

# Post-9/11 Trends in Medical Separation and Separation for Service Members with Posttraumatic Stress Disorder and Traumatic Brain Injury



*U.S. Navy photo by Mass Communications Specialist 2nd Class Stephane Belcher*

**B**etween 2002 and 2017, more than 200,000 active-component U.S. service members were diagnosed with posttraumatic stress disorder (PTSD), and nearly 300,000 were diagnosed with traumatic brain injury (TBI). These conditions became known as signature wounds of the wars in Afghanistan and Iraq, during which more than 3 million personnel deployed in support of combat operations. The physical and psychological toll of these conflicts strained the U.S. Department of Defense (DoD) disability evaluation system, leading to concerns about the consistency and timeliness of the disability evaluation process and the quality of care that injured service members received. In response, DoD has enacted numerous changes to how service members are treated

## KEY FINDINGS

- Between 2002 and 2017, the Military Health System diagnosed more than 200,000 active-duty service members with posttraumatic stress disorder (PTSD) and nearly 300,000 with a traumatic brain injury (TBI).
- Over time, the share of service members with a PTSD diagnosis who were medically discharged increased significantly: from 16 percent in 2002 to 34 percent in 2015. Rates of medical discharge for service members with a TBI diagnosis increased from 7 to 18 percent between 2002 and 2015.
- Disability ratings for service members who were medically discharged for PTSD increased over time. In 2008, 57 percent of service members with a disability rating for PTSD had a total rating of 0–40 percent. In 2009, almost all had a total rating of 50 percent or higher. Service members with disability ratings 30 percent or higher receive lifetime financial and health care benefits.
- A better understanding of disability evaluation trends and outcomes can help the U.S. Department of Defense set goals for diagnosing, treating, and evaluating disabilities among wounded, injured, and ill service members in future conflicts.

and evaluated for potentially career-ending medical conditions and injuries.

The U.S. Department of Veterans Affairs (VA) Schedule for Rating Disabilities (VASRD) serves as the basis for assigning a disability rating between 0 and 100 percent for each condition and for assigning a total disability rating. Service members who are found to be unfit will be medically retired or separated from the military, depending on the extent of the disability and years of service:

- With a total combined DoD disability rating of 30 percent or higher or at least 20 years of service, the service member may be medically retired, receiving lifetime disability pay and health care benefits. In some cases, a service member may be temporarily medically retired and will be reevaluated for a period of time or until the condition(s) stabilizes.
- With a total combined disability rating of 0, 10, or 20 percent and fewer than 20 years of service, the service member may be medically separated and receive six months of health care benefits and a lump-sum severance.

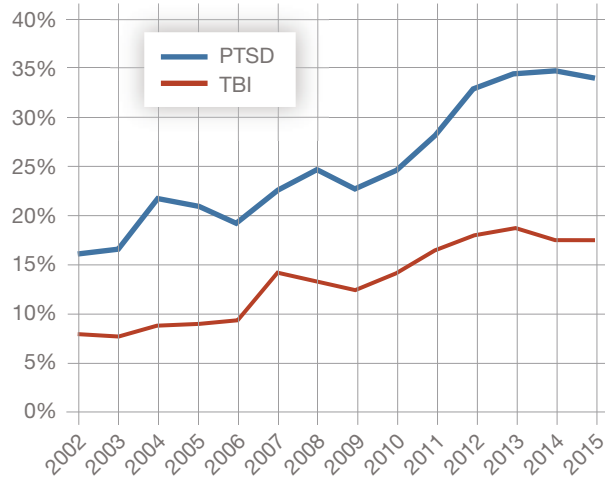
Those who are discharged for conditions that are not service-related or service-aggravated or that were the result of misconduct may be separated without pay or benefits.

## Service Members with a PTSD or TBI Diagnosis Received a Medical Discharge at Increasingly Higher Rates Between 2002 and 2015

For both PTSD and TBI, the number of service members with a first-time diagnosis grew steadily from 2002 to 2008 before leveling off and beginning to decline around 2012. This pattern coincides with the percentage of the force that deployed over this period. Over time, the percentage of service members who were diagnosed with PTSD or TBI and later medically discharged grew steadily, as shown in Figure 1.

FIGURE 1

Percentage of Service Members with a PTSD or TBI Diagnosis Who Were Medically Separated or Retired from the Military, 2002–2015



NOTES: The data capture medical separations or retirements within three years of an initial diagnosis of the condition. Diagnosis cohorts are not mutually exclusive; an individual service member may have been diagnosed with both PTSD and TBI.

## Beginning in 2009, There Was an Upward Shift in Total Disability Ratings

In 2008, DoD issued policy guidance requiring the military departments to consistently apply the VASRD such that service members who were determined to be unfit because of “mental disorders due to traumatic stress” (e.g., PTSD) received a minimum 50-percent disability rating. Figure 2 shows a clear shift in the distribution of disability ratings around the time of the policy change, with the percentage of service members with a PTSD VASRD who received less than a 50-percent rating dropping to nearly zero. A similar pattern emerged for service members who were medically discharged with a TBI disability rating, likely because of overlap between the two cohorts.

Higher disability ratings confer greater financial benefits to separating service members. Improved financial well-being for these individuals may be tied to better health and socioeconomic outcomes and may improve transition to civilian life. It is possible that there are disadvantages as well, such as increased costs to DoD and potentially mixed incentives for vet-

eran employment. DoD has not conducted analyses to weigh the positive and negative impacts of these rating changes, which affected large groups of service members, but it should do so before implementing future policy changes.

## Recommendations

### Evaluate the Effects of Changes to the Disability Evaluation System Soon After Implementation

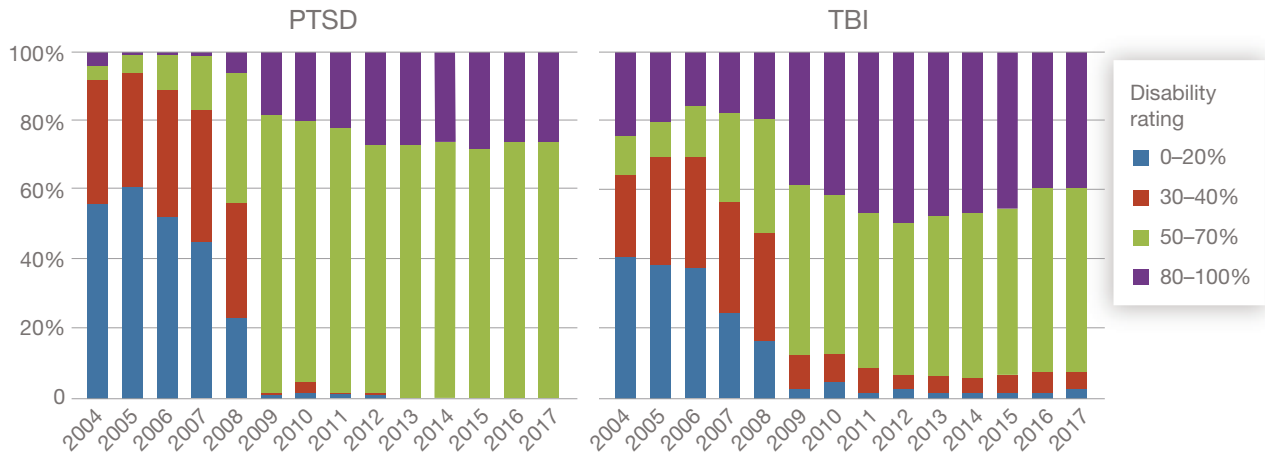
This research provides important insights on policy changes affecting the disability evaluation system and the Military Health System. However, these analyses were conducted many years after the policy changes were implemented and examined changes that occurred over a 16-year period. As DoD and the services implement future policies and practices to improve service member health and disability evaluation system performance, the effects of those changes should be evaluated soon after they occur and routinely thereafter to help ensure that the desired outcome is achieved. For example, DoD has shortened the disability evaluation process considerably (from a goal of 295 days in 2011 to 180 days in 2019). It should evaluate the positive and potential negative consequences of these changes.

### Conduct a Formal Assessment of Service Member Outcomes Following Medical Discharge

Service members who are medically retired receive lifetime health benefits through TRICARE. Linking health care data from time in service to postservice could reveal important findings on health care use and outcomes for this population. The same could be done with VA data. Despite active data-collection initiatives in VA, records from veterans’ service careers are not necessarily linked to those on care utilization and health outcomes after medical discharge. There are several models for longitudinally tracking veterans’ outcomes after they leave military service, such as those developed to study the effects of the post-9/11 GI Bill, home loans for veterans, and programs to increase civilian employment opportunities for veterans.

FIGURE 2

Disability Rating Trends for Service Members Who Were Discharged from the Military with a PTSD or TBI Disability Rating, 2004–2017



NOTES: The data capture the distribution of disability ratings for service members discharged with a PTSD or TBI disability rating. Disability cohorts are not mutually exclusive; an individual service member may receive a disability rating for both PTSD and TBI.

This brief describes work done in the RAND National Security Research Division and documented in *Evolution of Department of Defense Disability Evaluation and Management of Posttraumatic Stress Disorder and Traumatic Brain Injury: Overview of Policy Changes, 2001–2018*, by Molly M. Simmons, Carrie M. Farmer, Samantha Cherney, and Heather Krull, RR-3173-OSD, 2021 (available at [www.rand.org/t/RR3173](http://www.rand.org/t/RR3173)), and *Trends in Department of Defense Disability Evaluation System Ratings and Awards for Posttraumatic Stress Disorder and Traumatic Brain Injury, 2002–2017*, by Heather Krull, Carrie M. Farmer, Stephanie Rennane, Evan Goldstein, Philip Armour, and Teague Ruder, RR-3174-OSD, 2021 (available at [www.rand.org/t/RR3174](http://www.rand.org/t/RR3174)). To view this brief online, visit [www.rand.org/t/RBA1197-1](http://www.rand.org/t/RBA1197-1). The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.

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