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NATIONAL DEFENSE RESEARCH INSTITUTE

The Defense and Veterans Brain Injury Center Care Coordination Program

Assessment of Program Structure, Activities, and Implementation

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Prepared for the Office of the Secretary of Defense

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Summary

Between 2001 and 2011, 2.2 million service members were deployed in support of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). Improvised explosive devices have been used extensively against U.S. forces during these conflicts and have been one of the leading causes of death. Injuries among those who survive an improvised explosive device blast often include traumatic brain injuries (TBIs), which have been called the signature injury of the OEF/OIF conflict. Service members recovering from a TBI often find they must coordinate services across multiple systems of care to meet all their medical and psychological health needs. This task is difficult even for those without the cognitive challenges associated with TBI and may prove overwhelming or even impossible for those recovering from a TBI. This report focuses on a program designed to facilitate care coordination for service members and veterans recovering from a symptomatic brain injury—the Defense and Veterans Brain Injury Center (DVBIC) Care Coordination Program (CCP). CCP services bridge both the Department of Defense (DoD) and Department of Veterans Affairs (VA) systems of care, but the program is funded and overseen by DoD.

In 2007, DVBIC launched CCP to provide services to active duty, National Guard, and Reserve service members and veterans with ongoing symptoms associated with mild or moderate TBIs incurred while serving in OEF/OIF. Regional care coordinators (RCCs) are tasked with ensuring that individuals remain connected to the services they need to recover from a TBI, particularly during difficult transition points (e.g., during the transition from DoD to VA care, follow-

ing a permanent change of station [PCS]). Each RCC is located at a TBI clinical care center that is part of the DVBIC network of clinics and medical facilities specializing in TBI care—and serves a caseload drawn either from a defined geographic region of the country or from a specific military treatment facility (MTF). RCC services include education and support, referrals to local service providers, and systematic follow-up and tracking of TBI symptoms.

Purpose of the Report

This report summarizes the RAND Corporation's independent assessment of the structure, activities, and implementation of the DVBIC CCP. The assessment was conducted between April and July 2012. Although brief descriptions of the DVBIC CCP exist in the published literature, no thorough, complete, and publicly available description of the CCP is available. In addition to providing this description, the project sought to

1. document the history and implementation of the DVBIC CCP
2. identify target beneficiaries and document the reach of the program
3. explore perceived barriers to and facilitators of successful care coordination of TBI services
4. identify lessons CCP staff members have learned throughout the program's history, which may serve as a valuable resource to other care coordination programs.

Methods

To address the goals above, we conducted semistructured interviews in person with DVBIC CCP administrators and via telephone with RCCs between April 27, 2012, and July 12, 2012. These interviews included questions to prompt discussion of program services, history, eligibility criteria, population served, standards for delivery of program services,

fidelity protocols, outreach activities, referral patterns, caseloads, RCC work environments, staffing structure, variation across offices, barriers and facilitators of successful care coordination, perceived program benefits, and opportunities for improvement. All interviews were conducted by a team of two qualitative interviewers and one research assistant and lasted 30 to 60 minutes.

At the time of the assessment, there were 14 RCCs. We received permission from program leadership to contact 12 of the 14. Of the 12 RCCs approached to complete interviews, 11 participated. In-person interviews were also conducted at CCP headquarters with the acting CCP program manager and the care coordinator liaison.

Finally, to assess CCP's web presence, we completed a content analysis of CCP websites, examining each CCP site's web materials for inclusion of the information necessary for a service member or veteran to determine the goals of the program, eligibility criteria, and self-referral process.

Innovative Practices

The CCP provides a unique bridge across systems of care and geographic regions for service members with a mild or moderate TBI that is symptomatic. Unlike care coordinators affiliated with a specific MTF, RCCs can follow patients as they transition from an inpatient facility to outpatient services, as they leave active duty and enter the VA system, and as they experience a PCS. These transitions are critical periods during which service members may drop out of services and may be especially challenging for those experiencing TBI. The RCC's proactive contacts with service members may help to ensure that service members with TBI in need of support services continue to receive them.

One important CCP role is to serve as a library of TBI-related resources nationwide. However, all RCCs are licensed nurses, social workers, or counselors, which allows them be more than a simple clearinghouse. They are able to provide direct services, such as supportive listening and encouragement. Their expertise in TBI, unique among

care coordination programs, allows them to provide education to service members, veterans, and their families that is precisely targeted to their questions, concerns, and needs. Furthermore, their extensive knowledge of both TBI and support services nationwide is not limited to individuals eligible for program enrollment but is shared freely with anyone who calls the program.

Finally, the DVBIC CCP focuses on assisting individuals with mild TBI,[1] a population not served by other care coordination programs. Without the CCP, service members with mild TBI might "fall through the cracks" of the current military and VA health care system. The program has established strong collaborative ties with a handful of MTFs to ensure a regular, although declining, stream of patient referrals with diagnosed TBIs and unresolved symptoms. By proactively contacting identified service members, CCP serves a population that might not otherwise actively engage such services.

Recommendations

Despite many notable program strengths, several key issues were highlighted as potential challenges to program sustainability and/or expansion in the future. These included challenges related to (1) the flow of information throughout the CCP program, (2) a lack of clarity around core program features and standardization across sites relevant to these features, and (3) outreach. CCP staff consider outreach to referral organizations and to individuals who may benefit from the program both an essential feature of the program and critical to its sustainability. Yet interviewees almost universally cited this as the biggest challenge the program faces.

In 2011, the CCP caseload represented only 4.5 percent of the 24,883 service members diagnosed with TBI (DVBIC, 2012a). Although most cases of mild TBI resolve naturally, without interven-

[1] A brain injury is classified as mild if the initial alteration and/or loss of consciousness lasts no longer than 24 hours and if motor and verbal responses remain relatively unimpaired immediately after the trauma.

tion, and would not need or benefit from CCP services, these data suggest that the CCP may not be reaching the full population of service members who would benefit from program services.

We recognize that the DVBIC CCP may not be able to implement all our recommendations, but we offer them for consideration because the CCP is continually being improved and refined. It is possible that involvement with an external evaluation, as well as recent changes in program leadership, may already have prompted program changes between the time of our assessment and the publication of this report. Therefore, our recommendations should be considered in light of any recent changes to the program.

Based on our assessment, we recommend the following changes to improve the flow of information across the CCP:

- Expand opportunities for RCCs to receive training that promotes their understanding of all systems of care (DoD, VA, and community).
- Facilitate uniform RCC access to relevant medical records and health information.
- Continue to develop centralized data and information sharing tools.

To improve CCP standardization, we recommend that the program do the following:

- Continue to address program variation across sites related to multiple lines of authority.
- Clarify core features of the program and assess the program's fidelity to them.
- Consider the value of the decentralized, regional system of RCC sites, as compared to a more centralized system.

To improve program outreach, we recommend that the CCP do the following:

- Clarify funding available to RCCs to promote outreach.
- Consider alternative staffing models to facilitate outreach.

- Develop clear, standardized program materials at the headquarters level that all RCCs can use in outreach efforts.
- Consider changing the program's name and the RCC job title to better align with program services and to reflect the focus on TBI.
- Create a uniform web presence that is easy to navigate.
- Leverage additional TBI screening data to identify service members who may benefit from program services.

Finally, we recommend conducting an **outcomes evaluation**. Ideally, an outcomes evaluation would compare the short- and long-term outcomes of individuals who received CCP services with the outcomes of individuals with unresolved TBI who did not receive program services. Such comparisons are critical for understanding the effectiveness of the CCP in improving the lives of service members with TBI.

Limitations

This scope of this assessment was limited. Given resource constraints, RAND did not conduct an outcomes evaluation and thus makes no claims about the effectiveness of program services or the utility of the program relative to other services. We did not speak to service members the program serves and did not collect data to document the outcomes of service members or veterans who participated in the program relative to those who had no access to program services. Instead, we intended to provide a publicly available document of the program's organization, services, and history; to summarize the program's promising and innovative practices; and to provide limited recommendations for program improvement. Given that the primary data source was interviews with program administrators and staff, this report largely reflects their perceptions of the program's strengths and limitations. To improve the evidence base for the program and to document the effectiveness or utility of the program, we recommend conducting an outcomes evaluation of the DVBIC CCP.

Conclusion

The DVBIC CCP is an attempt to bridge the gaps across systems of care for service members with TBIs. Analysis of this program identified innovative practices, continuing challenges, and lessons learned. The recommendations provided here suggest strategies for meeting these challenges while maintaining the benefits possible through this novel approach to care.