disability retirement pay was, by statute, reduced by the dollar amount of VA disability compensation received (Henning, 2006). But Public Law 108-136, in addition to altering other DOD retirement payment policies,<sup>3</sup> authorized a 10-year phase-out of the reduction of military retirement due to VA compensation and allowed *concurrent receipt* of VA and DOD compensation for those veterans with a combined disability rating at or above 50 percent (DOD, 2006). As part of the military retirement offset phase-out, on January 1, 2005 veterans rated

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<sup>1</sup>There are limited circumstances where “the sum of several conditions which render a member unfit” are considered collectively in a disability evaluation (Howard, 2006).

<sup>2</sup>To qualify for monthly compensation, a service member must have accrued 20 years of service or have at least a 30 percent disability rating. Compensation is given as a lump sum for service members with less than 20 years in service or a disability rating of 20 percent or less. Service members are eligible for compensation for “non-aggravated pre-existing” conditions if they have at least 8 years of active-duty service. Service members may also be placed on the temporarily disabled retired list (GAO, 2006).

<sup>3</sup>Two other programs affecting a smaller number of veterans that have had the same material effect as concurrent receipt are the Special Compensation for Severely Disabled Retirees; effective October 1999 and repealed January 2004) and the Combat-Related Special Compensation (enacted in 2002) programs (Henning, 2006).

at 100 percent by the VA became entitled to their full military retirement pay without any offset of VA disability compensation. Those who are not rated at 100 percent according to the schedule of ratings but who receive 100 percent VA compensation under the provision of individual unemployability (IU) are slated to have their full military retirement entitlement restored beginning in October 2009 (DOD, 2006; Henning, 2006).

### Transition Assistance Program

TAP is a joint federal program of the DOD, VA, and the Department of Labor designed to help service members make the initial transition from military service to the civilian workforce. It was first implemented in 1990. Military members who have served at least 180 days on active duty are eligible to participate in TAP. Disabled service members are eligible regardless of time served (GAO, 2005). TAP has four core elements that are intended to help service members adjust successfully to civilian life. Of the four components, VA administers two: the Disabled Transition Assistance Program (DTAP), which offers briefings about the VA's vocational rehabilitation programs, and Benefits Delivery at Discharge (BDD), where VA representatives start processing disability claims before the service member leaves active service.

#### *TAP and DTAP briefings*

All service members who attend a TAP briefing receive a general overview of VA benefits and services. Benefits briefings cover education, insurance, and home loan guaranty entitlements—generally, GI Bill-related items<sup>4</sup>—and are offered to active-duty members at 215 military installations worldwide.<sup>5</sup> The majority of active-duty members can participate in TAP as early as one year before leaving service as a standard component of military out-processing. Retiring service members are eligible for TAP two years before separation (GAO, 2005). Active-duty service members are usually offered TAP at their assigned duty stations. It is less clear how activated Reserve personnel and National Guard personnel access TAP, as demobilization of these personnel takes place in a few days and occurs in areas remote from places of employment or residence (GAO, 2005).

DTAP briefings are provided to service members who are separating from active duty with a disability that may be related to their service.

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<sup>4</sup>The 1944 *Serviceman's Readjustment Act*, also known as the *GI Bill of Rights* entitled veterans to certain home loan and education benefits. The latest iteration, the *Montgomery GI Bill*, was enacted in 1985 (VBA, 2005).

<sup>5</sup>As of June 2005 (GAO, 2005).

They are focused on the VA's Vocational Rehabilitation and Employment Program. While briefings are typically held in a group setting, special provisions can be made for service members who are hospitalized, convalescing, or receiving outpatient treatment (U.S. Army, 2006). Representatives from veterans services organizations can also conduct TAP and DTAP briefings (VBA, 1999).

### *Disabled Transition Assistance Program and Benefits Delivery at Discharge*

The VA has two separate programs that allow personnel to initiate disability claims while still on active duty. The first program, DTAP, “offers [to disabled service members] personalized vocational rehabilitation and employment assistance at major military medical centers where such separations occur and at other military installations” (DVA, 2005a). The second program, BDD,<sup>6</sup> offers assistance to “service members at participating military bases with development of VA disability compensation claims prior to their discharge” (DVA, 2005a). Personnel with access to BDD have the opportunity to have their pre-discharge or exit physicals conducted according to VA protocols by DOD examiners, VA examiners, or contracted examiners (DVA, 2005a). There is an official Memorandum of Understanding (MOU) between the DOD and the VA for the BDD examination process. MOUs are also developed at the local level. These agreements discuss the exchange of information and resources between the DOD and the VA and also seek to ensure that examining clinicians have access to both service medical records and VA examination protocols. It is unclear if BDD replaces DTAP in certain circumstances and how DBB and DTAP eligibility, access, and participation vary.

Ideally, when service members attend TAP briefings, they receive an overview of the vocational rehabilitation program and its eligibility requirements. If they believe that they may be eligible for vocational rehabilitation and express an interest in that program, they can “self-select” into DTAP. They are then given the more in-depth briefings on vocational rehabilitation and can begin the evaluation process.

Barriers to participation in these transition-assistance programs do exist. Members of the Reserves and National Guard, for example, often participate in more than a dozen demobilization activities, including a physical examination, in the matter of just a few days (GAO, 2005), and this gives them little opportunity to participate in a transition-assistance program as well. Furthermore, members of the Reserves and National Guard were

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<sup>6</sup>Service members that are within 180 days of discharge are eligible for BDD examinations (VBA, 2005).

found to be less likely to have been briefed in transition on “certain education benefits and medical coverage requir[ing] service members to apply while they are still on active duty,” and some of those who had received briefings remained unaware of the limited application window for these benefits (GAO, 2005). Reserve and National Guard personnel on medical holdover status do not have the same access to TAP/DTAP programs that active duty personnel on holdover status do because of variation in the processing of military orders (VDBC, 2006). According to the GAO, no “data are available regarding participation in the VA components of TAP,” and “[r]egarding DTAP, no data are available to determine the number of eligible individuals, and VA’s records do not distinguish the number who participate in the component from the total of all recipients of VA outreach briefings” (GAO, 2005).

No matter what disability rating has been determined by the DOD, if a veteran desires compensation from VA, he or she must submit a separate application for disability benefits and have the VA rate their condition all over again. It is possible for a service member found fit for duty by the DOD with respect to a particular condition to be awarded disability compensation by the VA for the same condition. It is even possible to go “from 100 percent fit [for] duty [according to DOD] to 100 percent disabled” according to the VA for the same condition (Howard, 2006).

### VA Disability Claims Adjudication

Veterans’ disability benefits claims may go through many stages of processing and review before a decision is made. Figure 5-2 summarizes this process.

#### *VBA Claims Processing*

A veteran initiates the claims process by filing VA Form 21-526 with a VA Regional Office (VARO). An applicant may also file an application for benefits through the Veterans’ Online Applications website. Online applications are automatically forwarded to the VARO with original jurisdiction. By law (codified in 38 CFR §3.159), VA must provide claimants certain support in the development of these claims. Assisting with the acquisition of evidence, including requests for evidence from pertinent sources, is a major part of VA’s duty to assist the veteran (DVA, 2004).

Claims are processed at VARO Veteran Service Centers (VSCs). According to the Veterans Benefits Administration Adjudication Procedure Manual M21-1MR (VBA, 2005), each VSC using the Claims Process Improvement (CPI) model is composed of six teams. The composition and function of these teams is summarized in Table 5-1.

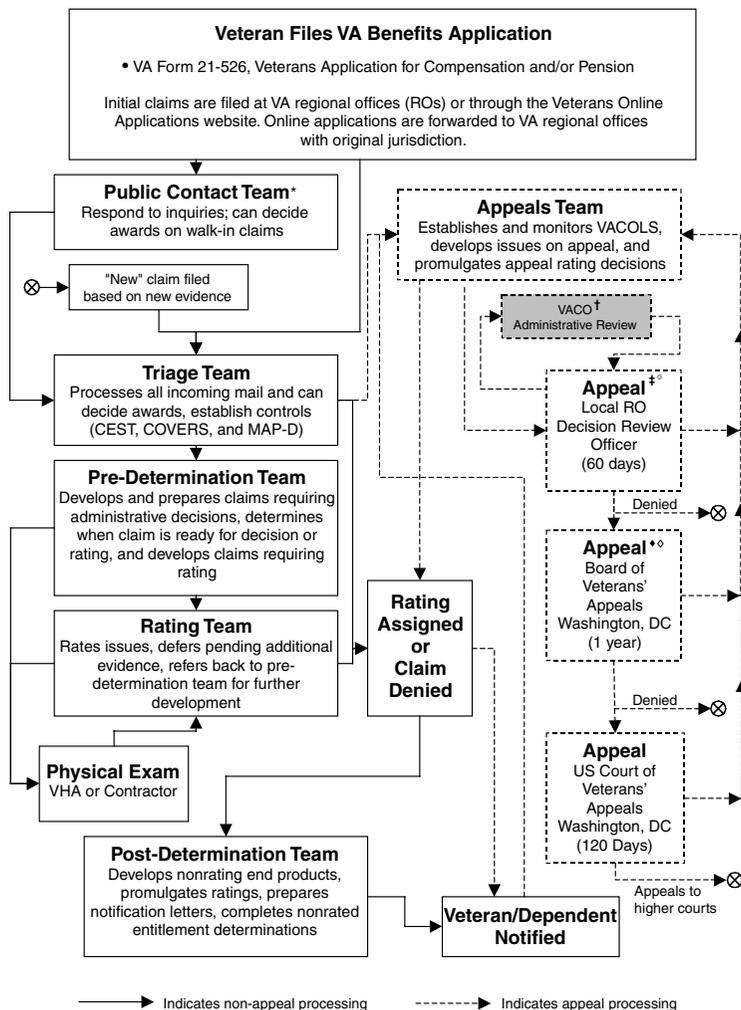


FIGURE 5-2 Veterans Benefits Administration Claims Process (CPI model).

\*Team also makes post-rating contacts; †Not the only type of special review, but the only one that can be initiated by the claimant's representative; ‡DRO may not reduce existing rating; ° VA Form 9; ♦May affirm, modify, reverse or remand; ◇VA Form 8.

Although regional offices have some discretion in assignments to the teams, a triage team will generally consist of about eight members and will include the following of employees: coach, assistant coach, rating veteran service representatives (RVSRs), veterans service representatives (VSRs),

TABLE 5-1 Veteran Service Center Teams

Team	Functions
Triage	<ul style="list-style-type: none"><li>• Reviews and controls all incoming mail</li><li>• Processes actions which can be completed without the claim folder or which may require brief review of the claim folder to verify eligibility</li></ul>
Predetermination	<ul style="list-style-type: none"><li>• Develops evidence for rating issues</li><li>• Prepares administrative decisions</li></ul>
Rating	<ul style="list-style-type: none"><li>• Makes decisions on claims that require consideration of medical evidence</li></ul>
Postdetermination	<ul style="list-style-type: none"><li>• Develops evidence for nonrating issues</li><li>• Processes awards</li><li>• Notifies claimants of decisions</li></ul>
Appeals	<ul style="list-style-type: none"><li>• Handles decisions with which claimants have formally disagreed</li></ul>
Public Contact	<ul style="list-style-type: none"><li>• Handles personal interviews and telephone inquiries</li></ul>

SOURCE: VBA manual M21-1MR, part III, subpart I, chapter 1 (2005).

senior VSR, claims assistant, file bank coach, and file clerk/program clerk (VBA, 2005).<sup>7</sup> Beyond the management of incoming mail and related files, the triage team is authorized to process those claims requiring only minimal review of the evidence. The VBA M21-1MR does not provide details on what is considered to be a “minimal review.”

The predetermination team manages claims requiring administrative decisions and determines when a claim is ready for a decision or rating. If a clinical examination<sup>8</sup> is required to adjudicate a claim, the team can order one to be performed. Examinations can be requested by more than one team/team member.

VSRs in the Predetermination Team have primary responsibility for requesting examinations. A RVSR may provide guidance on examination requests as necessary. RVSRs also have authority to directly request examinations. The Veterans Service Center Manager (VSCM) can authorize an examination in any case in which s/he believes it is warranted (VBA, 2005).

The committee was unable to determine the percentage of disability claims adjudicated without a clinical evaluation, as VBA does not track these data. The predetermination team has as many as eight team members, with the same titles and pay grades as triage team members.

<sup>7</sup>Details of the federal classification and job grades listed in parentheses can be found on the U.S. Office of Personnel Management website at <http://www.opm.gov/fedclass/>.

<sup>8</sup>Information on C&P clinical examinations is presented in Chapter 4.

A rating team consists of a coach, assistant coach, rating VSRs, and a claims assistant (VBA, 2005). The rating team is responsible for rating claims that have been deemed “ready to rate” by the predetermination team. The rating team may also receive claims directly from the triage, appeals, or public contact teams.

The membership of the postdetermination team has the same general composition as the rating team, with fewer RVSRs and more VSRs. This team receives developed claims from which it promulgates ratings and prepares notification letters. A veteran or a representative acting on her or his behalf can file an appeal to a disability determination or rating by requesting a reevaluation. The appeals team—coach, decision review officer, senior VSR, RVSR, VSR, claims assistant, and file clerk/program clerk—oversees this process, which consists of several stages.<sup>9</sup> Initially, if a claim is denied or a veteran disagrees with the level of the disability level awarded, she or he files a notice of disagreement. The claimant is then contacted by a Decision Review Officer (DRO) and is given the choice to have that person conduct a *de novo* (new) review. If the claimant is not satisfied with the DRO’s decision or chooses otherwise, then s/he can file a substantive appeal to the Board of Veterans’ Appeals (BVA). If the BVA’s decision fails to resolve the claimant’s concerns, s/he can file a lawsuit in the U.S. Court of Appeals for Veterans Claims. A veteran can also reopen a claim based on new and material evidence and begin the process anew.

In theory, a claim that has been processed and then appealed at the local regional office level could have 40 VBA rating-team members and a U.S. Army and Joint Services Records Research Center (JSRRC)<sup>10</sup> representative involved in the rating decision, assuming the VARO was fully staffed according to the CPI model.

While detailed requirements of knowledge, skills, and abilities are published for each rating-related position, VA regulations allow for the delegation of responsibility for nearly all of these positions. It is not known how staffing varies by VSC or whether the CPI model is the norm or the gold standard.

Complete tracking of the VBA personnel chain involved in the adjudication process is complicated by the repeated use of titles across teams, by the flexible assignment of responsibilities within and among teams, and by the many variations in local VARO policies and procedures. An additional factor that makes review difficult is that understaffed VAROs are

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<sup>9</sup>Separately, staff at the VA Central Office or at a regional office can initiate an administrative review or appeal in circumstances where they believe that an error was made in the evaluation of a claimant’s evidence or the application of regulations or procedures related to a claim.

<sup>10</sup>The JSRRC—formerly known as the Center for Unit Records Research—is a repository for records related to military conflicts.

authorized to “broker” claims to other regions for processing. Therefore, this summary has been provided as a general reference and not an absolute accounting of the VBA claims adjudication process.

The benefits application process is intended to be nonadversarial and supportive to claimants. As noted elsewhere, VA’s duty to assist includes helping veterans to gather evidence to support their claims, including provision of VA records and facilitation of requests for information from DOD and other sources. If a veteran disputes a determination, the initial stages of appeals process are conducted without anyone representing an opposing viewpoint and with consideration of all possible theories of entitlement (Violante, 2004). In addition, “[w]hen, after careful consideration of all procurable and assembled data, a reasonable doubt arises regarding service origin, the degree of disability, or any other point, such doubt will be resolved in favor of the claimant” (38 CFR §3.102). It is only when an action reaches the U.S. Court of Veterans’ Appeals that it takes on the characteristics of a formal legal proceeding, with the potential for presentation of evidence contrary to the claimant’s assertions or interest.

Nonetheless, the process has been described as “complex, legalistic, and protracted” and as particularly difficult for veterans with PTSD to manage because of the stresses and uncertainties involved (Sayer et al., 2005). The situation may be exacerbated in some circumstances by skeptical and cynical attitudes toward PTSD compensation-seeking veterans among certain VA staff (Sayer and Thuras, 2002; Van Dyke et al., 1985).

### *The VASRD Rating Process*<sup>11</sup>

The primary task of a rater is to assign one more ratings of disability based on the input received from the veteran, the clinician, and other members of the rating team. The VA disability rating depends on a complex assessment of many factors, and numerous variables play a role in determining the amount of the disability awarded. The VASRD does not take into account military rank, tenure, sex, or wartime cohort. The VA Office of the Inspector General did, however, find that variations in award ratings were correlated with certain factors, including (DVA, 2005b):

- enlisted (higher award) versus officer status;
- military retiree (higher award) versus nonmilitary retiree;
- attorney representation (higher award);

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<sup>11</sup>The Institute of Medicine report *A 21st Century System for Evaluating Veterans for Disability Benefits* (IOM, 2007) addresses the VASRD rating process in detail and offers several recommendations for improving it and its implementation.

- number of veterans applying for benefits (higher number, higher award);
  - period of service (Vietnam veterans receive highest awards);
  - branch of service (Marine Corps veterans receive highest award);
- and
- rater experience (more experience, higher award).

The same report also found that a lack of time to develop claims often leads to inadequate development of claims or to determinations that could support two different ratings for the same case (DVA, 2005b).

In addition, there are aspects of how disabilities are rated that may influence the amount of an award. For example, some disabilities, especially those based on self-reports, are more difficult to rate, and this may create a lack of reliability in the award decisions. The validity of currently employed instruments has also been called into question, as there have been substantial advances in fields related to disability assessment in the context of disease, illness, function, impairment, and rehabilitation since the establishment of the VASRD. These issues were recognized by a 2005 VA review (DVA, 2005b):

Our analysis of rating decisions shows that some disabilities are inherently more susceptible to variations in rating determinations. This is attributed to a combination of factors, including a disability rating schedule that is based on a 60-year-old model and some diagnostic conditions that lend themselves to more subjective decision making. . . . The VA disability compensation program is based on a 1945 model that does not reflect modern concepts of disability. Over the past 5 decades, various commissions and studies have repeatedly reported concerns about whether the rating schedule and its governing concept of average impairment adequately reflects medical and technological advancements and changes in workplace opportunities and earning capacity for disabled veterans. Although some updates have occurred, proponents for improving the accuracy and consistency of ratings advocate that a major restructuring of the rating schedule is long overdue (p. vi).

The assessment of psychiatric illness is particularly challenging. The VA Inspector General's 2005 review of state variances in disability compensation payments found that mental disorders—including PTSD—had the fourth highest variability in disability rating of the 15 body systems (DVA, 2005b). In contrast, ratings that can be independently validated (amputation, for example) were highly reliable and consistent.

The 2005 VA report also found that the number of PTSD cases receiving disability awards and the amounts of the awards given in these cases are both growing. From fiscal year (FY) 1999 to FY 2004 the number and

percentage of PTSD cases increased significantly. While the total number of all veterans receiving disability compensation grew by 12.2 percent, the number of PTSD cases grew by 79.5 percent, from 120,265 cases in FY 1999 to 215,871 cases in FY 2004. During the same period, PTSD benefits payments increased 148.8 percent, from \$1.7 billion to \$4.3 billion. By contrast, compensation for all other disability categories increased by 41.7 percent. While veterans being compensated for PTSD represented 8.7 percent of all compensation recipients, they received 20.5 percent of all compensation payments (DVA, 2005b).

### *Rater Training*

VBA manages and executes a national training program for VSRs and RVSRs called Challenge. The program involves a combination of on-the-job training, regional classroom training, and computer-assisted learning. It is administrated on a VSC level and, while variations exist, it generally follows the schedule summarized below.

When a VSR (or RVSR) is hired, the person is expected to undergo an orientation to his or her new job and to the regional office, learning the basics of the position, such as the workflow, rules of law, operational tools, and the like. This initial phase is intended to last about six months. Then the trainee is scheduled to attend three weeks of centralized classroom instruction on all major components of the job. Instructors include both C&P service experts and experienced technicians from the field. When trainees return from the classroom, they are given additional on-the-job training, and they work through a series of video-based structured learning modules that constitute the Training Performance and Support Systems (TPSS) program.<sup>12</sup> Initial rater training lasts approximately two years and includes a rotation on the postdetermination team. After mastering the tasks on the predetermination and postdetermination teams, the rater may work on a public contact team. The next level in the training hierarchy is rotation to the triage and appeals teams (DVA, 2005b; R.J. Epley, personal communication, 2006; Walcoff, 2006).

In 2001 the GAO cited “lack of time for training due to workload pressures” (p. 8) as the greatest barrier to field-wide use of TPSS training. A 2005 survey of VBA rating-team members by the VA Office of the Inspector General found that the two greatest issues in the rating process were, in order, the “perceived emphasis on production at the expense of quality” and “the need for more and better training” (OIG, 2005, p. 61). Regional office employees said that because of the complexity and variation in individual

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<sup>12</sup>The TPSS program consists of a series of task- and topic-specific video modules and is intended to provide standardized training for staff across the VA system.

claims, on-the-job training is the most effective means of training members of rating teams (GAO, 2001).

### ISSUES REGARDING PTSD DISABILITY RATING CRITERIA

VA asked the committee to address several issues related to the rating criteria currently used to rate disability for veterans with service-connected PTSD. These included whether the current rating schedule regulation, which applies to all mental disorders, is appropriate for evaluating PTSD, what criteria should be included in any revised schedule, and whether there are other evaluation methods in existence that would be more appropriate than the one VA currently uses. In addition to addressing these issues, the committee also offers some comments on the training of raters.

The section begins with discussions of three topics—the rating criteria for PTSD and other conditions, trends in disability compensation, and the considerations underlying how other disability-benefits systems evaluate mental disorders—that lay the groundwork for the committee's findings and conclusions.

#### The VASRD Rating Criteria for PTSD and Other Conditions

Table 5-2 summarizes the VASRD rating criteria for several dozen conditions, with a particular focus on those that, like PTSD, are symptom-based or have a relapsing/remitting course. As the table illustrates, there is considerable variability among the conditions in how percentage ratings are determined. The variability is manifested in several ways, including:

- The full range of disability ratings percentages (e.g., 10 percent, 20 percent, 30 percent, . . . , 100 percent) is seldom used. Instead, it is typical to employ somewhere between one<sup>13</sup> and three to five categories.
- Within a specific disorder, equivalent increases in percentage ratings do not necessarily correspond to equivalent increases in disease severity (that is, going from 10 to 30 percent may represent a very different change in disease severity than going from 30 to 50 percent or from 70 to 90 percent).
- The degree of disability represented by a particular rating level (30 percent, for example) does not appear to be consistent across different disorders.

These issues may be traced to several factors. First and most important,

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<sup>13</sup>For example, loss of the sense of smell or taste (which is not included in the table) is rated at 10 percent (38 CFR §4.87a).

**TABLE 5-2 VASRD Disability Percentage Ratings for Selected Conditions**

Condition	10%	20-30%	40-50%	60-70%	100%
<b>Mental disorders</b>	OSI <sup>a</sup> due to mild or transient symptoms which decrease work efficiency and ability to perform occupational tasks only during periods of significant stress; or symptoms controlled by continuous medication	30 OSI with decrease in work efficiency and intermittent occupational impairment due to such symptoms as depressed mood; anxiety; suspiciousness; panic attacks (weekly or less often); chronic sleep impairment; mild memory loss	50 OSI with reduced productivity due to such symptoms as: flattened affect; disordered speech; panic attacks ≥ once a week; impaired memory and judgment; disturbed motivation and mood; difficulty in establishing and maintaining relationships	70 OSI, with major deficiencies in most areas, such as work, school, family, judgment, thinking, or mood, due to such symptoms as suicidal ideation; obsessional rituals; disordered speech; near-continuous panic or depression affecting ability to function; impaired impulse control; neglect of personal appearance; etc.	Total OSI, due to such symptoms as: gross impairment in thought; persistent delusions; or hallucinations; grossly inappropriate behavior; persistent danger of hurting self or others; intermittent inability to perform ADL; disorientation to person/time/place
<b>Fibromyalgia</b>	Requires continuous medication for control	20 Episodic, but present more than one-third of the time	40 Constant, or nearly so, and refractory to therapy		
<b>Arthritis, degenerative (in absence of limitations in motion)</b>	X-ray evidence in ≥ 2 joints	20 X-ray evidence in ≥ 2 joints; occasional incapacitating exacerbations			

Intervertebral disc syndrome (based upon incapacitating episodes past 12 months) <sup>b</sup>	≥ 1 wk (< 2 wk)	20	≥ 2 wk (< 4 wk)	40	≥ 4 wk (< 6 wk)	60	≥ 6 wk
Peripheral vestibular disorders (requires objective vestibular findings)	Occasional dizziness	30	Dizziness, with occasional staggering				
Meniere's syndrome		30	Hearing impairment with vertigo < once a month	60	Hearing impairment with attacks of vertigo and cerebellar gait ≥ once a week	Hearing impairment with attacks of vertigo and cerebellar gait ≥ once a week	
Loss of auricle	Deformity of one, with loss of ≥ 1/3	30	Complete loss of one	50	Complete loss of both		
Chronic fatigue syndrome <sup>b</sup>	Waxes and wanes, resulting in periods of incapacitation of ≥ 1 (< 2) wks/yr	20	Nearly constant and restricts routine daily activities by < 25% of pre-illness level; or which waxes and wanes, resulting in periods of incapacitation of ≥ 2 (< 4) wks/yr	40	Nearly constant and restricts routine daily activities to < 50 to 75% of pre-illness level; or which waxes and wanes, resulting in periods of incapacitation of ≥ 4 (< 6) wks/yr	Nearly constant and so severe as to restrict routine daily activities almost completely and which may occasionally preclude self-care	

TABLE 5-2 Continued

Condition	10%	20-30%	40-50%	60-70%	100%
<b>Systemic lupus erythematosus</b>	Exacerbations once or twice a year or symptomatic during the past 2 years			60 Exacerbations lasting a week or more, 2 or 3 times per year	Acute, with frequent exacerbations and severe impairment of health
<b>HIV-related illness</b>	Symptomatic, T4 cell = 200-499, and on approved medication(s); or with depression or memory loss & employment limitations	30 Recurrent constitutional symptoms, intermittent diarrhea, and on approved medication(s); or minimum rating with T4 < 200, or hairy cell leukoplakia, or oral candidiasis		60 Refractory constitutional symptoms, diarrhea, and pathological weight loss; or minimum rating with AIDS	AIDS with recurrent opportunistic infections or with secondary diseases in multiple body systems; HIV illness with debility and progressive weight loss, with few or no remissions
<b>Sinusitis<sup>b</sup></b>	1-2 incapacitating episodes/yr requiring prolonged (4-6 wks) antibiotics; or > 6 non-incapacitating episodes/yr	30 ≥ 3 incapacitating episodes per year requiring prolonged (4-6 wks) antibiotics; or > 6 non-incapacitating episodes/yr	50 Following radical surgery with chronic osteomyelitis; or near-constant symptoms after repeated surgeries		

<b>Laryngeal disorders</b>	Hoarseness, with cord inflammation	30 Hoarseness, with nodules, polyps, or premalignant biopsy changes	60 Constant inability to speak above whisper	Total laryngectomy; or constant inability to speak
<b>Asthma</b>	FEV-1 71-80% or FEV-1/FVC 71-80%; or intermittent bronchodilators	30 FEV-1 56-70% or FEV-1/FVC 56-70%; or daily bronchodilators or inhalational anti-inflammatory medication	60 FEV-1 40-55% or FEV-1/FVC 40-55%; or at least monthly physician visits for exacerbations; or $\geq 3$ /yr courses of corticosteroids	60 FEV-1 < 40 %; or FEV-1/FVC < 40%; or > 1 attack/wk with episodes of respiratory failure; or requires daily use of high dose corticosteroids or immunosuppressive medications
<b>Allergic rhinitis</b>	Without polyps but > 50% bilateral or 100% unilateral obstruction	30 With polyps		
<b>Congestive heart failure (CHF)<sup>c</sup></b>	Symptoms with 7-10 METs workload; or continuous medication required.	30 Symptoms with 5-7 METs workload; or cardiac enlargement on ECG, echo, or X-ray	60 > 1 episode acute CHF in past year; or symptoms with 3-5 METs workload; or left ventricular ejection fraction of 30-50%	Chronic CHF; or symptoms with $\leq 3$ METs work-load; or left ventricular ejection fraction of < 30%

TABLE 5-2 Continued

Condition	10%	20-30%	40-50%	60-70%	100%
<b>Supraventricular arrhythmias</b>	Permanent atrial fibrillation; or 1-4 episodes/yr of paroxysmal atrial fibrillation or other supra-ventricular tachycardia	30 Paroxysmal atrial fibrillation or other supraventricular tachycardia, with > 4 four episodes/yr			
<b>Hypertension</b>	Diastolic pressure predominantly 100 or more, or systolic pressure predominantly 160 or more, or requires continuous medication for control	20 Diastolic pressure predominantly 110 or more, or systolic pressure predominantly 200 or more	40 Diastolic pressure predominantly 120 or more	60 Diastolic pressure predominantly 130 or more	
<b>Varicose veins</b>	Intermittent edema/symptom relief via elevation or compression hose	20 Chronic edema, incompletely relieved by elevation of legs	40 Chronic edema and stasis changes	60 Chronic edema or stasis change and persistent ulceration	Massive board-like edema with constant rest pain
<b>Irritable bowel syndrome</b>	Moderate: frequent episodes of bowel disturbance with abdominal distress	30 Severe: diarrhea, or alternating diarrhea and constipation, with fairly constant abdominal distress			

Ulcerative colitis	Moderate, with infrequent exacerbations	30 Moderately severe, with frequent exacerbations	60 Severe: numerous attacks a year and malnutrition; health only fair during remissions Pronounced: marked malnutrition, anemia, and debility, or with serious complication as liver abscess
Ulcer, duodenal	Mild, with recurring symptoms 1-2 times/yr	20 Moderate: recurring episodes of severe symptoms 2-3 times/yr averaging $\geq 10$ days; or with continuous moderate manifestations	40 Moderately severe: impaired health manifested by anemia and weight loss; or recurrent incapacitating episodes $\geq 10$ days for $\geq 4$ times/yr 60 Severe: pain only partially relieved by therapy, periodic vomiting, recurrent hematemesis or melena, with anemia and weight loss producing impaired health
Hiatal hernia	Two or more of the symptoms from the 30% evaluation, but of less severity	30 Recurrent epigastric distress with dysphagia, pyrosis, and regurgitation, accompanied by substernal or arm or shoulder pain; with con-siderable health impairment	60 Pain, vomiting, weight loss and hematemesis or melena with moderate anemia; or other symptom combinations producing severe health impairment

TABLE 5-2 Continued

Condition	10%	20-30%	40-50%	60-70%	100%
Inguinal hernia	Postoperative recurrent, readily reducible, and well supported by truss or belt	30 Small, post-operative recurrent, or unoperated irreparable not well supported by truss, or not readily reducible	40-50%	60 Large, post-operative, recurrent, or inoperable and not readily supported or reducible	100%
Renal dysfunction <sup>e</sup>		30 Constant or recurring albuminuria with casts or red blood cells; or transient/slight edema or hypertension $\geq$ 10% disabling under diagnostic code 7101		60 Constant albuminuria with some edema; or definite decrease in kidney function; or hypertension $\geq$ 40% disabling under code 7101	Chronic dialysis; or sedentary because of persistent edema and albuminuria; or BUN $>$ 80; or creatinine $>$ 8; or marked organ dysfunction, especially cardiovascular
Voiding dysfunction		20 Requires wearing of absorbent materials which must be changed $<$ 2 times/day	40 Requires wearing of absorbent materials which must be changed 2-4 times/day	60 Requires use of appliance or absorbents which must be changed $>$ 4 times/day	

Urinary frequency	Daytime voiding interval 2-3 hr; or nocturia 2 times per night	20	Daytime voiding interval 1-2 hr; or nocturia 3-4 times per night	40	Daytime voiding interval < 1 hr; or nocturia $\geq 5$ times per night
Disease, injury or adhesions of female reproductive organs	Symptoms that require continuous treatment	30	Symptoms not controlled by continuous treatment	30	
Uterus and ovaries, removal		30	Uterus only or both ovaries	50	Uterus and both ovaries
Breast surgery <sup>e</sup>		30	Unilateral breast surgery with significant alterations in size or focus	40	Unilateral modified radical mastectomy Unilateral radical mastectomy Bilateral modified radical mastectomy
Anemia	Hemoglobin $\leq 10$ with symptoms like weakness, fatigue, or headaches	30	Hemoglobin $\leq 8$ with symptoms like weakness, fatigue, dyspnea, headaches, or lightheadedness	60	Hemoglobin $\leq 5$ , with high output CHF or dyspnea at rest Hemoglobin $\leq 7$ with dyspnea on mild exertion, or tachycardia (100-120), or cardiomegaly or syncope ( $\geq 3$ in past 6 months)

TABLE 5-2 Continued

Condition	10%	20-30%	40-50%	60-70%	100%
<b>Dermatitis or eczema</b>	5-19% of body; or systemic corticosteroid or immunosuppressive drugs required for < 6 wks in past 12 months	30 20-40% of body; or systemic corticosteroid or immunosuppressive drugs required for ≥ 6 wks in past 12 months	40-50%	60 > 40% of body; or constant systemic corticosteroid or immunosuppressive drugs required in past 12 months	100%
<b>Urticaria</b>	Episodes ≥ 4 times in past 12 months; and responding to antihistamines or sympathomimetics	30 Debilitating episodes ≥ 4 times in past 12 months, requiring intermittent systemic immunosuppressive therapy		60 Debilitating episodes ≥ 4 times in past 12 months, despite continuous systemic immunosuppressive therapy	
<b>Acne</b>	Deep acne < 40% face/neck or elsewhere	30 Deep acne ≥ 40% face/neck			
<b>Hypothyroidism</b>	Fatigability, or continuous medication required for control	30 Fatigability, constipation, and mental sluggishness		60 Muscular weakness, mental disturbance, and weight gain	Cold intolerance, muscular weakness, cardiovascular involvement, mental changes (e.g., dementia, depression), bradycardia (< 60 beats/min), and sleepiness

Addison's disease	20 1-2 crises or 2-4 episodes in past 12 months; or weakness and fatigability; or corticosteroids required for control	40 3 crises or $\geq 5$ episodes in past 12 months	60 $\geq 4$ crises in past 12 months	Requiring > 1 daily injection of insulin, with ketoacidosis or hypoglycemia requiring $\geq 3$ hospitalizations/yr or twice-a-month clinic visits, plus either progressive loss of weight/strength or complications that would be compensable if separately rated
Diabetes mellitus	Manageable by restricted diet only	40 Requiring insulin, restricted diet, and regulation of activities	60 Requiring insulin, with ketoacidosis or hypoglycemia requiring $\geq 1-2$ hospitalizations /yr or twice-a-month clinic visits, plus complications that would be not be compensable if separately rated	Requiring > 1 daily injection of insulin, with ketoacidosis or hypoglycemia requiring $\geq 3$ hospitalizations/yr or weekly clinic visits, plus either progressive loss of weight/strength or complications that would be compensable if separately rated
Migraine	Prostrating attacks on average of one in 2 months over last several months	30 Prostrating attacks on average of once a month over last several months	50 Very frequent completely prostrating and prolonged attacks, with economic inadaptability	

TABLE 5-2 Continued

Condition	10%	20-30%	40-50%	60-70%	100%
Epileptic seizures <sup>e</sup>	Confirmed diagnosis of epilepsy	20 ≥ 1 major seizure in last 2 years; or ≥ 2 minor seizures in past 6 months	40 ≥ 1 major seizure in last 6 months or 2 in past year; or averaging 5-10 minor seizures per week	60 Averaging ≥ 1 major seizure in 4 months in past year; or 9-10 minor seizures per wk	Averaging ≥ 1 major seizure per month in past year

<sup>a</sup>OSI = occupational and social impairment. ADL = activities of daily living.

<sup>b</sup>*Incapacitating* means requiring bed rest prescribed by a physician and treatment by a physician.

<sup>c</sup>These rules are also used as a major determinant of disability for other cardiac diseases, such as coronary artery disease (post MI or post CABG), valvular heart disease, hypertensive heart disease, etc.

<sup>d</sup>Hypertension or isolated systolic hypertension must be confirmed by readings taken ≥ 2 times on at least three different days.

<sup>e</sup>There is also an 80 percent disability level for these conditions, defined as follows:

- renal dysfunction that is characterized by persistent edema and albuminuria with BUN 40-80; or creatinine 4-8; or poor health with lethargy, anorexia, weight loss, or limitation of exertion (renal dysfunction).
- bilateral radical mastectomy (breast surgery).
- averaging ≥ 1 major seizure in 3 mo in past year; or > 10 minor seizures per week (epileptic seizures).

SOURCE: Summarized from 38 CFR §4 Subpart B.

the committee did not identify a strong evidence basis for assigning any percentages to any particular disorder. Second, because each disorder has a unique set of symptoms, complications, objective findings, prognostic features, and treatment options and efficacy, there may be little or no common basis on which to make a comparison among disorders. Third, it is apparent that the ratings for each category of disease were derived by the specialists responsible for that disease (endocrinologists for diabetes and hypothyroidism, neurologists for epilepsy and migraine, gastroenterologists for irritable bowel and ulcerative colitis, and so forth). Not only may different specialists view their particular sets of diseases differently, it is not clear that any cross-communication took place among different specialists in an effort to calibrate percentage ratings across diseases.

Notably, there are some “intra-specialty” ratings where two diseases affecting a similar organ have seemingly divergent criteria for the same percentage rating. For example, allergic rhinitis is rated at 30 percent simply if polyps are present—which are not only often minimally symptomatic but are also readily treatable. In contrast, sinusitis achieves a rating of 30 percent only if there are three or more incapacitating episodes per year requiring prolonged (4-6 weeks) use of antibiotics or else at least six non-incapacitating episodes per year.

Furthermore, there are seemingly similar conditions that have widely disparate ratings. Evidence suggests that chronic fatigue syndrome (CFS) and fibromyalgia share much in common with one another and with other functional somatic syndromes (Aaron and Buchwald, 2001; Gardner et al., 2003). However, while CFS can be rated as high as 100 percent, the maximal rating for fibromyalgia is 40 percent even when symptoms are “constant and refractory to therapy.”

Two important rating thresholds for a disorder are 40 and 60 percent. This is because total disability may be assigned, when the rating according to the schedule is less than 100 percent,

when the disabled person is . . . unable to secure or follow a substantially gainful occupation as a result of service-connected disabilities: *Provided* That, if there is only one such disability, this disability shall be ratable at 60 percent or more, and that, if there are two or more disabilities, there shall be at least one disability ratable at 40 percent or more, and sufficient additional disability to bring the combined rating to 70 percent or more (38 CFR §4.16; emphasis and capitalization in original).

According to 38 CFR §4.1, “the percentage ratings represent as far as can practicably be determined the average impairment in earning capacity resulting from such diseases and injuries and their residual conditions in civil occupations.” Thus, the overriding consideration in setting the VASRD ratings does not seem to be providing compensation for pain and suffering

or offering a lower threshold for paying disability to individuals who have risked their lives as public servants. Instead, the VASRD ratings are more akin to factors influencing civilian worker compensation.

### *Conditions with No or Minimal Disability*

Partly because the primary explicit factor in VASRD ratings is the effect on earnings capacity, the presence of a disorder itself—even if it is service-connected—may result in no (0 percent) or minimal (10 percent) disability ratings. Features that may result in a condition being rated as 0 percent disability (Table 5-3) include it being asymptomatic (for example, sinus disease detected only by radiographic imaging, mild anemia, or asymptomatic HIV disease), very mild (vitiligo in body areas normally covered by clothing, superficial acne, small patches of eczema, small reducible hernias), or infrequent (occasional irritable bowel symptoms, migraine headaches less than once a month). Features that result in ratings at the minimum of 10 percent (Table 5-4 as well as Table 5-2) include mildly deforming conditions (vitiligo in exposed body parts, partial loss of the auricle of the ear) or functional deficits, such as complete loss of smell or taste, that do not impair the ability to work in most occupations. Other features leading to low levels of disability include symptoms being mild and episodic, the disease being minimal according to laboratory parameters, and the ability to control the disease well with simple treatments.

### *Factors that Influence Disability Ratings*

While the overarching consideration in VASRD ratings is a disorder's effect on earnings capacity, Table 5-5 summarizes a number of secondary factors that also influence percentage ratings. These include symptom severity and frequency; objective, independently verifiable findings on physical examination or diagnostic testing; deformities; permanence (that is, not likely to improve over time); functional impairment (occupational and, secondarily, social); treatment intensity and responsiveness; extent of outpatient or inpatient health use required for the condition; features of the condition that adversely affect the long-term prognosis; and disease complications.

### *Symptom-Based Disorders (Including Pain)*

Some disorders are characterized exclusively by patient-reported symptoms and lack objective findings on physical examination, laboratory testing, radiographic imaging, or other diagnostic tests. These include conditions such as CFS, fibromyalgia, irritable bowel syndrome, migraine, most

**TABLE 5-3** Examples of Disorders with a No (0%) Disability Rating Level

Code[s]	Disorder	Severity level
9200s–9400s	Mental disorders	Symptoms neither cause occupational and social impairment nor require continuous medication
6510	Sinusitis	Detected by X-ray only
6315	HIV-related illness	Asymptomatic, with or without lymphadenopathy or low T4 count
7319	Irritable bowel syndrome	Mild disturbances of bowel function; occasional abdominal distress
7338	Hernia, inguinal	Not operated but remediable; or small, reducible, no true protrusion
7500s	Renal dysfunction	Albuminuria and casts with history of acute nephritis
7610–7615	Diseases of female reproductive organs	Symptoms that do not require continuous treatment
7619	Ovary	Removal of one ovary with or without partial removal of the other
7626	Breast surgery	Wide local excision, without significant alteration of size or focus
7700	Anemia	Hemoglobin < 10 gm/100 ml, but asymptomatic
7806	Dermatitis or eczema	< 5% of body and only topical therapy required during past year
7823	Vitiligo	With no exposed areas affected
7828	Acne	Only superficial (comedones, papules, pustules), not deep acne
8100	Migraine	Attacks less than once in two months in last several months.

SOURCE: 38 CFR §4 Subpart B.

**TABLE 5-4** Examples of Disorders (excluding those in Table 5-2) with a Minor (10%) Disability Rating Level

Code	Disorder	Severity level
6210	Chronic otitis externa	Swelling, dry and scaly or serous discharge, and itching, requiring frequent and prolonged treatment
6275	Sense of smell	Complete loss
6276	Sense of taste	Complete loss
7823	Vitiligo	With exposed areas affected

SOURCE: 38 CFR §4 Subpart B.

**TABLE 5-5** Factors that Influence VASRD Percentage Disability Ratings

Factor	Example Conditions
<b>Primary</b>	
Average impairment in earning capacity expected in civil occupations	All conditions
<b>Secondary</b>	
Severity and frequency of symptoms (e.g., number of exacerbations, number of weeks or months, “incapacitating” episodes)	Seizures Migraine Fibromyalgia Arthritis Back conditions
Objective findings (e.g., on physical examination, laboratory tests, X-rays)	Dizziness (vestibular findings)
Deformity (e.g., loss or mutilation of body part)	Amputations Surgical resection Acne (deep, worse than superficial)
Permanence (clear evidence that “time will not heal”)	HIV disease (progression to AIDS)
Functional impairment (especially work; secondarily social)	Chronic fatigue syndrome CHF Laryngeal (level of speech impairment)
Treatment response (e.g., refractory to medications, failed surgery)	Sinusitis Inguinal hernia Fibromyalgia
Treatment intensity (e.g., continuous, more complicated or toxic therapies)	Diabetes (insulin) Asthma (steroids) Renal function (dialysis) Urinary voiding (frequency, number of diapers)
Health care use (e.g., number of hospitalizations or clinic visits)	Diabetes (frequency of clinic visits)
Severity of condition which may affect future prognosis	Hypertension (level of blood pressure) Renal function (level of creatinine)
Complications of condition	Duodenal ulcer (anemia, weight loss) Ulcerative colitis (abscess) Hypothyroidism (mental, cardiac)

cases of low back pain, and mental disorders such as depression, anxiety, and PTSD. Table 5-2 offers a number of examples of how disability ratings are assigned for these disorders. One of the most prevalent physical symptoms in disorders of this sort is pain, which is a cardinal symptom in musculoskeletal disorders. It is informative to examine how the VASRD rating system deals with an entirely self-reported symptom like pain.

Pain can be considered in rating the disability associated with musculoskeletal disorders if the pain is associated with “functional loss” and “supported by adequate pathology and evidenced by the visible behavior of the claimant undertaking the motion.” (38 CFR §4.40). This would suggest that objective findings are to be sought by the examiner before using pain alone as a basis for disability. However, this paragraph in 38 CFR goes on to say that “a part which becomes painful on use must be regarded as seriously disabled.” Painful motion is further elaborated upon in 38 CFR §4.59, which states, “With any form of arthritis, painful motion is an important factor of disability; the facial expression, wincing, etc., on pressure or manipulation, should be carefully noted and definitely related to affected joints.” The examiner is also encouraged to identify the presence of more objective findings such as muscle spasm, crepitus, joint instability, malalignment, or other evidence of articular or periarticular pathology. Taken together, these paragraphs imply some leeway for the examiner to incorporate pain and its functional consequences in assessing musculoskeletal disorder disability. Nonetheless, the context of both paragraphs seems to caution raters against using pain as the sole or even predominant determinant in the absence of concomitant objective findings.

#### *Disorders with a Relapsing/Remitting Course*

Certain disorders listed in the VASRD exhibit a relapsing and remitting course, that is, there are some periods of time when symptoms are manifest or exacerbated and others when they are latent or subclinical. Among the conditions with these characteristics are multiple sclerosis (MS), lupus, and many mental disorders, including PTSD and depression. These disorders present a challenge for raters: It can be difficult to assign a level of disability to them because the absence of disabling symptoms does not mean that the subject is free from the effects of the disorder. As Table 5-2 illustrates, the statutory criteria for remitting/relapsing conditions do not use a consistent approach to managing this issue, varying in how the frequency and effect of symptoms are factored, whether response to treatment is considered, and whether nonoccupational impacts are addressed.

The VASRD listing for MS does not specify particular symptoms or levels of symptom severity and corresponding ratings. Instead, the regulation simply states that disability be rated “in proportion to the impairment” (38 CFR §4.124a). A minimum rating of 30 percent is assigned to claimants with a diagnosis of MS.

As noted above, PTSD is managed differently than other conditions in that it is governed by the general mental-disorders ratings schedule rather than by a PTSD-specific set of criteria.

### *Comparing VASRD Ratings for Mental and Physical Disorders*

Table 5-2 allows one to compare how ratings of mental disorders (the first entry in the table) compare to physical disorders (the rest of the entries in the table). Several overall observations can be made:

1. There is one general rating scheme that is applied to all types of mental disorders, which makes it necessary to lump together a very heterogeneous set of symptoms and signs from multiple conditions into a single spectrum of problems. Furthermore, the rating scheme particularly focuses on symptoms from schizophrenia, mood, and anxiety disorders. Although there are other examples of groups of disorders that are handled with one general rating scheme—disorders of the spine, disorders of the female reproductive system, renal disease, and certain other physical conditions—this “lumping” is carried to an extreme in the case of mental disorders, allowing very little differentiation across specific conditions.

2. Some of the secondary factors shown in Table 5-6 (objective findings, deformity, physical complications) that may influence percentage ratings cannot be met for mental disorders. This could theoretically put mental disorders at a relative disadvantage compared to physical disorders in terms of achieving higher percentage ratings.

3. Two important threshold levels for increases in disability benefits—40 and 60 percent—cannot be assigned to mental disorders. However, there are also a number of physical disorders that do not have the 40 and 60 percent options, and raters always have the option of using 50 and 70 percent ratings for mental disorders, which may serve to mitigate what would otherwise be a major disadvantage.

4. Occupational and social impairment (OSI) is the central factor used in determining each level of disability for mental disorders. However, little guidance is given about how to measure either OSI or its differential impairment across different percentage ratings. Furthermore, the various secondary factors that are used in rating physical disorders (Table 5-6) are not applied to mental disorder ratings, which gives the primary factor—OSI—a value in determining the ratings that is disproportionately high compared to other symptoms.

### *Summary Observations*

PTSD and other conditions that are patient-reported or have relapsing and remitting symptoms present a challenge for raters. The rating criteria for such conditions use an inconsistent approach, which varies in how the frequency and effect of symptoms are factored, whether response to treatment is considered, and whether nonoccupational effects are addressed.

**TABLE 5-6** Numbers of Veterans Receiving Disability Compensation on September 30, 1999–2006, by Selected Diagnostic Categories, Primary Rated Service-Connected Disability Only\*

Condition (Diagnostic Category/ies)											% Increase 1999– 2006	% of Total 2006
	1999	2000	2001	2002	2003	2004	2005	2006	2006	2006		
Other mood disorders (9431–9433, 9435)	4,376	5,874	7,052	8,698	10,706	12,344	14,222	15,946	15,946	264.4%	0.6%	
Psychotic disorders (9201–9211)	90,334	87,209	84,344	81,657	79,210	76,804	74,387	72,064	72,064	–20.2%	2.6%	
All anxiety disorders	194,671	199,660	204,340	216,326	235,168	251,195	269,825	286,625	286,625	47.2%	10.5%	
—PTSD (9411)	98,839	109,598	119,685	137,113	160,537	181,000	203,377	223,099	223,099	125.7%	8.2%	
—Other anxiety disorders (9400–9410, 9412–9413)	95,832	90,062	84,655	79,213	74,631	70,195	66,448	63,526	63,526	–33.7%	2.3%	
Fibromyalgia (5025)	796	1,013	1,235	1,521	1,887	2,156	2,493	2,766	2,766	247.5%	0.1%	
Colitis (7323)	6,255	6,299	6,312	6,440	6,501	6,612	6,691	6,783	6,783	8.4%	0.2%	
Irritable bowel syndrome (7319)	3,406	3,515	3,622	3,787	3,987	4,189	4,359	4,607	4,607	35.3%	0.2%	
Major depression (9434)	4,570	6,458	8,173	10,609	14,212	17,848	22,024	26,226	26,226	473.9%	1.0%	
All other mental disorders (9300–9327, 9416–9425, 9440, 9520, 9521)	13,775	13,819	13,887	14,035	14,366	14,645	15,093	15,591	15,591	13.2%	0.6%	

*continued*

TABLE 5-6 Continued

Condition (Diagnostic Category/fes)											% Increase	
	1999	2000	2001	2002	2003	2004	2005	2006	2006	2006	1999– 2006	% of Total 2006
Multiple sclerosis (8018)	6,781	6,767	6,645	6,645	6,567	6,446	6,385	6,254	6,197	6,197	-8.6%	0.2%
Lumbosacral or cervical sprain (5237, 5295)	82,121	84,142	85,421	86,823	86,863	88,416	92,137	99,499	107,209	107,209	30.6%	3.9%
Diabetes (7913)	22,811	22,774	26,823	61,097	82,512	92,937	101,883	111,264	387,8%	387,8%	4.1%	4.1%
Asthma (6602)	28,891	29,495	30,047	30,914	31,882	32,882	34,149	35,515	22.9%	22.9%	1.3%	1.3%
All other	1,835,550	1,841,057	1,843,104	1,869,688	1,909,850	1,945,496	1,986,036	2,034,970	10.9%	10.9%	74.7%	74.7%
Overall total (includes other categories)	2,294,337	2,308,082	2,321,005	2,398,202	2,485,143	2,555,630	2,636,915	2,725,763	18.8%	18.8%	100.0%	100.0%

\*The primary rated service-connected disability is either the condition rated as most disabling or equal to the highest rated condition.  
 SOURCE: Data provided to the committee by VA.

Moreover, the absence of disabling symptoms does not mean that the subject is free from the effects of the disorder. PTSD is managed differently than almost all other conditions in that it is subject to the general mental disorders ratings schedule, which is not focused on its particular symptomatology, rather than being subject to a set of criteria that is specific to the disorder.

### Trends in Disability Compensation

#### *Numbers of Veterans Receiving Disability Compensation*

In response to a request, VA provided the committee with data regarding the numbers of veterans receiving disability benefits for the years 1999–2006. Table 5-6 categorizes these data by the primary rated disability that is either the condition rated as most disabling or equal to the highest rated condition. Table 5-7 lists the same conditions but reports the total number of veterans who have each disability, whether or not it is their primary rated disability. Note that a veteran may be counted more than once in Table 5-7 because he or she may be rated for multiple listed conditions.

The bottom row of Table 5-6 shows that the total number of veterans receiving disability benefits increased by approximately 18.8 percent over the seven years shown. The rate of increase varied widely by disability category, however. The primary disability diagnosis categories with the largest percentage increase over that seven-year period were major depression (474 percent increase), diabetes (388 percent), other mood disorders (264 percent), and fibromyalgia (247 percent). PTSD showed the next largest percentage increase—126 percent—which is particularly noteworthy because more veterans had PTSD as their primary disability than any of the other conditions.

The trend for PTSD in comparison with other mental disorders is of interest. The number of beneficiaries whose primary disability was “other anxiety disorders” actually declined by 34 percent at the same time that the PTSD numbers were rising sharply. The only other mental disorder category for which a decline occurred was psychotic disorders. By contrast, the numbers for affective disorders—major depression and other mood disorders—and for all other mental disorders increased. It is thus possible that some of the growth in PTSD was actually a change in diagnostic labeling with, for example, fewer veterans being classified with other anxiety disorders than in the past because these veterans were now being diagnosed with PTSD. It is of note that the percentage increase in the number of beneficiaries for all anxiety disorders was approximately 47 percent.

The changes in the numbers in Table 5-7—that is, the changes in the totals of all veterans with a particular disability, whether it was their pri-

**TABLE 5-7** Numbers of Veterans Receiving Disability Compensation on September 30, 1999–2006, by Selected Diagnostic Categories, Any Rated Service-Connected Disability

Condition (Diagnostic Category/fes)											% Increase 1999– 2006		% of Total 2006	
	1999	2000	2001	2002	2003	2004	2005	2006	2006	2006	1999– 2006	2006	2006	
Other mood disorders (9431–9433, 9435)	6,799	8,981	10,681	13,299	16,352	18,893	21,837	24,624	24,624	262.2%	262.2%	0.9%		
Psychotic disorders (9201–9211)	93,646	90,397	87,425	84,648	82,101	79,616	77,117	74,755	74,755	-20.2%	-20.2%	2.7%		
All anxiety disorders	257,156	261,113	265,218	279,406	301,607	320,304	343,098	364,445	364,445	41.7%	41.7%	13.4%		
—PTSD (9411)	122,034	133,745	144,920	165,898	193,791	217,855	244,846	269,331	269,331	120.7%	120.7%	9.9%		
—Other anxiety disorders (9400–9410, 9412–9413)	135,122	127,368	120,298	113,508	107,816	102,449	98,252	95,114	95,114	-29.6%	-29.6%	3.5%		
Fibromyalgia (5025)	1,561	2,059	2,548	3,218	4,070	4,810	5,630	6,351	6,351	306.9%	306.9%	0.2%		
Colitis (7323)	7,843	7,953	8,031	8,273	8,515	8,746	8,963	9,205	9,205	17.4%	17.4%	0.3%		
Irritable bowel syndrome (7319)	11,809	12,612	13,453	14,647	15,979	17,206	18,555	19,908	19,908	68.6%	68.6%	0.7%		
Major depression (9434)	7,533	10,697	13,731	18,225	24,350	30,593	37,810	45,235	45,235	500.5%	500.5%	1.7%		
All other mental disorders (9300–9327, 9416–9425, 9440, 9520, 9521)	23,243	23,631	23,996	24,851	25,965	27,028	28,490	30,087	30,087	29.4%	29.4%	1.1%		
Multiple sclerosis (8018)	7,564	7,598	7,532	7,565	7,630	7,699	7,674	7,717	7,717	2.0%	2.0%	0.3%		
Lumbosacral or cervical strain (5237, 5295)	163,123	168,797	173,840	180,893	188,918	199,306	218,474	239,463	239,463	46.8%	46.8%	8.8%		
Diabetes (7913)	36,789	36,796	44,845	105,895	149,684	176,322	201,962	226,896	226,896	516.7%	516.7%	8.3%		
Asthma (6602)	42,545	44,070	45,523	47,696	50,014	52,355	55,419	58,593	58,593	37.7%	37.7%	2.1%		

SOURCE: Data provided to the committee by VA.

mary rated disability or not—are generally quite similar to the changes in Table 5-6. The percentage increase for PTSD was similar to the percentage increase in all anxiety disorders, which suggests that the number of veterans with a secondary diagnosis of anxiety disorder or PTSD has grown at about the same rate as the number of veterans with a primary diagnosis for those disorders. In contrast, for most of categories listed (fibromyalgia, irritable bowel syndrome, major depression, all other mental disorders, multiple sclerosis, lumbarsacral or cervical strain, diabetes, and asthma), the number of all veterans with a particular disorder has increased at a faster rate than the number of veterans with that disorder as their primary disability.

The information in these tables is consistent with the suggestion that the growth in PTSD awards is due to a greater willingness on the part of veterans to apply for PTSD compensation. It may also, though, reflect in part an increasing tendency for VA to recognize a diagnosis of PTSD and, more generally, to recognize disability resulting from any mental disorder. Unlike most other categories, PTSD as a secondary diagnosis has not increased more rapidly than the number of primary PTSD diagnoses.

#### *Demographic Characteristics of Beneficiaries*

Table 5-8 illustrates two well-known trends: an increasing percentage of females in the beneficiary population, and a decrease in the average age in the beneficiary population. These trends presumably reflect trends in the general population of veterans. There are several distinctive features that can be discerned in the characteristics and trends for PTSD beneficiaries. First, the percentage of males among PTSD beneficiaries is slightly higher than the percentage of males among all beneficiaries, and it declined by a very small amount between 1999 and 2006. Second, the age of PTSD beneficiaries has also declined by a very small amount (especially for PTSD as a primary disability<sup>14</sup>). In short, while the major demographic trends affecting most beneficiaries are also visible among PTSD beneficiaries, they are less pronounced.

#### *Trends in Combined Ratings, Future Exams, and IU Designations*

Table 5-9 describes changes between 1999 and 2006, by diagnostic category, in the mean combined rating of a disorder, in the percentages of beneficiaries classified as IU, and in the percentage of beneficiaries for whom a future exam is scheduled. The data on combined ratings show that the ratings had a modest upward trend in almost all diagnostic categories

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<sup>14</sup>Defined as either the condition rated as most disabling or equal to the highest rated condition.

**TABLE 5-8** Demographic Characteristics of Beneficiaries on September 30, 1999, and September 30, 2006

Diagnostic Categories (Code)	Mean Age		% Male	
	1999	2006	1999	2006
<i>Primary Disability</i>				
Other mood disorders (9431–9433, 9435)	50.6	46.0	78.8	77.5
Psychotic disorders (9201–9211)	63.6	58.7	95.9	95.1
<b>PTSD (9411)</b>	<b>61.8</b>	<b>59.1</b>	<b>97.2</b>	<b>96.4</b>
Other anxiety disorders (9400–9410, 9412–9413)	76.9	68.9	96.3	93.6
Fibromyalgia (5025)	46.0	42.0	44.9	41.5
Colitis (7323)	58.4	52.0	93.2	90.4
Irritable bowel syndrome (7319)	61.4	51.2	87.3	80.9
Major depression (9434)	49.6	45.7	71.9	72.5
All other mental disorders (9300–9327, 9416–9425, 9440, 9520, 9521)	65.4	56.1	96.2	91.0
MS (8018)	61.9	55.2	87.6	82.3
Lumbosacral or cervical strains (5237, 5295)	57.3	49.3	93.2	89.3
Diabetes (7913)	61.1	59.8	97.0	99.0
Asthma (6602)	62.1	51.0	90.7	84.0
All other	65.8	58.4	95.4	93.0
Total	65.5	58.1	95.3	92.9
<i>Primary or Secondary Disability</i>				
Other mood disorders (9431–9433, 9435)	51.1	46.5	78.5	77.0
Psychotic disorders (9201–9211)	63.6	58.8	95.6	94.9
<b>PTSD (9411)</b>	<b>62.5</b>	<b>59.6</b>	<b>97.2</b>	<b>96.4</b>
Other anxiety disorders (9400–9410, 9412–9413)	75.6	67.3	95.7	92.8
Fibromyalgia (5025)	47.5	44.1	48.1	45.3
Colitis (7323)	59.6	52.9	92.8	89.9
Irritable bowel syndrome (7319)	62.7	53.3	84.1	78.3
Major depression (9434)	50.2	46.4	72.4	73.1
All other mental disorders (9300–9327, 9416–9425, 9440, 9520, 9521)	63.9	54.5	95.5	89.7
MS (8018)	61.6	54.4	87.0	80.9
Lumbosacral or cervical strains (5237, 5295)	57.5	49.4	92.2	87.8
Diabetes (7913)	64.0	60.7	97.0	99.0
Asthma (6602)	60.3	49.8	88.1	81.1

NOTE: These data describe beneficiaries and not conditions. Therefore, the frequency in a particular diagnostic category refers to the number of beneficiaries with either a primary or any service-connected diagnosis in a category rather than the number of reported conditions in that category. Accordingly, for *primary* diagnoses the number of beneficiaries is equal to the number of conditions. The frequencies describing *primary and/or secondary* conditions in each diagnostic group are not mutually exclusive and individuals with reported service-connected diagnoses in more than one group are counted more than once. Non-service-connected conditions are not represented in these data.

SOURCE: Data provided to the committee by VA.

**TABLE 5-9** Trends in Combined Ratings, Future Exams, and IU Designations of Beneficiaries on September 30, 1999, and September 30, 2006

Diagnostic Categories (Code)	Mean Combined Rating %		% with Future Exams		% with IU Designation	
	1999	2006	1999	2006	1999	2006
<i>Primary Disability</i>						
Other mood disorders (9431–9433, 9435)	56.0	64.3	29.2	11.1	13.8	23.3
Psychotic disorders (9201–9211)	72.0	75.9	2.7	1.7	2.7	6.7
<b>PTSD (9411)</b>	<b>63.4</b>	<b>71.2</b>	<b>14.2</b>	<b>5.6</b>	<b>14.0</b>	<b>29.6</b>
Other anxiety disorders (9400–9410, 9412–9413)	35.2	42.3	1.5	2.2	5.1	11.0
Fibromyalgia (5025)	45.1	51.9	27.8	8.6	9.7	15.7
Colitis (7323)	45.9	47.9	3.5	2.4	4.2	6.0
Irritable bowel syndrome (7319)	23.3	31.9	4.8	3.3	2.5	4.2
Major depression (9434)	56.5	65.0	34.5	13.5	13.5	24.7
All other mental disorders (9300–9327, 9416–9425, 9440, 9520, 9521)	60.7	63.9	3.2	4.9	12.0	17.5
MS (8018)	78.0	76.1	0.8	0.8	12.4	15.8
Lumbosacral or cervical strains (5237, 5295)	20.6	27.0	2.9	2.3	1.4	3.6
Diabetes (7913)	41.6	37.5	1.3	0.4	7.1	5.4
Asthma (6602)	27.4	35.4	3.7	3.5	4.3	4.6
All other	28.3	33.6	1.8	1.6	3.7	6.1
Total	32.2	38.8	2.5	2.2	4.2	8.4
<i>Primary or Secondary Disability</i>						
Other mood disorders (9431–9433, 9435)	56.9	64.0	26.3	9.7	16.6	23.8
Psychotic disorders (9201–9211)	71.3	75.2	2.7	1.7	3.2	7.1
<b>PTSD (9411)</b>	<b>62.8</b>	<b>71.3</b>	<b>12.8</b>	<b>5.5</b>	<b>15.2</b>	<b>29.4</b>
Other anxiety disorders (9400–9410, 9412–9413)	38.6	45.8	1.5	2.2	7.9	13.6
Fibromyalgia (5025)	52.5	63.2	26.8	9.5	11.8	23.1
Colitis (7323)	46.2	49.6	3.9	2.8	5.6	8.5
Irritable bowel syndrome (7319)	40.3	49.9	6.1	4.7	11.6	15.8
Major depression (9434)	58.5	65.4	29.8	11.5	16.3	25.0
All other mental disorders (9300–9327, 9416–9425, 9440, 9520, 9521)	62.5	63.8	3.6	4.9	14.7	18.9
MS (8018)	78.7	78.1	1.0	1.2	13.5	17.8
Lumbosacral or cervical strains (5237, 5295)	28.7	37.6	3.7	3.9	3.6	6.5
Diabetes (7913)	48.8	56.6	1.8	2.0	10.0	16.2
Asthma (6602)	31.5	40.4	4.4	4.1	4.8	6.3

NOTE: These data describe beneficiaries and not conditions. Therefore, the frequency in a particular diagnostic category refers to the number of beneficiaries with either a primary or any service-connected diagnosis in a category rather than the number of reported conditions in that category. Accordingly, for *primary* diagnoses the number of beneficiaries is equal to the number of conditions. The frequencies describing *primary and/or secondary* conditions in each diagnosis group are not mutually exclusive and individuals with reported service-connected diagnoses in more than one group are counted more than once. Non-service-connected conditions are not represented in these data.

SOURCE: Data provided to the committee by VA.

and that the mean rating for PTSD is and has been relatively high compared to most other diagnostic categories.

The percentage of beneficiaries classified as IU nearly doubled between 1999 and 2006. Corresponding changes in this percentage for PTSD and for other mental disorders were generally similar. The absolute magnitude of the percentage changes, however, were generally larger for mental disorders, including PTSD, because these percentages were already somewhat higher in 1999 than the IU percentages for other diagnostic categories. For PTSD in particular, almost 30 percent of beneficiaries with a PTSD primary diagnosis were classified as IU in 2006, and more than one-third of all beneficiaries with an IU classification had either a primary or secondary diagnosis of PTSD.

The explanations for the high rate of IU among PTSD beneficiaries, as well as for the large differential between mental disorders in general and other diagnostic categories, may be important. One possible explanation is that the ratings for mental disorders incorporate information on occupational functioning (e.g., in the GAF), and the use of this information in the ratings process may provide a stronger basis for the IU classification than occurs with disorders for which information on occupational functioning is not incorporated. A second possibility is that it is more difficult to get access to psychiatric care than it is to get access to care for somatic disorders, so those with psychiatric disorders would have a stronger incentive to seek increased access based on an IU classification. A third possible explanation is that the rigidity in the current rating schedule for PTSD, which focuses on occupational impairment, may lead rating technicians to use IU as a means to account for individualized circumstances that can otherwise not be accounted for under the schedule.

The practice of beneficiaries scheduling future exams became relatively less frequent over the 1999–2006 period, and the total number of beneficiaries scheduled for such exams rose almost imperceptibly from 1999 to 2006 (from 57,938 to 58,879; data not shown in Table 5-9). In 1999, the percentage of beneficiaries who scheduled future exams varied widely among the various diagnostic categories, but such scheduling was clearly most frequent for those with depression and other mood disorders, PTSD, and fibromyalgia. Veterans with mental disorders as their primary diagnoses accounted for 37 percent of all future exams scheduled in 1999, and those with mental disorders as a primary or secondary diagnosis accounted for 48 percent of all future exams. By 2006, while the future exams continued to be concentrated among beneficiaries with primary or secondary mental disorders, the percentage of beneficiaries who scheduled these exams dropped sharply. For PTSD primary beneficiaries, the decline was from 14.2 to 5.6 percent. The reasons for the decline in rates of future exams is unclear, but it appears at this point that if those reasons are making veterans less likely

to seek care for PTSD—as some have suggested—the overall magnitude of this effect must be quite small.

### *Availability of PTSD Disability Compensation Data*

Tables 5-6 through 5-9 summarize some basic data on the characteristics of PTSD beneficiaries and the details of their compensation over time. However, other information that would have helped inform the committee's evaluations were not available. The committee has the following recommendations for addressing gaps they identified:

- Data fields recording the application and reevaluation of benefits should be preserved over time, rather than being overwritten when final determinations are made, so that better analyses of the PTSD disability application and review process can be performed.
- Data should be gathered and coded at two points in the process where there is currently little information available: before claims are made, and after compensation decisions are rendered.

Data such as these will facilitate more informed future analyses of PTSD disability compensation issues.

### **Other Disability Rating Systems for Mental Disorders**

The committee was asked to address other methods of evaluating disability from mental impairments. The approaches taken in the American Medical Association (AMA) *Guides to the Evaluation of Permanent Impairment* (2001), the “Psychological Impairment” chapter of AMA's *Disability Evaluation* (Eliashof and Streltzer, 2003), and the Social Security Administration's (SSA's) *Blue Book* (2005) are summarized.

#### *AMA Guides to Assessment of Permanent Impairment*

Following the lead of the American Psychiatric Association, the AMA expresses skepticism about assigning percentage ratings to the level of impairment from mental disorders:

Unlike cases with some organ systems, there are no precise measures of impairment in mental disorders. The use of percentages implies a certainty that does not exist. Percentages are likely to be used inflexibly by adjudicators, who then are less likely to take into account the many factors that influence mental and behavioral impairment. In addition, the authors are unaware of data that show the reliability of the impairment percentages. After considering this difficult matter, the Committee on Disability and

Rehabilitation of the American Psychiatric Association advised *Guides* contributors against the use of percentages in the chapter on mental and behavioral disorders of the fourth edition, and that remains the opinion of the authors of the present chapter (AMA, 2001, §14.3).

The AMA publication offers guidance on several aspects of assessing mental disorders, including the variability of function over time, information sources, claimant motivation, persistence of functional impairment, the dimensions of a functional assessment, determination of social functioning, and the role of treatment response. This guidance is briefly summarized below.

Impairment related to mental disorders can fluctuate considerably over time. Thus, as noted in §14.1a, “it is important to obtain evidence over a sufficiently long period of time. . . . This evidence should include treatment notes, hospital discharge summaries, work evaluations, and rehabilitation progress notes if they are available.” Multiple sources of information (both medical and nonmedical) may be used to make a determination about the individual’s daily living, social functioning, concentration, persistence, pace, and ability to tolerate increased mental demands, such as stress (AMA, 2001).

The AMA *Guides* notes that lack of motivation on the part of the person claiming disability is difficult to assess since it may be due to a number of factors, including: the mental illness itself, e.g., depression or schizophrenia; fear of losing entitlements or other benefits of being ill; a side effect of some psychotropic medications; conscious malingering; the natural demoralization that can be associated with any chronic illness; and inadequate social network support. Thus, as stated in §14.2b, “the determination of motivation is often nonempirical, and conclusions are all too often drawn on the basis of prejudice. Many times, an individual’s motivation is not well understood even after careful assessment.”

The determination of the persistence of functional impairment is inevitably accompanied by some degree of uncertainty. The *Guides* indicates that it is important to acknowledge the tension that exists between labeling the disability as permanent, which can make improvement less likely, and being overoptimistic about recovery, since mental disorders are often chronic or relapsing. As stated in §14.2c, “The use of the impairment label can be seen as pessimistic, providing an adverse prediction that may be self-fulfilling. However, the tendency for physicians and others to minimize psychiatric impairments must also be considered; this . . . may lead to failure to refer individuals for potentially helpful rehabilitative measures.”

Section 14.3 outlines a multidimensional functional assessment comprising four main categories: (a) activities of daily living; (b) social functioning; (c) concentration, persistence, and pace; and (d) work functioning.

The section indicates that independence and sustainability of activities should also be considered and that the evaluating clinician should ascertain whether limitations in activities are due to the mental disorder or to other factors, such as lack of money or transportation. It notes that social functioning may be more difficult to assess than occupational functioning, since the latter can be gauged by employment history, absenteeism, and other outcomes that are more easily measured. Advice is provided in §14.3b:

Impaired social functioning may be demonstrated by a history of altercations, evictions, firings, fear of strangers, avoidance of interpersonal relationships, social isolation, or similar events or characteristics. Strength in social functioning may be documented by an individual's ability to initiate social contact with others, communicate clearly with others, and interact and actively participate in group activities. Cooperative behavior, consideration for others, awareness of others' sensitivities, and social maturity also need to be considered. Social functioning in work situations may involve interactions with the public, responding to persons in authority such as supervisors, or being part of a team (AMA, 2001).

The *Guides* also states that treatment response—in particular, the effect of medications—must be considered. As stated in §14.2c, “An individual who is taking certain types of medication may be able to sustain a satisfactory degree of functioning, whereas without medication he or she might fail to do so. . . . The physician should note the performance with and without medication.”

### *AMA Disability Evaluation*

In 2003 AMA published a complement to the Fifth Edition of the *AMA Guides to the Evaluation of Permanent Impairments* intended to provide additional details on the evaluation of impairments and disability (Demeter and Andersson, 2004). Eliashof and Streltzer (2003) note that the only time that the *AMA Guides* (2001) assigns rating percentages to mental disorders is when neurologic impairment (e.g., organic brain syndrome, dementia) is also present. In this case, patients may be rated for their psychological impairment using the clinical dementia rating score. Impairment categories are:

- Mild (0–14 percent rating): ability to perform most activities of daily living with only mild limitations of social and interpersonal functioning;
- Moderate (15–20 percent rating): requires some direction and supervision of daily living activities or has moderate limitation of some but not all social and interpersonal interactions;
- Marked (30–49 percent rating): requires directed care under con-

**TABLE 5-10** *AMA Guides to the Evaluation of Permanent Impairment*  
 Classes of Impairment due to Mental and Behavioral Disorders

Area or Aspect of Functioning	Class 1 No Impairment	Class 2 Mild Impairment	Class 3 Moderate Impairment	Class 4 Marked Impairment	Class 5 Extreme Impairment
Activities of daily living	No impairment noted	Impairment levels are compatible with most useful functioning	Impairment levels are compatible with some, but not all, useful functioning	Impairment levels significantly impede useful functioning	Impairment levels preclude useful functioning
Social functioning					
Concentration					
Adaptation					

SOURCE: AMA, 2001. Reprinted with permission.

tinued supervision and confinement in the home or another facility, or has severe limitations impeding useful action in almost all social and interpersonal daily functions; and

- Extreme (50–70 percent): unable to care for self or to be safe without supervision, or has severe limitation of daily functions requiring total dependence on another person.

Table 5-10, reproduced from the *AMA Guides* (2001), summarizes the impairment categories identified by the association.

### SSA “Blue Book”

Many of the criteria used by the SSA for assessing impairment due to mental disorders are captured in the *AMA Guides* discussed above. A key difference between Social Security and VA disability is that in Social Security ratings the impairment must be severe enough to prevent any substantial gainful activity (SGA). Thus, unlike VASRD ratings, there are not varying degrees of partial disability but rather an “either-or” ability or inability to achieve SGA. The following key criteria in the paragraphs below are excerpted from the so-called *Blue Book* (SSA, 2005).

Functional limitations are assessed in four areas: activities of daily living; social functioning; concentration, persistence, or pace; and episodes of decompensation. The severity in one or more of these areas must be *marked*, defined as more than moderate but less than extreme. A marked limitation must interfere seriously with the ability to function independently, appropriately, effectively, and on a sustained basis (§§ 404.1520a and 416.920a).

*Activities of daily living* include activities such as cleaning, shopping, cooking, taking public transportation, paying bills, maintaining a residence, grooming and hygiene, using telephones and directories, and using a post office. An assessment will examine the level of independence (i.e., not needing supervision or direction), appropriateness, effectiveness, and sustainability of each of these activities.

*Social functioning* includes the ability to get along with others: family members, friends, neighbors, and so on. Evidence of impairment of social functioning may include a history of altercations, evictions, firings, fear of strangers, avoidance of interpersonal relationships, or social isolation. Conversely, strength in social functioning can be exhibited by participation in group activities, consideration for others, awareness of others' feelings, and the ability to initiate social contacts and communicate clearly with others. Social functioning in the workplace may involve interactions with the public, responding appropriately to supervisors, or cooperating with coworkers.

*Concentration, persistence, or pace* refers to the ability to sustain focused attention and concentration for a duration sufficient to permit the timely and appropriate completion of tasks commonly found in work settings. Major limitations in this area can often be assessed through clinical examination or psychological testing with such tests as subtracting serial sevens from 100, tasks requiring short-term memory, or tasks that must be completed within established time limits. In work evaluations, concentration, persistence, or pace is assessed by testing the ability to sustain work in either real or simulated work tasks, for example, by filing index cards, locating telephone numbers, or disassembling and reassembling objects. Strengths include the ability to work at a consistent pace for acceptable periods of time and until a task is completed and the ability to repeat a sequence of actions to achieve a goal or an objective. A marked limitation might exist if the completion of tasks requires extra supervision or assistance or cannot be done in accordance with quality and accuracy standards, at a consistent pace without an unreasonable number and length of rest periods, or without undue interruptions or distractions.

*Episodes of decompensation* are exacerbations or temporary increases in symptoms or signs that would ordinarily require increased treatment or being placed in a less stressful situation. Episodes of decompensation may be inferred from medical records showing significant alteration in medication or from documentation of the need for a more structured psychological support system, such as hospitalization, placement in a halfway house, or living in a highly structured household. The term "repeated episodes of decompensation, each of extended duration" implies at least three episodes within one year, or an average of at least once every four months, with each episode lasting for at least two weeks.

### *Summary Observations*

The AMA publications and SSA programs reviewed above provide guidance on the evaluation of disabilities resulting from mental disorders, but their systems generally shy away from the kind of numerical rating specificity that is at the heart of the VA compensation system. The committee thus concludes that these other evaluation methods are not more appropriate to use for evaluating mental-disorder disability than the one VA currently uses. However, these other methods do offer some insights into the components of a comprehensive disability assessment, which ultimately informed the committee's conclusions and recommendations on VA's rating criteria for PTSD.

### **Conclusions—Rating Criteria for PTSD**

As mentioned above, there are two major limitations regarding the current VASRD approach to rating mental disorders. First, there is a single rating scheme that lumps together heterogeneous symptoms and signs, allowing very little differentiation across specific conditions. Second, OSI is the driving factor for each level of disability for mental disorders. Not only is OSI ill defined, but secondary factors used for physical disorders (Table 5-5) are not explicitly considered, which leaves a disproportionate reliance on OSI.

The committee concludes that these criteria are—at best—a crude and overly general instrument for the assessment of PTSD disability and therefore recommends that rating criteria be developed that are specific to PTSD and based on the *DSM*.

It is beyond the scope of the committee's charge to specify the criteria and disability levels that should be associated with such a revised rating schedule. However, in response to VA's charge, the committee offers for VA's consideration a framework that it developed for establishing a revised PTSD disability rating system. This framework—illustrated in Table 5-11—takes a multidimensional approach in order to provide a more comprehensive evaluation of disability. Although the table focuses specifically on PTSD, it is likely that the approach used in the framework could be effective for other mental disorders as well. Five dimensions are assessed in rating disability: symptoms, psychosocial functional impairment, occupational functional impairment, treatment factors, and health-related quality of life. The second and third factors can also be considered as two elements of an overarching construct, functional impairment.

PTSD *symptoms* could be assessed by a skilled clinical interview as described in the *Best Practice Manual* (Watson et al., 2002), which may be supplemented by the standardized PTSD symptom severity scales discussed

in Chapter 3—the Clinician-Administered PTSD Scale (CAPS) or the PTSD Checklist (PCL), for example.

The primary feature that distinguishes the committee's framework from the current rating criteria is that it specifies that the psychosocial and occupational aspects of functional impairment be separately evaluated and that a claimant be rated on the dimension on which he or she is more affected. This differs from the current scheme, which defines the rating level solely in terms of occupational impairment. The committee believes that the emphasis on occupational impairment in the current criteria unduly penalizes veterans who may be symptomatic or impaired in other dimensions but who are capable of working, and thus it may serve as a disincentive to both work and recovery.

*Psychosocial functional impairment* might be assessed with the Post-Military Psychosocial Adjustment interview items recommended in the *Best Practice Manual* (Watson et al., 2002). The number and severity of psychosocial-functioning variables could be ranked in some ordinal fashion. This dimension is also where the distress related to PTSD that is not captured by symptom severity alone might be graded.

*Occupational functional impairment* would cover not only inability to work or absenteeism but also partial work impairment as reflected in decreased work performance (also known as *presenteeism*). This impairment might be captured by assessing concentration, pace, persistence, and other factors that decrease work productivity, or else by standardized scales (for example, the Work Limitation Questionnaire), though the validity and applicability of each approach would need to be determined. The fact that medical disorders can be rated 100 percent without requiring total unemployment suggests that, in order to avoid creating disincentives to return to work, Level V could be coded for profound occupational impairment in a person who is sporadically employed. Research indicates that people with severe mental illness constrain their work activity in order to retain social welfare benefits (Polak and Warner, 1996; MacDonald-Wilson et al., 2001), which in turn acts as an impediment to recovery.<sup>15</sup> Eliminating occupational impairment as the defining factor in rating the severity of disability would remove this deterrent. Furthermore, having occupational impairment as one of several dimensions—rather than as the predominant factor—in rating disability would result in greater parity between the rating of mental disorders and physical disorders.

*Treatment factors* such as intensity, complexity, and response are given a discrete dimension in the framework, as is the case for a number of physical disorders rated in the VASRD. The treatments considered would be those that are evidence-based, such as cognitive therapies, antidepressants,

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<sup>15</sup>The literature regarding disincentives to recovery is addressed in Chapter 6.

and the like. The ratings along the treatment dimension would be higher in those cases where there were conditions such as substance use that often occur in conjunction with PTSD and that complicate treatment and treatment response and thus adversely affect disability. This dimension would, of course, be assessed only in claimants for whom treatment records were available. The committee notes that the treatment dimension would likely play a far greater role in reevaluations than in initial examinations since many initial claimants may be filing for disability in order to obtain access to treatment.

*Health-related quality of life* is one of the assessment factors specified in the VA's Automated Medical Information Exchange worksheets for initial and review PTSD examinations (reproduced in Appendix C), but it is not explicitly mentioned in the current rating criteria. Since these worksheets are intended to ensure that a rating specialist receives all information necessary to rate a claim, it is clear that VA believes this factor to be important. Section M of the initial examination worksheet<sup>16</sup> (Integrated Summary and Conclusions) calls for the clinician to:

- describe changes in psychosocial functional status and quality of life following trauma exposure (performance in employment or schooling, routine responsibilities of self-care, family role functioning, physical health, social/interpersonal relationships, recreation/leisure pursuits); and
- describe linkage between PTSD symptoms and aforementioned changes in impairment in functional status and quality of life. Particularly in cases where a veteran is unemployed, specific details about the effects of PTSD and its symptoms on employment are especially important.

The worksheets do not specify how quality of life is to be evaluated, but the committee notes that this dimension could be assessed with standardized, well-validated measures such as the SF-36 (Ware, 1993; McHorney et al., 1993), CDC HRQoL-14 (CDC, 2007), or other health-related quality-of-life scales.

The percentage ratings provided in each row of Table 5-11 should not be taken as a final recommendation but instead are intended to illustrate how such a multidimensional approach is compatible with the current VASRD ordinal rating system. Furthermore, it should be noted that the percentage ratings are *not* intended to read across a row; in other words, it is not the intent to require an individual to meet a particular severity level in every dimension in order to qualify for that VASRD disability rating—for example, requiring that an individual be given Level III ratings or greater on all five dimensions in order to attain a 50 percent disability rating. Rather

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<sup>16</sup>Analogous language is contained in Section L of the review examination worksheet.

the percentages reflect the ordinal severity level *within* each dimension. There are various ways that the ratings from the individual dimensions can be aggregated to obtain a composite disability rating. The committee does not endorse any particular means, but observes that examples include:

- *All domains equal approach*: add up the percent disability for each domain, and divide by the number of domains.
- *Worst domains dominate approach*: take that average of the two (or three) highest-rated domains.
- *Hierarchical domains approach*: assign greater weight to certain domains (for example, symptom severity > occupational impairment > psychosocial functioning > treatment response > quality of life).
- *Multi-attribute rating scale approach*: use case vignettes and an expert panel to derive a system of scoring and weighting.

Several factors were not included in the multidimensional rating framework. The type and severity of the stressor is not included, for example. There are several reasons for this particular omission. First, the stressor is not an outcome but presumably a causal factor in the pathogenesis of PTSD. Second, it is evaluated as criterion A of the *DSM-IV* diagnostic criteria for PTSD (APA, 1994). Third, the VA requires that the stressor be ascertained except in special circumstances. Fourth, any impairment related to the particular type and severity of stressor should be picked up in one or more of the other dimensions.

Another factor not included as a dimension was complications (or comorbidity) related to PTSD, such as substance abuse or chronic pain. Since these can be coded elsewhere, the VASRD would discourage double-counting them (known as pyramiding<sup>17</sup>) and thereby inflating the disability rating of PTSD as well. Indeed, the veteran benefits from having disabilities rated separately.

The mandate underlying the VASRD<sup>18</sup> specifies that ratings be based on the impairment of earning capacity, a standard that would suggest that a focus on occupational function is proper. However, as documented in Chapter 1, there is abundant evidence that both the VA and the Congress take other criteria into account when setting ratings policy. The committee believes that it is appropriate to apply this broader approach to PTSD ratings. The committee wishes to emphasize that this framework is only a starting point for the revision of the ratings schedule for PTSD and that the final product must be the result of careful consideration by the VA.

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<sup>17</sup>38 CFR §4.14

<sup>18</sup>U.S. Code Title 38, Part II, Chapter 11, subchapter VI, §1155, *Authority for schedule for rating disabilities*.

**TABLE 5-11** Example of a Multidimensional Approach to PTSD Disability Rating

Qualitative Severity Level			Functional Impairment	
Level	(%) <sup>a</sup>	PTSD Symptoms <sup>b</sup>	Psychosocial <sup>c</sup>	or
I	(10)	Mild	No psychosocial or occupational impairment	
II	(30)	Moderate	Mild psychosocial impairment (e.g., frequent altercations with family or friends, sexual dysfunction, avoids activities)	or
III	(50)	Moderately severe	Moderate psychosocial impairment (e.g., divorce, estrangement from children, engages in high-risk behavior)	or
IV	(70)	Severe	Severe psychosocial impairment (e.g., trouble with the law, self-mutilation)	or
V	(100)	Incapacitating	Very severe psychosocial impairment (suicidality, violent behavior, extreme social isolation)	or

<sup>a</sup>These percentage ratings are not intended to read across a row, i.e., requiring an individual to meet a particular severity level across all dimensions in order to qualify for that VASRD disability rating (e.g., Level III ratings or greater on all five dimensions to attain a 50 percent disability rating). Rather the percentages reflect the ordinal severity level within each dimension. Various ways of aggregating individual dimension severity ratings into an overall rating are discussed in the text.

<sup>b</sup>Use skilled clinical interview as described in the *Best Practice Manual* (Watson et al., 2002), which may be supplemented by standardized PTSD symptom severity scales, e.g., Clinician-Administered PTSD Scale (CAPS) and/or PTSD Checklist (PCL).

<sup>c</sup>For psychosocial functioning, raters could use the Post-Military Psychosocial Adjustment interview items recommended in the *Best Practice Manual* (Watson et al., 2002). Number and severity of psychosocial functioning variables could be ranked in some ordinal fashion. Also, this is where the distress related to PTSD not captured by symptom severity alone might be graded.

### Training of Raters

Determining ratings for mental disabilities in general and for PTSD specifically is more difficult than for many other disorders because of the inherently subjective nature of symptom reporting. In order to promote more accurate, consistent, and uniform PTSD disability ratings, the committee recommends that the VA establish a specific certification program for raters who deal with PTSD claims, with the training to support it, as well as periodic recertification. PTSD certification requirements should be

Occupational <sup>d</sup>	Treatment Intensity, Complexity, and Response <sup>e</sup>	Health-Related Quality of Life Impairment <sup>f</sup>
	No formal treatment indicated	Minimal
Mild occupational impairment ( <i>e.g., decreased work performance, excess sick days</i> )	Responds to intermittent therapy	Mild
Moderate occupational impairment ( <i>e.g., frequent job changes or job losses</i> )	Responds to continuous or repeated therapy	Moderate
Severe occupational impairment ( <i>e.g., prolonged periods without work</i> )	Incomplete response to multiple therapeutic trials	Moderately severe
Profound occupational impairment ( <i>unable to participate in sustained employment</i> )	Refractory to treatment	Severe

<sup>d</sup>For occupational functioning, decreased work performance (“presenteeism”) might be captured by asking about concentration, pace, persistence, and other factors that decrease work productivity, or by standardized scales (e.g., Work Limitation Questionnaire), though the validity and applicability of each approach would need to be determined. Also the fact that medical disorders may be rated 100 percent without requiring total “unemployability” suggests Level V could be coded for profound occupational impairment in a person who is sporadically employed (to avoid disincentives to return to work).

<sup>e</sup>Treatments would be those that are evidence-based (cognitive therapies, antidepressants, and the like). Rating along the treatment dimension would reach a higher severity level if there are conditions (substance use, for example) that co-occur at high rates in PTSD, complicate treatment and treatment response, and thus adversely affect disability. This dimension would only be assessed in claimants for whom treatment records were available.

<sup>f</sup>Assess factors that affect health-related quality of life (HRQoL) not captured by other dimensions such as several that are captured by SF-36 (Ware, 1993; McHorney et al., 1993), CDC HRQOL-14 (CDC, 2007), or other HRQoL scales.

regularly reviewed and updated to include medical advances and to reflect lessons learned. The program should provide specialized training on the psychological and medical issues (including common comorbidities) that characterize the claimant population, and guidance on how to appropriately manage commonly encountered ratings problems. The committee believes that rater certification will foster greater confidence in ratings decisions and in the decision-making process.

Requiring certification may also necessitate that some ratings be done at a facility other than the one closest to the veteran in order to ensure that

a qualified rater performs the evaluation in a timely manner. Because raters do not directly evaluate claimants but rather evaluate the information produced by clinicians and other members of the C&P team, the committee does not believe that this would necessarily cause problems with the delivery of services. However, it is up to VA to implement the program in a manner that facilitates open communications between clinicians, remote raters, and other dispersed personnel and ensures that the claimants and those who help them are not disadvantaged.

The Institute of Medicine report *A 21st Century System for Evaluating Veterans for Disability Benefits*, which will be released in summer 2007, will also address and offer recommendations regarding the C&P examination and disability rating processes.

## FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

On the basis of the review of the papers, reports, and other information presented in this chapter, the committee has reached the following findings, conclusions, and recommendations, and identified the following research needs.

### Findings and Conclusions

- The VASRD criteria for rating mental disorders disability levels are at best a crude and overly general instrument for the assessment of PTSD disability.

### Recommendations

- Data fields recording the application and reevaluation of benefits should be preserved over time rather than being overwritten when final determinations are made. Data should also be gathered at two points in the process where there is currently little information available: before claims are made and after compensation decisions are rendered.

- New VASRD rating criteria specific to PTSD and based on the DSM should be developed and implemented. A multidimensional framework for characterizing PTSD disability—detailed in this chapter—should be considered when formulating these criteria.

- VA should establish a certification program for raters who deal with PTSD claims, with the training to support it, as well as periodic recertification. PTSD certification requirements should be regularly reviewed and updated to include medical advances and to reflect lessons learned. The program should provide specialized training on the psychological and medical issues (including common comorbidities) that characterize the claimant

population, and guidance on how to appropriately manage commonly encountered ratings problems.

## REFERENCES

- Aaron LA, Buchwald D. 2001. A review of the evidence for overlap among unexplained clinical conditions. *Annals of Internal Medicine* 134(9 Pt 2):868–881.
- AMA (American Medical Association). 2001. L Cocchiarella, GBJ Andersson, eds. *Guides to the Evaluation of Permanent Impairment, Fifth Edition*. Chicago, IL: AMA.
- APA (American Psychiatric Association). 1994. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. (DSM-IV)*. Washington, DC: APA.
- CDC (Centers for Disease Control and Prevention). 2007. *Centers for Disease Control and Prevention Health-Related Quality-of-Life 14-Item Measure*. [Online]. Available: [http://www.cdc.gov/hrqol/hrqol14\\_measure.htm](http://www.cdc.gov/hrqol/hrqol14_measure.htm) [accessed January 28, 2007].
- Demeter SL, Andersson GBJ. 2004. *Disability Evaluation*. Washington, DC: AMA.
- DOD (Department of Defense). 1996 (November 14). *Department of Defense Instruction—Application of the Veterans Administration Schedule for Rating Disabilities*. DODI 1332.39. [Online]. Available: [http://www.dtic.mil/whs/directives/corres/pdf/i133239\\_111496/i133239p.pdf](http://www.dtic.mil/whs/directives/corres/pdf/i133239_111496/i133239p.pdf) [accessed July 3, 2006].
- DOD. 2006 (February 17). *DOD Programs Addressing the Issue of Concurrent Receipt*. [Online]. Available: [http://www.defenselink.mil/prhome/docs/concurrent\\_retire\\_06.pdf](http://www.defenselink.mil/prhome/docs/concurrent_retire_06.pdf) [accessed July 3, 2006].
- DVA (U.S. Department of Veterans Affairs). 2004 (February). *Veterans Benefits Administration Handbook for Veterans Service Representatives, Version 4*. Washington, DC: DVA.
- DVA. 2005a (June). *Fact Sheet: Transition Assistance in the VA Military Services Program*. Washington, DC: Office of Public Affairs, Media Relations.
- DVA. 2005b. *Review of State Variances in VA Disability Compensation Payments*. Report No. 05-00765-137. Washington, DC: VA Office of the Inspector General. [Online]. Available: <http://www.va.gov/oig/52/reports/2005/VAOIG-05-00765-137.pdf> [accessed November 9, 2006].
- Eliashof BA, Streltzer J. 2003. Chapter 41: Psychological impairment. Pp. 583-594 in SL Demeter, GB Andersson, eds. *Disability Evaluation, Second Edition*. St. Louis, MO: American Medical Association.
- GAO (U.S. General Accounting Office). 2001. *Veterans' Benefits. Training for Claims Processors Needs Evaluation*. GAO-01-601. Washington, DC: GAO.
- GAO. 2005. *Military and Veterans' Benefits—Improvements Needed in Transition-Assistance Services for Reserves and National Guard*. GAO-05-844T. Washington, DC: GAO.
- GAO. 2006. *Military Disability System—Improved Oversight Needed to Ensure Consistent and Timely Outcomes for Reserve and Active Duty Service Members*. GAO-06-362. Washington, DC: GAO.
- Gardner JW, Gibbons RV, Hooper TI, Cunnion SO, Kroenke K, Gackstetter GD. 2003. Identifying new diseases and their causes: the dilemma of illnesses in Gulf War veterans. *Military Medicine* 168(3):186–193.
- Henning CA. 2006 (March 14). *Military Retirement: Major Legislative Issues. Congressional Research Service, The Library of Congress*. [Online]. Available: <http://www.fas.org/sgp/crs/natsec/IB85159.pdf> [accessed July 3, 2006].
- Howard NS. 2006 (June 21). *Department of Defense Disability Evaluation System*. [PowerPoint presentation]. Washington, DC: Veterans' Disability Benefits Commission.
- IOM (Institute of Medicine). 2007. *A 21st Century System for Evaluating Veterans for Disability Benefits*. Washington, DC: The National Academies Press.

- MacDonald-Wilson K, Rogers ES, Anthony WA. 2001. Unique issues in assessing work function among individuals with psychiatric disabilities. *Journal of Occupational Rehabilitation* 11(3):217–232.
- McHorney CA, Ware JE, Raczek AE. 1993. The MOS 36-item short-form health survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. *Medical Care* 31:247–263.
- Polak P, Warner R. 1996. The economic life of seriously mentally ill people in the community. *Psychiatric Services* 47(3):270–274.
- Sayer NA, Thuras P. 2002. The influence of patients' compensation-seeking status on the perceptions of Veterans Affairs clinicians. *Psychiatric Services* 53(2):210–212.
- Sayer NA, Spooft M, Nelson DB. 2005. Post-traumatic stress disorder claims from the viewpoint of veterans service officers. *Military Medicine* 170(10):867–870.
- SSA (Social Security Administration). 2005. 12.00 Mental Disorders—Adult. In *Disability Evaluation Under Social Security (Blue Book—January 2005)*. [Online]. Available: <http://www.ssa.gov/disability/professionals/bluebook/12.00-MentalDisorders-Adult.htm> [accessed February 20, 2007].
- U.S. Army. 2006. *Disabled Veterans Benefits*. [Online]. Available: [http://www.acap.army.mil/transitioner/transition\\_assistance/disbl\\_veterans.cfm](http://www.acap.army.mil/transitioner/transition_assistance/disbl_veterans.cfm) [accessed February 13, 2007].
- Van Dyke C, Zilberg NJ, McKinnon JA. 1985. Posttraumatic stress disorder: a thirty-year delay in a World War II veteran. *American Journal of Psychiatry* 142:1070–1073.
- VBA (Veterans Benefits Administration). 1999 (January 25). *VBA Pre-discharge Claims Development, Examinations, and Rating Decisions*. Circular 20-98-2, Change 1. Washington, DC: Department of Veterans Affairs.
- VBA. 2005. *Veterans Benefits Administration Manual M21-1MR, Part III, Chapter 3, General Claims Process, Subpart IV, General Rating Process*. Washington, DC: Department of Veterans Affairs.
- VDDB (Veteran's Disability Benefits Commission). 2006. *Meeting Minutes, September 13-15, 2006*. [Online]. Available: [https://www.1888932-2946.ws/vetscommission/e-document-manager/gallery/Documents/October\\_2006/SeptemberMinutes\\_final.pdf](https://www.1888932-2946.ws/vetscommission/e-document-manager/gallery/Documents/October_2006/SeptemberMinutes_final.pdf) [accessed June 23, 2007].
- Violante JA. 2004. *Statement of Joseph A. Violante, National Legislative Director of the Disabled American Veterans Before the Committee on Veterans' Affairs United States House of Representatives, February 4, 2004*. [Online]. Available: [http://www.dav.org/voters/documents/statement\\_violante\\_020404.pdf](http://www.dav.org/voters/documents/statement_violante_020404.pdf) [accessed April 16, 2007].
- Walcoff M. 2006 (September 13). *Statement of Michael Walcoff, Associate Deputy Under Secretary for Field Operations, Veterans Benefits Administration, Department of Veterans Affairs, Before the Subcommittee on Disability Assistance and Memorial Affairs, House Committee on Veterans' Affairs*. Washington, DC.
- Ware JE. 1993. *SF-36 Health Survey: Manual and Interpretation Guide*. Boston, MA: The Health Institute, New England Medical Center.
- Watson P, McFall M, McBrine C, Schnurr PP, Friedman MJ, Keane T, Hamblen JL. 2002. *Best Practice Manual for Posttraumatic Stress Disorder (PTSD) Compensation and Pension Examinations*. [Online]. Available: <http://www.avapl.org/pub/PTSD%20Manual%20final%206.pdf> [accessed January 13, 2007].

## 6

### Other PTSD Compensation Issues

As part of their charge, the Department of Veterans Affairs (VA) requested that the committee offer their observations on some broad topics concerning compensation for posttraumatic stress disorder (PTSD). It posed four questions:

- What are the barriers or disincentives to recovery?
- What are or might be incentives to recovery?
- What is the evidentiary basis for the physical, psychological, and social influences of compensation on treatment and recovery?
- Is periodic reexamination appropriate for asymptomatic patients, as it relates to compensation?

This chapter addresses these questions. As some of the relevant research on the topics comes from nonmilitary populations and civilian compensation programs, the chapter reviews literature in these areas. Sexual assault and gender—two intersecting issues related to exposure to trauma and the frequency and severity of PTSD in veterans—are also discussed. The committee undertook to examine these issues because research indicates that there is gender disparity in service connection for PTSD and that the relative difficulty of documenting in-service sexual assault (as compared to documenting combat exposure) may be a factor in this difference.

## BARRIERS OR DISINCENTIVES TO RECOVERY

The committee's charge directed it to examine the barriers or disincentives to recovery and to "directly assess how PTSD compensation might influence beneficiaries' attitudes and behaviors in ways that might serve as barriers to recovery." This section addresses the general topic of barriers or disincentives to recovery, while the section that follows presents the literature on the effect of compensation on recovery and the committee's conclusions and recommendations regarding this issue. Many of the studies on the barriers to recovery for persons with mental disorders have been conducted on civilian populations receiving support from programs administered by the Social Security Administration (SSA). As such, this chapter examines a broader range of research than other parts of the report.

*Recovery* can be defined in various ways. In the context of this report, the committee considered recovery to be a reduction in the frequency and intensity of symptoms accompanied by an increase in social and occupational function. The research reviewed and cited in this section often used *return to work* as the specific measure of recovery.

Research from the fields of disability, economics, health care, and labor studies has documented the wide variety of barriers to recovery and more broadly, to career advancement and economic security that can affect people with disabling mental disorders. In the civilian population, these barriers include low educational attainment, unfavorable labor market dynamics, low productivity, lack of appropriate vocational and clinical services, stigma in seeking services, labor force discrimination due to disabling conditions or race and ethnicity, failure of protective legislation, work disincentives caused by private and public disability policies, linkage of health care access to disability beneficiary status, and ineffective work incentive programs. Several notable barriers are discussed in more detail below.

### Barriers Encountered by Veterans and Members of the General Population

One major barrier to recovery for many veterans who leave active-duty service is that they lack the necessary postsecondary education and training required to build careers. The original GI Bill was created, in part, to compensate veterans whose educational and career opportunities were interrupted by military service (Angrist, 1993). Research has shown that users of veterans' benefits do increase their levels of education, resulting in corresponding increases in earning power (O'Neill, 1977), and that the largest benefits accrue to those who attend college or graduate school (Angrist, 1993). It has been suggested that PTSD is more likely to oc-

cur among veterans at lower educational levels rather than higher ones<sup>1</sup> (Breslau et al., 1991), and, indeed, Beckham and colleagues found that the average number of years of education was significantly lower among veterans with PTSD than among veterans without PTSD (Beckham et al., 1998). One implication of this is that analyses of the association between PTSD and occupational success will be confounded by the level of educational achievement.

Deficits in education are critically important because advanced education is increasingly essential to securing a high-paying job. In 2004, all but one of the 50 highest-paying occupations in the U.S. required a college degree or graduate education (BLS, 2006). A multivariate analysis of employment among a nationally representative group of adults with mental illness in the National Health Interview Survey: Disability Supplement found that education was a significant predictor of employment in general as well as, specifically, of employment in executive, administrative, or professional specialty occupations (Mechanic et al., 2002).

Another barrier to recovery stems from the fact that many individuals whose condition improves after the onset of disability reenter the workforce at a significant disadvantage. Research shows that disabled individuals on Supplemental Security Income (SSI) who reenter the labor force tend to work at jobs that are lower paying and held for fewer hours per week than the jobs they held prior to becoming disabled (Schechter, 1999). Further, while workplace accommodations may extend the average duration of employment for disabled individuals (Burkhauser et al., 1995), there is evidence that some injured workers who receive job accommodations also receive lower wages so that they, in essence, “pay the price” of their own accommodations (Gunderson and Hyatt, 1996). In one study of individuals with psychiatric disabilities who returned to work, among those working full-time only 24 percent had jobs that provided medical coverage, 16 percent had dental coverage, 8 percent mental-health coverage, and 20 percent sick leave (Cook et al., 2006).

Disability-income support policies often create unintended employment disincentives that help contribute to under- and unemployment (Burkhauser and Wittenburg, 1996; CBO, 1982). In both private and public disability-

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<sup>1</sup>There is little information on the association between educational level and combat exposure, but available studies do not indicate that lower educational attainment is serving as a proxy for combat exposure and thus accounts for the observed higher rates of PTSD in the less educated. Orcutt and colleagues (2002), who examined a cohort of nearly 3,000 male and female Gulf War veterans, found those with more years of education were both more likely to have been exposed to combat (0.15;  $p < .001$ ) and less likely to report PTSD symptoms ( $-0.05$ ;  $p < .001$ ). Frueh and colleagues (2005) did not identify a statistical association between combat exposure and educational level in a sample of ~100 Vietnam veterans presenting for PTSD treatment at a VA Medical Center.

compensation systems, for instance, regulations typically mandate an administrative review of the individual's disability status upon return to work. This discourages many disabled beneficiaries from seeking employment (Newcomb et al., 2003). And once they become employed, beneficiaries often find that, as their earnings increase, their monthly cash payments are sharply reduced. For example, the SSA sets an earnings cutoff called the substantial gainful activity (SGA) level. Social Security Disability Income (SSDI) beneficiaries can earn up to the SGA level each month (\$830 in 2006) with no loss of benefits; however, once earnings exceed that amount for nine nonconsecutive months plus a three-month grace period, all SSDI cash benefits cease. The sudden cutoff is referred to as the "earnings cliff" (White et al., 2005). SSI beneficiaries face a different penalty: Once their earnings reach \$65 per month, their cash payment is reduced by one dollar for every two dollars of additional earnings, a tax rate of 50 percent—far exceeding that paid by the wealthiest individuals (Stapleton et al., 2005). Yet another disincentive is an "implicit tax" on disabled workers whose labor force participation causes them to lose additional benefits such as housing subsidies, utility supplements, transportation stipends, and food stamps (Polak and Warner, 1996). Research has indicated that people with psychiatric disabilities are aware of these disincentives and report that they plan their labor force participation accordingly (Polak and Warner, 1996; MacDonald-Wilson et al., 2003).

The effects of work disincentives are also evident in studies comparing the employment outcomes of disabled individuals who do and who do not receive disability-related income support. One study of individuals with psychiatric disabilities receiving employment services found that those receiving SSI or SSDI cash benefits were significantly less likely to work competitively, to work forty or more hours per month, or to have high earnings than those who didn't receive such benefits, regardless of clinical condition, level of disability, symptoms, education, or prior work history (Cook et al., 2005). According to research on both national and statewide cohorts of state vocational rehabilitation service recipients with psychiatric disabilities, employment rates are significantly lower among SSI and SSDI beneficiaries than among nonbeneficiaries, after controlling for functional impairment, level of family support, and demographics (Hayward and Schmidt-Davis, 2005; Cook, 2003). Two studies that controlled for a series of confounding demographic and clinical factors found that veterans with psychiatric and other disabilities are less likely to work, earn less money, and work fewer hours if they receive full—versus partial—benefits or if they receive more generous benefit amounts (Rosenheck et al., 1995; Drew et al., 2001). It should be noted that the reasons for the behavior underlying these results are complex and deserve careful thought; one should not simply conclude from them that giving only partial benefits would solve the problem.

Given the evidence suggesting that people respond to work disincentives by altering their labor force participation, it follows that policies designed to discourage reliance on disability income may paradoxically discourage substantial work attempts that could lead to exit from the rolls. Instead, many individuals receiving SSI and SSDI find themselves out of the labor force or trapped in low-paying, entry-level jobs where they are prevented from realizing their full career potential (Stapleton et al., 2005; Cook and Burke, 2002). Those who do successfully overcome their disability and maintain employment—and thus lose their cash benefits and related health insurance—often experience relapses of their illnesses due to their inability to get access to health and mental-health services.

Recognizing this problem, various work-incentive provisions for individuals receiving public disability income support have been legislated by Congress. The Employment Opportunities of Disabled Americans Act of 1986 (Public Law 99-643), Section 1619(b), provided for continued SSI eligibility and access to Medicaid as long as earnings remain below a threshold established by each state. Another mechanism permitting individuals to work above SGA level while retaining Medicaid benefits was the Medicaid buy-in state plan option under the Balanced Budget Act of 1997 (Public Law 105-33). The newest piece of disability legislation designed to address work disincentives is the Ticket to Work and Work Incentives Improvement Act of 1999 (Public Law 106-170). This legislation was intended to give people with disabilities increased vocational service options and reduce employment disincentives, while at the same time reducing government spending on people with disabilities (Stapleton and Livermore, 2003). To accomplish the first objective, vouchers or “tickets” were mailed to all work-disabled SSI and SSDI beneficiaries. The tickets are redeemable for 5 years of vocational services from providers of the beneficiaries’ own choosing (Cook et al., 2006). In addition, Ticket participants were offered free benefits and entitlements counseling to help them gauge the effects of employment on their cash benefits and other unearned income. SSA also placed a moratorium on continuing-disability reviews for Ticket participants and encouraged state Medicaid buy-ins enabling people to keep their health insurance after cash benefits ceased. The idea was that SSA would realize savings from the “outcome payment”-based structure, where providers would be paid only for the months that individuals earned above SGA or only at the time beneficiaries left the rolls because of employment.

Unfortunately, the national evaluation of the Ticket program (Thornton et al., 2006) has identified several problems with its implementation. First, the rate of participation in the program is very low. Even in states where it has operated the longest, just 1.1 percent of beneficiaries have assigned their tickets to providers. Second, the rate of provider participation is similarly low. Only 40 percent of all providers were accepting tickets as of June 2004.

Moreover, consistent with the simulation study cited earlier (Cook et al., 2006), the evaluators' analysis of provider costs and revenues suggests that those relying solely on Ticket payments would have lost money after two years of operation. Despite this pessimistic picture, Ticket participation is relatively vigorous among individuals with disabling mental disorders, who have the fifth-highest rate of participation among the 21 primary disabling conditions examined (Thornton et al., 2006). At the same time, there is also evidence of reluctance to serve this population since one-third of the providers interviewed for the evaluation mentioned psychiatric or other disabilities as a challenge to finding jobs for Ticket beneficiaries.

Some of the barriers discussed above apply to veterans but are ameliorated by the presence of VA programs, while others are exacerbated by the special circumstances of military service. One ameliorative factor is that veterans' benefits subsidize education and vocational training. Among the exacerbating circumstances is the high level of stigma that the military culture places on seeking help for mental-health problems. For example, one study found that VA providers reported more negative attitudes toward clinical work involving veterans seeking PTSD compensation than toward clinical work involving other veterans (Sayer and Thuras, 2002). Another exacerbating factor is the lack of VA-sponsored employment programs in some areas of the country.

On the other hand, there is also some evidence that receiving service-connected disability for PTSD actually encourages individuals to seek mental-health treatment. Unpublished research by Sayer and colleagues indicates that the claim process may make it easier to gain access to medical services and that being awarded disability status for PTSD may facilitate access to mental-health services (Sayer et al., 2005b).<sup>2</sup>

Although there are studies on racial and ethnic influences on PTSD incidence and severity (Beals et al., 2002; Friedman et al., 2004; Kulka et al., 1990a; Loo et al., 2005; Ruef et al., 2000) and on culturally-sensitive diagnosis and treatment for the disorder (Blow et al., 2004; Penk and Allen, 1991; Rosenheck and Fontana, 1996), the information on service connection is far more limited. Murdoch and colleagues (2003a), however, did find that African American service members were less likely to be service connected for PTSD than other veterans (43 percent versus 56 percent;  $p=.003$ ) after controlling for sociodemographic characteristics, symptom severity, functional status, and trauma histories. A fact sheet produced by the VA's National Center for PTSD (Loo, 2007) counsels examining clinicians that

[p]rofessional responsibility in providing appropriate services to ethnic minority veterans also applies to Compensation and Pensions examina-

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<sup>2</sup>This topic is addressed in greater detail later in this chapter in the section entitled "Disability Compensation and the Use of VA Mental-Health Care Services."

tions. If clinicians do not evaluate for negative race-related events that may have led to psychiatric problems, the ethnic minority veteran may not be receiving the appropriate disability rating or compensation. Thus, it behooves VA clinicians to be particularly attentive to examining possible race, ethnic, or cultural issues among ethnic minority veterans.

### Summary

The committee's literature review indicates that there are many barriers to recovery for Vietnam veterans diagnosed with PTSD. Some of these are common to all people with disabilities, some are experienced by all those with mental disabilities, and a few are unique to veterans, to those with PTSD, and to persons using the VA disability system.

The literature suggests that many barriers are endemic to the programs used to provide services to those with disabilities, while some are unfortunate consequences of the symptomatology of certain disabilities, and others result from entrenched attitudes about the disabled and, in particular, about those with psychiatric illnesses. There are no easy solutions: experience with civilian benefits systems has shown that the problems will be difficult to remedy.

### THE EFFECT OF COMPENSATION ON RECOVERY

One of the key issues that the committee was asked to assess is how PTSD compensation might influence veteran beneficiaries' attitudes and behavior in ways that could serve as barriers to recovery. The committee was specifically asked to evaluate the evidentiary basis for various influences of compensation on treatment and recovery (Szybala, 2006).

The effect of disability compensation on beneficiaries' behavior has long been an issue in research and in practice, both in the general population (IOM, 1991; Bellamy, 1997) and for the military and veterans (IOM, 1999; Drew et al., 2001; Mossman, 1996). Attention has increasingly shifted to the more subjective ailments and injuries, such as chronic pain (Sullivan and Loeser, 1992; Rohling et al., 1995) and mental disorders (Estroff et al., 1997), particularly PTSD (Rosen, 2004, 2006; Mossman, 1994; Guriel and Fremouw, 2003). Because a positive finding often results in monetary or other types of compensation, assessing psychopathology within the context of disability is almost always complicated by the possible influences of secondary gain. Indeed, secondary gain has long been hypothesized to increase the possibility that symptoms and their effects will be exaggerated, both during the course of treatment and during recovery, and both for general disabilities and for combat-related PTSD in particular (Atkinson et al., 1982; APA, 1994; Resnick, 1997). In recent years, however, because of the

dramatic increase in the numbers of veterans seeking and receiving awards for PTSD, the possibility of service-connected disability being awarded because of exaggerated or fraudulent claims has become an increasing concern (DVA, 2005b; Murdoch et al., 2003a,b,c).

These concerns have resulted in a substantial research literature on compensation-seeking attitudes and behaviors among veterans. In the case of PTSD, most studies fall into one of four categories. The first is research on the fabrication, misrepresentation, or misrecall of veterans' combat or trauma exposure; such exposure is, of course, a key criterion if they are to receive service connection for their disabilities. The second—and by far the most common—type of research consists of studies that focus on the detection of misreporting or exaggeration of PTSD and other symptoms by veterans seeking or receiving compensation. Third, there is some research that examines how seeking or receiving compensation affects treatment-seeking or the use of mental-health services. Finally, there are a few studies on how receiving compensation might affect subsequent responsiveness to treatment or treatment outcomes.

### Misreporting of Combat or Trauma Exposure

A number of observers have suggested that the opportunity to receive disability compensation might motivate veterans to falsify or exaggerate their combat involvement or exposure. Some case reports describe Vietnam-era veterans who have fabricated histories of traumatic events, tours of duty, and even military service itself in order to obtain benefits (Sparr and Pankratz, 1983; Lynn and Belza, 1984; Burkett and Whitley, 1998), but these cases provide no direct evidence of the prevalence of such behaviors or the probable magnitude of their effect on seeking or receiving disability. A 2005 analysis by the VA Office of the Inspector General (OIG) focused on the claim files of 2,100 veterans receiving disability for PTSD and found that 25 percent had no compelling evidence that they had been exposed to any traumatic event whatsoever, thereby raising the specter of questionable compensation payments (DVA, 2005b). Subsequent review of the cases by the VA, however, determined that “[t]he problems with these files appear to be administrative in nature, such as missing documents, and not fraud” (DVA, 2005a).

The most widely cited empirical study on this issue is that of Frueh and colleagues (2005), who found that only 41 percent of 100 treatment-seeking veterans reporting Vietnam combat involvement had objective evidence of combat exposure documented in their publicly available military personnel records. They concluded from these results that a “meaningful” number of treatment-seekers “may be exaggerating or misrepresenting their involvement [and combat exposure] in Vietnam,” and, by inference, they attributed

this to “the disability benefit incentive” and compensation-seeking. They concluded, for example, that “concerns that exaggerated or false reports of combat exposure are at least in part associated with financial incentives are supported by our findings that the ‘no combat’ group appeared to be applying or intending to apply for disability benefits at the same rate as the ‘combat’ group.” However, both prior and subsequent research has called into question whether the information available solely in the military personnel files—commonly referred to as *201 files*—is adequate to support such a strong conclusion.

In contrast, a later study (Dohrenwend et al., 2006) came to a very different conclusion when it combined data from the National Vietnam Veterans Readjustment Study (NVVRS) (Kulka et al., 1990b) with newly developed data from military records and a comprehensive set of other archival sources in order to address questions raised about the influence of self-report bias on NVVRS estimates of the prevalence of PTSD among Vietnam veterans. Those researchers found “a strong positive relationship between [the veterans’] record-based . . . exposure measures and the dichotomous measure of . . . war zone stress constructed by the NVVRS investigators on the basis of veterans’ retrospective reports of their experiences.” While acknowledging McNally’s caution that “one cannot generalize from an epidemiological sample to a clinical one” and advice that “archival sources are important in both contexts” (McNally, 2006), it is also important to know the strengths and limitations of these sources.

In its role as the conservator of the military personnel records, which was the sole records source used by Frueh and colleagues, the National Archives and Research Administration offers the following caveat for users on its website:<sup>3</sup> “Detailed information about the veteran’s participation in military battles and engagements is NOT contained in the record” (U.S. National Archives and Records Administration, 2006; emphasis in original). The methods developed by Dohrenwend and colleagues (2006) clearly demonstrate the value of broad-based research into other indicators of the likelihood of having experienced traumatic stressors and the importance of using information from historical accounts (for example, unit assignments and dates of service). A veteran’s 201-file information is a necessary but not always sufficient source with which to confirm self-reported information related to combat involvement or exposure. A careful reading of the meticulous methodology employed by Dohrenwend and colleagues reveals that their analysis depended a great deal on indicators not directly obtainable from 201 files and shows that they did not consult with archival sources only as needed, despite what McNally implied and suggested in both the original and follow-up commentaries (McNally, 2006, 2007). Moreover,

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<sup>3</sup>[www.archives.gov/veterans/military-service-records/](http://www.archives.gov/veterans/military-service-records/).

Frueh and colleagues explicitly acknowledge the great potential value of adding “objective military records, including research on unit records and casualty reports” (Frueh et al., 2005).

In summary, while misrepresentation of combat involvement and exposure undoubtedly does happen among veterans seeking treatment and compensation for PTSD, the evidence currently available is insufficient to establish how prevalent such misrepresentations are and how much effect they have on the ultimate outcome of disability claims. And no matter how common such behavior ultimately proves to be, the best strategy for addressing this problem is most likely already at hand, based on the research that has been conducted to date.

The committee concludes that the most effective strategy for dealing with problems with self-reports of traumatic exposure is to ensure that a comprehensive, consistent, and rigorous process is used throughout the VA to verify veteran-reported evidence. One approach to achieving this objective is routine and consistent use of the full range and battery of methods implemented and tested by Dohrenwend and colleagues (2006). The best-practice manual for C&P examinations, written by VA clinicians, already recognizes the value of careful and in-depth review of records (Watson et al., 2002).

Consistent with such a strategy, a GAO report (GAO, 2006) described methods that the VA can use to improve its procedures for obtaining military service records, including several used by Dohrenwend, and reiterated the VA’s “duty to assist” veterans in obtaining any records relevant to their claims. One potential records issue that emerged from the committee’s research is the need for claimants to identify the dates of their stressor events within a fairly narrow time window.<sup>4</sup> Given the potential for a substantial gap between the time these events occurred and the time that claims are filed, it is possible that claimants might misremember dates and thus valid events might fail to be verified. In contrast, Dohrenwend used the full range of service dates to identify unit exposures from records and other archival sources. While it is recognized that such a protocol may increase both the time and expense required to complete these examinations, the OIG estimates of both the annual and lifetime costs of possible questionable compensation payments (DVA, 2005b) suggest that the long-term benefits of a more rigorous assessment may greatly outweigh such increases in costs (McGrath and Frueh, 2002).

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<sup>4</sup>Claimants requesting documentation from the U.S. Army and Joint Services Records Research Center are requested to provide the month and year of the stressor event[s] (Stichman, 2006). The committee understands that records researchers typically bracket their search by also checking the months before and after the dates provided.

### Misreporting or Exaggeration of Symptoms

As noted above, the majority of empirical studies conducted to date on the possible influence of the VA disability compensation system on PTSD and its treatment have addressed symptom-reporting issues. These issues include “symptom elevation” (Fairbank et al., 1983), “overreporting” (Hyer et al., 1988), “exaggeration” (Smith and Frueh, 1996) and “extreme exaggeration” (Gold and Frueh, 1999) in veterans seeking or receiving compensation for PTSD, and many of the studies have examined the use of standardized test measures to detect malingering or the feigning of PTSD symptoms (Frueh et al., 2000).<sup>5</sup> It is well established that combat veterans who are evaluated for PTSD frequently exhibit extreme elevations across various assessment measures (Fairbank et al., 1983). These elevated measures are also typically accompanied by a pattern of elevations on the MMPI/MMPI-2 validity scales consistent with symptom overreporting (Fairbank et al., 1983; Frueh et al., 1996, 1997; Hyer et al., 1986; Elhai et al., 2001; Franklin et al., 2002), so concerns have been raised regarding the accuracy of veterans’ accounts of their psychological functioning, which in turn poses significant challenges for diagnostic assessment and treatment. On the other hand, several researchers have noted that this response pattern—the reporting of a wide range of symptoms and overreporting of symptoms in general—is part of the overall profile of PTSD, a disorder characterized by the presence of a heterogeneous set of symptoms, high rates of comorbidity, and, quite often, extreme symptom severity (APA, 2000; Elhai et al., 2000, 2001; Fairbank, et al., 1983; Hyer et al., 1988; Keane and Wolfe, 1990).

While research and commentary (Elhai et al., 2000; Frueh et al., 1996, 1997; Smith and Frueh, 1996) suggests that this pattern may reflect, at least in part, symptom overreporting by a subset of veterans who are motivated by possible receipt of financial compensation, access to treatment, and other incentives, the literature examining the relationship between compensation seeking and reported levels of psychopathology has in fact yielded mixed results. Frueh and colleagues found that veterans they defined as compensation-seeking<sup>6</sup> scored significantly higher than non-compensation-seeking veterans on several MMPI scales (including the F scale) as well as on several associated pathology scales (Frueh et al., 1996). Similar results

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<sup>5</sup>Chapter 5, which addresses issues surrounding the conduct of the PTSD C&P examination, also discusses the topic of testing to detect malingering in the context of a broader examination of the use of psychometric instruments.

<sup>6</sup>*Compensation-seeking* veterans were defined as “those who were currently seeking or planning to seek VA disability compensation or increases in existing disability payments for PTSD” while *non-compensation-seeking* veterans were “those who were not intending to seek VA disability compensation for their PTSD symptoms” (Frueh et al., 2003).

were reported where compensation-seeking was not restricted to claims for PTSD (Frueh et al., 2003). When Smith and Frueh classified veterans as “exaggerators” and “nonexaggerators” of psychopathology based on the MMPI-2 F-K index, they found that exaggerators had higher rates of affective disorders and scored higher on self-report measures of various psychological symptoms but were no more likely to be seeking compensation (Smith and Frueh, 1996). In a follow-up study using stricter criteria for exaggeration, Gold and Frueh reported that “extreme exaggerators” were much more likely to be compensation-seeking and scored much higher on self-report measures of various symptoms, despite having lower rates of PTSD diagnoses and similar rates of comorbid disorders (Gold and Frueh, 1999).

A later study (DeViva and Bloem, 2003) replicated the results reported by Smith and Frueh, finding no relationship between exaggeration and compensation-seeking status using the lower cutoff for exaggerators, but the study did not replicate an earlier finding (Frueh et al., 1997) that compensation seekers scored higher on MMPI-2 subscales. Grubaugh and colleagues (2004) found that self-reports of distress and validity scale indices on the MMPI-2 were higher among compensation-seeking veterans than among non-compensation-seeking veterans, despite a lack of difference in actual PTSD diagnoses. Similarly, Tolin and colleagues (2004) found compensation-seeking status associated with extreme elevations across clinical and validity scales, but, in contrast to previous findings, compensation-seeking veterans were also found to be more likely to receive a PTSD diagnosis.

As a body of literature, these studies have weaknesses that limit their informativeness. Most of them, for instance, examined veterans seeking treatment through specialized PTSD programs, and these samples have generally been small. They generally study veterans who apply for compensation as opposed to those who actually receive a service-connected disability for PTSD. The definitions used to define compensation seekers, while similar, are not identical, and heterogeneities in the group not seeking compensation are generally left unaddressed. There are also alternative explanations for some reported malingering: Certain claimants whose test scores are inconsistent with a diagnosis of PTSD, for example, may be experiencing another compensable psychiatric condition whose symptoms are being misattributed to PTSD. And the studies are all cross-sectional rather than longitudinal, thereby further limiting their ability to yield consistent and firm conclusions (Friedman, 2006). Thus, while considerable research has been conducted to date, it is not as consistent or comprehensive as it needs to be if it is to provide reliable answers to questions regarding how large a role compensation plays in malingering or symptom overreporting or, if it is, to help identify a clear direction or policy.

Many of the studies examining misreporting or exaggeration of symp-

toms use the MMPI-2 and its validity scales or else some other more recently derived measures, such as the  $F_p$ <sup>7</sup> (Arbisi et al., 2004; Tolin et al., 2004). Generally, the focus of these studies is the potential use of one or more of these instruments as a tool to detect exaggeration or illness simulation in veterans seeking or receiving compensation for PTSD. A key question then is whether these standardized measures are able to play a larger role in detecting and screening out those who are feigning PTSD in order to receive service-connected status and compensation.

While these studies indicate that the validity and related indices derived from the MMPI-2 can play a role in identifying veterans who may be exaggerating their psychopathology to gain disability compensation (Gold and Frueh, 1999; Arbisi et al., 2004; Keane, 2006), it is also true that “currently, there is no method or single instrument that is universally recognized as being the best tool to detect malingering in PTSD claimants” (Guriel and Fremouw, 2003).

Arbisi and colleagues observe:

It is important to bear in mind that the MMPI-2 is a single source of information in a comprehensive diagnostic evaluation for PTSD and should never be the sole piece of data used to make a disability determination. [Rather, it should] be used within the context of a careful review of the military history and medical treatment records contained in the claims file as well as a thorough clinical interview including a structured interview for PTSD before reaching a conclusion regarding claimed disability resulting from PTSD (Arbisi et al., 2006, p. 258).

The *Diagnosis and Assessment* report (IOM, 2006) and this committee (in Chapter 5) found that available data support the role of the MMPI-2 and other psychometric instruments as a valuable source of information in the C&P process. It should be noted, though, that if these or other such measures were ever to be used as the *sole* source of information for detecting and screening out potential malingerers, motivated claimants would quickly learn how to respond to these items to avoid detection (Bury and Bagby, 2002). It is thus unlikely that either the MMPI-2 or any other measure will ever provide a “silver bullet” that will allow for a quick and easy identification of fabrication or malingering among PTSD claimants.

The committee thus concluded in Chapter 5 that psychological testing may be a useful adjunct to the PTSD C&P examination but also recommended that the choice of whether to test and which tests to use should be left to the discretion of the clinician, the person who is best able to evaluate the individual circumstances of the case. In the absence of a definitive measure, the most effective way to detect inappropriate claims is to require a consistent and comprehensive state-of-the-art examination and assess-

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<sup>7</sup>This scale is referred to as the  $F(p)$  in some publications.

ment that allows the time to conduct appropriate testing in those specific circumstances where the examining clinician believes it would inform the assessment.

Testimony presented to the committee indicated that clinicians often feel pressured to severely constrain the time that they devote to conducting a PTSD C&P examination—to as little as 20 minutes (Arbisi, 2006)—even though the examination protocol suggested in the *Best Practice Manual* (Watson et al., 2002) requires up to three hours to complete, with additional time needed for complex cases. While a more thorough examination would increase upfront costs, it may produce significant long-term cost savings by reducing inappropriate awards, and it may provide substantial benefits as well by increasing the fairness and validity of the system—not only reducing the number of false-positive determinations but also avoiding many of the false negatives that would deny benefits to veterans who truly deserve them.

### Disability Compensation and the Use of VA Mental-Health Care Services

Given the consistent cross-sectional findings that indicate that veterans with VA disability benefits are more likely to use VA services (Wolinsky et al., 1985), it would be reasonable to assume that claimants who are awarded service-connection disability for PTSD would increase their use of mental-health care services. However, if claimants exaggerate symptoms or malingering for the purpose of obtaining compensation they are not entitled to, one would instead suspect that these persons would tend to drop out of treatment for PTSD (Burkett and Whitley, 1998) or use VA services less often (Campbell and Tueth, 1997) once they achieve the benefits level they seek and no longer need such services to help validate their claim. Burkett and Whitley (1998) summarize this second view as follows:

One common-sense question might weed out imposters: Do PTSD claimants continue with therapy and Vet Center counseling after they successfully obtain PTSD disability compensation? Valid sufferers would persevere, seeking alleviation of their suffering; malingerers would not (p. 280).

The evidence base available to evaluate this issue is sparse. In its report on variances in disability compensation, the OIG provides some data that do appear to be consistent with a “malingering/drop-out” hypothesis:

When PTSD ratings were increased to 100 percent, veterans sought less treatment for the conditions. In a judgment sample of 92 PTSD cases, we found that 39 percent of the veterans had a 50 percent or greater decline in mental-health visits over the 2 years after the rating decision. The average decline was 82 percent, and some veterans received no mental-health treat-

ment at all. While their mental-health visits declined, non-mental-health visits did not (DVA, 2005b, p. 52).

And, in keeping with that hypothesis, it was asserted that “the compensation program has a built-in disincentive to get well when veterans are re-applying to get their disability ratings increased” (DVA, 2005b). Although the OIG analysis has received some attention (McNally, 2005, 2006), it is clearly limited by the selective nature of the sample and the lack of supporting data. To the committee’s knowledge, no further work has been done with the data to explore this critical issue. This is unfortunate because other scientific evidence does not support the OIG findings. During a presentation to the committee, Friedman (2006) summarized the evidence as follows:

- Longitudinal studies suggest that disability claim approval results in increased use of mental-health services.
- Cross-sectional research shows that veterans with service-connected disability for PTSD do not differ from non-service-connected veterans in their levels of participation in treatment, and there is some evidence that service-connected veterans are more likely to participate in treatment.

A cross-sectional study of the potential effect of compensation-seeking on service utilization found no significant differences between compensation-seeking and non-compensation-seeking veterans in their use of health care, but compensation-seeking veterans were more likely to use PTSD services (Grubaugh et al., 2004). The best way to address this question, however, would be to compare veterans granted service connection for PTSD versus those denied service connection, instead of examining compensation-seeking versus non-compensation-seeking veterans, and to use longitudinal rather than cross-sectional designs.

Sayer and colleagues did conduct such longitudinal research, the results of which were shared with the committee (Sayer et al., 2005a). In one study effort (Sayer et al., 2004a, 2005b) data were abstracted from VA administrative databases for 452 veterans who had disability evaluations for a new PTSD claim between 1997 and 1999. The rates of mental-health service use before the initiation of a disability claim and mental-health service use soon after the claim were determined and compared. Mental-health service utilization increased after disability benefits were awarded, from an average of 2.5 mental-health appointments during the preclaim period to 5.6 after the award, and the proportion of veterans using mental-health services more than doubled, increasing from 25 to 52 percent. Furthermore, as the disability level increased, the rate of mental-health service use increased significantly, with the rate of mental-health service utilization higher among veterans with 70 to 100 percent disability for service-connected PTSD than

for those veterans with ratings of 50 percent or less. A separate analysis for these claimants that looked at three different time periods (Spoont et al., 2002) found that for veterans whose claims were ultimately awarded the numbers of mental-health visits during the examination and postnotification periods were higher than they had been during the preclaim period.

A separate study by Sayer (2006a,b; also in Spoont et al., 2005) conducted standardized assessments of symptoms and functioning for a group of 102 veterans who had filed original PTSD claims. Two assessments were performed: one near the time of claim initiation, and the other several weeks after notification of claim determination. The researchers also abstracted data on service utilization from VA administrative databases for 260 days before claim initiation and for the same period after claim determination. Those awarded benefits had more severe PTSD symptoms and poorer functioning than those denied benefits, both at the time of claim initiation and after notification. While the proportion of those using VA medical services increased about equally among those awarded and denied claims, the proportion of those using mental-health services increased significantly—in this case, from 48 to 70 percent—only among those who had been awarded claims.

Thus, while the OIG's findings are quite provocative and sobering, the preponderance of evidence currently available is not consistent with its results or conclusion. As Sayer (2006a) noted, in summarizing this research, "This is *not* the pattern of effects that one would expect if financial incentives were driving symptom levels and service utilization among veterans who seek PTSD disability status."

There are some important limitations to the studies performed by Sayer and colleagues. The samples are fairly small, are limited to one VA region, and include only those already using VA medical services (including, in many cases, mental-health services) prior to initiating a disability claim for PTSD. While it was logical to design these studies to include in their samples only those veterans for whom VA medical care was an option both before and after obtaining service-connection for PTSD, it has been noted elsewhere that nearly half of the veterans seeking service-connected disability for PTSD have never used mental-health services (Sayer et al., 2004b). It has also been reported that from 69 to 94 percent of veterans who seek treatment for PTSD in the VA system apply for psychiatric disability (Frueh et al., 2003), although it is unclear how many veterans applying for PTSD disability have not used VA services or mental-health care.

Access to VA health care services requires the claimant to demonstrate eligibility; once eligibility is demonstrated, priority and the cost of services (if any) are based on a ranking system by which veterans with service-connected injuries or conditions, regardless of their financial circumstances, take precedent over low-income veterans without such condi-

tions (Murdock et al., 2005). The 452 beneficiaries examined by Sayer and colleagues (2004a, 2005b) were all already entitled to VA medical care without charge, either because of service connection for other conditions or because they met low-income criteria. Such veterans are likely to be quite different from those not already in the system—that is, not already eligible for free or priority VA mental-health treatment before obtaining a service-connected disability for PTSD. If the dynamics behind the use of post-service-connection mental-health services are to be better understood, both larger and more diverse samples will need to be examined.

It is possible that Sayer and colleagues observed an increase in the use of VA mental-health treatment in the months following receipt of service connection for PTSD because the C&P process, which would necessarily include revisiting the traumatic stressor in rather great detail, placed a strain on the mental and physical health of the claimant. An alternate, or additional, explanation is that the C&P evaluation process generated referrals to services. However, such referrals are not a formal part of the C&P process, and it is highly unlikely that they occur in any systematic way.<sup>8</sup>

In addition to the literature on veterans, there are a small number of studies that address the determinants of PTSD treatment participation in nonmilitary populations. These studies suggest, in general, that symptom severity is an important factor in attrition from programs. A 2006 meta-analysis of 11 studies found that persons who dropped-out of treatment programs were more likely to have had elevated PTSD symptoms scores prior to participation than those who did not drop out (Matthieu and Ivanoff, 2006). Holtzheimer and colleagues (2005) evaluated the records of 587 persons hospitalized for PTSD and comorbid depression and a matched cohort with depression alone. They found that, all else equal, those with PTSD and depression were far more likely to have been discharged against medical advice than those with depression alone (OR=6.10; 95% CI 2.96–12.57).

In summary, while some veterans do drop out of mental-health treatment once they obtain service-connected disability compensation for PTSD, the currently available data suggest that this concern may well not apply to the majority of veterans who seek and obtain such awards. Sayer and colleagues (2004b) found that veterans report many reasons other than monetary gain for seeking disability compensation, including acknowledgement from the government of their contribution and sacrifice and validation of the health problems they are experiencing. Over half of the veterans in their sample endorsed the statement, “If I get service connected for PTSD,

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<sup>8</sup>Indeed, veterans seeking a referral for treatment may need to undergo an entirely separate evaluation than that provided by the clinician performing a C&P examination and the results of C&P examinations do not become part of a veteran’s VHA record.

I can focus on getting better,” an attitude that is inconsistent with the malingering/drop-out hypothesis. Research examining the full range of reasons why beneficiaries discontinue seeking mental-health care in the VA system—including access to services, degree of satisfaction with VA services or treatment outcome, and pursuit of treatment in non-VA venues—would make it possible to carry out a more informed and less politically charged consideration of this topic.

### Disability Compensation and Treatment Outcome<sup>9</sup>

In addition to concerns that veterans may participate in treatment merely to get compensation, there are related concerns that disability compensation for PTSD may create a situation in which secondary-gain issues produce obstacles and disincentives for therapy or treatment (Mossman, 1996). Specifically, some researchers have speculated that veterans may be reluctant to acknowledge therapeutic gains because they believe that this may lead VA to lower their disability rating and thus lower their benefits (Frueh et al., 2003). Some of the evidence for these concerns is indirect. For example, in contrast to studies reporting relative success in the treatment of non-combat-related PTSD, there is a general lack of treatment efficacy for PTSD related to combat (Carlsen et al., 1998; Johnson et al., 1996). In a meta-analysis of psychotherapy for PTSD conducted by Bradley and colleagues (2005), the overall effect size from studies of combat veterans was significantly lower than the effect sizes for other trauma groups. Other research has found that the VA clinicians treating veterans seeking compensation for PTSD often have negative impressions of these veterans (Bell and Williamson, 2002), with “most clinicians express[ing] a belief that pursuit of service connection for PTSD has a negative impact on the therapeutic relationship” (Sayer and Thuras, 2002).

One empirical study more directly related to the hypothesized association between compensation seeking and treatment outcomes found that veterans classified on the MMPI as “symptom overreporters” were less likely to show improvement after six weeks of partial hospitalization, even though clinicians rated them as no more dysfunctional than other veterans before treatment (Perconte and Griger, 1991). In contrast, DeViva and Bloem (2003) found no relationship between either symptom exaggeration or compensation seeking and treatment outcome in an eight-week residential treatment program at a specialized VA Medical Center inpatient PTSD unit.

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<sup>9</sup>A separate IOM committee addressing PTSD treatment issues will also examine compensation as a factor in treatment outcomes. Its report, scheduled for release in mid-2007, was in preparation at the time this report was completed.

As Friedman (2006) noted in his presentation to the committee, data from evaluations of VA programs on the relationship between compensation seeking or disability status and treatment outcomes are inconclusive. The most widely cited of these is by Fontana and Rosenheck (1998a), who found that veterans in outpatient programs who were compensation-seeking improved more than veterans who were not compensation-seeking, while veterans in inpatient programs who were seeking compensation either improved less or deteriorated in comparison with those who were not seeking compensation. When inpatient programs were classified according to length of stay, however, outcomes were worse for those seeking compensation only in the group of inpatients in programs with very long lengths of stay (100 days on average). There were no differences in treatment outcomes by compensation status for inpatients in moderate-stay programs (30 days).

Friedman (2006) noted that no relationship between treatment outcome and PTSD disability status has been found in any of the VA clinical trials that have tested the potential effects of seeking or receipt of a service-connected disability. This was also the case in a 2006 study of cognitive processing therapy by Monson and colleagues. They found that treatment participants receiving PTSD-related disability compensation had reductions in their PTSD symptoms over time that were similar to the reduction in symptoms among those participants without PTSD disability status, PTSD-related disability status showed no association with the PTSD diagnostic status at posttreatment or follow-up (Monson et al., 2006).

With regard to the possible effect of PTSD disability status on short- and long-term recovery, Murdoch told the committee of some work in progress that indicates that veterans who were service-connected for PTSD for longer periods of time have less severe symptoms and better functioning than those who were service-connected for shorter periods of time or who never achieved PTSD-related disability status (Murdoch, 2006). Such effects might, though, reflect maturation or cohort effects rather than recovery related to treatment. But they are not consistent with concerns that, in spite of the intent of the regulations stating that veterans receiving VA disability benefits for nonpermanent conditions should be reevaluated every two to five years, the provision of disability payments might provide a disincentive for improvement and an incentive to exaggerate symptomatology (Sayer et al., 2004a).

In summary, although it may seem logical that secondary-gain considerations would create obstacles and disincentives for therapy or treatment among combat veterans, and although there is a body of indirect evidence consistent with this logic, there is little direct evidence that either compensation-seeking or receipt of compensation has secondary gain effects on PTSD treatment outcomes. Most empirical studies or trials conducted to date show no relationship between compensation seeking, PTSD disability

status, and treatment outcomes. And the authors of the one study that does show significant differences conclude that

[s]eeking to obtain or maintain compensation status does not have an inhibiting effect on improvement in treatment among outpatients or among most inpatients. Among inpatients in programs which are designed to provide an extremely long length of stay (100 days on average), however, the motivation to apply for and maintain compensation does appear to inhibit improvement (Fontana and Rosenheck, 1998a, p. 229).

Hospitalizations of more than 21 days entitle veterans to receive disability payment at a rate of 100 percent for the duration of the stay. This may account at least in part for the worse outcomes in long-term programs, and it has led some to suggest that this regulation be eliminated (Mossman, 1994). The data needed to evaluate the determinants of outcomes in long-term programs are lacking, though, and it is not possible to draw a firm conclusion on this issue.

Thus, in spite of concerns that disability compensation for PTSD may create a context in which veterans are reluctant to acknowledge or otherwise manifest therapeutic gains because they have a financial incentive to stay sick, the preponderance of evidence does not support this possibility. While some beneficiaries will undoubtedly understate their improvement in the course of pursuing compensation, the scientific literature suggests that such patients are in the minority, and there is some evidence that disability payments may actually contribute to better treatment outcomes in some programs (Fontana and Rosenheck, 1998a). The authors note, though, that the data needed to confidently separate unconscious influences on symptom reporting from deliberate attempts to game the system for economic advantage are lacking.

### Summary Observations

VA asked the committee to “recommend strategies for reducing disincentives and maximizing incentives for achieving optimal mental functioning” (Szybala, 2006). Chapter 5 presents the committee’s framework for formulating a revised set of criteria for evaluating disability due to PTSD. One part of that framework proposes the elimination of occupational impairment as the defining factor in rating the severity of disability and suggests that a broader approach that evaluates the psychosocial and occupational dimensions of functional impairment be used in its place. Allowing a claimant to have his or her rating based on the more severe of those two dimensions would allow a veteran who is symptomatic or impaired in other ways but capable of working to do so, thus eliminating one possible disincentive to both work and recovery.

Based on the literature reviewed in previous chapters and here, the committee additionally recommends that the VA consider instituting a set, long-term minimum level of benefits that would be available to any veteran with service-connected PTSD at or above some specified rating level without regard to that person's state of health at a particular point in time after the C&P examination.<sup>10</sup>

Regulation already specifies an analogous approach for other disorders, including conditions whose symptoms may remit and relapse over time. Multiple sclerosis, for example, has a minimum *rating* of 30 percent without regard to whether the condition is disabling at the moment that the subject is evaluated.<sup>11</sup> However, rather than being limited to a particular minimum rating, the committee suggests that the VA consider what minimum *benefits* level—where “benefits” comprise compensation and other forms of assistance, such as priority access to VA medical treatment—would be most likely to promote wellness. It is beyond the scope of the charge to the committee to specify the particular set of benefits that would be most appropriate or the level[s] of impairment that would trigger provision of these benefits. This would require a careful consideration of the needs of the population, of the new incentives that the policy change would create, of the possible effects on compensation outlays and demand for other VA resources, and of how to maintain fairness with respect to other conditions that have a remitting/relapsing nature.

Providing a guaranteed minimum level of benefits would take explicit account of the nature of chronic PTSD by providing a safety net for those who might be asymptomatic for periods of time. A properly designed set of benefits could eliminate uncertainty over future timely access to treatment

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<sup>10</sup>There is a circumstance under current VASRD regulations where a veteran being compensated for PTSD (or any other service-connected disability) may receive additional benefits during a relapse or exacerbation of symptoms. 38 CFR §4.29 specifies: “[a] total disability rating (100 percent) will be assigned without regard to other provisions of the rating schedule when it is established that a service-connected disability has required hospital treatment in a Department of Veterans Affairs or an approved hospital for a period in excess of 21 days or *hospital observation at Department of Veterans Affairs* expense for a service-connected disability for a period in excess of 21 days.” [emphasis in original] The 100 percent rating is maintained until discharge and may be extended for a convalescence period. A claimant can also file a request to reopen her or his case on the basis of “new and material evidence” and be reevaluated (38 CFR §3.156).

<sup>11</sup>It should be noted that this minimum rating is predicated on the presence of “ascertainable residuals” and regulation specifies that [d]eterminations as to the presence of residuals not capable of objective verification, i.e., headaches, dizziness, fatigability, must be approached on the basis of the diagnosis recorded; subjective residuals will be accepted when consistent with the disease and not more likely attributable to other disease or no disease (38 CFR §4.124a).

and financial support in times of need and would in part remove the incentive to “stay sick” that some suggest is a flaw of the current system.

### PERIODIC REEXAMINATIONS AND REEVALUATIONS

In its charge to the committee, the VA noted that:

VBA currently has no set schedule for re-examining veterans receiving compensation for PTSD. It would be very helpful to us if the committee would address whether such a re-examination schedule is advisable and, if so, what it might be (Szybala, 2006).

With a few exceptions,<sup>12</sup> regulation does not offer specific advice on when such reexaminations are required. The Automated Medical Information Exchange worksheet for review evaluations for PTSD (reproduced in Appendix C) does provide a template for the information to be gathered when such examinations are conducted. This includes details of the beneficiary’s psychosocial adjustment since the last examination and the clinician’s evaluation of the effect and effectiveness of any treatments received. Since disability determinations are dependent on the degree of impairment, it is thus possible that compensation could be adjusted downward for a veteran who showed improvement as a result of treatment. However, VA does not code the information needed to evaluate how often this happens.

Based on the information provided to the committee, it does not appear to be standard practice to require periodic reexaminations after a disability rating has been established, although a notation for a follow-up examination after a specified time has elapsed may be placed in a beneficiary’s record. Data are not available on the number or percentage of PTSD disability cases that are scheduled for reexamination by raters or the extent to which disability ratings change as a result of such evaluations.<sup>13</sup>

The VA’s primary motivation for conducting reexamination is presumably to determine if an improvement in disability status has occurred since the last disability rating. A veteran, or a representative acting on her or his behalf, can file an appeal to a disability determination or rating by requesting a reexamination. It is reasonable to assume that veterans will initiate such requests if they believe that the initial rating was in error or if their

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<sup>12</sup>There are circumstances under which regulation mandates a single reexamination for rating purposes after a set period of time—for example, six months after surgery to treat certain heart problems. General guidance on the scheduling of review examinations is contained in 38 CFR §3.327.

<sup>13</sup>Data are available on the numbers of beneficiaries who have PTSD among their compensable conditions and who have reexaminations. However, many beneficiaries receive compensation for more than one condition, and VA does not code which condition prompted the reexamination.

condition deteriorates to the point that they think their disability rating should be increased.

The committee does not believe it is appropriate to require across-the-board periodic reexaminations for veterans with PTSD service-connected disability. It recommends that reexamination be done only on a case-by-case basis when there are sound reasons to expect that major changes in disability status might occur.

The committee reached this conclusion on the basis of the following two considerations. First, there are finite resources—both funds and personnel—to conduct C&P examinations and determine disability ratings. According to data provided by the VA, over 300,000 veterans were receiving disability compensation for PTSD in 2006, with over 233,000 of these having PTSD as their primary disability. While certain of these veterans would be exempt by regulation from reexamination, any periodic review policy would still entail significant numbers of beneficiaries and put additional strain on the system. The committee believes that resources should be focused on the performance of uniformly high-quality C&P clinical examinations. It believes that allocating resources to such examinations—in particular, to initial C&P evaluations—is a better use of resources than periodic, across-the-board reexaminations. Second, as the committee understands it, across-the-board periodic reexaminations are not required for other mental disorders or medical conditions.<sup>14</sup> The committee's review of the literature on misreporting or exaggeration of symptoms by PTSD claimants yielded no justification for singling out PTSD disability for special action and thereby potentially stigmatizing veterans with the disability by implying that their condition requires extra scrutiny.

The committee recommends that the VA develop criteria for reexamination to be used on a case-by-case basis. These criteria should be based on factors that might be expected to influence the course of PTSD symptomatology and disability. An example of a circumstance that might be expected to improve PTSD symptomatology and reduce a disability rating is the successful completion of evidenced-based treatment. While it is reasonable to consider reexamination after such situations, it would be important to structure reexamination policy in a way that limits disincentives for receiving treatment or rehabilitation services. Setting a long-term minimum level of benefits, as suggested above, would be one way to address this issue. Case-by-case criteria for reexamination should also include any future event in the veteran's life that would be expected to produce a dramatic change in his or her clinical and disability status. Ideally, a recommendation for reexamination in a given case could be made by the clinical examiner in

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<sup>14</sup>Again, with the exception of those circumstances under which regulation mandates a single reexamination for rating purposes after a set period of time.

the initial C&P exam if there was some reason to expect a change in the veteran's status or by a treatment, vocational, or rehabilitation professional upon completion of these services.

### GENDER AND MILITARY SEXUAL ASSAULT

Gender and sexual assault are two important intersecting issues to consider when discussing the subject of PTSD compensation among veterans. A substantial body of literature has emerged that documents measurable gender differences in PTSD frequency and severity. A recent, well-conducted meta-analysis of more than 200 studies meeting reasonable inclusion criteria and including military as well as civilian samples found that PTSD was twice as prevalent in females as in males, even controlling for potential confounders, including study methods (Tolin and Foa, 2006). This gender difference holds up even though males report significantly more traumatic events than do females overall. Males do report significantly less sexual assault than females do, however (Tolin and Foa, 2006). Tolin and Foa (2006) concluded that sex differences in the prevalence of adult and child sexual abuse may account for some of the disparity in PTSD rates between men and women but that the variance they found in the meta-analysis was not completely due to this difference. After controlling for type of trauma, the largest gender difference they found was in adult nonsexual assault. However, the exact type of traumatic experience was not well differentiated in most studies. For instance, adult nonsexual assault was usually not differentiated between chronic (e.g., intimate partner violence, with female victimization more likely) and acute (such as robbery, with male victimization more likely). One potential methodological contributor to the observed variance relates to PTSD measurement, with “[t]he sex difference in PTSD [seeming] most clear when the PTSD assessment is explicitly linked to one specific traumatic event” (p. 978).

Tolin and Foa were able to rule out some of the possible reasons for the gender differences, but the studies they reviewed were not able to rule out gender differences in cognitive response to the event, immediate coping strategies, or amount of fear associated with experience. There also may be sex differences in willingness to admit symptoms because of differences in gender role expectations or in pretrauma psychiatric history and trauma exposure during military service. Sex differences are particularly likely in chronic trauma, such as repeated childhood sexual assaults by a family member or recurring intimate-partner violence, or in a history of multiple traumas, which may be more frequent among females than males. Researchers seldom examine sex-specific effects of various types of trauma, or chronic versus episodic or one-time events, even though these different

types of trauma can have different repercussions in terms of physiological responses (Gill and Page, 2006).

There are also sex differences in the manifestation of conditions commonly comorbid with PTSD—females being more likely than males to have major depressive disorder (MDD) along with PTSD. Females with PTSD tend to experience symptoms for a longer duration and have more associated physical health problems than do males (Gill and Page, 2006; Kimerling, 2004; Ouimette et al., 2004). Few of the studies examining this issue have been conducted among female military populations, however, and among female victims of intimate-partner violence some of the PTSD and MDD comorbidity patterns differed between female civilians and women on active military duty (O'Campo et al., 2006).

Tolin and Foa (2006) did not observe a significant sex difference in postcombat PTSD in the 11 studies of veterans they analyzed. However, these studies did not evaluate any interaction between combat and sex, and those looking at Somalia and Desert Storm I participants did not examine sexual assault while in the military (abbreviated here as *MSA* for *military sexual assault*<sup>15</sup>) as a source of trauma separate from combat.

In contrast, a narrative synthesis of 21 large cohort samples from the Gulf War era by Goldzweig and colleagues (2006) found that in most, although not all, of the studies females were more likely to develop PTSD than males. Among Vietnam War-era veterans, the same review found that males were more likely to be diagnosed with PTSD than females, but female military personnel in that war were not involved in direct combat. Those developing PTSD were most often nurses who had witnessed horrific physical trauma and death, were victims of sexual assault but were not exposed to combat, with the exception of the exposure to shelling (Zatzick et al., 1997).

### Prevalence of Military Sexual Assault

The prevalence of sexual assault in the military is alarming and has been the object of several recent congressional hearings and military reports (e.g., U.S. Air Force, 2004). A narrative synthesis of 21 studies found that 4.2 to 7.3 percent of active duty military (ADM) females had experienced a military sexual assault, while 11 to 48 percent of female veterans reported having experienced a sexual assault during their time in the military (Goldzweig et al., 2006). One of the studies included was a nationally representative sample of veterans (Skinner et al., 2000), which found a 23 percent prevalence of MSA among females. A sample of female reservists (Street et al., 2003) also found a 23 percent prevalence of MSA.

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<sup>15</sup>In some papers and reports the term *military sexual trauma* (MST) is used.

The greater prevalence among veterans and reservists than among current ADM females may be related to a reluctance to report sexual assault while pursuing a military career; there may also be differences in cohort experiences, with current ADM females experiencing less sexual assault than their counterparts who were on active duty at an earlier point in time. The latter interpretation is somewhat supported by the fact that a higher percentage of ADM females reported sexual assault and sexual harassment in a 1995 survey than did in 2002 (Lipari and Lancaster, 2003). In addition, some of the veteran cohorts (e.g., Yaeger et al., 2006) consisted of females who were seeking medical or psychiatric services (prevalence by type of service not reported), and these are females who would be expected to have increased PTSD prevalence. Indeed, 41 percent of the 896 female veterans studied by Yaeger and colleagues reported having experienced sexual assault while in the military.

By contrast, Campbell and Raja (2005), using a convenience sample of primarily African-American veterans or reservists from a VA women's clinic, found a 15 percent prevalence of MSA. This study is noteworthy for being one of the few to actually describe the type of MSA. Among the 104 females who reported that they were sexually assaulted while in military service, 13 percent reported sexual assault from a marital partner and 8 percent from a date, which highlights a type of MSA that is not usually considered. Eighty-two percent of the perpetrators in the MSAs were military peers or supervisors. The females in this sample also reported a great deal of secondary victimization by the military and by the VA system, an experience that is known to make the PTSD symptoms worse. Two other studies found subsequent secondary victimization and sexual harassment, exposing the women to additional trauma over and above rape and combat (Fontana and Rosenheck, 1998b; Murdoch et al., 2006 a,b,c). Social support from family and friends was an important factor influencing whether and how PTSD developed in the women examined in these studies.

The synthesis by Goldzweig and colleagues (2006) found a 55 to 79 percent prevalence of sexual harassment for females while in military service across the 21 studies it reviewed, but two other efforts found a somewhat lower prevalence of sexual harassment: 46 percent in a small convenience sample of Gulf War I veterans (Wolfe et al., 1998), and 24 percent in a more representative DOD survey of active-duty personnel in 2002 (Lipari and Lancaster, 2003). Kang and associates found that among soldiers in the Gulf War I theatre, sexual harassment contributed to PTSD over and above sexual assault both for males (with an adjusted odds ratio [aOR] equal to 4.26) and for females (aOR = 2.52), although the harassment occurred much more often for females (Kang et al., 2005).

It is recognized that the circumstances of military service may create barriers to reporting sexual assault above and beyond those extant in other

sectors of the population. A 2004 U.S. Air Force report, addressing information for that service only, noted:

Available evidence suggests that the majority of sexual assaults occurring in the Air Force might not be reported. . . . Air Force victims face numerous real or perceived reporting barriers. The lack of privacy/confidentiality is the most frequently cited barrier to reporting. Other barriers include stigma, fear, or shame; fear of disciplinary action because of a victim's misconduct; fear of being reduced in the eyes of one's commander/colleagues; fear of re-victimization; and fear of perceived operational impacts, including loss of security clearances, effect on training, and impact on overseas deployments (U.S. Air Force, 2004, p. 10).

The same report noted that "these barriers can have a significant impact on sexual assault reporting rates" (p. 42).

### Relationship of Sexual Assault and PTSD

Sexual-assault experiences were strongly associated with PTSD in both civilian and military cohorts. In one of the few large-sample studies (2,131 females; 9,310 males) to examine the strength of the association between combat exposure and sexual assault in male and female veterans, Kang and associates found that MSA increased the risk of PTSD among a representative sample of Gulf War I veterans by an adjusted odds ratio of 5.41, when controlling for other covariates, including combat status (Kang et al., 2005). MSA increased the risk of developing PTSD among males to a greater degree than among females (aOR = 6.21), although MSA occurred in only 0.2 percent of the males compared to 3.3 percent of females while in theater. In a less representative sample of 327 female veterans being treated in a VA clinical program for women with stress disorders, military sexual stress was four times stronger as an etiological factor in the development of PTSD than military stress (Fontana and Rosenheck, 2006). Of those 327 women being treated for stress, 63 percent had been exposed to sexual harassment, 43 percent had been raped, and 12 percent had been exposed to enemy fire. Another study, this one of a convenience sample of female veterans using medical or mental-health services in the Texas area, found that the association of PTSD with MSA for female veterans (aOR = 9) was stronger than the association of PTSD with childhood sexual assault (aOR = 7) or with civilian adult sexual assault (aOR = 5) (Suris et al., 2004). Yeager and associates (2006) also found MSA associated with PTSD over and above other trauma in a similar sample from the Los Angeles area. However, neither of the last two studies offered any comparison with combat trauma, and it is unclear how much combat exposure those cohorts experienced.

In the Kang analysis (2005), the risk for PTSD associated with high

combat level was slightly greater for males (aOR = 4.45) than for females (aOR = 4.03), with males more likely to have combat experience. Murdoch and associates (2006c) found a similar relationship of MSA versus combat exposure for females in a representative sample of 1,655 male and 1,682 female veterans who had filed PTSD claims between 1985 and 1998. The sample represented 54 percent of the females who had filed such claims compared to 1.7 percent of the males. For females, MSA was a stronger predictor of PTSD than was combat history (MSA:  $F = 51.6$ , 3.1 percent variance explained; combat history:  $F = 26.1$ , 1.6 percent variance explained). However, the opposite situation was true for males, with combat history ( $F = 45.4$ ; 2.7 percent variance explained) a much stronger factor than sexual assault ( $F = 4.7$ ; 0.3 percent variance explained). Prevalence of in-service sexual assault for females who had filed PTSD claims was 71 percent, while for males who filed PTSD claims it was only 4 percent; by contrast, combat exposure was reported by 30 percent of the females and 94 percent of the males. The difference in reported MSA in females between the Kang (3.3 percent) and Murdoch (71 percent) studies is striking, and it can be partially explained by the difference in samples (a representative cohort sample versus females filing claims for PTSD) and partly explained by the Kang use of MSA “in theatre” while Murdoch used MSA in the more generic sense (any sexual assault while in ADM service). The degree of specificity in measurements and the comparisons between males and females make these two studies extremely helpful in illuminating the intersections of military sexual trauma and combat in the development of PTSD, but neither study differentiated between the prevalence of MSA while in theatre compared to other MSA.

### PTSD Comorbidities and Recovery for Female Veterans

In all of the studies of female veterans, PTSD symptoms and PTSD diagnoses were associated with comorbidities such as depression, substance abuse, smoking, and physical health problems (e.g., Dobie et al., 2004) as well as with increased medical utilization (Dobie et al., 2006). In the only study found to address the issue, Murdoch and associates (2003b) found that a significantly smaller percentage of females (52 percent) as compared to males (71 percent) had their PTSD deemed to be service connected. This was primarily related to the lower rates of combat exposure among females, with their increased rates of sexual trauma apparently not being taken into account. When MSA was substantiated in the claims file, service-connected PTSD determinations increased substantially (Murdoch, 2006). Unfortunately, there are huge barriers to women being able to independently substantiate their experiences of MSA, especially in a combat arena.

In the few studies of recovery from PTSD for female veterans, postmili-

tary social support from family and friends was found to be an important factor in recovery (King et al., 1998) as well as a protective agent against the development of PTSD (Fontana and Rosenheck, 1998b). The study by King and colleagues (1998) also found that hardiness and additional negative life events postwar were additional factors affecting recovery. In a somewhat similar vein, Fontana and Rosenheck (2006) in a later study found that female veterans were more comfortable in a specialized treatment program for women; it increased their participation (attendance and commitment), but had no effect on outcomes. Studies of PTSD treatment for female veterans are badly needed—and, fortunately, under way—but it is unclear if the current studies will have samples that are sufficiently large to disentangle the differential treatment effects for women whose trauma is primarily MSA versus those whose trauma is primarily combat or to determine if multiple traumas are part of the etiology of the PTSD experience.

### Conclusions and Continuing Issues

Although there has been increasing attention paid to women in the military, to their experiences with both combat trauma and sexual trauma, to their increased vulnerability to PTSD and its comorbidities, and to their need for gender-specific PTSD treatment, research is only beginning to illuminate some of the issues involved.

Very little research exists on the subject of PTSD compensation and female veterans. What information is available suggests that female veterans are less likely to receive service connection for PTSD and that this is a consequence of the relative difficulty of substantiating exposure to noncombat traumatic stressors—notably, MSA. The committee notes that PTSD training and reference materials for raters (VBA, 2005) address MSA but that scant attention is paid to the challenges of documenting it as an in-service stressor or to approaches to addressing this problem.<sup>16</sup> In contrast, a great deal of guidance is given on various service medals and devices that can be used to support PTSD claims and on how to use DOD resources to corroborate possible combat-related traumatic exposures.

The committee believes that it is important to gain a better understanding of the sources of gender disparity in awards for PTSD service connection and to better substantiate MSA-related traumas in both women and men when they do occur. The committee therefore makes the following recommendations:

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<sup>16</sup>The slides accompanying the instructor's materials for the rater's PTSD training do address PTSD secondary to sexual or personal trauma (VBA 2005), but this is a one-time, six-hour class.

1. The VBA should conduct more detailed data gathering on the determinants of service connection and ratings level for MSA-related PTSD claims, including the gender-specific coding of MSA-related traumas for analysis purposes.
2. The VBA should develop and disseminate reference materials for raters that more thoroughly address the management of MSA-related claims.
3. Training and testing on MSA-related claims should be a part of the certification program addressed in Chapter 4 for raters who deal with PTSD claims.

The committee observes that appropriate management of MSA-related claims begins with the proper documentation of incidents that occur during active service. Therefore, improved training of military medical and nursing personnel on how to document and collect evidence regarding sexual assault is needed. Civilian sector SANE<sup>17</sup> and Forensic Nursing programs are models for such training. The committee also observes that more research is needed on the as yet unexplained gender differences in vulnerability to PTSD, which could help identify useful sex-specific approaches to prevention and treatment, and on more effective means for preventing military sexual assault and sexual harassment.

## FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

On the basis of the review of the papers, reports, and other information presented in this chapter, the committee has reached the following findings, conclusions, and recommendations, and identified the following research needs.

### Findings and Conclusions

- The most effective strategy for dealing with problems with self-reports of traumatic exposure is to ensure that a comprehensive, consistent, and rigorous process is used throughout the VA to verify veteran-reported evidence.
- In the absence of a definitive measure, the most effective way to detect inappropriate claims is to require a consistent and comprehensive state-of-the-art examination and assessment that allows the time to conduct

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<sup>17</sup>The Sexual Assault Nurse Examiner (SANE) program was developed with funding from the U.S. Department of Justice to provide advanced education in the forensic examination of sexual assault victims (Ledray, 1999).

appropriate testing in those specific circumstances where the examining clinician believes it would inform the assessment.

- Research reviewed by the committee indicates that PTSD compensation does not, in general, serve as a disincentive to seeking treatment.
- It is not appropriate to require across-the-board periodic reexaminations for veterans with PTSD service-connected disability.

### Recommendations

- VA should consider instituting a set, long-term minimum level of benefits that would be available to any veteran with service-connected PTSD at or above some specified rating level without regard to that person's state of health at a particular point in time after the C&P examination.
- The determination of whether and when reevaluations of PTSD beneficiaries are carried out should be made on a case-by-case basis using information developed in a clinical setting. Specific guidance on the criteria for such decisions should be established so that these can be administered in a fair and consistent manner.
- The VBA should conduct more detailed data gathering on the determinants of service connection and ratings level for MSA-related PTSD claims, including the gender-specific coding of MSA-related traumas for analysis purposes.
- The VBA should develop and disseminate reference materials for raters that more thoroughly address the management of MSA-related claims. Training and testing on MSA-related claims should be a part of the certification program addressed in Chapter 4 for raters who deal with PTSD claims.
- More research is needed on the as yet unexplained gender differences in vulnerability to PTSD, which could help identify useful sex-specific approaches to prevention and treatment, and on more effective means for preventing military sexual assault and sexual harassment.

### REFERENCES

- Angrist J. 1993. The effect of veterans benefits on education and earnings. *Industrial and Labor Relations Review* 46(4):637–652.
- APA (American Psychiatric Association). 1994. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*. Washington, DC: APA.
- APA. 2000. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR)*. Washington, DC: APA.
- Arbisi PA. 2006 (July 6). *Issues and Barriers to Implementation of Best Practice Guidelines in Compensation and Pension Examinations*. Presentation to the Committee on Veterans' Compensation for Post Traumatic Stress Disorder. Washington, DC.

- Arbisi PA, Murdoch M, Fortier L, McNulty J. 2004. MMPI-2 validity and award of service connection for PTSD during the VA compensation and pension evaluation. *Psychological Services* 1(1):56–67.
- Arbisi PA, Ben-Porath YS, McNulty J. 2006. The ability of the MMPI-2 to detect feigned PTSD within the context of compensation seeking. *Psychological Services* 3(4):249–261.
- Atkinson RM, Henderson RG, Sparr LF, Deal S. 1982. Assessment of Vietnam veterans for posttraumatic stress disorder in Veterans Administration disability claims. *American Journal of Psychiatry* 139(9):1118–1121.
- Beals J, Manson SM, Shore JH, Friedman M, Ashcraft M, Fairbank JA, Schlenger WE. 2002. The prevalence of posttraumatic stress disorder among American Indian Vietnam veterans: disparities and context. *Journal of Traumatic Stress* 15:89–97.
- Beckham JC, Moore SD, Feldman ME, Hertzberg MA, Kirby AC, Fairbank JA. 1998. Self-report and physician-rated health in combat veterans with posttraumatic stress disorder. *American Journal of Psychiatry* 155:1565–1569.
- Bell CC, Williamson J. 2002. Articles on special populations published in *Psychiatric Services* between 1950 and 1999. *Psychiatric Services* 53:419–424.
- Bellamy R. 1997. Compensation neurosis: financial reward for illness as nocebo. *Clinical Orthopaedics and Related Research* 336:94–106.
- Blow FC, Zeber JE, McCarthy JF, Valenstein M, Gillon L, Bingham CR. 2004. Ethnicity and diagnostic patterns in veterans with psychoses. *Social Psychiatry and Psychiatric Epidemiology* 39(10):841–851.
- Bradley R, Greene J, Russ E, Dutra L, Westen D. 2005. A multidimensional meta-analysis of psychotherapy for PTSD. *American Journal of Psychiatry* 162:214–227.
- Breslau N, Davis GC, Andreski P, Peterson EL. 1991. Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Archives of General Psychiatry* 48:216–222.
- Burkett BC, Whitley G. 1998. *Stolen Valor: How the Vietnam Generation Was Robbed of Its Heroes and History*. Dallas, TX: Verity.
- Burkhauser RV, Wittenburg D. 1996. How current disability transfer policies discourage work: analysis from the 1990 SIPP. *Journal of Vocational Rehabilitation* 7:9–27.
- Burkhauser RV, Butler JS, Kim YW. 1995. The importance of employer accommodations on the job duration of workers with disabilities: a hazard model approach. *Labour Economics* 3:109–130.
- Bury AS, Bagby RM. 2002. The detection of feigned uncoached and coached posttraumatic stress disorder with the MMPI-2 in a sample of workplace accident victims. *Psychological Assessment* 14(4):472–484.
- Campbell R, Raja S. 2005. The sexual assault and secondary victimization of female veterans: help-seeking experiences with military and civilian social systems. *Psychology of Women Quarterly* 29(1):97–106.
- Campbell WH, Tueth MJ. 1997. Misplaced rewards: Veterans Administration system and symptom magnification. *Clinical Orthopaedics and Related Research* 336:42–46.
- Carlson JG, Chemtob CM, Rusnak K, Hedlund NL, Muraoka MY. 1998. Eye movement desensitization and reprocessing (EMDR) treatment for combat-related posttraumatic stress disorder. *Journal of Traumatic Stress* 11(1):3–24.
- CBO (Congressional Budget Office, Congress of the United States). 1982, June. *Disability Compensation: Current Issues and Options for Change*. Washington, DC: Government Printing Office.
- Cook JA. 2003. One-year followup of Illinois state vocational rehabilitation clients with psychiatric disabilities following successful closure into community employment. *Journal of Vocational Rehabilitation* 18:25–32.

- Cook JA. 2006. Employment barriers for persons with psychiatric disabilities: update of a report for the President's Commission. *Psychiatric Services* 57(10):1391–1405.
- Cook JA, Burke J. 2002. Public policy and employment of people with disabilities: exploring new paradigms. *Behavioral Science and the Law* 20(6):541–557.
- Cook JA, Leff HS, Blyler CR, Gold PB, Goldberg RW, Mueser KT, Toprac MG, McFarlane WR, Shafer MS, Blankertz LE, Dudek K, Razzano LA, Grey DD, Burke-Miller J. 2005. Results of a multi-site randomized clinical trial of supported employment interventions for individuals with severe mental illness. *Archives of General Psychiatry* 62(5):503–512.
- Cook JA, Leff HS, Blyler CR, Gold PB, Goldberg RW, Clark RE, Onken SJ, Shafer MS, Blankertz LE, McFarlane WR, Razzano LA, Burke-Miller JK. 2006. Estimated payments to service providers for persons with mental illness in the Ticket to Work program. *Psychiatric Services* 57(4):465–471.
- DeViva JC, Bloem WD. 2003. Symptom exaggeration and compensation seeking among combat veterans with posttraumatic stress disorder. *Journal of Traumatic Stress* 16(5):503–507.
- Dobie DJ, Kivlahan DR, Maynard C, Bush KR, Davis TM, Bradley KA. 2004. Posttraumatic stress disorder in female veterans: association with self-reported health problems and functional impairment. *Archives of Internal Medicine* 164(4):394–400.
- Dobie DJ, Maynard C, Kivlahan DR, Johnson KM, Simpson T, David AC, Bradley K. 2006. Posttraumatic stress disorder screening status is associated with increased VA medical and surgical utilization in women. *Journal of General Internal Medicine* 21(Suppl. 3):S58–S64.
- Dohrenwend BP, Turner JB, Turse NA, Adams BG, Koenen KC, Marshall R. 2006. The psychological risks of Vietnam for U.S. veterans: a revisit with new data and methods. *Science* 313:979–982.
- Drew D, Drebing CE, Van Ormer A, Losardo M, Krebs C, Penk W, Rosenheck RA. 2001. Effects of disability compensation on participation in and outcomes of vocational rehabilitation. *Psychiatric Services* 52(11):1479–1484.
- DVA (Department of Veterans Affairs). 2005a (November 10). *No Across-the-Board Review of PTSD Cases—Secretary Nicholson*. Department of Veterans Affairs news release. Washington, DC.
- DVA. 2005b. *Review of State Variances in VA Disability Compensation Payments*. Report No. 05-00765-137. Washington, DC: VA Office of the Inspector General. [Online]. Available: <http://www.va.gov/oig/52/reports/2005/VAOIG-05-00765-137.pdf> [accessed November 9, 2006].
- Elhai JD, Gold PB, Frueh BC, Gold SN. 2000. Cross-validation of the MMPI-2 in detecting malingered posttraumatic stress disorder. *Journal of Personality Assessment* 75:449–463.
- Elhai JD, Gold SN, Sellers AH, Dorfman WI. 2001. The detection of malingered posttraumatic stress disorder with MMPI-2 fake bad indices. *Assessment* 8(2):221–236.
- Estroff SE, Patrick DL, Zimmer CR, Lachicotte, WS. 1997. Pathways to disability income among persons with severe, persistent psychiatric disorders. *Milbank Quarterly* 75(4):495–532.
- Fairbank JA, Keane TM, Malloy PF. 1983. Some preliminary data on the psychological characteristics of Vietnam veterans with posttraumatic stress disorders. *Journal of Consulting and Clinical Psychology* 51:912–919.
- Fontana A, Rosenheck R. 1998a. Effects of compensation on treatment outcomes among veterans with posttraumatic stress disorder. *Journal of Nervous and Mental Disease* 186:223–230.
- Fontana A, Rosenheck R. 1998b. Duty-related and sexual stress in the etiology of PTSD among women veterans who seek treatment. *Psychiatric Services* 49(5):658–662.

- Fontana A, Rosenheck R. 2006. Treatment of female veterans with posttraumatic stress disorder: the role of comfort in a predominantly male environment. *Psychiatric Quarterly* 77(1):55–67.
- Franklin CL, Repasky SA, Thompson KE, Sheldon SA, Uddo M. 2002. Differentiating over-reporting and extreme distress: MMPI-2 use with compensation-seeking status. *Journal of Personality Assessment* 79:274–285.
- Friedman MJ. 2006 (May 1). *Evidence Relevant to Compensation Awards for PTSD: a Report to the Institute of Medicine*. Presentation to the Committee on Veterans' Compensation for Posttraumatic Stress Disorder. Washington, DC.
- Friedman MJ, Schnurr PP, Sengupta A, Holmes T, Ashcraft M. 2004. The Hawaii Vietnam Veterans Project: Is minority status a risk factor for posttraumatic stress disorder? *Journal of Nervous and Mental Disease* 192:42–50.
- Frueh BC, Smith DW, Barker SE. 1996. Compensation seeking status and psychometric assessment of combat veterans seeking treatment for PTSD. *Journal of Traumatic Stress* 9(3):427–439.
- Frueh BS, Gold PB, de Arellano MA. 1997. Symptom overreporting in combat veterans evaluated for PTSD: differentiation on the basis of compensation seeking status. *Journal of Personality Assessment* 68(2):369–384.
- Frueh BC, Hamner MB, Cahill SB, Gold PB, Hamlin KL. 2000. Apparent symptom over-reporting in combat veterans evaluated for PTSD. *Clinical Psychology Review* 20(7):853–885.
- Frueh BC, Elhai JD, Gold PB, Monnier J, Magruder KM, Keane TM, Arana GW. 2003. Disability compensation seeking among veterans evaluated for posttraumatic stress disorder. *Psychiatric Services* 54(1):84–91.
- Frueh BC, Elhai JD, Grubaugh AL, Monnier J, Kashdan TB, Sauvageot JA, Hamner MB, Burkett BG, Arana GW. 2005. Documented combat exposure of U.S. veterans seeking treatment for combat-related post-traumatic stress disorder. *British Journal of Psychiatry* 186:467–472.
- GAO (Government Accountability Office). 2006. Veteran disability benefits: VA can improve its procedures for obtaining military records. GAO-07-98. Washington, DC: U.S. Government Accounting Office.
- Gill JM, Page GG. 2006. Psychiatric and physical health ramifications of traumatic events in women. *Issues in Mental Health Nursing* 27:711–734.
- Gold PB, Frueh BC. 1999. Compensation-seeking and extreme exaggeration of psychopathology among combat veterans evaluated for posttraumatic stress disorder. *Journal of Nervous and Mental Disease* 187(11):680–684.
- Goldzweig CL, Balekian TM, Rolon C, Yano EM, Shekelle PG. 2006. The state of women veterans' health research: results of a systematic literature review. *Journal of General Internal Medicine* (Suppl. 3):S82–S92.
- Grubaugh AL, Elhai JD, Monnier J, Frueh BC. 2004. Service utilization among compensation-seeking veterans. *Psychiatric Quarterly* 75(4):333–341.
- Gunderson M, Hyatt D. 1996. Do injured workers pay for reasonable accommodation? *Industrial and Labor Relations Review* 50:92–104.
- Gurriel J, Fremouw W. 2003. Assessing malingered posttraumatic stress disorder: a critical review. *Clinical Psychology Review* 23:881–904.
- Hayward B, Schmidt-Davis H. 2005. *The context of VR services*. Office of Special Education and Rehabilitative Services, Third final report. Research Triangle Park, NC: Research Triangle Institute.
- Holtzheimer PE 3rd, Russo J, Zatzick D, Bundy C, Roy-Byrne PP. 2005. The impact of comorbid posttraumatic stress disorder on short-term clinical outcome in hospitalized patients with depression. *American Journal of Psychiatry* 162(5):970–976.

- Hyer L, O'Leary WC, Saucer RT, Blount J, Harrison WR, Boudewyns PA. 1986. Inpatient diagnosis of posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology* 54:698–702.
- Hyer L, Boudewyns P, Harrison WR, O'Leary WC, Bruno RD, Saucer RT, Blount JB. 1988. Vietnam veterans: overreporting versus acceptable reporting of symptoms. *Journal of Personality Assessment* 52(3):475–486.
- IOM (Institute of Medicine). 1991. *Disability in America: Toward a National Agenda for Prevention*. Washington, DC: National Academy Press.
- IOM. 1999. *Strategies to Protect the Health of Deployed U.S. Forces: Medical Surveillance, Record Keeping, and Risk Reduction*. Washington, DC: National Academy Press.
- Johnson DR, Rosenheck R, Fontana A, Lubin H, Southwick S, Charney D. 1996. Outcome of intensive inpatient treatment for combat-related posttraumatic stress disorder. *American Journal of Psychiatry* 153(6):771–777.
- Kang H, Dalager N, Mahan C, Ishii E. 2005. The role of sexual assault on the risk of PTSD among Gulf War veterans. *Annals of Epidemiology* 15(3):191–195.
- Keane TM. 2006 (May 1). *Assessing Combat-Related PTSD*. Presentation to the Committee on Veterans' Compensation for Post Traumatic Stress Disorder. Washington, DC.
- Keane TM, Wolfe J. 1990. Comorbidity in post-traumatic stress disorder: an analysis of community and clinical studies. *Journal of Applied Social Psychology* 20:1776–1788.
- Kimerling R. 2004. An investigation of sex differences in nonpsychiatric morbidity associated with PTSD. *Journal of the American Medical Women's Association* 59:43–47.
- King LA, King DW, Fairbank JA, Keane TM, Adams GA. 1998. Resilience-recovery factors in post-traumatic stress disorder among female and male Vietnam veterans: hardiness, postwar social support, and additional stressful life events. *Journal of Personality and Social Psychology* 74(2):420–434.
- Kulka RA, Schlenger WE, Fairbank JA, Hough RL, Jordan BK, Marmar CR, Weiss DS. 1990a. *Trauma and the Vietnam War Generation: Report of Findings from the National Vietnam Veterans Readjustment Study*. New York: Brunner/Mazel.
- Kulka RA, Schlenger WE, Fairbank JA, Hough RL, Jordan BK, Marmar CR, Weiss DS. 1990b. *The National Vietnam Veterans Readjustment Study: Tables of Findings and Technical Appendices*. New York: Brunner/Mazel.
- Ledray LE. 1999. *Sexual Assault Nurse Examiner (SANE) Development and Operation Guide*. U.S. Department Of Justice, Office of Justice Programs, Office for Victims of Crime. [Online]. Available: <http://www.ojp.usdoj.gov/ovc/publications/infores/sane/sane-guide.pdf> [accessed January 2, 2007].
- Lipari RN, Lancaster AR. 2003. *Armed Forces 2002: Sexual Harassment Survey*. DMDC Report #2003-026. Arlington, VA: Defense Manpower Data Center. [Online]. Available: <http://www.defenselink.mil/news/Feb2004/d20040227shs1.pdf> [accessed January 2, 2007].
- Loo CM. 2007. *PTSD Among Ethnic Minority Veterans*. *National Center for PTSD Fact Sheet*. [Online]. Available: [http://www.ncptsd.va.gov/ncmain/ncdocs/fact\\_shts/fs\\_ethnic\\_vet.html](http://www.ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_ethnic_vet.html) [accessed April 17, 2007].
- Loo CM, Fairbank JA, Chemtob CM. 2005. Adverse race-related events as a risk factor for posttraumatic stress disorder in Asian American Vietnam veterans. *Journal of Nervous and Mental Disease* 193(7):455–463.
- Lynn EJ, Belza N. 1984. Factitious post-traumatic stress disorder: the veteran who never got to Vietnam. *Hospital and Community Psychiatry* 35:697–701.
- MacDonald-Wilson KL, Rogers ES, Ellison ML, Lyass A. 2003. A study of the Social Security work incentives and their relation to perceived barriers to work among persons with psychiatric disability. *Rehabilitation Psychology* 48:301–309.

- Matthieu M, Ivanoff A. 2006. Treatment of human-caused trauma: attrition in the adult outcomes research. *Journal of Interpersonal Violence* 21(12):1654–1664.
- McGrath JM, Frueh BC. 2002. Fraudulent claims of combat status in the VA? *Psychiatric Services* 53: 45.
- McNally RJ. 2006. Psychiatric casualties of war. *Science* 313:923–924.
- McNally RJ. 2007. PTSD and Vietnam veterans: response. *Science* 315:185–186.
- Mechanic D, Bilder S, McAlpine DD. 2002. Employing persons with serious mental illness. *Health Affairs* 21(5):242–253.
- Monson CM, Schnurr PP, Resnick PA, Friedman MJ, Young-Xu Y, Stevens SP. 2006. Cognitive processing therapy for veterans with military-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology* 74(5):898–907.
- Mossman D. 1994. At the VA, it pays to be sick—Department of Veterans Affairs. *The Public Interest* 115:35–47.
- Mossman D. 1996. Veterans Affairs disability compensation: a case study in countertherapeutic jurisprudence. *Bulletin of the American Academy of Psychiatry and the Law* 24:27–44.
- Murdoch M. 2006. PTSD Disability Benefits: A Focus on Gender. Presentation to the Committee on Veterans' Compensation for Posttraumatic Stress Disorder, July 6, 2006. Washington, DC.
- Murdoch M, Hodges J, Cowper D, Fortier L, van Ryn M. 2003a. Racial disparities in VA service connection for posttraumatic stress disorder disability. *Medical Care* 41(4):536–549.
- Murdoch M, Hodges J, Hunt C, Cowper D, Kressin N, O'Brien N. 2003b. Gender differences in service connection for PTSD. *Medical Care* 41(8):950–961.
- Murdoch M, Nelson D, Fortier L. 2003c. Time, gender, and regional trends in the application for service-related post-traumatic stress disorder disability benefits, 1980–1998. *Military Medicine* 168(8):662–670.
- Murdoch M, van Ryn M, Hodges J, Cowper D. 2005. Mitigating effect of Department of Veterans Affairs disability benefits for post-traumatic stress disorder on low income. *Military Medicine* 170(2):137–140.
- Murdoch M, Bradley A, Mather SH, Klein RE, Turner CL, Yano EM. 2006a. Women and war: what physicians should know. *Journal of Internal General Medicine* 21(Suppl 3): S5–S10(1).
- Murdoch M, Polusny MA, Hodges J, Cowper D. 2006b. Association between in-service sexual harassment and PTSD among VA disability applicants. *Military Medicine* 171(2):166–173.
- Murdoch M, Pryor JB, Gackstetter GD, Hodges J, O'Brien N, Cowper D, Fortier L, Shult T. 2006c. *Association Between Sexual Harassment and Adverse Outcomes After Controlling for Other Trauma*. Poster presentation given at the U.S. Department of Veterans Affairs Health Services Research and Development national meeting, February 16–17, 2006. Arlington, VA.
- Newcomb C, Payne S, Waid MD. 2003. What do we know about disability beneficiaries' work and use of work incentives prior to Ticket? Background information and baseline data. In K Rupp, SH Bell, eds. *Paying for Results in Vocational Rehabilitation: Will Provider Incentives Work for Ticket to Work*. Washington, DC: The Urban Institute.
- O'Campo P, Kub J, Woods A, Garza M, Snow Jones A, Gielen AC, Dienemann J, Campbell J. 2006. Depression, PTSD and co-morbidity related to intimate partner violence in civilian and military women. *Brief Treatment and Crisis Intervention Journal* 6(2):99–110.
- O'Neill D. 1977. Voucher funding of training programs: evidence from the GI bill. *Journal of Human Resources* 12(4):425–445.
- Orcutt HK, Erickson DJ, Wolfe J. 2002. A prospective analysis of trauma exposure: the mediating role of PTSD symptomatology. *Journal of Traumatic Stress* 15(3):259–266.

- Ouimette P, Cronkite R, Henson BR, Prins A, Gima K, Moos RH. 2004. Posttraumatic stress disorder and health status among female and male medical patients. *Journal of Traumatic Stress* 17:1–9.
- Penk WE, Allen IM. 1991. Clinical assessment of post-traumatic stress disorder (PTSD) among American minorities who served in Vietnam. *Journal of Traumatic Stress* 4(1):41–66.
- Perconte ST, Griger ML. 1991. Comparison of successful, unsuccessful, and relapsed Vietnam veterans treated for posttraumatic stress disorder. *Journal of Nervous and Mental Disease* 179:558–562.
- Polak P, Warner R. 1996. The economic life of seriously mentally ill people in the community. *Psychiatric Services* 47:270–274.
- Resnick PJ. 1997. Malingering of posttraumatic disorders. Pp. 130–152 in R Rogers, ed. *Clinical Assessment of Malingering and Deception, Second Edition*. New York: Guilford Press.
- Rohling ML, Binder LM, Langhinrichsen-Rohling J. 1995. Money matters: a meta-analytic review of the association between financial compensation and the experience and treatment of chronic pain. *Health Psychology* 14(6):537–547.
- Rosen GM. 2004. Malingering and the PTSD database. Pp. 85–89 in GM Rosen, ed. *Post-traumatic Stress Disorder: Issues and Controversies*. Chichester, England: John Wiley & Sons.
- Rosen GM. 2006. DSM's cautionary guideline to rule out malingering can protect the PTSD database. *Journal of Anxiety Disorders* 20(4):530–535.
- Rosenheck RA, Fontana A. 1996. Race and outcome of treatment for veterans suffering from PTSD. *Journal of Traumatic Stress* 9(2):343–351.
- Rosenheck R, Frisman L, Sindelar J. 1995. Disability compensation and work among veterans with psychiatric and non-psychiatric impairments. *Psychiatric Services* 46:359–365.
- Ruef AM, Litz BT, Schlenger WE. 2000. Hispanic ethnicity and risk for combat-related posttraumatic stress disorder. *Cultural Diversity and Ethnic Minority Psychology* 6(3):235–251.
- Sayer NA. 2006a. *Beliefs, Symptoms and Help-Seeking Behaviors Associated with Phases in the VA PTSD Claim Process*. Presentation to the Committee on Veterans' Compensation for Post Traumatic Stress Disorder, July 6, 2006. Washington, DC.
- Sayer, NA. 2006b. *The Impact of Disability Compensation for PTSD on Veterans' Mental Health Care Utilization*. Unpublished manuscript provided to the Committee on Veterans' Compensation for Post Traumatic Stress Disorder. Washington, DC.
- Sayer NA, Thuras P. 2002. The influence of patients' compensation-seeking status on the perceptions of Veterans Affairs clinicians. *Psychiatric Services* 53(2):210–212.
- Sayer NA, Spoont M, Nelson DB. 2004a. Disability compensation for PTSD and use of VA mental-health care. *Psychiatric Services* 55(5):589.
- Sayer NA, Spoont M, Nelson DB. 2004b. Veterans seeking disability benefits for post-traumatic stress disorder: who applies and the self-reported meaning of disability compensation. *Social Science & Medicine* 58(11):2133–2143.
- Sayer NA, Spoont M, Nelson DB. 2005a. Post-traumatic stress disorder claims from the viewpoint of veterans service officers. *Military Medicine* 170(10):867–870.
- Sayer NA, Spoont M, Nelson DB, Clothier B. 2005b. *Changes in Symptoms, Functioning and Service Utilization After PTSD Claim Determinations*. Paper Presented at the U.S. Department of Veterans Affairs Health Services Research and Development national meeting. Baltimore, MD.
- Schechter ES. 1999. Industry, occupation, and disability insurance beneficiary work return. *Social Security Bulletin* 62(1):10–22.

- Skinner KM, Kressin N, Frayne S, Tripp TJ, Hankin CS, Miller DR, Sullivan LM. 2000. The prevalence of military sexual assault among female Veterans' Administration outpatients. *Journal of Interpersonal Violence* 15(3):291–310.
- Smith DW, Frueh BC. 1996. Compensation seeking, comorbidity, and apparent symptom exaggeration of PTSD symptoms among Vietnam combat veterans. *Psychological Assessment* 8(1):3–6.
- Sparr LF, Pankratz LD. 1983. Factitious posttraumatic stress disorder. *American Journal of Psychiatry* 140:1016–1019.
- Spoont M, Sayer N, Nelson D, Nugent S, Murdoch M. 2002. *Changes in Service Utilization During Phases of the C&P process for PTSD*. Paper presented at the U.S. Department of Veterans Affairs Health Services Research and Development national meeting, Washington, DC.
- Stapleton DC, Livermore GA. 2003. A conceptual model and evaluation strategy for the empirical study of the adequacy of incentives in the Ticket to Work program. In K Rupp, SH Bell, eds. *Paying for Results in Vocational Rehabilitation: Will Provider Incentives Work for Ticket to Work?* Washington, DC: The Urban Institute.
- Stapleton DC, O'Day B, Livermore GA, Imperato AJ. 2005 (July). *Dismantling the Poverty Trap: Disability Policy for the 21st Century*. Ithaca, NY: Rehabilitation Research and Training Center for Economic Research on Employment Policy for Persons with Disabilities, Cornell University.
- Stichman BF. 2006. *Problems Faced by Veterans in Obtaining Disability Compensation from the Department of Veterans Affairs for Post Traumatic Stress Disorder*. Presentation before the Committee on Veterans' Compensation for Post Traumatic Stress Disorder. June 6, 2006. Washington, DC.
- Street AE, Stafford J, Mahan CM, Hendricks AM, Gardner JA, Bruce TA. 2003. *Military Sexual Trauma Among the Reserve Components of the Armed Forces*. Washington, DC: U.S. Department of Veterans Affairs.
- Sullivan MD, Loeser JD. 1992. The diagnosis of disability: treating and rating disability in a pain clinic. *Archives of General Medicine* 152:1829–1835.
- Suris A, Lind L, Kashner TM, Borman PD, Petty F. 2004. Sexual assault in women veterans: an examination of PTSD risk, health care utilization, and cost of care. *Psychosomatic Medicine* 66(5):749–756.
- Szybala RL. 2006. *Statement of Renée L. Szybala, Director, Compensation and Pension Service, to the Institute of Medicine Committee on VA Compensation for Posttraumatic Stress Disorder, May 2, 2006*. [Online]. Available: <http://www.iom.edu/File.aspx?ID=34556> [accessed October 12, 2006].
- Thornton C, Fraker T, Livermore G, Stapleton D, O'Day B, Silva T, Martin ES, Kregel J, Wright D. 2006. *Evaluation of the Ticket to Work Program: Implementation Experience During the Second Two Years of Operations (2003-2004)*. Washington, DC: Mathematica Policy Research Inc., and Cornell University Institute for Policy Research.
- Tolin DF, Foa EB. 2006. Sex differences in trauma and posttraumatic stress disorder: a quantitative review of 25 years of research. *Psychological Bulletin* 132:959–992.
- Tolin DF, Maltby N, Weathers FW, Litz BT, Knight J, Keane TM. 2004. The use of the MMPI-2 Infrequency-Psychopathology scale in the assessment of posttraumatic stress disorder in male veterans. *Journal of Psychopathology and Behavioral Assessment* 26(1):23–29.
- U.S. Air Force. 2004. *Report Concerning the Assessment of USAF Sexual Assault Prevention and Response—August 2004*. Office of the Assistant Secretary of the Air Force (Manpower and Reserve Affairs). [Online]. Available: [http://www.af.mil/library/posture/SA\\_Assessment\\_Report.pdf](http://www.af.mil/library/posture/SA_Assessment_Report.pdf) [accessed January 2, 2007].

- U.S. National Archives and Records Administration. 2006. *Military Service Records and Official Military Personnel Files*. [Online]. Available: <http://www.archives.gov/veterans/military-service-records/> [accessed February 8, 2006].
- VBA (Veterans Benefits Administration). 2005. *Post-Traumatic Stress Disorder—Student Guide*. Washington, DC: Department of Veterans Affairs.
- Watson P, McFall M, McBrine C, Schnurr PP, Friedman MJ, Keane T, Hamblen JL. 2002. *Best Practice Manual for Posttraumatic Stress Disorder (PTSD) Compensation and Pension Examinations*. [Online]. Available: <http://www.avapl.org/pub/PTSD%20Manual%20final%2006.pdf> [accessed January 13, 2007].
- White JS, Black WE, Ireys HT. 2005. *Explaining Enrollment Trends and Participant Characteristics of the Medicaid Buy-In Program, 2002–2003*. Washington, DC: Mathematica Policy Research Inc.
- Wolfe J, Sharkansky EJ, Read JP, Dawson R, Martin JA, Ouimette PC. 1998. Sexual harassment and assault as predictors of PTSD symptomatology among U.S. female Persian Gulf War military personnel. *Journal of Interpersonal Violence* 13(1):40–57.
- Wolinsky R, Coe R, Mosely R, Homan S. 1985. Veterans and nonveterans use of health services. *Medical Care* 23:1358–1371.
- Yaeger D, Himmelfarb N, Cammack A, Mintz J. 2006. DSM-IV diagnosed posttraumatic stress disorder in women veterans with and without military sexual trauma. *Journal of General Internal Medicine* 21(Suppl 3):S65–S69.
- Zatzick DF, Weiss DS, Marmar CR, Metzler TJ, Wells KB, Golding JM, Stewart A, Schlenger WE, Browner WS. 1997. Post-traumatic stress disorder and functioning and quality of life outcomes in female Vietnam veterans. *Military Medicine* 162(10):661–665.

## General Observations

In addition to answering specific questions posed in the charge, the committee wishes to make some general observations that flow from its examination of the Department of Veterans Affairs (VA's) posttraumatic stress disorder (PTSD) disability-compensation system. This final chapter of the report addresses these items, which deal with the overall conduct of the system.

There are three general observations that capture the committee's thinking on the issue of PTSD disability compensation practices.

**1. The key to proper administration of VA's PTSD compensation program is a thorough compensation and pension (C&P) clinical examination conducted by an experienced professional.** This echoes the conclusion of an earlier Institute of Medicine (IOM) committee that examined issues regarding the diagnosis and assessment of PTSD. That committee found:

[A]n optimal assessment of a patient consists of a face-to-face interview in a confidential setting with a health professional experienced in the diagnosis of psychiatric disorders. It is critical that adequate time be allocated for that assessment. Depending on the mental and physical health of the veteran, the veteran's willingness and capacity to work with the health professional, and the presence of comorbid disorders, the process of diagnosis and assessment will likely take at least an hour or could take many hours to complete (IOM, 2006).

Many of the problems and issues identified by the committee in previous chapters can be addressed by consistently allocating and applying the time and resources needed for a thorough PTSD C&P clinical examination. This measure will facilitate:

- more comprehensive and consistent assessment of veteran reports of exposure to trauma;
- more complete assessment of the presence and impact of comorbid conditions;
- the conduct of standardized psychological testing where appropriate;
- more accurate assessment of the social and vocational impacts of identified disabilities;
- evaluation of any suspected malingering or dissembling using multiple strategies including standardized tests, if appropriate, and clinical face-to-face assessment;
- more detailed documentation of the claimant's condition to inform the rater's decision (and thus potentially lead to better and more consistent decisions); and
- an informed, case-specific determination of whether reexamination is appropriate and, if so, when.

The committee recognizes the sometimes difficult circumstances under which VA professionals operate, and this conclusion should not be read as a criticism of the work they are doing. Indeed, the committee was impressed by the scholarship and dedication of these people who gave presentations in open meetings and responded to the committee's questions. Still, anecdotal remarks to the committee suggest that not all evaluations are currently performed in a thorough manner.

The VA may well incur increased up-front costs by implementing more consistently detailed examinations for all veterans who present for initial and review C&P evaluations for PTSD. It is not possible, though, to make an informed estimate of what the additional costs may be because the total will depend on many variables whose values are not available or are difficult to derive from public sources—notably, the time currently spent on examinations and the costs associated with those examinations. Further uncertainty is introduced by the fact that a change in policies regarding the exams may lead to changes in the number and characteristics of claimants.

As noted in Chapter 6, information available to the committee indicates that clinicians currently spend from as little as 20 minutes (Arbisi, 2006) to as much as three hours or more (Watson et al., 2000) to conduct a PTSD C&P examination. There are no data characterizing the distribution of time spent or the average amount of time spent on examinations, and the

broad range between the lowest and the highest figures—at least a nine-fold difference—makes bounding calculations relatively uninformative. Without a figure for the amount of time currently spent, it is not possible to confidently estimate how the amount of time devoted to an examination might change.

Based on 2003 data, the cost of an average C&P examination—whether administered by VA or by QTC Management Inc.—was \$400 (GAO, 2005). This figure excluded the costs of testing, laboratory work, diagnostic imaging, and the like. According to the 2006 VA Office of the Inspector General report on state variances in disability ratings, QTC was receiving \$590 per examination two years later—a 48 percent increase, assuming that the figures are comparable (DVA, 2005). Even if these data could be used to project the future cost of an examination, the fact that they represent an overall average makes them uninformative for psychiatric examinations because these examinations “are substantially more expensive than examinations by other specialties” (Commission on Health and Safety and Workers’ Compensation, 1993). Private-sector figures are similarly inadequate because the pricing of services there typically includes an assumption that there will be less than 100 percent cost recovery.

A 2006 GAO report noted that even the VA had difficulty estimating the cost of changes to their mental health policy, indicating that the VA does not track expenditures in a way that allows such analysis (GAO, 2006).

Data vital to constructing an informed estimate are thus unavailable. The committee believes it would be irresponsible to offer a number that is not well founded because it might influence decision making. Instead, it recommends that VA collect and make the information to perform such an estimate available so that the impact of conducting more uniformly thorough examinations can be fairly and openly evaluated.

The committee is also aware that a policy change of this type may present challenges for the administration of exams conducted on a contractual basis, where specificity in the time spent, tests to be performed, and the like is desirable. The committee observes that the conscientious application of clinical judgment in the face of a diverse claimant population does not easily lend itself to standardization. Innovative approaches will need to be developed and tested in order to identify the best means of granting clinicians claimant-specific discretion in the conduct of the exam.

It is not possible to say with any degree of certainty whether an initial examination that is more consistently thorough would result in an overall cost benefit for VA. Historic patterns of PTSD compensation grants for cohorts such as Vietnam veterans may or may not be useful in predicting trends among Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF) veterans. The nature of military-related stressors and pre- and postwar social and economic conditions is considerably different from

earlier service periods. In the absence of a postwar economic boom, peaks for delayed-onset cases may emerge sooner than those observed for previous cohorts. Whether variation in these factors will affect PTSD expression and compensation-seeking behavior—and, if so, to what degree—is not known.

At first glance one might expect that a front-end investment in more consistently thorough examinations would lead to cost savings because it would decrease false-positive awards or inappropriately high ratings. However, even if this were the case, this savings could be offset by a concomitant decrease in false-negative denials and inappropriately low ratings. There are, however, other opportunities for reducing long-term costs. Having fewer incorrect or incomplete evaluations should, for example, result in fewer challenges of examination results and ratings decisions—and fewer successful challenges. More consistently thorough evaluations will also allow the generation of information needed to identify and focus on problem areas in the system. Finally, VA could realize cost savings if a more-thorough screening of cases led to earlier and presumably more effective secondary intervention, which in turn might result in reduced lifetime functional impairment and less compensation paid over the lifetime of a recipient.

More comprehensive evaluations may also yield another benefit: greater claimant satisfaction. A thorough examination by a caring professional will help demonstrate VA's commitment to providing help to veterans in need. If the committee's recommendations are followed, this will be coupled with more consistent ratings determinations rendered by VA staff certified to handle PTSD claims. While the C&P decisions coming out of such evaluations will not necessarily be more favorable to the claimant, he or she will have greater confidence that they were made as a result of a careful, even-handed consideration of the evidence and this may lead to greater acceptance of the results.

**2. An informed evaluation of the PTSD compensation system will not be possible until VA implements a comprehensive data collection, analysis, and publication effort.** The report identifies a number of instances where there are gaps in the data and in the research literature regarding PTSD disability compensation issues and offers some specific recommendations to address them. However, some data sought by the committee were not available because they were in various cases not collected, not coded, collected but not retained, annotated only in hardcopy files rather than placed in a database, or spread among the VBA and the VHA databases in ways that made retrieval and integration difficult or impossible, or due to a combination of these conditions. The data are handled this way because they are being collected for disparate purposes—the VBA data being primarily associated with the actuarial documentation of the delivery of compensation

while the VHA data are used to fulfill its mission as a health care delivery network.

The committee believes that an informed evaluation of the PTSD compensation system will not be possible until VA implements a comprehensive and integrated data collection, analysis, and publication effort. This effort should be focused on data useful to research, policy, and planning purposes. It will allow VA to:

- evaluate interrater reliability and generate information that can be used to promote the accuracy and validity of ratings;
- more easily determine whether examinations and benefits are being properly and consistently managed throughout the VA system;
- establish whether there are subsections of the population that differ in ways that require the particular attention of the system (such as the elderly, certain racial or ethnic groups, female veterans, those just returning from combat, those with relatively low or with high levels of disability, those with particular comorbidities, and the like); and, most importantly,
  - evaluate what is working and what isn't and determine where resources should be focused.

More widely and systematically collecting data for research, policy, and planning purposes and assembling these data in more user-friendly forms will allow VA to better conduct the kinds of analyses needed to make informed decisions about the scope and magnitude of the problems that exist within the PTSD disability compensation system and the best approaches to addressing them, as well as to better project the resources needed to serve future veteran populations.

**3. One cannot look at the effect of compensation in isolation.** The VA offers a range of other services to veterans with service-related disabilities that is unmatched by civilian benefits systems. These veterans services include compensation, pension, comprehensive medical care, vocational rehabilitation, employment counseling, education and training, home loans, housing assistance, and other supports to veterans and their families.<sup>1</sup> It is beyond the scope of this committee to make recommendations regarding the general conduct of the VA benefits and services program. However, the committee notes that a complete evaluation of the strategies for reducing disincentives and maximizing incentives for achieving optimal mental functioning would have to include an examination of the roles and coordination of all of these services. VA has some experience with a more integrated evaluation of veteran's needs and delivery of services through VBA's Vo-

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<sup>1</sup>More severely disabled veterans are eligible for additional and greater benefits, depending on the nature of their disability.

ational Rehabilitation and Employment Service. However, problems have been identified with this program (DVA, 2004) and coordination between VBA- and VHA-administered services is limited. There are currently no processes in place for individual case planning and management, integration of services, or evaluation of opportunities to provide incentives for improvement in health and function. Further, VA does not systematically collect the information needed to evaluate the effectiveness of their PTSD treatment programs and other benefits in promoting return to function. Having these data would facilitate the determination of the best ways to deploy the full spectrum of VA services to meet the needs of individual claimants. The IOM report *A 21st Century System for Evaluating Veterans for Disability Benefits*, which will be released in summer 2007, offers recommendations regarding a more integrated approach to the provision of benefits (IOM, 2007). In late summer 2007, a second IOM report on PTSD treatment will focus on this component of the benefits system.

VA has the opportunity to adopt a broader vision of benefits provision and the committee believes that PTSD may be a good test case for an integrated benefits approach. In developing such an approach, one component might be a rethinking of the rules for access to VA mental-health care. The VA already offers some veterans access to their services without seeking or receiving a service connection<sup>2</sup> and should evaluate the feasibility of expanding such access—decoupling the seeking of PTSD disability through the C&P system from some form of priority access to VHA-provided mental health services. To be sure, there are already capacity constraints on this system, but the committee believes that if it were possible to provide a path to treatment that did not involve C&P review, it would enhance opportunities for recovery and wellness.

In conclusion, the committee is acutely aware that resource constraints—both funds and staff—limit the ability of VA to deliver services and force difficult decisions on allocations among vital efforts. It believes that increases in the number of veterans seeking and receiving disability benefits for PTSD, the prospect of a large number of veterans of OIF and OEF entering the system, and the profound impact of the disorder on the nation's veterans make changes in PTSD C&P policy a priority deserving of special attention and action by the VA and the Congress.

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<sup>2</sup>For example, GAO (2006) notes that at present (late 2006) the VA offers no-cost access to all of its health-care services to OIF/OEF veterans for two years following their discharge or release from active duty. This includes out- and inpatient access to mental-health counseling, drug therapy, and education.

## REFERENCES

- Arbisi PA. 2006. *Issues and Barriers to Implementation of Best Practice Guidelines in Compensation and Pension Examinations*. Presentation to the Committee on Veterans' Compensation for Posttraumatic Stress Disorder, July 6, 2006. Washington, DC.
- Commission on Health and Safety and Workers' Compensation. 1993. *Evaluating the Reforms of the Medical-legal Process using the WCIRB Permanent Disability Survey*. [Online]. Available: [http://www.dir.ca.gov/CHSWC/med\\_legal/med\\_sum1.html](http://www.dir.ca.gov/CHSWC/med_legal/med_sum1.html) [accessed January 31, 2007].
- DVA (U.S. Department of Veterans Affairs). 2004. *The Vocational Rehabilitation and Employment Program for the 21st Century Veteran: Report to the Secretary of Veterans Affairs*. Washington, DC: Vocational Rehabilitation and Employment Task Force. [Online]. Available: [www.va.gov/op3/docs/VRE\\_Report.pdf](http://www.va.gov/op3/docs/VRE_Report.pdf) [accessed December 8, 2006].
- DVA. 2005. *Review of State Variances in VA Disability Compensation Payments*. Report No. 05-00765-137. Washington, DC: VA Office of the Inspector General. [Online]. Available: <http://www.va.gov/oig/52/reports/2005/VAOIG-05-00765-137.pdf> [accessed November 9, 2006].
- GAO (Government Accountability Office). 2005. *VA and DOD Health Care: Efforts to Coordinate a Single Physical Exam Process for Servicemembers Leaving the Military*. GAO-05-64. Washington, DC: GAO.
- GAO. 2006. *VA Health Care: Spending for Mental Health Strategic Plan Initiatives Was Substantially Less Than Planned*. GAO-07-66. Washington, DC: GAO.
- IOM (Institute of Medicine). 2006. *Posttraumatic Stress Disorder: Diagnosis and Assessment*. Washington, DC: The National Academies Press.
- IOM. 2007 (forthcoming). *A 21st Century System for Evaluating Veterans for Disability Benefits*. Washington, DC: The National Academies Press.
- Watson P, McFall M, McBrine C, Schnurr PP, Friedman MJ, Keane T, Hamblen JL. 2002. *Best Practice Manual for Posttraumatic Stress Disorder (PTSD) Compensation and Pension Examinations*. [Online]. Available: <http://www.avapl.org/pub/PTSD%20Manual%20final%206.pdf> [accessed January 13, 2007].

## APPENDIX

### A

# Committee on Veterans' Compensation for Posttraumatic Stress Disorder

## Public Meeting Agendas

### MEETING #1

May 2, 2006

National Academy of Sciences Building  
2100 C Street, NW  
Washington, DC

**1:00 p.m. – 1:20 p.m.**

*Chair's opening statement*

*Introductions*

**1:20 p.m. – 1:40 p.m.**

*Sponsor's charge to the committee*

Renée L. Szybala, Esq.

Director, Compensation and Pension Service,  
U.S. Department of Veterans Affairs

**1:40 p.m. – 2:10 p.m.**

*Making PTSD Compensation "Effective": Values, Perspectives, & Science*

Charles C. Engel, M.D., M.P.H.; Colonel, Medical Corps, U.S. Army

Deployment Health Clinical Center

U.S. Department of Defense

**2:10 p.m. – 2:20 p.m.**

*Remarks from the Veterans' Disability Benefits Commission*

William M. Matz, Jr., Major General, U.S. Army (Ret.)

Veterans' Disability Benefits Commission

**2:20 p.m. – 2:30 p.m.**

*Break*

**2:30 p.m. – 3:30 p.m.**

*Evidence Relevant to Compensation Awards for PTSD*

Matthew Friedman, M.D., Ph.D.

National Center for PTSD

Department of Veterans Affairs

**3:30 p.m. – 4:30 p.m.**

*Traumatic Exposure and Its Consequences*

Terrance M. Keane, Ph.D.

VA Boston Healthcare System

**4:40 p.m. – 5:15 p.m.**

*Follow-up questions from the committee, and questions and comments from the floor*

**5:15 p.m.**

*Public meeting adjourns*

## MEETING #2

July 6, 2006

Keck Center of the National Academies

500 5th Street, NW

Washington, DC 20001

**10:00 a.m. – 10:15 a.m.**

*Chair's opening statement and introductions*

**10:15 a.m. – 11:00 a.m.**

*Issues and Barriers to Implementation of Best Practice Guidelines in Compensation and Pension Examinations for PTSD*

Paul A. Arbisi, Ph.D., ABAP

Associate Professor, Department of Psychiatry, University of Minnesota

Associate Adjunct Professor, Department of Psychology, University of Minnesota

Staff Psychologist, Minneapolis VA Medical Center

**11:00 a.m. – 11:45 a.m.**

*Beliefs, Symptoms and Help-Seeking Behaviors Associated with Phases in the VA PTSD Claims Process*

Nina A. Sayer, Ph.D. L.P.

Clinical Assistant Professor, Department of Psychology, University of Minnesota

Assistant Professor, Department of Medicine, University of Minnesota

Core Investigator, Center for Chronic Disease Outcomes Research

**11:45 a.m. – 12:00 p.m.**

*General discussion and questions*

**12:00 p.m. – 12:50 p.m.**

*Break*

**1:00 p.m. – 1:45 p.m.**

*PTSD Disability Benefits: A Focus on Gender*

Maureen Murdoch, M.D., M.P.H.

Assistant Professor, School of Medicine, University of Minnesota

Staff Physician, Section of General Internal Medicine, Minneapolis VAMC

Core Investigator, Center for Chronic Disease Outcomes Research

**1:45 p.m. – 2:30 p.m.**

*The Evaluation of PTSD for Disability Compensation Purposes*

Bradley B. Flohr

Chief, Judicial/Advisory Review Staff, Compensation and Pension Service

Veterans Benefits Administration, Department of Veterans Affairs

**2:30 p.m. – 2:45 p.m.**

*Break*

**2:45 p.m. – 4:00 p.m.**

*Problems Faced by Veterans in Obtaining Disability Compensation from the Department of Veterans Affairs for Posttraumatic Stress Disorder*

Barton F. Stichman, Esq.

Joint Executive Director, National Veterans Legal Services Program

**4:00 p.m. – 5:00 p.m.**

*Presentations by meeting registrants*

Statement by Sidney Lee, President, The African American Post Traumatic Stress Disorder Association

Statement by Rick Weidman, Executive Director, Vietnam Veterans of America

**5:00 p.m. – 5:30 p.m.**

*Follow-up questions from the committee, and questions and comments from the floor*

**5:30 p.m.**

*Public meeting adjourns*

## APPENDIX B

# Federal Regulations Related to VA Compensation of PTSD and Other Mental Disorders

### TITLE 38: PENSIONS, BONUSES, AND VETERANS' RELIEF

#### Part 4—Schedule for Rating Disabilities

#### Subpart B—Disability Ratings

#### Mental Disorders

##### § 4.125 Diagnosis of mental disorders

(a) If the diagnosis of a mental disorder does not conform to *DSM-IV* or is not supported by the findings on the examination report, the rating agency shall return the report to the examiner to substantiate the diagnosis.

(b) If the diagnosis of a mental disorder is changed, the rating agency shall determine whether the new diagnosis represents progression of the prior diagnosis, correction of an error in the prior diagnosis, or development of a new and separate condition. If it is not clear from the available records what the change of diagnosis represents, the rating agency shall return the report to the examiner for a determination.

(Authority: 38 U.S.C. 1155)  
[61 FR 52700, Oct. 8, 1996]

##### § 4.126 Evaluation of disability from mental disorders

(a) When evaluating a mental disorder, the rating agency shall consider

the frequency, severity, and duration of psychiatric symptoms, the length of remissions, and the veteran's capacity for adjustment during periods of remission. The rating agency shall assign an evaluation based on all the evidence of record that bears on occupational and social impairment rather than solely on the examiner's assessment of the level of disability at the moment of the examination.

(b) When evaluating the level of disability from a mental disorder, the rating agency will consider the extent of social impairment, but shall not assign an evaluation solely on the basis of social impairment.

(c) Delirium, dementia, and amnesic and other cognitive disorders shall be evaluated under the general rating formula for mental disorders; neurologic deficits or other impairments stemming from the same etiology (e.g., a head injury) shall be evaluated separately and combined with the evaluation for delirium, dementia, or amnesic or other cognitive disorder (see §4.25).

(d) When a single disability has been diagnosed both as a physical condition and as a mental disorder, the rating agency shall evaluate it using a diagnostic code which represents the dominant (more disabling) aspect of the condition (see §4.14).

(Authority: 38 U.S.C. 1155)  
[61 FR 52700, Oct. 8, 1996]

#### **§ 4.128 Convalescence ratings following extended hospitalization**

If a mental disorder has been assigned a total evaluation due to a continuous period of hospitalization lasting six months or more, the rating agency shall continue the total evaluation indefinitely and schedule a mandatory examination six months after the veteran is discharged or released to non-bed care. A change in evaluation based on that or any subsequent examination shall be subject to the provisions of §3.105(e) of this chapter.

(Authority: 38 U.S.C. 1155)  
[61 FR 52700, Oct. 8, 1996]

#### **§ 4.129 Mental disorders due to traumatic stress**

When a mental disorder that develops in service as a result of a highly stressful event is severe enough to bring about the veteran's release from active military service, the rating agency shall assign an evaluation of not less than 50 percent and schedule an examination within the six month period following the veteran's discharge to determine whether a change in evaluation is warranted.

(Authority: 38 U.S.C. 1155)  
[61 FR 52700, Oct. 8, 1996]

### § 4.130 Schedule of ratings—mental disorders

The nomenclature employed in this portion of the rating schedule is based upon the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*, of the American Psychiatric Association (*DSM-IV*). Rating agencies must be thoroughly familiar with this manual to properly implement the directives in §4.125 through §4.129 and to apply the general rating formula for mental disorders in §4.130. The schedule for rating for mental disorders is set forth as follows:

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#### Schizophrenia and Other Psychotic Disorders

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- 9201 Schizophrenia, disorganized type
- 9202 Schizophrenia, catatonic type
- 9203 Schizophrenia, paranoid type
- 9204 Schizophrenia, undifferentiated type
- 9205 Schizophrenia, residual type; other and unspecified types
- 9208 Delusional disorder
- 9210 Psychotic disorder, not otherwise specified (atypical psychosis)
- 9211 Schizoaffective disorder

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#### Delirium, Dementia, and Amnesic and Other Cognitive Disorders

---

- 9300 Delirium
- 9301 Dementia due to infection (HIV infection, syphilis, or other systemic or intracranial infections)
- 9304 Dementia due to head trauma
- 9305 Vascular dementia
- 9310 Dementia of unknown etiology
- 9312 Dementia of the Alzheimer's type
- 9326 Dementia due to other neurologic or general medical conditions (endocrine disorders, metabolic disorders, Pick's disease, brain tumors, etc.) or that are substance-induced (drugs, alcohol, poisons)
- 9327 Organic mental disorder, other (including personality change due to a general medical condition)

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#### Anxiety Disorders

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- 9400 Generalized anxiety disorder
- 9403 Specific (simple) phobia; social phobia
- 9404 Obsessive compulsive disorder
- 9410 Other and unspecified neurosis
- 9411 Post-traumatic stress disorder**

- 9412 Panic disorder and/or agoraphobia  
9413 Anxiety disorder, not otherwise specified

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Dissociative Disorders

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- 9416 Dissociative amnesia; dissociative fugue; dissociative identity disorder  
(multiple personality disorder)  
9417 Depersonalization disorder

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Somatoform Disorders

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- 9421 Somatization disorder  
9422 Pain disorder  
9423 Undifferentiated somatoform disorder  
9424 Conversion disorder  
9425 Hypochondriasis

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Mood Disorders

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- 9431 Cyclothymic disorder  
9432 Bipolar disorder  
9433 Dysthymic disorder  
9434 Major depressive disorder  
9435 Mood disorder, not otherwise specified

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Chronic Adjustment Disorder

---

Rating

- 
- 9440 Chronic adjustment disorder

General Rating Formula for Mental Disorders:

Total occupational and social impairment, due to such symptoms as: gross impairment in thought processes or communication; persistent delusions or hallucinations; grossly inappropriate behavior; persistent danger of hurting self or others; intermittent inability to perform activities of daily living (including maintenance of minimal personal hygiene); disorientation to time or place; memory loss for names of close relatives, own occupation, or own name

100

- Occupational and social impairment, with deficiencies in most areas, such as work, school, family relations, judgment, thinking, or mood, due to such symptoms as: suicidal ideation; obsessional rituals which interfere with routine activities; speech intermittently illogical, obscure, or irrelevant; near-continuous panic or depression affecting the ability to function independently, appropriately and effectively; impaired impulse control (such as unprovoked irritability with periods of violence); spatial disorientation; neglect of personal appearance and hygiene; difficulty in adapting to stressful circumstances (including work or a worklike setting); inability to establish and maintain effective relationships 70
- Occupational and social impairment with reduced reliability and productivity due to such symptoms as: flattened affect; circumstantial, circumlocutory, or stereotyped speech; panic attacks more than once a week; difficulty in understanding complex commands; impairment of short- and long-term memory (e.g., retention of only highly learned material, forgetting to complete tasks); impaired judgment; impaired abstract thinking; disturbances of motivation and mood; difficulty in establishing and maintaining effective work and social relationships 50
- Occupational and social impairment with occasional decrease in work efficiency and intermittent periods of inability to perform occupational tasks (although generally functioning satisfactorily, with routine behavior, self-care, and conversation normal), due to such symptoms as: depressed mood, anxiety, suspiciousness, panic attacks (weekly or less often), chronic sleep impairment, mild memory loss (such as forgetting names, directions, recent events) 30

Occupational and social impairment due to mild or transient symptoms which decrease work efficiency and ability to perform occupational tasks only during periods of significant stress, or; symptoms controlled by continuous medication 10

A mental condition has been formally diagnosed, but symptoms are not severe enough either to interfere with occupational and social functioning or to require continuous medication 0

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(Authority: 38 U.S.C. 1155)  
[9, Oct. 8, 1996]

## APPENDIX C

# Automated Medical Information Exchange (AMIE) Worksheets for Initial and Review Examinations for PTSD

**A**s noted in Chapter 4, the Veterans Benefits Administration (VBA) of the Department of Veterans Affairs (VA) has developed Automated Medical Information Exchange (AMIE) worksheets to help focus C&P examinations. The worksheets are prompts designed to ensure that clinician-examiners gather all of the information that a VBA rating specialist will need to rate a claim.

What follows are reproduced verbatim from the most current PTSD initial and review evaluation worksheets posted to the VA website (<http://www.vba.va.gov/bln/21/Benefits/exams/index.htm>) at the time this report was completed. The website notes that these were last changed February 9, 2005. Bold, italics, and all-caps emphasis formatting are retained from the source text.

## INITIAL EVALUATION FOR POST-TRAUMATIC STRESS DISORDER (PTSD)

### # 0910 Worksheet

Name: \_\_\_\_\_ SSN: \_\_\_\_\_  
Date of Exam: \_\_\_\_\_ C-number: \_\_\_\_\_  
Place of Exam: \_\_\_\_\_

*The following health care providers can perform initial examinations for PTSD.*

*a board-certified or board “eligible” psychiatrist;*

*a licensed doctorate-level psychologist;*

*a doctorate-level mental health provider under the close supervision of a board-certified or board eligible psychiatrist or licensed doctorate-level psychologist*

*a psychiatry resident under close supervision of a board certified or board eligible psychiatrist or licensed doctorate-level psychologist; or*

*a clinical or counseling psychologist completing a one-year internship or residency (for purposes of a doctorate-level degree) under close supervision of a board-certified or board eligible psychiatrist or licensed doctorate-level psychologist.*

#### **A. Identifying Information:**

- age
- ethnic background
- era of military service
- reason for referral (original exam to establish PTSD diagnosis and related psychosocial impairment; re-evaluation of status of existing service-connected PTSD condition)

#### **B. Sources of Information:**

- records reviewed (C-file, DD-214, medical records, other documentation)
- review of social-industrial survey completed by social worker
- statements from collaterals
- administration of psychometric tests and questionnaires (identify here)

#### **C. Review of Medical Records:**

1. Past Medical History:

- a. Previous hospitalizations and outpatient care.
  - b. Complete medical history is required, including history since discharge from military service.
  - c. Review of Claims Folder is required on initial exams to establish or rule out the diagnosis.
2. Present Medical History—over the past one year.
    - a. Frequency, severity and duration of medical and psychiatric symptoms.
    - b. Length of remissions, to include capacity for adjustment during periods of remissions.

**D. Examination (Objective Findings):**

Address each of the following and fully describe:

**History (Subjective Complaints):**

Comment on:

Premilitary History (refer to social-industrial survey if completed)

- describe family structure and environment where raised (identify constellation of family members and quality of relationships)
- quality of peer relationships and social adjustment (e.g., activities, achievements, athletic and/or extracurricular involvement, sexual involvements, etc.)
- education obtained and performance in school
- employment
- legal infractions
- delinquency or behavior conduct disturbances
- substance use patterns
- significant medical problems and treatments obtained
- family psychiatric history
- exposure to traumatic stressors (see CAPS trauma assessment checklist)
- summary assessment of psychosocial adjustment and progression through developmental milestones (performance in employment or schooling, routine responsibilities of self-care, family role functioning, physical health, social/interpersonal relationships, recreation/leisure pursuits).

Military History

- branch of service (enlisted or drafted)
- dates of service
- dates and location of war zone duty and number of months stationed in war zone

- Military Occupational Specialty (describe nature and duration of job(s) in war zone)
- highest rank obtained during service (rank at discharge if different)
- type of discharge from military
- substance use and consequences of substance use
- describe routine combat stressors veterans was exposed to (refer to Combat Scale)
- combat wounds sustained (describe)
- clearly describe specific stressor event(s) veteran considered particularly traumatic, particularly, if the stressor is a type of personal assault, including sexual assault, provide information, with examples, if possible.
- indicate overall level of traumatic stress exposure (high, moderate, low) based on frequency and severity of incident exposure
- citations or medals received
- disciplinary infractions or other adjustment problems during military

NOTE: Service connection for post-traumatic stress disorder (PTSD) requires medical evidence establishing a diagnosis of the condition that conforms to the diagnostic criteria of DSM-IV, credible supporting evidence that the claimed in-service stressor actually occurred, and a link, established by medical evidence, between current symptomatology and the claimed in-service stressor. It is the responsibility of the examiner to indicate the traumatic stressor leading to PTSD, if he or she makes the diagnosis of PTSD.

A diagnosis of PTSD cannot be adequately documented or ruled out without obtaining a detailed military history and reviewing the claims folder. This means that initial review of the folder prior to examination, the history and examination itself, and the dictation for an examination initially establishing PTSD will often require more time than for examinations of other disorders. Ninety minutes to two hours on an initial exam is normal.

Post-Military Trauma History (refer to social-industrial survey if completed)

- describe post-military traumatic events (see CAPS trauma assessment checklist)
- describe psychosocial consequences of post-military trauma exposure(s) (treatment received, disruption to work, adverse health consequences)

Post-Military Psychosocial Adjustment (refer to social-industrial survey if completed)

- legal history (DWIs, arrests, time spent in jail)
- educational accomplishment
- employment history (describe periods of employment and reasons)
- marital and family relationships (including quality of relationships with children)
- degree and quality of social relationships
- activities and leisure pursuits
- substance use and consequences of substance use
- significant medical disorders (resulting pain or disability; current medications)
- treatment history for significant medical conditions, including hospitalizations
- history of inpatient and/or outpatient psychiatric care (dates and conditions treated)
- history of assaultiveness
- history of suicide attempts
- summary statement of current psychosocial functional status (performance in employment or schooling, routine responsibilities of self care, family role functioning, physical health, social/interpersonal relationships, recreation/leisure pursuits)

#### **E. Mental Status Examination**

Conduct a mental status examination aimed at screening for *DSM-IV* mental disorders. Describe and fully explain the existence, frequency and extent of the following signs and symptoms, or any others present, and relate how they interfere with employment and social functioning:

- Impairment of thought process or communication.
- Delusions, hallucinations and their persistence.
- Eye Contact, interaction in session, and inappropriate behavior cited with examples.
- Suicidal or homicidal thoughts, ideations or plans or intent.
- Ability to maintain minimal personal hygiene and other basic activities of daily living.
- Orientation to person, place and time.
- Memory loss, or impairment (both short and long-term).
- Obsessive or ritualistic behavior which interferes with routine activities.
- Rate and flow of speech (note any irrelevant, illogical, or obscure speech patterns and whether constant or intermittent.)
- Panic attacks noting the severity, duration, frequency and effect on independent functioning and whether clinically observed or good evidence of prior clinical or equivalent observation is shown.

- Depression, depressed mood or anxiety.
- Impaired impulse control and its effect on motivation or mood.
- Sleep impairment and describe extent it interferes with daytime activities.
- Other disorders or symptoms and the extent they interfere with activities

#### F. Assessment of PTSD

- identify the primary stressor or stressors
- state whether or not the stressor meets the DSM-IV stressor criterion
- identify behavioral, cognitive, social, affective, or somatic changes veteran attributes to stress exposure
- describe specific PTSD symptoms present (symptoms of trauma re-experiencing, avoidance/numbing, heightened physiological arousal, and associated features [e.g., disillusionment and demoralization])
- specify onset, duration, typical frequency, and severity of symptoms
- state whether or not the current symptoms are linked to the identified stressor or stressors

#### G. Psychometric Testing Results

- provide psychological testing if deemed necessary
- provide specific evaluation information required by the rating board or on a BVA Remand.
- comment on validity of psychological test results
- provide scores for PTSD psychometric assessments administered
- state whether PTSD psychometric measures are consistent or inconsistent with a diagnosis of PTSD, based on normative data and established “cutting scores” (cutting scores that are consistent with or supportive of a PTSD diagnosis are as follows: PCL  $\geq 50$ ; Mississippi Scale  $\geq 107$ ; MMPI PTSD subscale a score  $> 28$ ; MMPI code type: 2-8 or 2-7-8)
- state degree of severity of PTSD symptoms based on psychometric data (mild, moderate, or severe)
- describe findings from psychological tests measuring problems other than PTSD (MMPI, etc.)

#### H. Diagnosis:

1. The Diagnosis must conform to DSM-IV and be supported by the findings on the examination report.

2. If there are multiple mental disorders, discuss their relationship with PTSD.
3. The evaluation is based on the effects of the signs and symptoms on occupational and social functioning.

NOTE: VA is prohibited by statute, 38 U.S.C. 1110, from paying compensation for a disability that is a result of the veteran's own ALCOHOL OR DRUG ABUSE. However, when a veteran's alcohol or drug abuse disability is secondary to or is caused or aggravated by a primary service-connected disorder, the veteran may be entitled to compensation. See *Allen v. Principi*, 237 F.3d 1368, 1381 (Fed. Cir. 2001). Therefore, it is important to determine the relationship, if any, between a service-connected disorder and a disability resulting from the veteran's alcohol or drug abuse. Unless alcohol or drug abuse is secondary to or is caused or aggravated by another mental disorder, you should separate, to the extent possible, the effects of the alcohol or drug abuse from the effects of the other mental disorder(s). If it is not possible to separate the effects in such cases, please explain why.

#### I. Diagnostic Status

- Axis I disorders
- Axis II disorders
- Axis III disorders
- Axis IV (psychosocial and environmental problems)
- Axis V (GAF score—current)

#### J. Global Assessment of Functioning (GAF):

NOTE: The complete multi-axial format as specified by *DSM-IV* may be required by BVA REMAND or specifically requested by the rating specialist. If so, include the GAF score and note whether it refers to current functioning. A BVA REMAND may also request, in addition to an overall GAF score, that a separate GAF score be provided for each mental disorder present when there are multiple Axis I or Axis II diagnoses and not all are service-connected. If separate GAF scores can be given, an explanation and discussion of the rationale is needed. If it is not possible, an explanation as to why not is needed. (See the above note pertaining to alcohol or drug abuse, the effects of which cannot be used to assess the effects of a service-connected condition.)

*DSM-IV* is only for application from 11/7/96 on. Therefore, when applicable note whether the diagnosis of PTSD was supportable under *DSM-III-R* prior to that date. The prior criteria under *DSM-III-R* are provided as an attachment.

**K. Capacity to Manage Financial Affairs:** Mental competency, for VA benefits purposes, refers only to the ability of the veteran to manage VA benefit payments in his or her own best interest, and not to any other subject. Mental incompetency, for VA benefits purposes, means that the veteran, because of injury or disease, is not capable of managing benefit payments in his or her best interest. In order to assist raters in making a legal determination as to competency, please address the following:

What is the impact of injury or disease on the veteran's ability to manage his or her financial affairs, including consideration of such things as knowing the amount of his or her VA benefit payment, knowing the amounts and types of bills owed monthly, and handling the payment prudently? Does the veteran handle the money and pay the bills himself or herself?

Based on your examination, do you believe that the veteran is capable of managing his or her financial affairs? Please provide examples to support your conclusion.

If you believe a Social Work Service assessment is needed before you can give your opinion on the veteran's ability to manage his or her financial affairs, please explain why.

**L. Other Opinion:** Furnish any other specific opinion requested by the rating board or BVA remand (furnish the complete rationale and citation of medical texts or treatise supporting opinion, if medical literature review was undertaken). If the requested opinion is medically not ascertainable on exam or testing please state why. If the requested opinion can not be expressed without resorting to speculation or making improbable assumptions say so, and explain why. If the opinion asks “. . . is it at least as likely as not . . .”, fully explain the clinical findings and rationale for the opinion.

#### **M. Integrated Summary and Conclusions**

- Describe changes in psychosocial functional status and quality of life following trauma exposure (performance in employment or schooling, routine responsibilities of self care, family role functioning, physical health, social/interpersonal relationships, recreation/leisure pursuits)
- Describe linkage between PTSD symptoms and aforementioned changes in impairment in functional status and quality of life. Particularly in cases where a veteran is unemployed, specific details about the effects of PTSD and its symptoms on employment are especially important.

- If possible, describe extent to which disorders other than PTSD (e.g., substance use disorders) are independently responsible for impairment in psychosocial adjustment and quality of life. If this is not possible, explain why (e.g., substance use had onset after PTSD and clearly is a means of coping with PTSD symptoms).
- If possible, describe pre-trauma risk factors or characteristics that may have rendered the veteran vulnerable to developing PTSD subsequent to trauma exposure.
- If possible, state prognosis for improvement of psychiatric condition and impairments in functional status.
- Comment on whether veteran is capable of managing his or her financial affairs.

#### **N. Effects of PTSD on Occupational and Social Functioning**

Evaluation of PTSD is based on its effects on occupational and social functioning. Select the appropriate assessment of the veteran from the choices below:

- Total occupational and social impairment due to PTSD signs and symptoms.  
Provide examples and pertinent symptoms, including those already reported.  
OR
- PTSD signs and symptoms result in deficiencies in most of the following areas: work, school, family relations, judgment, thinking, and mood.  
Provide examples and pertinent symptoms, including those already reported for each affected area.  
OR
- There is reduced reliability and productivity due to PTSD signs and symptoms.  
Provide examples and pertinent symptoms, including those already reported.  
OR
- There is occasional decrease in work efficiency or there are intermittent periods of inability to perform occupational tasks due to signs and symptoms, but generally satisfactory functioning (routine behavior, self-care, and conversation normal).  
Provide examples and pertinent symptoms, including those already reported.  
OR
- There are PTSD signs and symptoms that are transient or mild and decrease work efficiency and ability to perform occupational tasks only during periods of significant stress.

Provide examples and pertinent symptoms, including those already reported.

OR

- PTSD symptoms require continuous medication
- OR
- Select all that apply:
  - PTSD symptoms are not severe enough to require continuous medication.
  - PTSD symptoms are not severe enough to require continuous medication.

Include your name; your credentials (i.e., a board certified psychiatrist, a licensed psychologist, a psychiatry resident or a psychology intern); and circumstances under which you performed the examination, if applicable (i.e., under the close supervision of an attending psychiatrist or psychologist); include name of supervising psychiatrist or psychologist.

Signature:

Date:

Signature of Supervising  
psychiatrist or psychologist:

Date:

SOURCE: <http://www.vba.va.gov/bln/21/Benefits/exams/disexm43.htm>.

## REVIEW EVALUATION FOR POST-TRAUMATIC STRESS DISORDER (PTSD)

Name: \_\_\_\_\_ SSN: \_\_\_\_\_  
Date of Exam: \_\_\_\_\_ C-number: \_\_\_\_\_  
Place of Exam: \_\_\_\_\_

The following health care providers can perform review examinations for PTSD.

- a board-certified psychiatrist or board “eligible” psychiatrist;
- a licensed doctorate-level psychologist;
- a doctorate-level mental health provider under close supervision of a board-certified or board eligible psychiatrist or licensed doctorate-level psychologist;
- a psychiatry resident under close supervision of a board-certified or board eligible psychiatrist or licensed doctorate-level psychologist;
- a clinical or counseling psychologist completing a one year internship or residency (for purposes of a doctorate-level degree) under close supervision of a board-certified or board eligible psychiatrist or licensed doctorate-level psychologist;
- a licensed clinical social worker (LCSW), a nurse practitioner, a clinical nurse specialist, or a physician assistant, if they are clinically privileged to perform activities required for C&P mental disorder examinations, under close supervision of a board-certified or board eligible psychiatrist or doctorate-level psychologist.

### A. Review of Medical Records.

### B. Medical History since last exam:

Comment on:

1. hospitalizations and outpatient care from the time between last rating examination to the present, UNLESS the purpose of this examination is to ESTABLISH service connection, then the complete medical history since discharge from military service is required.
2. significant medical disorders (resulting pain or disability; current medications)
3. frequency, severity and duration of psychiatric symptoms.
4. length of remissions from psychiatric symptoms, to include capacity for adjustment during periods of remissions.
5. treatments including statement on effectiveness and side effects experienced.
6. subjective complaints: describe fully.

### C. Psychosocial Adjustment since the last exam

- legal history (DWIs, arrests, time spent in jail)
- educational accomplishments
- extent of time lost from work over the past 12 month period and social impairment. If employed, identify current occupation and length of time at this job. *If unemployed, note in **complaints** whether veteran contends it is due to the effects of a mental disorder. Further indicate following **DIAGNOSIS** what factors, and objective findings support or rebut that contention.*
- marital and family relationships (including quality of relationships with spouse and children)
- degree and quality of social relationships
- activities and leisure pursuits
- substance use and consequences of substance use
- significant medical disorders (resulting pain or disability; current medications)
- history of violence / assaultiveness
- history of suicide attempts
- summary statement of current psychosocial functional status (performance in employment or schooling, routine responsibilities of self care, family role functioning, physical health, social/interpersonal relationships, recreation/leisure pursuits)

### D. Mental Status Examination

Conduct a **brief** mental status examination aimed at screening for DSM-IV mental disorders. Describe and fully explain the existence, frequency and extent of the following signs and symptoms, or any others present, and relate how they interfere with employment and social functioning:

- Impairment of thought process or communication.
- Delusions, hallucinations and their persistence.
- Eye contact, interaction in session, and inappropriate behavior cited with examples.
- Suicidal or homicidal thoughts, ideations or plans or intent.
- Ability to maintain minimal personal hygiene and other basic activities of daily living.
- Orientation to person, place and time.
- Memory loss, or impairment (both short and long-term).
- Obsessive or ritualistic behavior which interferes with routine activities and describe any found.
- Rate and flow of speech (note any irrelevant, illogical, or obscure speech patterns and whether constant or intermittent.)

- Panic attacks noting the severity, duration, frequency and effect on independent functioning and whether clinically observed or good evidence of prior clinical or equivalent observation is shown.
- Depression, depressed mood or anxiety.
- Impaired impulse control and its effect on motivation or mood.
- Sleep impairment and describe extent it interferes with daytime activities.
- Other disorders or symptoms and the extent they interfere with activities

#### E. Assessment of PTSD

- identify behavioral, cognitive, social, affective, or somatic symptoms veteran attributes to PTSD
- describe specific PTSD symptoms present (symptoms of trauma re-experiencing, avoidance/numbing, heightened physiological arousal, and associated features [e.g., disillusionment and demoralization])
- specify typical frequency and severity of symptoms

#### F. Psychometric Testing Results

- provide psychological testing if deemed necessary provide specific evaluation information required by the rating board or on a BVA Remand.
- comment on validity of psychological test results · provide scores for PTSD psychometric assessments administered
- state whether PTSD psychometric measures are consistent or inconsistent with a diagnosis of PTSD, based on normative data and established “cutting scores” (cutting scores that are consistent with or supportive of a PTSD diagnosis are as follows: PCL  $\geq 50$ ; Mississippi Scale  $\geq 107$ ; MMPI PTSD subscale a score  $> 28$ ; MMPI code type: 2-8 or 2-7-8)
- state degree of severity of PTSD symptoms based on psychometric data (mild, moderate, or severe)
- describe findings from psychological tests measuring problems other than PTSD (MMPI, etc.)

#### G. Diagnosis:

1. The Diagnosis must conform to DSM-IV and be supported by the findings on the examination report.
2. If there are multiple mental disorders discuss the relationship with PTSD.
3. The evaluation is based on the effects of the signs and symptoms on occupational and social functioning.

Note: VA is prohibited by statute, 38 U.S.C. 1110, from paying compensation for a disability that is a result of the veteran's own ALCOHOL OR DRUG ABUSE. However, when a veteran's alcohol or drug abuse disability is secondary to or is caused or aggravated by a primary service-connected disorder, the veteran may be entitled to compensation. See *Allen v. Principi*, 237 F.3d 1368, 1381 (Fed. Cir. 2001). Therefore, it is important to determine the relationship, if any, between a service-connected disorder and a disability resulting from the veteran's alcohol or drug abuse. Unless alcohol or drug abuse is secondary to or is caused or aggravated by another mental disorder, you should separate, to the extent possible, the effects of the alcohol or drug abuse from the effects of the other mental disorder(s). If it is not possible to separate the effects in such cases, please explain why.

#### H. Diagnostic Status

- Axis I disorders
- Axis II disorders
- Axis III disorders
- Axis IV (psychosocial and environmental problems)
- Axis V (GAF score: current)

#### I. Global Assessment of Functioning (GAF):

NOTE: The complete multi-axial format as specified by *DSM-IV* may be required by BVA REMAND or specifically requested by the rating specialist. If so, include the GAF score and note whether it refers to current functioning. A BVA REMAND may also request, in addition to an overall GAF score, that a separate GAF score be provided for each mental disorder present when there are multiple Axis I or Axis II diagnoses and not all are service-connected. If separate GAF scores can be given, an explanation and discussion of the rationale is needed. If it is not possible, an explanation as to why not is needed. (See the above note pertaining to alcohol or drug abuse, the effects of which cannot be used to assess the effects of a service-connected condition.)

**J. Capacity to Manage Financial Affairs:** Mental competency, for VA benefits purposes, refers only to the ability of the veteran to manage VA benefit payments in his or her own best interest, and not to any other subject. Mental incompetency, for VA benefits purposes, means that the veteran, because of injury or disease, is not capable of managing benefit payments in his or her best interest. In order to assist raters in making a legal determination as to competency, please address the following:

What is the impact of injury or disease on the veteran's ability to manage his or her financial affairs, including consideration of such things as know-

ing the amount of his or her VA benefit payment, knowing the amounts and types of bills owed monthly, and handling the payment prudently? Does the veteran handle the money and pay the bills himself or herself?

Based on your examination, do you believe that the veteran is capable of managing his or her financial affairs? Please provide examples to support your conclusion.

If you believe a Social Work Service assessment is needed before you can give your opinion on the veteran's ability to manage his or her financial affairs, please explain why.

**K. Other Opinion:** Furnish any other specific opinion requested by the rating board or BVA remand (i.e., furnish the complete rationale and citation of medical texts or treatise supporting opinion, if medical literature review was undertaken). If the requested opinion is medically not ascertainable on exam or testing please state why. If the requested opinion can not be expressed without resorting to speculation or making improbable assumptions say so, and explain why. If the opinion asks “. . . is it at least as likely as not . . .”, fully explain the clinical findings and rationale for the opinion.

#### L. Integrated Summary and Conclusions

1. Describe changes in psychosocial functional status and quality of life since the last exam (performance in employment or schooling, routine responsibilities of self care, family role functioning, physical health, social/interpersonal relationships, recreation/leisure pursuits).
2. Describe linkage between PTSD symptoms and aforementioned changes in impairment in functional status and quality of life. *Particularly in cases where a veteran is unemployed, specific details about the effects of PTSD and its symptoms on employment are especially important.*
3. If possible, describe extent to which disorders other than PTSD (e.g., substance use disorders) are independently responsible for impairment in psychosocial adjustment and quality of life. If this is not possible, explain why (e.g., substance use had onset after PTSD and clearly is a means of coping with PTSD symptoms).
4. If possible, state prognosis for improvement of psychiatric condition and impairments in functional status.
5. Comment on whether veteran is capable of managing his or her financial affairs.

### M. Effects of PTSD on Occupational and Social Functioning

Evaluation of PTSD is based on its effects on occupational and social functioning. Select the appropriate assessment of the veteran from the choices below:

- Total occupational and social impairment due to PTSD signs and symptoms.  
Provide examples and pertinent symptoms, including those already reported.  
OR
- PTSD signs and symptoms result in deficiencies in most of the following areas: work, school, family relations, judgment, thinking, and mood.  
Provide examples and pertinent symptoms, including those already reported for each affected area.  
OR
- There is reduced reliability and productivity due to PTSD signs and symptoms.  
Provide examples and pertinent symptoms, including those already reported.  
OR
- There is occasional decrease in work efficiency or there are intermittent periods of inability to perform occupational tasks due to signs and symptoms, but generally satisfactory functioning (routine behavior, self-care, and conversation normal).  
Provide examples and pertinent symptoms, including those already reported.  
OR
- There are PTSD signs and symptoms that are transient or mild and decrease work efficiency and ability to perform occupational tasks only during periods of significant stress.  
Provide examples and pertinent symptoms, including those already reported.  
OR
- PTSD symptoms require continuous medication  
OR
- Select all that apply:
  - PTSD symptoms are not severe enough to require continuous medication.
  - PTSD symptoms are not severe enough to require continuous medication.

Include your name; your credentials, i.e., a board certified psychiatrist, a licensed psychologist, a psychiatry resident or a psychology intern, LCSW, or NP and circumstances under which you performed the examination, if applicable, i.e., under the close supervision of an attending psychiatrist or psychologist; include name of supervising psychiatrist or psychologist.

Signature:

Date:

Signature of Supervising  
psychiatrist or psychologist:

Date:

SOURCE: <http://www.vba.va.gov/bln/21/Benefits/exams/disexm56.htm>.

## APPENDIX D

### Acronyms and Abbreviations

AMA	American Medical Association
AMIE	Automated Medical Information Exchange
APA	American Psychiatric Association
BDD	Benefits Delivery at Discharge
BVA	Board of Veterans' Appeals
C&P	compensation and pension
CAPS	Clinician-Administered PTSD Scale
CEST	claims establishment
CFR	Code of Federal Regulations
DBSSE	Division on Behavioral and Social Sciences and Education (NRC)
DES	Disability Evaluation System (DoD)
<i>Diagnosis and Assessment</i>	<i>Posttraumatic Stress Disorder: Diagnosis and Assessment</i> (IOM, 2006)
DOD	Department of Defense
DSM-III	<i>Diagnostic and Statistical Manual of Mental Disorders</i> , 3rd Edition
DSM-IV	<i>Diagnostic and Statistical Manual of Mental Disorders</i> , 4th Edition

DSM-IV-TR	<i>Diagnostic and Statistical Manual of Mental Disorders</i> , 4th Edition, Technical Revision
DTAP	Disabled Transition Assistance Program
DVA	Department of Veterans Affairs (used in reference citations only)
FY	Fiscal Year
GAF	Global Assessment of Functioning
GAO	U.S. Government Accountability Office (before July 2004, General Accounting Office)
IOM	Institute of Medicine (of The National Academies)
IU	individual unemployability
LTD	long-term disability
MAP-D	Modern Awards Processing-Development
MMPI	Minnesota Multiphasic Personality Inventory
MOU	Memorandum of Understanding
MSA	military sexual assault
NAS	National Academy of Sciences (a.k.a. The National Academies)
NRC	National Research Council (of The National Academies)
NVVRs	National Vietnam Veterans Readjustment Study
OIF/OEF	Operation Iraqi Freedom/Operation Enduring Freedom
OIG	Office of the Inspector General
OMB	Office of Management and Budget
PCL	PTSD Checklist
PTSD	posttraumatic stress disorder
SGA	substantial gainful activity
SSA	Social Security Administration
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income
STD	short-term disability
TAP	Transition Assistance Program

UK	United Kingdom
USC	U.S. Code
VA	Department of Veterans Affairs
VACO	VA Central Office
VACOLS	Veterans Appeals Control and Locator System
VARO	VA Regional Office (sometimes abbreviated as RO)
VASRD	VA Schedule of Rating Disabilities
VBA	Veterans Benefits Administration (VA)
VDBC	Veterans' Disability Benefits Commission
VHA	Veterans Health Administration (VA)
VR&E	Vocational Rehabilitation and Employment
VSO	Veterans Service Organization
VSR	Veteran Service Representative
WHO	World Health Organization
WHODAS	WHO Disability Assessment Schedule

## APPENDIX E

### Biographical Sketches of Committee Members, Consultants, and Staff

**Nancy C. Andreasen, M.D., Ph.D.,** Chair, is Andrew H. Woods Chair of Psychiatry and director of the Neuroimaging Research Center at the University of Iowa Carver College of Medicine. Dr. Andreasen's academic and clinical research is concerned with the relationships between medical, psychological, and social factors of distress, specifically including brain imaging, schizophrenia, and genetic and family studies. She previously served as President of the American Psychopathological Association and the Psychiatric Research Society. Dr. Andreasen is a Member of the Institute of Medicine and was elected to serve on its governing council for two four-year terms. She is also a Fellow of the American Academy of Arts and Sciences and of the Society for Neuroscience. Dr. Andreasen won the President's National Medal of Science for 2000 and has also received many other awards including the Interbrew-Baillet-Latour Prize from the Belgian government, the Rhoda and Bernard Sarnat Prize from the Institute of Medicine, the Lieber Prize for Outstanding Schizophrenia Research, the Sigmund Freud Award from the American College of Psychoanalysis, and both the Kolb Award and Sachar Award from Columbia University. She has written two widely praised books for the general public, *The Broken Brain: The Biological Revolution in Psychiatry* (1983) and *Brave New Brain: Conquering Mental Illness in the Era of the Genome* (2001). More recently, she authored *The Creating Brain: The Neuroscience of Genius* (2005). Dr. Andreasen has also authored, co-authored, or edited 12 other scholarly books and more than 500 articles.

**Jacquelyn C. Campbell, Ph.D., R.N.**, is the Anna D. Wolf Chair at The Johns Hopkins School of Nursing. She earned her Ph.D. in nursing from the University of Rochester. Dr. Campbell's research addresses the risk factors for and the evaluation of interventions to prevent domestic violence, and she served on the National Institute of Mental Health Violence and Traumatic Stress Study Section. Dr. Campbell has been inducted into the American Academy of Nursing and the Institute of Medicine. She has been selected as the Simon Visiting Scholar, University of Manchester (U.K.) and, most recently, the Institute of Medicine/American Academy of Nursing/American Nursing Foundation Scholar in Residence. Dr. Campbell was a member of the Defense Task Force on Domestic Violence (2000–2003), a congressionally appointed civilian and military committee to make recommendations to improve the military response to intimate-partner violence. She has been active in the Institute of Medicine as a board member on the Board on Global Health and has served as a member of two committees for the Board on Children, Youth, and Families.

**Judith A. Cook, Ph.D.**, is Professor of Psychiatry at the University of Illinois at Chicago (UIC). She directs UIC's Center on Mental Health Services Research and Policy, which conducts research projects intended to enhance the state of evidence-based practice and systems transformation in behavioral health. Her research focuses on self-determination and recovery among people with psychiatric disabilities. Dr. Cook has served as an expert consultant on employment and income supports for the President's New Freedom Commission on Mental Health, and she authored the commission subcommittee's report on "Employment and Income Supports for People with Mental Illness." She contributed a paper on decisional capacity in mental illness and substance-use disorders to the 2006 Institute of Medicine report *Improving the Quality of Health Care for Mental and Substance-Use Conditions: Quality Chasm Series*. Dr. Cook received her Ph.D. in sociology from Ohio State University.

**John A. Fairbank, Ph.D.**, is Associate Professor of medical psychology in the Department of Psychiatry and Behavioral Sciences at Duke University Medical Center and Co-Director of the National Center for Child Traumatic Stress, sponsored by the Substance Abuse and Mental Health Services Administration. He received his Ph.D. from Auburn University. His research interests include assessment, prevention, and treatment of traumatic stress reactions in children, adolescents, and adults. Dr. Fairbank is currently a member of the National Center for Injury Prevention and of the Control Initial Review Group for the Centers for Disease Control and Prevention. In 1998 he served as an advisor to an IOM study on strategies to protect the health of deployed U.S. forces. Dr. Fairbank is currently the chair of the

technical working group of the National Survey of Child and Adolescent Well-Being for the Administration for Children, Youth, and Families.

**Bonnie L. Green, Ph.D.**, is Professor of Psychiatry and Director of Research in the Department of Psychiatry at Georgetown University Medical School in Washington, D.C. She has studied the consequences of traumatic events, including disasters (dam collapse, fire, radioactive contamination) and war (Vietnam and World War II), for several decades, examining what predicts different types of outcomes, including posttraumatic stress disorder. Her research at Georgetown has focused on the psychological and physical health consequences of individual traumas, including breast cancer, traumatic bereavement, and interpersonal violence. Her current research focuses on the trauma-related mental health needs of poor women in primary care settings, including physical health outcomes associated with trauma exposure. She is principal investigator (PI) and Director of a developing center from the National Institute of Mental Health (NIMH), The Georgetown Center for Trauma and the Community, the purpose of which is to develop innovative and sustainable interventions for trauma-related mental health needs of low-income populations seen in primary-care safety-net settings in the Washington, D.C., region. She is past editor of the *Journal of Traumatic Stress*, and past president of the International Society for Traumatic Stress Studies. Dr. Green has served on numerous advisory, review, and oversight groups, including an IOM committee on evaluation of the Department of Veterans' Affairs Uniform Case Assessment Protocol, which addressed the health concerns of veterans.

**Dean G. Kilpatrick, Ph.D.**, is Distinguished University Professor in the Department of Psychiatry and Behavioral Sciences and Director of the National Crime Victims Research and Treatment Center at the Medical University of South Carolina. Dr. Kilpatrick received his Ph.D. in clinical psychology from the University of Georgia. He previously held a position at the Veterans Administration Medical Center in South Carolina as a clinical psychologist. His primary research interests include measuring the prevalence of rape, other violent crimes, and other types of potentially traumatic events as well as assessing the mental health impact of such events. He is currently President of the International Society for Traumatic Stress Studies. In 1990, President George H.W. Bush presented Dr. Kilpatrick with the President's Award for Outstanding Service for Victims of Crime, the nation's highest award in the crime victims' field.

**Kurt Kroenke, M.D.**, is Professor of Medicine in the Division of General Internal Medicine and Geriatrics at Indiana University. He is also a Research Scientist in the Regenstrief Institute, where he is Director of fellowship

training. Dr. Kroenke has directed clinical research training programs since 1988, first at the Uniformed Services University of the Health Sciences and, since 1997, at Indiana University. In 2002, he was elected to Mastership in the American College of Physicians. Dr. Kroenke is a past president of the Society of General Internal Medicine and has served on the American Psychiatric Association *DSM-IV* Primary Care Working Group, and the National Board of Medical Examiners Step 1 Behavioral Medicine Task Force. He is a member of the NIMH Services Research Study Section, and has over 200 publications. His principal research interests include common symptoms in medical patients including pain, depression assessment and treatment, and somatization. Dr. Kroenke's studies include a randomized trial of enhanced care for poststroke depression, primary-care-based depression interventions, improved evaluation and therapy of pain, and strategies for investigating and managing physical symptoms, symptom syndromes, and somatization. He served as a physician in the U.S. Army for 20 years, earning the rank of Colonel.

**Richard A. Kulka, Ph.D.**, is Senior Vice President of strategic business development for the research and consulting firm Abt Associates Inc. He also serves as a Senior Research Scientist at the Center for Demographic Studies at Duke University, where he is a co-PI of the National Long Term Care Survey, and recently served as Executive Vice President of the social and statistical sciences at RTI International. Dr. Kulka received his Ph.D. in social psychology from the University of Michigan. He is a Fellow of the American Statistical Association. Dr. Kulka has been involved with the design, conduct, and analysis of numerous surveys on health and other social policy issues, as well as applied research on survey research methods. He served as project leader and co-PI for the National Vietnam Veterans Readjustment Study—a national survey of the incidence and prevalence of posttraumatic stress disorder and Vietnam veterans and their peers. He has served on numerous advisory, review, and oversight groups, including two expert panels for the Committee on National Statistics, National Research Council, National Academy of Sciences, for which he has also served as report coordinator for several recent reports.

**Patricia M. Owens, M.P.A.**, is a consultant for public and private organization on health and disability programs. She is the past president of Integrated Health Disability Management at UNUM Life Insurance Company of America, where she designed and implemented their extensive disability research initiative. Ms. Owens is a board member of the National Academy of Social Insurance and served on their Disability Policy Panel. She is the former Associate Commissioner for disability of the U.S. Social Security Administration, where she oversaw the overhaul of the mental listings and

the incorporation of pain symptoms in disability determinations. Ms. Owens recently served as a panel member for a symposium for the Disability Research Institute and an IOM workshop on improving the disability decision process.

**Robert T. Reville, Ph.D.**, is the director of the RAND Institute of Civil Justice, in Santa Monica, California, and previously served as its research director. He earned his Ph.D. in economics from Brown University. Dr. Reville is a labor economist who focuses on compensation policy and more specifically on workplace injury compensation policy and the impact of disability on employment. He is on the Board of Scientific Counselors of the National Institute for Occupational Safety and Health of the Centers for Disease Control and Prevention. Dr. Reville is a founding co-director of the Center for Terrorism Risk Management Policy, which addresses compensation, liability, risk management, risk modeling, and insurance. He is a member of the National Academy of Social Insurance, serving on the Workers' Compensation Steering Committee.

**David S. Salkever, Ph.D.**, is Professor in the Department of Public Policy at the University of Maryland-Baltimore County. He is also Research Associate for the National Bureau of Economic Research. Dr. Salkever previously was on the faculty of The Johns Hopkins School of Public Health where he served as the director of the school's Interdepartmental Program in Public Health Economics and as Professor in the Department of Health Policy and Management, the Department of Economics, and the Department of Mental Health. Dr. Salkever received his Ph.D. in economics at Harvard University. His past research includes topics related to health policy including labor market impacts for severe mental disorders, the costs and effectiveness of trauma center services, and determinants and regulation of hospital cost inflation. Currently he serves on the Interventions Review Committee of the NIMH. He previously served on the Data Monitoring Board of the Department of a Veterans Affairs Cooperative Study entitled "The Clinical and Economic Impact of Olanzapine in the Treatment of Schizophrenia." In 2003 Dr. Salkever was recognized with the Adam Smith Award for Mental Health Economics Research.

**Robert J. Ursano, M.D.**, is Professor of Psychiatry and Neuroscience and Chairman of the Department of Psychiatry at the Uniformed Services University of the Health Sciences in Bethesda, Maryland. He is also director of the Center for the Study of Traumatic Stress. Dr. Ursano received his M.D. from Yale University. He has served as the Department of Defense representative to the National Advisory Mental Health Council of the NIMH and is a past member of the NIMH Rapid Trauma and Disaster Grant Review

Section. Dr. Ursano is the editor of the journal *Psychiatry*. He has received the Department of Defense Humanitarian Service Award and a Lifetime Achievement Award from the International Traumatic Stress Society. Dr. Ursano is widely published in the field of PTSD and the psychological effects of terrorism, bioterrorism, and traumatic events and disasters, and combat. He has been a member of many national advisory boards related to mental health including the IOM Committee on Psychological Responses to Terrorism. He was a physician in the U.S. Air Force, retiring after 20 years service with the rank of Colonel.

### *Consultants*

**Robert J. Epley** is an independent consultant working in the areas of strategic planning, training, performance management, and the operations of federal entitlement programs. Mr. Epley served with the Department of Veterans Affairs (VA) for 31 years, dividing his tenure between positions in headquarters and in the field. In VA field offices, he progressed through positions as benefits counselor and claims examiner to director of two regional offices in Detroit and St. Louis. At VA headquarters, Mr. Epley was Chief of Field Operations for the education program, and later he served as Deputy Director and Director of the Compensation & Pension Service. His final position with VA was Associate Deputy Under Secretary for Policy and Program Management, where he was responsible for administration and oversight of the Veterans Benefits Administration's business lines: compensation, pension, housing, insurance, vocational rehabilitation, and education. During his tenure with VA, Mr. Epley received two Vice President Al Gore Hammer Awards for reinventing government, and two Presidential Rank Awards.

**Carol S. North, M.D., M.P.E.**, is Professor of Psychiatry and the Nancy and Ray L. Hunt Professor of Crisis Psychiatry at UT Southwestern Medical Center in Dallas. Dr. North is also Director of the Program in Trauma and Disaster at the VA North Texas Health Care System in Dallas. She holds a joint appointment in emergency medicine in the Division of Homeland Security. Listed in *The Best Doctors in America*, Dr. North is also recognized as a Distinguished Fellow of the American Psychiatric Association and Fellow of the American Psychopathological Association, serves on the board of directors of the American Academy of Clinical Psychiatrists, and is past president of the Eastern Missouri Psychiatric Society. Dr. North investigates the role of psychiatric illness in the presentation of gastrointestinal disease, the psychiatric effects of disasters and terrorism, and the interface of psychiatric and medical disease. She has authored more than 100 peer-reviewed scientific published articles, has served on editorial boards for scientific

journals, and chaired or served on committees for federal grant review and development of terrorism policy for the Institute of Medicine.

**Alfred V. Rascon**, Reserve Major, is an officer in the Medical Service Corps of the U.S. Army. From 2001 to 2003, he served as the 10th Director of the Selective Service System, where he was directly responsible to the President for the management of that agency. Prior to his appointment as Director, Major Rascon had served for five years as Selective Service's Inspector General. His career as a federal employee spans over 40 years, with assignments in the Army and within the Department of Justice, where he served with the Immigration and Naturalization Service, the Drug Enforcement Administration, and INTERPOL (International Criminal Police Organization). On February 8, 2000, Major Rascon received the Congressional Medal of Honor from President Clinton. He was recognized with the nation's highest combat decoration for extraordinarily courageous acts in Vietnam, where he served as a combat medic.

#### *Institute of Medicine Staff*

**David A. Butler, Ph.D.**, is Senior Program Officer in the IOM Board on Military and Veterans Health. He received his B.S. and M.S. degrees in engineering from the University of Rochester and his Ph.D. degree in public policy analysis from Carnegie-Mellon University. Before joining the IOM, Dr. Butler served as an analyst for the U.S. Congress Office of Technology Assessment and was Research Associate in the Department of Environmental Health at the Harvard School of Public Health. He has directed several IOM studies on health and risk-assessment topics, resulting in the reports *Veterans and Agent Orange: Update 1998*, and *Veterans and Agent Orange: Update 2000*; and the report series *Characterizing the Exposure of Veterans to Agent Orange and Other Herbicides Used in Vietnam*; *Disposition of the Air Force Health Study*; *Clearing the Air: Asthma and Indoor Air Exposures*; and *Damp Indoor Spaces and Health*.

**Amy O'Connor, M.P.H.** is Research Associate in the IOM Board on Military and Veterans Health. She received her M.P.H. in environmental and occupational health from the George Washington University where she was the recipient of the Ruhland Fellowship for outstanding applicant. She received her undergraduate degree in chemistry from George Mason University. She is also an Army veteran of the first Gulf War era, during which time she served as combat photographer. She served as Research Associate for the IOM report *Disposition of the Air Force Health Study*.

**Jon Q. Sanders, B.A.**, is Program Associate with the Board on Military

and Veterans Health. Since joining the National Academies in 2001, Mr. Sanders has worked on more than a dozen studies ranging from Everglades restoration to childhood obesity. Mr. Sanders received his B.A. degree in anthropology from Trinity University, and he is currently pursuing graduate work in public health. In 2006 Mr. Sanders was recognized by the Institute of Medicine for his five years of distinguished service. He is a member of the Society for Applied Anthropology and the American Indian Science and Engineering Society. He is coauthor of *Sitting Down at the Table: Mediation and Resolution of Water Conflicts* (2001). Mr. Sanders' research interests include veteran health issues and environmental decision making.

**Eileen Santa, M.A.**, has been Research Associate at the IOM for two years. She earned her Masters degree in clinical psychology from the University of Massachusetts, where she is currently a doctoral candidate. Her research focuses on the cultural factors that contribute to healthy outcomes for Latina mothers and children.

**Frederick (Rick) Erdtmann, M.D., M.P.H.**, is Director of the Board on Military and Veterans Health and Director of the Medical Follow-up Agency of the IOM at the National Academies. He attended medical school in Philadelphia where he earned his M.D. degree from Temple University School of Medicine, and he holds an M.P.H. from the University of California at Berkeley. He completed a residency program in general preventive medicine at Walter Reed Army Institute of Research in 1975 and is board certified in that specialty. Dr. Erdtmann's assignments with the Army Medical Department included chief of the preventive medicine services at Fitzsimons Army Medical Center, at Frankfurt Army Medical Center in Germany, and at Madigan Army Medical Center. He also served as division surgeon for the Second Infantry Division in Tongduchon, Korea. He later served as deputy chief of staff for clinical operations within DOD's TRICARE Region 1, prior to assuming hospital command at Walter Reed Army Medical Center in March 1998. Following that he was assigned to the Office of the Surgeon General as the Deputy Assistant Surgeon General for Force Development. In 2001, following 30 years of commissioned military service, Dr. Erdtmann joined the National Academies and assumed his present responsibilities.

**Christine R. Hartel, Ph.D.**, is the Director of the Board on Behavioral, Cognitive, and Sensory Sciences at the National Research Council, where she has also directed studies on Social Security benefits, behavioral research for the military, and social psychology and aging. Previously, she served as associate executive director for science at the American Psychological Association and as deputy director for basic research at the National Institute on Drug Abuse. She was also a consultant to the World Health Organization

on the effects of marijuana. Dr. Hartel served as a research psychologist at the U.S. Army Research Institute for the Behavioral and Social Sciences, where she earned the Army's highest civilian award for technical excellence. She is a Fellow of the American Psychological Association and a member of the Association for Psychological Science, the Society for Neuroscience, and the Gerontological Society of America. Her Ph.D. degree is in biopsychology from the University of Chicago.

