

VA Neurological Health Care Networks

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The VA neurological health care networks provide a seamless delivery of specialized health care. Efficiency of the network model has been demonstrated through increased access to the accumulated wealth of expertise and experience of committed providers in the areas of Parkinson's disease, multiple sclerosis, and epilepsy.



Federal Practitioner's 30th anniversary celebration continues with the spotlight this month on the accomplishments of the neurological health care networks.

The Department of Veterans Affairs is a total care health system, and during the past 10 years has made great progress in treating neurological and movement disorders within its veteran population. Through the establishment of neurological health care networks, the VA provides access to specialized health care and a seamless delivery of continuous consultative support. In the quest for excellence in providing premier health care to veterans with Parkinson's disease (PD), multiple sclerosis (MS), and epilepsy, these networks are organized by 4 functional cores: (1) clinical care, (2) research and development, (3) education and training, and (4) informatics and telemedicine. These health care networks provide the means to maximize existing health care resources within VHA

and extends specialty care to the nation's veterans.

The mechanisms that set apart the neurological health care networks from others are the strategic enactment of a hub-and-spokes model and the unique patient population. Efficiency of the model has been demonstrated through increased access to the accumulated wealth of expertise and experience of committed providers in PD, MS, and epilepsy. The networks are potentially cost-neutralizing and reduce outsourcing (fee-based care). The focus of the networks is also unique in that it is not unifocal but multifocal and holistic, providing resources for patients, their families, their caregivers, and providers. Through collaborative innovation, education, state of the art technology, and research, the neurological health care networks are able to provide a premier set of services unique to each veteran's needs, regardless of location.

PARKINSON'S DISEASE RESEARCH, EDUCATION, AND CLINICAL CENTERS

Parkinson is among the list of diseases subject to presumptive service connection based on herbicide exposure, and VA medical centers treat at

least 40,000 PD patients every year.^{1,2} These veterans typically have significant levels of disability and require high levels of service. In 2001, the VA began the process of enhancing services for about 40,000 veterans with PD by establishing 6 Parkinson's Disease Research, Education, and Clinical Centers (PADRECCs).

Over the past 8 years, the PADRECCs have worked collaboratively to serve this large veteran population, estimated at 45,000 unique patients. Each center has pursued an area of expertise that has shaped the collective PADRECC model. The most important function of the PADRECC Centers of Excellence is to support a distributive network of 50-plus sites (consortium) that optimizes specialized veteran-centered care and to support quality of life by providing comprehensive medical and surgical care to veterans with PD and other movement disorders, advancing investigation into the cause and cure for PD, and enhancing understanding of the disorder through education and research.³⁻⁵

MULTIPLE SCLEROSIS CENTERS OF EXCELLENCE

Also in 2001, Congress urged the VHA to establish 2 Multiple Scler-

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rosis Centers of Excellence (MS CoEs) for clinical care, education, and research. Presently, VHA cares for more than 40,000 veterans with a diagnosis of MS. Veterans with MS have complex needs and most of the MS diagnosis are service connected. Service connection indicates that a condition was temporally associated with, or directly resulted from, an individual being in military service. For MS, the window of temporal association is 7 years.

The MS system of care consists of an integrated network of care based on a hub-and-spoke model. Spokes are primarily outpatient facilities within the local area of the identified MS Regional Program (hub) or VAMC. The MS system of care consists of at least 1 MS Regional Program (hub) in each VISN. Within this model, comprehensive, multidisciplinary specialty MS care is centrally located at designated MS Regional Programs.

The MS CoEs connect subject matter experts, who possess high levels of expertise, in MS and function as regional centers for performing very complex procedures, for referral of the more-complicated and difficult patients, and for the dissemination of knowledge and support to a broad network of MS providers throughout VHA.⁶ Multiple Sclerosis Regional Centers support MS network sites in each VISN to support primary care at both inpatient and outpatient facilities. The MS Handbook (a product of the centers) establishes guidelines for care.⁶ However, the main focus of these MS CoEs is to support a distributive network of 40-plus sites that optimize highly specialized veteran-centered care, to reduce the need for trans-VISN travel, to reduce the need for veterans with MS to be treated outside the VA, and to

implement national strategies for management (eg, the use of natalizumab).⁷

EPILEPSY CENTERS OF EXCELLENCE

In 2008, under Public Law S. 2162, the VA set on its mission to revolutionize services for veterans with epilepsy and other seizure disorders. The VA established 4 regional Epilepsy Centers of Excellence (ECoEs), which consist of 16 sites. The main goal of the ECoEs is to provide premier epilepsy care to veterans throughout the U.S., using state-of-the-art diagnostic and therapeutic services for veterans with epilepsy, and to promote outreach and educational efforts for patients, their families, and their providers.

The ECoEs offer a range of outpatient and inpatient clinics serviced by a staff of neurology specialists. From these clinics, patients can be directed to the most advanced testing methods for the evaluation of epilepsy, including magnetic resonance imaging, electroencephalography, and video monitoring. For those patients that require more intensive testing, the ECoEs also provide inpatient monitoring units. The epilepsy centers are linked with the polytrauma centers to increase collaboration in caring for veterans with traumatic brain injury who are at a higher risk for post-traumatic epilepsy.⁸ The centers are developing protocols to identify veterans with epilepsy and to develop referral networks to enhance access for veterans to obtain specialized treatment such as epilepsy surgery and advanced electrodiagnosis within the veteran health care system.

LATEST SUCCESSES

Looking to the future, the goals of the neurological centers of excel-

lence are to continue in the development of resources to provide premier health care to our nation's veterans with PD, MS, epilepsy, and other movement disorders. Strategies that will ensure that the mission is met include strengthening community outreach collaboration, incorporating the use of survey instruments for collecting vital feedback from patients and their families in an effort to improve care and services, expanding collaborative research projects, and promoting the translation of basic science findings to clinical trials. The latter will be strengthened through a collaborative use of VA resources and support from the National Institute of Neurological Disorders and Stroke as well as the newly funded Oregon Health and Science University's "NEXT" Center of Excellence for clinical trials in neuroscience. Additional strategies include ensuring that each center has an affiliation with an accredited medical school that provides education and training of residents in the diagnosis and treatment of these disorders; providing ongoing educational opportunities for nursing staff, house staff, referring physicians, and patients; and finally, expanding on the use of telehealth.^{3,6,8} ●

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