POLYTRAUMA AND TRAUMATIC BRAIN INJURY

The U.S. Department of Veterans Affairs (VA) provides world-class medical and rehabilitation services for Veterans and Service members with Traumatic Brain Injury (TBI) and Polytrauma. VA’s Polytrauma/TBI System of Care (PSC) is an integrated nationwide network of over 110 facilities with specialized rehabilitation programs balancing access and expertise to provide the right rehabilitation care at the right time and location.

Rehabilitation services within the PSC are coordinated across four tiers of care based on the needs of the patient. Five Polytrauma Rehabilitation Centers serve as regional referral centers for acute inpatient rehabilitation for severe injuries; 23 Polytrauma Network Sites offer comprehensive TBI evaluation programs and interdisciplinary rehabilitation for patients in the post-acute stage of recovery; 87 Polytrauma Support Clinic Teams provide ongoing specialized care and community re-integration services closer to the patient’s home community; and Polytrauma Points of Contact at other VA Hospitals throughout the nation provide a more limited range of services and facilitate referrals to the appropriate resources for care.

WHAT IS TRAUMATIC BRAIN INJURY (TBI)?

TBI may happen from a blow or jolt to the head, or an object penetrating the brain. Falls and vehicular accidents are the most common causes of TBI. When the brain is injured, the person may experience changes in consciousness ranging from being dazed and disoriented to slipping into a coma. Most brain injuries are mild, also known as concussions. More severe TBI often occurs in the context of Polytrauma, defined as two or more severe injuries occurring as a result of the same traumatic event.

TBI SYMPTOMS

Mild TBI may result in symptoms such as headaches, dizziness and changes in behavior or thinking skills. Symptoms of mild TBI resolve within weeks to months in the vast majority of individuals. In cases of more severe TBI/Polytrauma, initial symptoms may be life-threatening and may result in long-term functional disability.

TBI SCREENING AND EVALUATION

VA screens all Veterans of combat operations in Iraq and Afghanistan for mild TBI upon initial entry into VA health care. As of September 2018, VA has screened over 1.2 million Veterans for possible TBI. Veterans with positive TBI screens are referred for comprehensive evaluations with specialty providers to determine a definitive diagnosis and develop a Plan of Care for rehabilitation services, as necessary.
INTEGRATED CARE

The hallmark of TBI and Polytrauma rehabilitation in VA is the patient–centered, interdisciplinary approach to care. Veterans, their caregivers, and interdisciplinary teams of rehabilitation specialists engage in the development and implementation of a treatment plan that addresses the individual needs and goals of the Veteran, and focuses on community reintegration.

A Case Manager is assigned to every patient receiving rehabilitation care in the PSC. Case Managers coordinate services and resources to optimize rehabilitation outcomes.

SPECIALIZED REHABILITATION

VA continually improves access to specialized rehabilitation services for Veterans with TBI and Polytrauma including:

- **Assistive Technology Labs** that serve to maximize the functional status of Veterans with disabilities through the use of technology;
- **Transitional Rehabilitation Programs** focusing on promoting independence and community re-integration after injury;
- **Telehealth Services** for Veterans living at a distance from the medical centers;
- **Drivers’ Training Programs** providing assessments and training for adaptive driving;
- **Emerging Consciousness Programs** serving Veterans who are slow to recover consciousness after severe brain injuries.

OUTCOMES

VA tracks and compares TBI rehabilitation outcomes with those from the private sector. A collaborative research project between the five VA Polytrauma Rehabilitation Centers and the Traumatic Brain Injury Model Systems (TBIMS) evaluates the long term outcomes of patients who suffered a TBI. VA outcomes compare favorably to those from the civilian TBIMS, both in percentages of patients discharged to home, and patients who live independently at one and two years following rehabilitation.

VA has a robust TBI research program. “The Chronic Effects of Neurotrauma Consortium (CENC),” a large interagency collaboration led by a VA researcher, just completed enrollment of over 1,600 participants with military-related TBI. Over 70 researchers are currently analyzing data to advance the understanding of the biological basis of TBI and lead the way in diagnosis, prevention and treatment.