EPILEPSY Centers of Excellence

Improving the health and well being of Veteran patients with epilepsy and other seizure disorders through the integration of clinical care, research and education.



United States Department of Veterans Affairs Veterans Health Administration

> Karen Parko, MD Director

Ryan Rieger, MHPA Administrative Director



www.epilepsy.va.gov

MISSION:

To improve the health and well being of Veteran patients with epilepsy and other seizure disorders through the integration of clinical care, research and education.

INTODUCTION:

In 2008 under Public Law S. 2162, the Department of Veterans Affairs (VA) set upon its mission to revolutionize services for the veterans afflicted by epilepsy and other seizure disorders. The VA founded the Epilepsy Centers of Excellence (ECoE), establishing 16 sites that are linked to form 4 regional centers. The ECoE seek to provide the best possible epilepsy care to veterans throughout the United States with state-of-the-art diagnostic and therapeutic services. Our goal is to deliver the highest quality of ongoing medical care to veterans suffering from epilepsy. We also seek to promote outreach and educational efforts for both patients and their physicians in order to further the understanding of this chronic condition.

The ECoE offers a range of services in both the outpatient and inpatient realms. The ECoE provides outpatient epilepsy clinics with 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 (MRI), electroencephalography (EEG), and video monitoring. For those patients that require more intensive testing or attention, the ECoE also provide inpatient units for examining certain seizure types more closely or changing medications in a monitored setting.

The epilepsy centers are also linked with the Polytrauma Centers to increase ability to mutually follow veterans with moderate and severe traumatic brain injury who are at the greatest risk for post-traumatic epilepsy. The sites are developing protocols to identify veterans with epilepsy and to develop referral networks to enable veterans to obtain specialized treatment such as epilepsy surgery and advanced electro-diagnosis within the veteran healthcare system

If you are a veteran with seizures and are interested in visiting our Epilepsy Center, please communicate with your local VA primary care physician. This doctor will be able to determine if you might benefit from visiting us, and can help set up a visit. For more information please visit our website at <u>www.epilepsy.va.gov</u>.

NATIONAL ECOE GOALS:

- Establishing a national system of care to all veterans with Epilepsy, to function as a center of excellence in research, education, and clinical care activities in the diagnosis and treatment of epilepsy. Developing jointly a national consortium of providers with interest in treating epilepsy at Department health care facilities lacking an epilepsy center of excellence in order to ensure better access to state-of-the-art diagnosis, research, clinical care, and education for traumatic brain injury and epilepsy throughout the health care system of the Department.
- To perform epilepsy research, education, and clinical care activities in collaboration with Department medical facilities that have centers for research, education, and clinical care activities on complex multi-trauma associated with combat injuries established under section 7327 of title S2162.
- To ensure an affiliation with an accredited medical school that provides education and training in neurology, including an arrangement with such school under which medical residents receive education and training in the diagnosis and treatment of epilepsy (including neurosurgery).
- Utilizing national VA and other databases in order to inform providers and policy makers in Central Office about health care delivery and health policy decisions, conducting state-of-the-art research about Epilepsy, and implementing an informatics backbone to meet the above objectives.
- Providing health professional education and training in order to deliver the highest quality of standard of care to veterans with Epilepsy. To provide an educational opportunity for nursing staff, medical students, house staff, fellows, referring physicians, and patients.

CENTERS OF EXCELLENCE:

Northeast

States Covered: Virginia, W. Virginia, Ohio, Pennsylvania, Delaware, New Jersey, New York, Vermont, Maine, Connecticut, Rhode Island, New Hampshire, Massachusetts, Maryland, and District of Columbia

Linked Polytrauma Site: Richmond

Richmond	Hunter Holmes McGuire VAMC	(804) 675-5000 x3748
Baltimore	VA Maryland HCS	(410) 605-7414
West Haven	VA Connecticut HCS	(203) 932-5711 x4724

Northwest

States Covered: Alaska, Washington, Oregon, Idaho, Montana, Wyoming, N. Dakota, S. Dakota, Minnesota, Iowa, Illinois, Indiana, Michigan, and Wisconsin.

Linked Polytrauma Site: Minneapolis

Madison	William S. Middleton Memorial VA	(608) 256-1901 x17728
Minneapolis	Minneapolis VAMC	(612) 467-2047
Portland	Portland VAMC	(503) 220-8262 x58334
Seattle	Puget Sound	(206) 764-2021

Southeast

States Covered: Florida, Alabama, Georgia, Mississippi, Tennessee, Kentucky, S.Carolina, Puerto Rico, Arkansas, Louisiana, N. Carolina, and Missouri

Linked Polytrauma Site: Tampa

Durham	Durham VAMC	(919) 286-0411
Miami	Miami VAHCS	(305) 575-7000 x7063
Gainesville	Malcom Randall VAMC	(800) 324-8387 x4020
Tampa	James A. Haley VAMC	(813) 972-7633

Southwest

States Covered: California, Utah, Colorado, Kansas, Nebraska, Nevada, Hawaii, Arizona, New Mexico, Texas, Oklahoma, and Philippines

Linked Polytrauma Site: Palo Alto

Albuquerque	New Mexico VAHCS	(505) 265-1711 x2752
Houston	Michael E. DeBakey VAMC	(713) 794-8835
San Francisco	San Francisco VAMC	(415) 379-5599
West Los Angeles	Greater Los Angeles HCS	(310) 268-3595
San Antonio	Audie L. Murphy VA Hospital	(210) 617-5161

REGIONAL MAPS:

Epilepsy Regional Map



Northwest Northeast Southwest Southeast

Epilepsy Network



ORGANIZATIONAL CHART:



PATHWAYS:



VETERAN POPULATION DATA:

Veteran Population Projections: FY2000 to FY2036







Note: Categories are mutually exclusive. 'Black 'and 'All other races' are not Hispanic.

'All other races' includes American Indian/Alaska Native, Asian. Pacific Islander, and Other.

Source: Department of Veterans Affairs, Office of the Actuary, Veteran Population Projections Model (VetPop), 2007 tables 5L and 8D.



Fiscal Year

Veteran Deaths



Note: Veterans who served in multiple periods are shown in the most recent period in which they served.

Prepared October 2010

VETERAN EPILEPSY POPULATION DATA:

Unique Seizure Patients (Diagnosed as 345 or 780) Data Source: VSSC outpatient encounter file Data collected using 345.xx or 780.02, 780.3, 780.33, 780.39 as primary or secondary diagnosis



PUBLICATIONS:

MJV Pugh, DR Berlowitz, G Montouris, B Bokhour, JA Cramer, V Bohm, M Bollinger, S Helmers, A Ettinger, KJ Meador, N Fountain, J Boggs, WO Tatum IV, J Knoefel, C Harden, RH Mattson, L Kazis, "What constitutes high quality of care for adults with epilepsy?" Neurology, 69:1–1, 2007.

JE Zeber, LA Copeland, MJV Pugh, "Variation in Antiepileptic Drug Adherence Among Older Patients with New-Onset Epilepsy" The Annals of Pharmacotherapy, Volume 44:1896-904, December 2010.

MJV Pugh, AC VanCott, MA Steinman, EM Mortensen, ME Amuan, CP Wang, JE Knoefel, DR Berlowitz, "Choice of Initial Antiepileptic Drug for Older Veterans: Possible Pharmacokinetic Drug Interactions with Existing Medications" J Am Geriatr Soc, 58:465–471, 2010.

MJV Pugh, J Tabares, E Finley, M Bollinger, K Tortorice, AC VanCott, "CHANGES IN ANTIEPILEPTIC DRUG CHOICE FOR OLDER VETERANS WITH NEW-ONSET EPILEPSY: 2002 TO 2006" Letters to the Editor. JAGS, VOL. 59, NO. 5, MAY 2011.

JE Zeber, LA Copeland, M Amuan, JA Cramer, MJV Pugh, "The role of comorbid psychiatric conditions in health status in epilepsy" Epilepsy & Behavior, 10, 539–546, 2007.

M Pramuka, R Hendrickson, AC Van Cott, "Survey results of Internet and computer usage in veterans with epilepsy" Epilepsy & Behavior, 17 366–368, 2010.

AM Bozorg, JC Lacayo, SR Benbadis, "The Yield of Routine Outpatient Electroencephalograms in the Veteran Population" Journal of Clinical Neurophysiology, Volume 27, Number 3, June 2010.

MJV Pugh, LA Copeland, JE Zeber, JA Cramer, ME Amuan, JE Cavazos, LE Kazis, "The Impact of Epilepsy on Health Status among Younger and Older Adults" Epilepsia, 46(11):1820–1827, 2005.

MJV Pugh, JE Knoefel, EM Mortensen, ME Amuan, DR Berlowitz, AC Van Cott, "New-Onset Epilepsy Risk Factors in Older Veterans" J Am Geriatr Soc, 57:237–242, 2009.

DK Chen, S Izadyar, "Characteristics of psychogenic nonepileptic events among veterans with posttraumatic stress disorder: An association of semiology with the nature of trauma" Epilepsy & Behavior, 17, 188–192, 2010.

MJV Pugh, JE Zeber, LA Copeland, JV Tabares, JA. Cramer, "Psychiatric Disease Burden Profiles Among Veterans With Epilepsy: The Association With Health Services Utilization" PSYCHIATRIC SERVICES, Vol. 59 No. 8, August 2008.

MJV Pugh, DR Berlowitz, JK Rao, G Shapiro, R Avetisyan, AHanchate, K Jarrett, J Tabares, LE Kazis, "The quality of care for adults with epilepsy: an initial glimpse using the QUIET measure" BMC Health Services Research, 11:1, 2011.

OA Hope, JE Zeber, NR Kressin, BG Bokhour, AC Van Cott, JA Cramer, ME Amuan, JE Knoefel, MJV Pugh, "Newonset geriatric epilepsy care: Race, setting of diagnosis, and choice of antiepileptic drug" Epilepsia, 50(5):1085–1093, 2009.

AC Van Cott, JA Cramer, LA Copeland, JE Zeber, MA Steinman, JJ Dersh, ME Glickman, EM Mortensen, ME Amuan, MJV Pugh, "Suicide-related behaviors in older patients with new anti-epileptic drug use: data from the VA hospital system" BMC Medicine, 8:4, 2010.

V Raymont, AM Salazar, R Lipsky, D Goldman, G Tasick, J Grafman, "Correlates of posttraumatic epilepsy 35 years following combat brain injury" Neurology, 75, July 20, 2010.

V Raymont, AM Salazar, F Krueger, J Grafman, "Studying injured minds"-the Vietnam head injury study and 40 years of brain injury research" Frontiers in Neurology, Volume 2, Article 15, March 2011.

PUBLIC LAW S. 2162:

One Hundred Tenth Congress of the United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Thursday, the third day of January, two thousand and eight

An Act

To improve the treatment and services provided by the Department of Veterans Affairs to veterans with post-traumatic stress disorder and substance use disorders, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE IV—HEALTH CARE MATTERS

Sec. 404. Epilepsy Centers of Excellence.

§ 7330A. Epilepsy centers of excellence

(a) ESTABLISHMENT OF CENTERS.—(1) Not later than 120 days after the date of the enactment of the Veterans' Mental Health and Other Care Improvements Act of 2008, the Secretary shall designate at least four but not more than six Department health care facilities as locations for epilepsy centers of excellence for the Department.

(2) Of the facilities designated under paragraph (1), not less than two shall be centers designated under section 7327 of this title.

(3) Of the facilities designated under paragraph (1), not less than two shall be facilities that are not centers designated under section 7327 of this title.

(4) Subject to the availability of appropriations for such purpose, the Secretary shall establish and operate an epilepsy center of excellence at each location designated under paragraph (1).

(b) DESIGNATION OF FACILITIES.—(1) In designating locations for epilepsy centers of excellence under subsection (a), the Secretary shall solicit proposals from Department health care facilities seeking designation as a location for an epilepsy center of excellence.

(2) The Secretary may not designate a facility as a location for an epilepsy center of excellence under subsection (a) unless the peer review panel established under subsection (c) has determined under that subsection that the proposal submitted by such facility seeking designation as a location for an epilepsy center of excellence is among those proposals that meet the highest competitive standards of scientific and clinical merit.

(3) In choosing from among the facilities meeting the requirements of paragraph (2), the Secretary shall also consider appropriate geographic distribution when designating the epilepsy centers of excellence under subsection (a).

(c) PEER REVIEW PANEL.—(1) The Under Secretary for Health shall establish a peer review panel to assess the scientific and clinical merit of proposals that are submitted to the Secretary

S. 2162—18

for the designation of epilepsy centers of excellence under this section.

(2)(A) The membership of the peer review panel shall consist of experts on epilepsy, including post-traumatic epilepsy.

(B) Members of the peer review panel shall serve for a period of no longer than two years, except as specified in subparagraph

(C).

(C) Of the members first appointed to the panel, one half shall be appointed for a period of three years and one half shall be appointed for a period of two years, as designated by the Under Secretary at the time of appointment.

(3) The peer review panel shall review each proposal submitted to the panel by the Under Secretary for Health and shall submit its views on the relative scientific and clinical merit of each such proposal to the Under Secretary.

(4) The peer review panel shall, in conjunction with the national coordinator designated under subsection (e), conduct regular evaluations of each epilepsy center of excellence established and operated under subsection (a) to ensure compliance with the requirements of this section.

(5) The peer review panel shall not be subject to the Federal Advisory Committee Act. "(d) EPILEPSY CENTER OF EXCELLENCE DEFINED.—In this section, the term 'epilepsy center of excellence' means a health care facility that has (or in the foreseeable future can develop) the necessary capacity to function as a center of excellence in research, education, and clinical care activities in the diagnosis and treatment of epilepsy and has (or may reasonably be anticipated to develop) each of the following:

(1) An affiliation with an accredited medical school that provides education and training in neurology, including an arrangement with such school under which medical residents receive education and training in the diagnosis and treatment of epilepsy (including neurosurgery).

(2) The ability to attract the participation of scientists who are capable of ingenuity and creativity in health care research efforts.

(3) An advisory committee composed of veterans an appropriate health care and research representatives of the facility and of the affiliated school or schools to advise the directors of such facility and such center on policy matters pertaining to the activities of the center during the period of the operation of such center.

(4) The capability to conduct effectively evaluations of the activities of such center.

(5) The capability to assist in the expansion of the Department's use of information systems and databases to improve the quality and delivery of care for veterans enrolled within the Department's health care system.

(6) The capability to assist in the expansion of the Department telehealth program to develop, transmit, monitor, and review neurological diagnostic tests.

(7) The ability to perform epilepsy research, education, and clinical care activities in collaboration with Department medical facilities that have centers for research, education, and clinical care activities on complex multi-trauma associated S. 2162—19

with combat injuries established under section 7327 of this title.

(e) NATIONAL COORDINATOR FOR EPILEPSY PROGRAMS.—(1) To assist the Secretary and the Under Secretary for Health in carrying out this section, the Secretary shall designate an individual in the Veterans Health Administration to act as a national coordinator for epilepsy programs of the Veterans Health Administration.

(2) The duties of the national coordinator for epilepsy programs shall include the following:

(A) To supervise the operation of the centers established pursuant to this section.

(B) To coordinate and support the national consortium of providers with interest in treating epilepsy at Department health care facilities lacking such centers in order to ensure better access to state-of-the-art diagnosis, research, clinical care, and education for traumatic brain injury and epilepsy throughout the health care system of the Department.

(C) To conduct, in conjunction with the peer review panel established under subsection (c), regular evaluations of the epilepsy centers of excellence to ensure compliance with the requirements of this section.

(D) To coordinate (as part of an integrated national system) education, clinical care, and research activities within all facilities with an epilepsy center of excellence.

(E) To develop jointly a national consortium of providers with interest in treating epilepsy at Department health care facilities lacking an epilepsy center of excellence in order to ensure better access to state-of-the-art diagnosis, research, clinical care, and education for traumatic brain injury and epilepsy throughout the health care system of the Department. Such consortium should include a designated epilepsy referral clinic in each Veterans Integrated Service Network.

(3) In carrying out duties under this subsection, the national coordinator for epilepsy programs shall report to the official of the Veterans Health Administration responsible for neurology.

(f) AUTHORIZATION OF APPROPRIATIONS.—(1) There are authorized to be appropriated \$6,000,000 for each of fiscal years 2009 through 2013 for the support of the clinical care, research, and education activities of the epilepsy centers of excellence established and operated pursuant to subsection (a)(2).

(2) There are authorized to be appropriated for each fiscal year after fiscal year 2013 such sums as may be necessary for the support of the clinical care, research, and education activities of the epilepsy centers of excellence established and operated pursuant to subsection (a)(2).

(3) The Secretary shall ensure that funds for such centers are designated for the first three years of operation as a special purpose program for which funds are not allocated through the Veterans Equitable Resource Allocation system.

(4) In addition to amounts authorized to be appropriated under paragraphs (1) and (2) for a fiscal year, the Under Secretary for Health shall allocate to such centers from other funds appropriated generally for the Department medical services account and medical

and prosthetics research account, as appropriate, such amounts as the Under Secretary for Health determines appropriate.

(5) In addition to amounts authorized to be appropriated under paragraphs (1) and (2) for a fiscal year, there are authorized to

S. 2162—20

be appropriated such sums as may be necessary to fund the national coordinator established by subsection (e).".

(b) CLERICAL AMENDMENT.—The table of sections at the beginning of chapter 73 is amended by inserting after the item relating to section 7330 the following new item: "7330A. Epilepsy centers of excellence.".