

EPILEPSY

Centers of Excellence

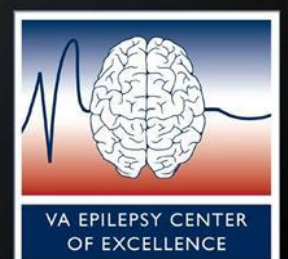
Improving the health and well being of Veteran patients with epilepsy and other seizure disorders through the integration of clinical care, research and education.



United States Department of Veterans Affairs
Veterans Health Administration

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www.epilepsy.va.gov

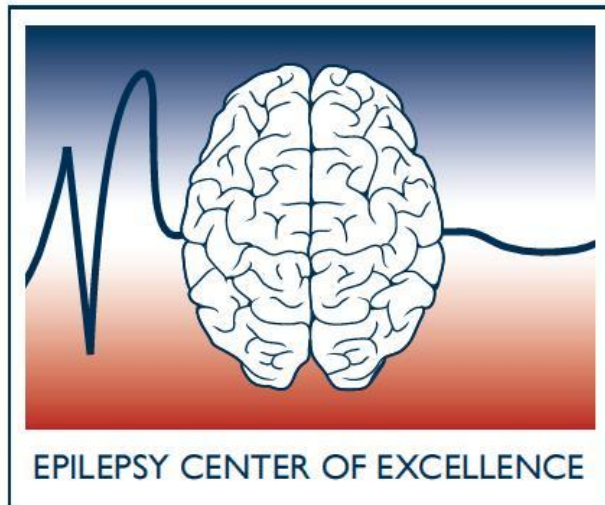
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EPILEPSY CENTERS OF EXCELLENCE

ANNUAL REPORT FY11



MISSION

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

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.

INTRODUCTION

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 that 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 seeking services at one of the Epilepsy Centers, please inquire with your local VA primary care physician. This doctor will be able to determine if you might benefit from the services provided by ECoE and assist you with scheduling an appointment. For more information please visit our website at www.epilepsy.va.gov.

NATIONAL ADVISORY COMMITTEE

The National Advisory Committee is an important part of the ECoE overall team. The National Advisory Committee is responsible for providing guidance and direction to the ECoEs. It will assist in the planning phases of the ECoE to maximize cooperation between the facilities and enhance referral patterns across the VA healthcare system. The National Advisory Committee will also assist in the collaboration between VA sites and affiliate universities. It will establish performance measures with an emphasis on measurable outcomes for the ECoE and will provide oversight of all clinical, educational, and research related activities within the ECoE.

Marc Dichter, MD, PhD, University of Pennsylvania, ECoE Advisory Committee Chair

Susan Axelrod, C.U.R.E. Chair

John Booss, MD, FAAN, American Academy of Neurology

Tony Coelho, Epilepsy Foundation Former Chair

Ramon Diaz-Arrastia, MD, PhD, Uniformed Services University of the Health Sciences

Mill Etienne, MD, MPH, Walter Reed National Military Medical Center

Glenn Graham, MD, VA Department of Neurology

COL Jamie Grimes, MD, Defense and Veterans Brain Injury Center

Robert Gumnit, MD, National Association of Epilepsy Centers

Patty Horan, Military Officers Association of America

Rajiv Jain, MD, VA Specialty Care Services

Christopher Jones, Air Force Veteran

Richard Mattson, MD, Yale Comprehensive Epilepsy Center

Shane McNamee, MD, Richmond VA Poly-Trauma Centers

Ed Perlmutter, U.S. Representative for Colorado

Robert Ruff, MD, PhD, VA Department of Neurology

Rawn Sahai, Air Force Veteran

Brien Smith, MD, Epilepsy Foundation Chair

William Theodore, MD, National Institute of Neurological Disorders and Stroke

Kathy Tortorice, PharmD, BCPS, VA Pharmacy Benefits Management

CAPT William Watson, MD, PhD, Uniformed Services University of the Health Sciences

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) 416-5982
Miami	Miami VAHCS	(305) 575-7000 x7008
Gainesville	Malcom Randall VAMC	(352) 374-6082
Tampa	James A. Haley VAMC	(813) 972-7633

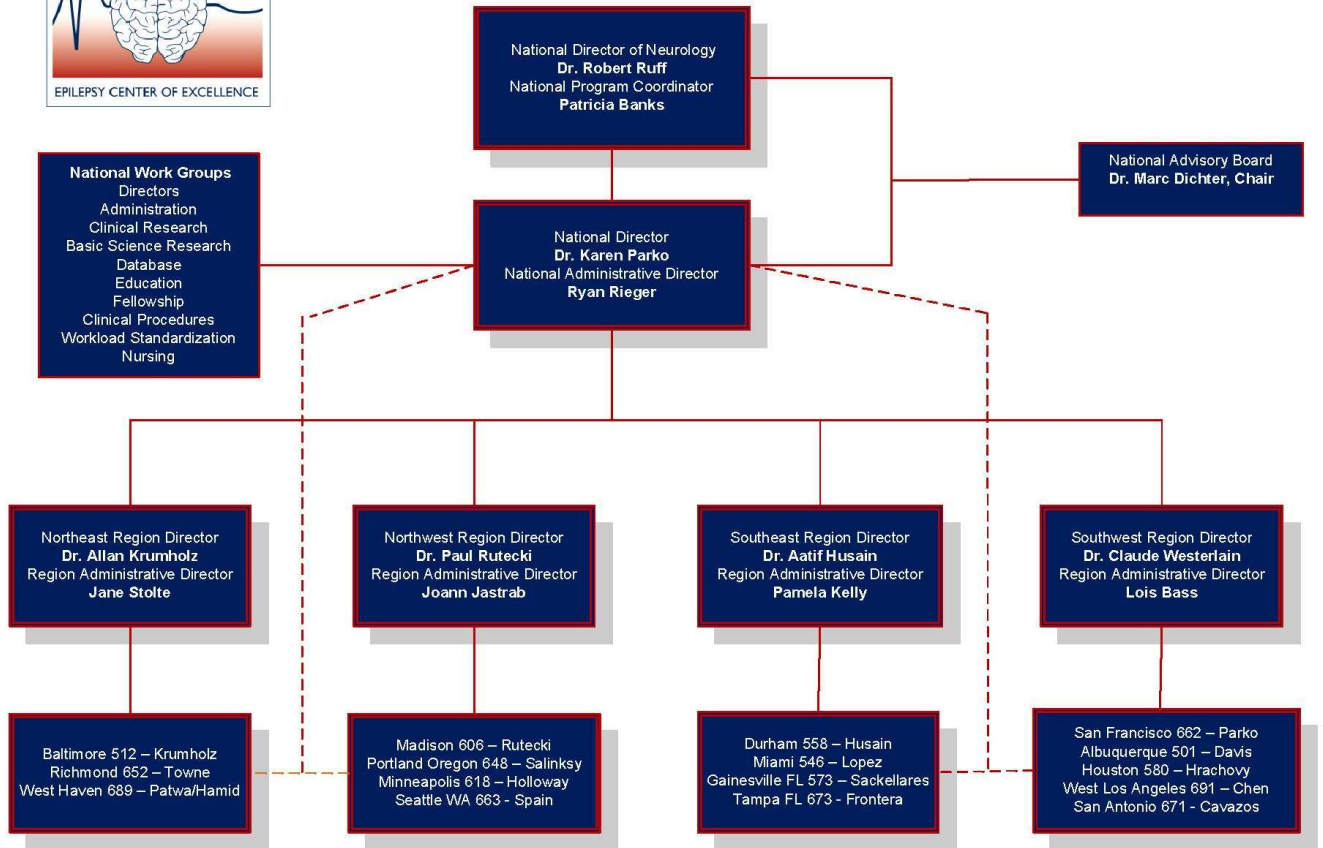
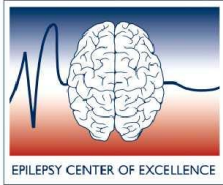
Southwest

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

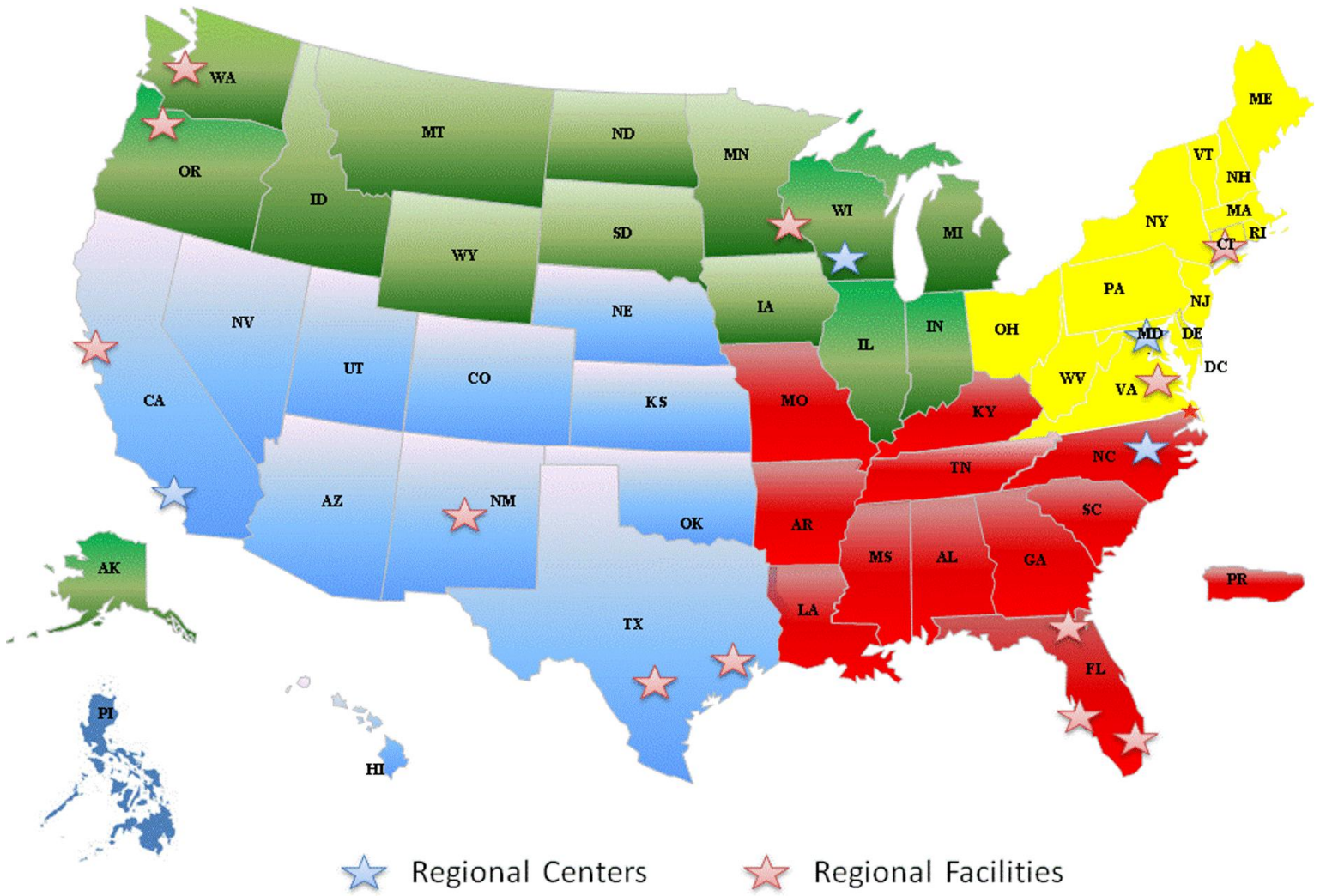
Linked Polytrauma Site: [Palo Alto](#)

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

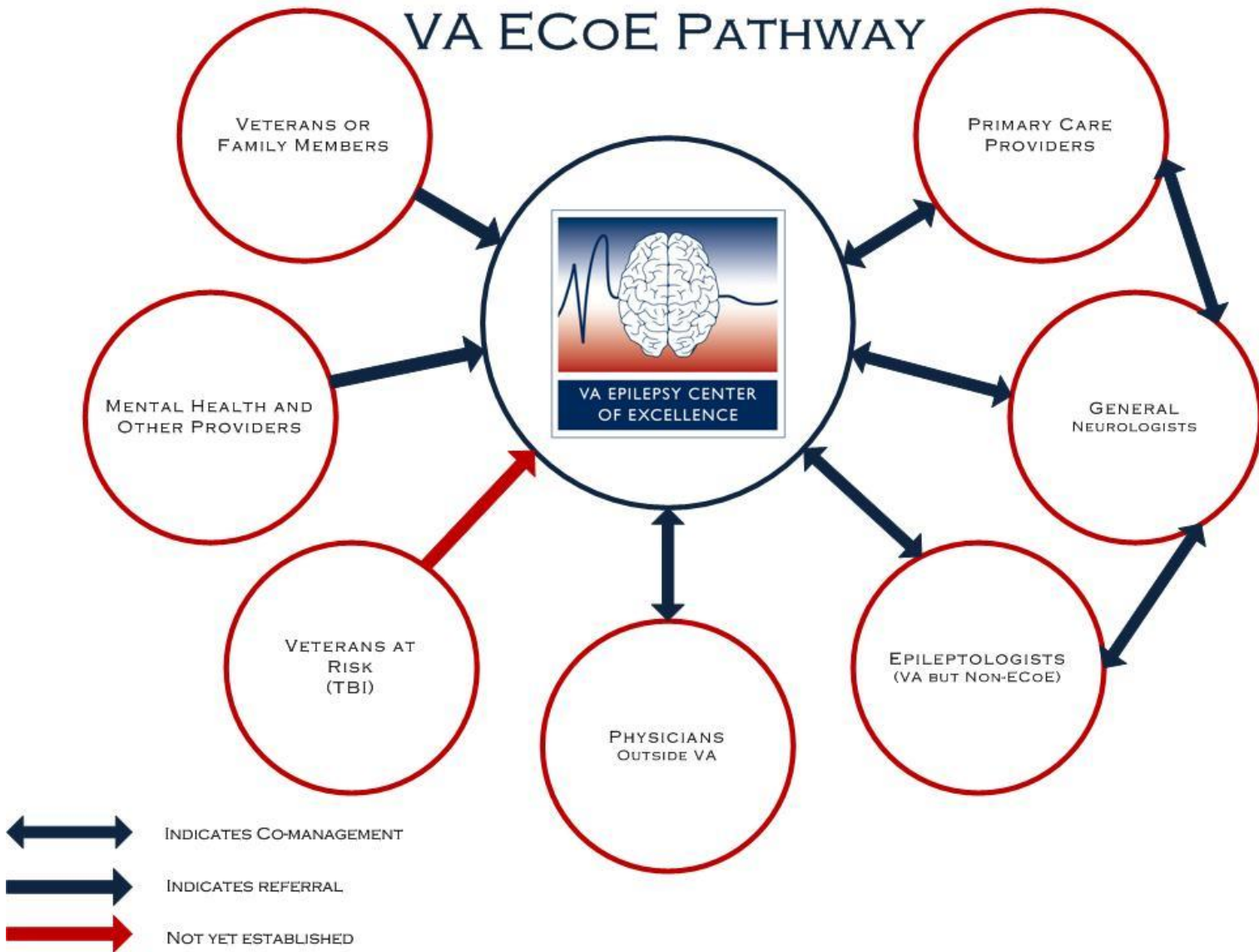
ORGANIZATIONAL CHART



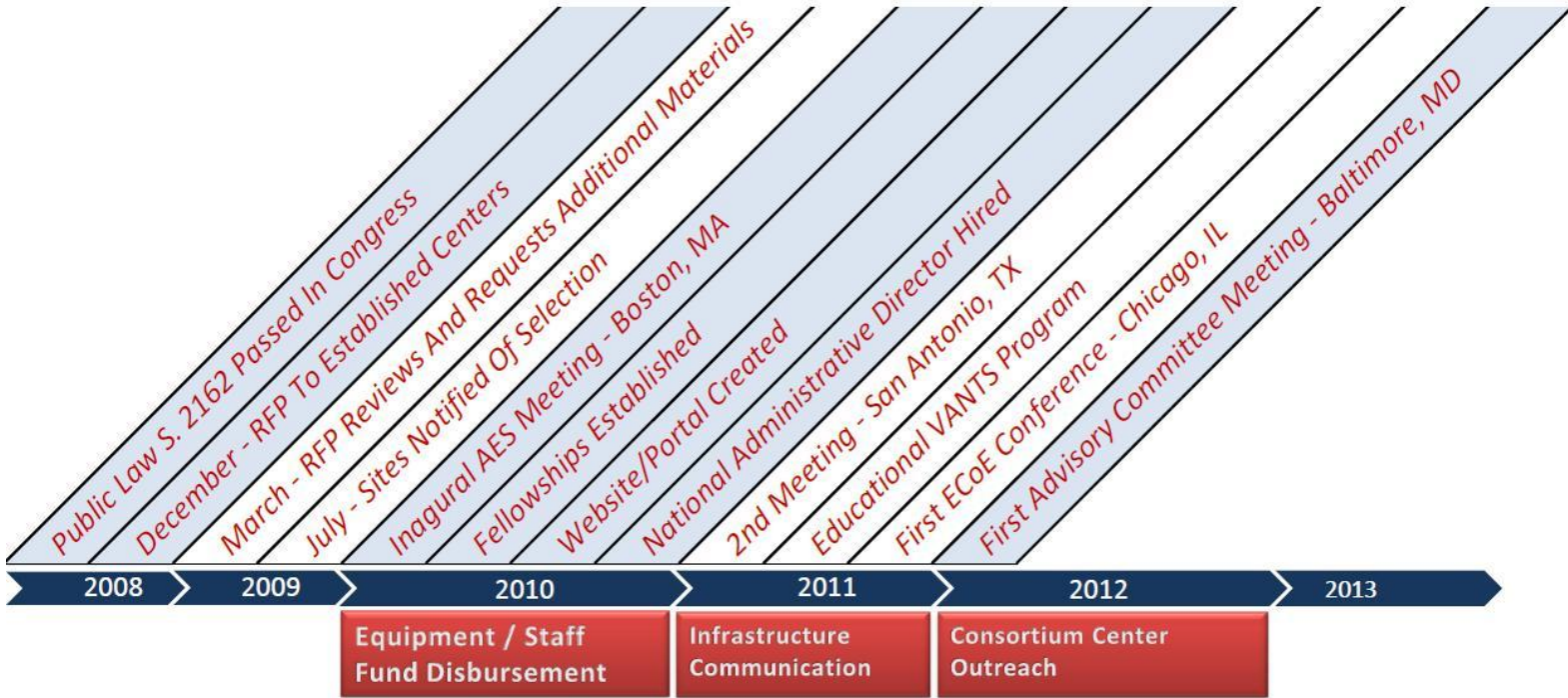
REGIONAL MAP



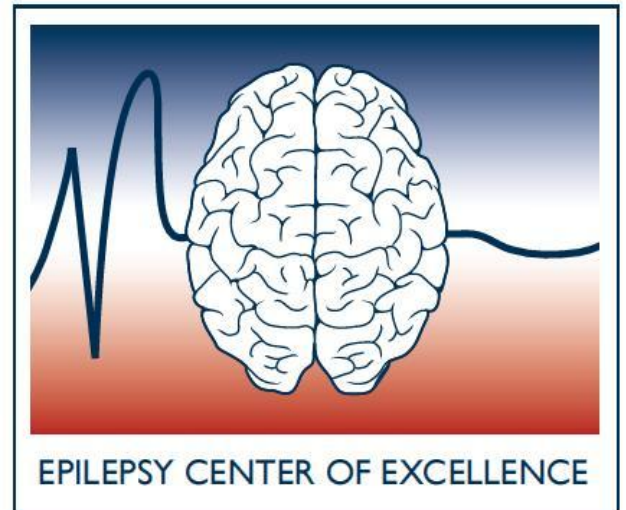
PATHWAYS



TIMELINE



FY11 ECoE NATIONAL GOALS



Administration

- Conduct National Advisory Committee Meeting
- Complete Installation of Stop Code 345 for Workload Tracking
- Complete Content of National/Regional ECoE Website
- Develop and Implement an Epilepsy Patient Satisfaction Survey (at the ECoEs and at selected non-ECoE centers).

Clinical

- Development of a hub and spoke network for Epilepsy clinical care
- Develop and Implement Procedure for EMU Workload Tracking
- Develop and Implement National Formulary for Epilepsy
- Gain Approval for Travel Policy for ECoE Patients
- Develop outreach programming including telemedicine clinics and exploring remote EEG reading
- Reclassify EEG Technician position description.

Research

- Develop Prioritized Listing of RFAs for Dr. Ruff for submission to R&D
- Develop collaborative group study with all ECoE site participation

Education

- Establish Education Workgroup
- Implement Provider Educational CME Program – VANTS Audio Conference
- Implement Patient Educational Program – VANTS Audio Conference
- Conduct EES Satellite Broadcast

Database

- Finalize CPRS Template for Patient Registry
- Gain approval for National CPRS Template
- Develop Partnership with OIF/OEF TBI Registry

Fellowship

- Secure ongoing guaranteed Fellowship Funding through Office of Academic Affiliation (OAA)

Nursing

- Establish Nursing Protocol for EMU Patients

Outreach/Collaboration

- Develop partnership with Poly-Trauma Centers
- Develop partnership with Defense and Veterans Brain Injury Center (DVBIC)
- Develop partnership with other Neurology special programs including Parkinson's Disease Research, Education and Clinical Center (PADRECC) and Multiple Sclerosis Center of Excellence(MSCoE)
- Develop partnership with active duty military
- Develop partnership with Epilepsy Foundation

FY11 WORKLOAD REPORT

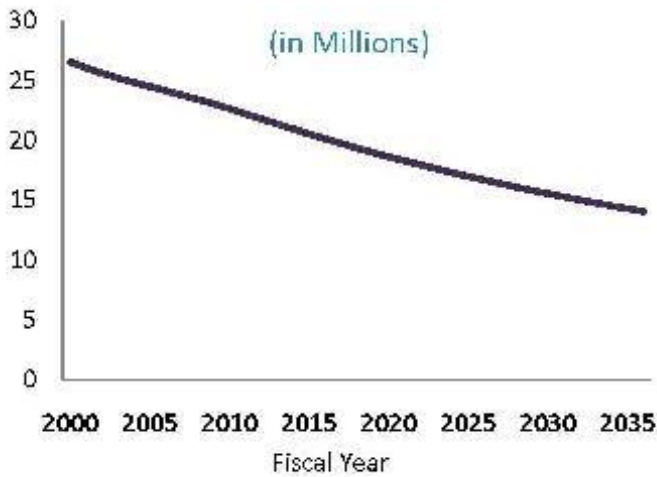
ECoE Site	EMU Patients # of admissions	EMU Patients Length of hospital stay (# of days)	Epilepsy Surgeries # of surgeries at the VAMC	VNS # of patients Implanted	Epilepsy Clinic New – Uniques / Encounters*	Epilepsy Clinic Follow Up – Encounters*	EEGs – Encounters*
San Francisco	60	276	0	1	97	234	150
Los Angeles	27	150	3	2	292	398	835
Houston	144	720	4	1	235	842	772
San Antonio	0	0	0	0	137	578	549
Albuquerque	0	0	0	0	135	284	361
Southwest Region	231	1146	7	4	896	2336	2667
Baltimore	15	59	1	0	144	360	204
Richmond	12	33	1	1	106	420	516
West Haven	65	176	0	0	48	313	446
Northeast Region	92	268	2	1	298	1093	1166
Madison	38	185	1	0	53	292	382
Portland	45	209	1	0	160	694	385
Seattle	36	155.5	0	0	168	242	544
Minneapolis	39	160	0	0	80	238	271
Northwest Region	158	709.5	2	0	461	1466	1582
Durham	25	85	0	1	110	823	518
Miami	63	217	0	1	158	278	504
Tampa	32	79	0	0	69	45	649
Gainesville	28	97	0	1	176	491	707
Southeast Region	148	478	0	3	513	1637	2378
ECoE Total	629	2601.5	11	8	2168	6532	7793

*Encounters: A count of clinic stops made by patients where duplicates have not been removed. A duplicate clinic stop occurs when a patient makes more than one of the same type of PRIMARY clinic stop at the same substation on the same day. (An encounter is a professional contact between a patient and a practitioner vested with primary responsibility for diagnosing, evaluating, and/or treating the patient's condition. Encounters occur in both the outpatient and inpatient setting. Contact can include face-to-face interactions or those accomplished via telemedicine technology).

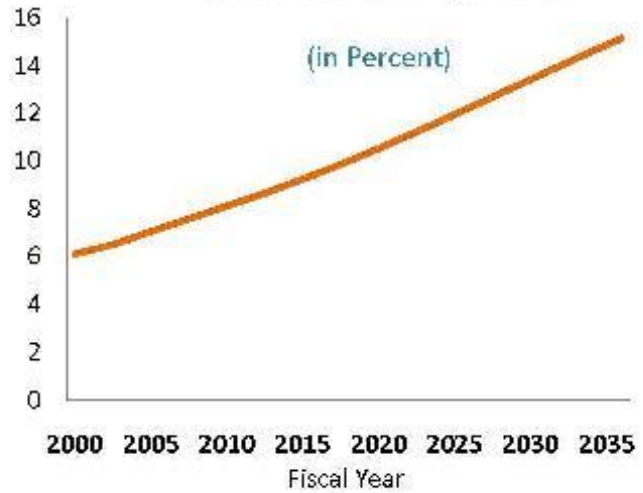
VETERAN POPULATION DATA

Veteran Population Projections: FY2000 to FY2036

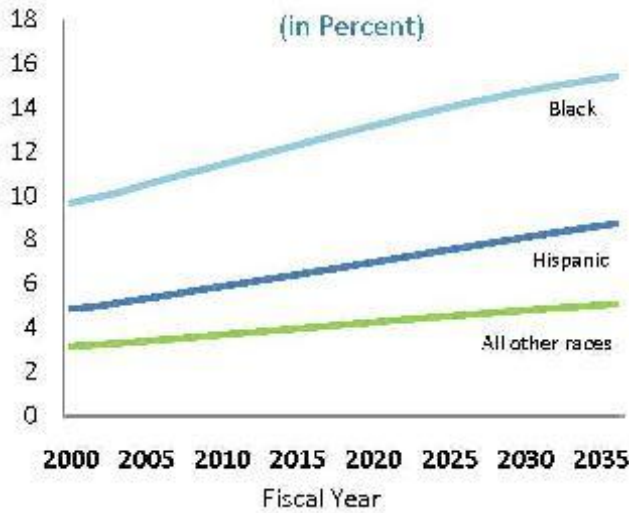
Total Veteran Population



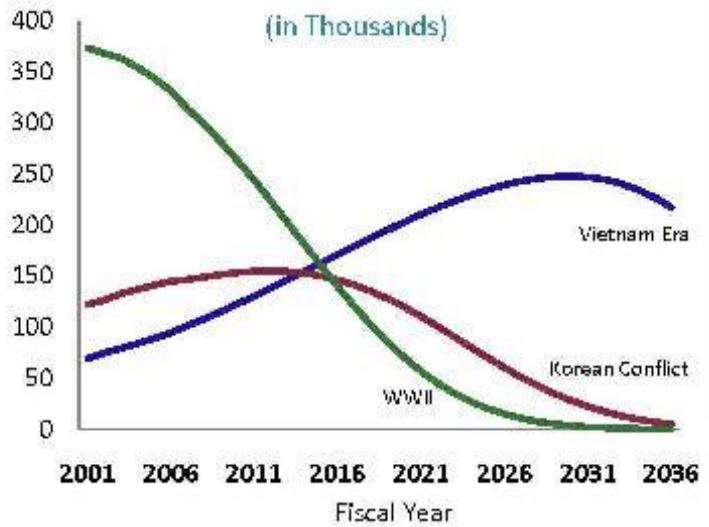
Female Veteran Population



Minority Veteran Population



Veteran Deaths



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

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

'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.

Prepared October 2010

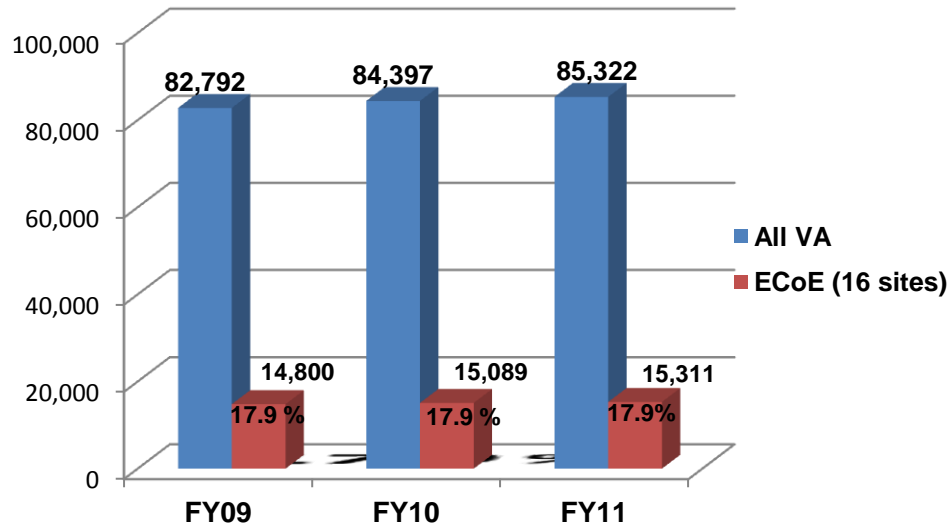
VETERAN SEIZURE POPULATION DATA

Unique Seizure Patients (ICD-09 345 or 780 diagnosis codes)

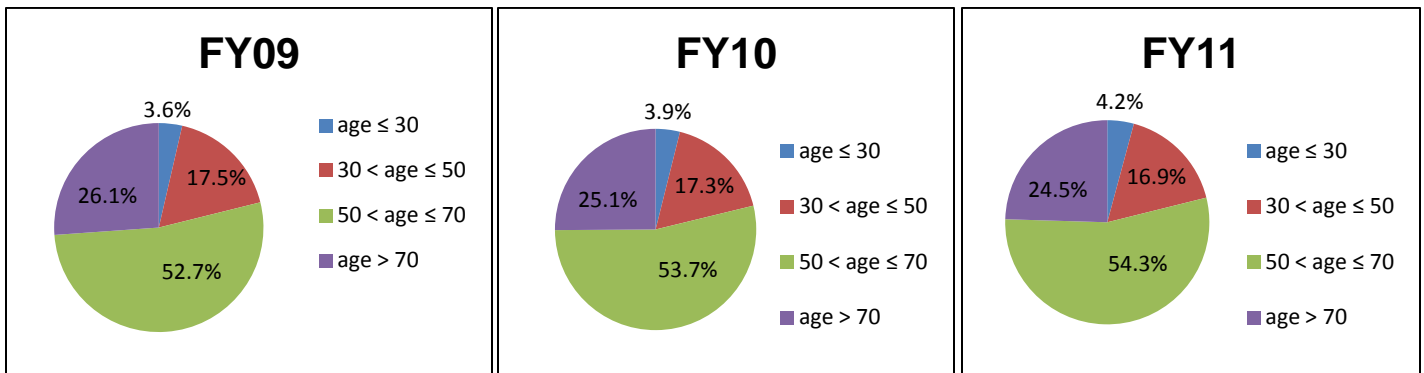
Data Source: VSSC Outpatient Encounter File

Data collected using 345.xx and 780.02, 780.3, 780.33, 780.39 as primary or secondary diagnosis for parent stations.

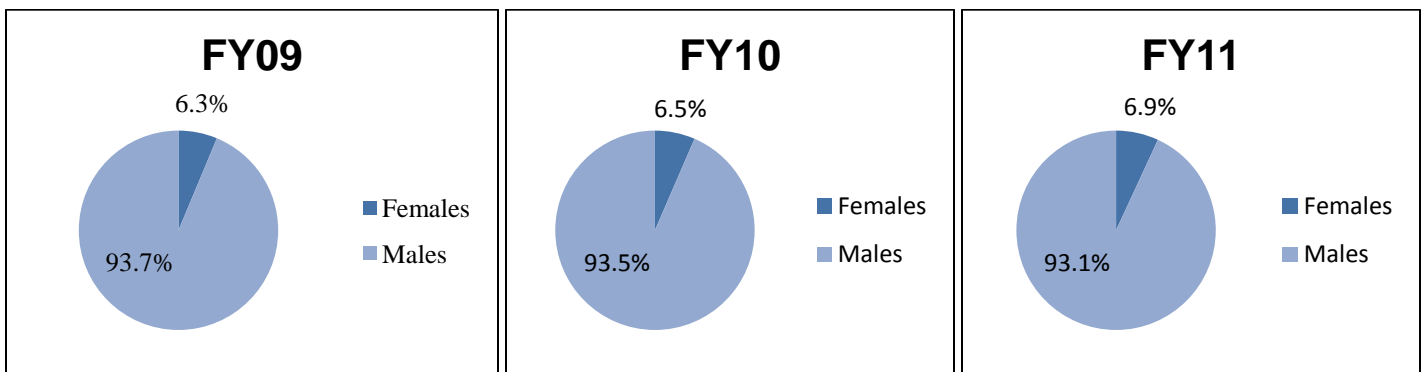
Unique Seizure Patients



Age Group (Percentages)



Gender (Percentages)



Numbers rounded to the nearest one decimal digit for percentages

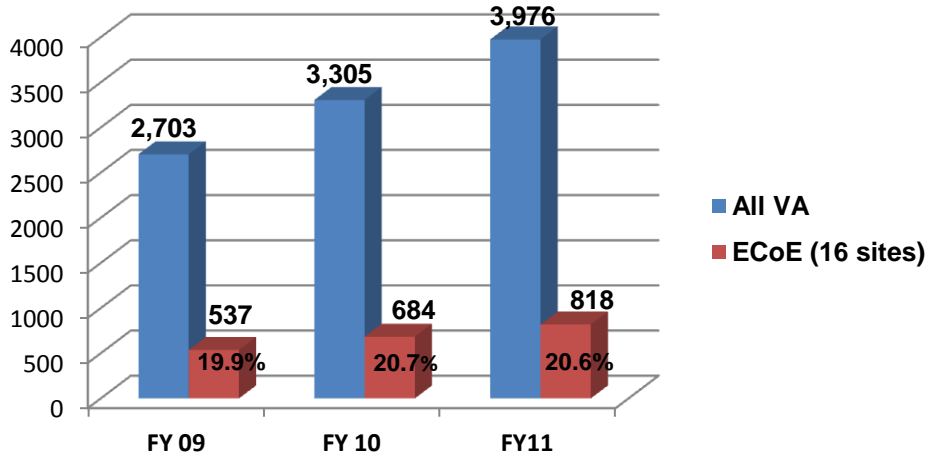
OEF/OIF/OND VETERAN SEIZURE POPULATION DATA

Unique Seizure Patients identified as OEF/OIF/OND (ICD-09 345 or 780 diagnosis codes)

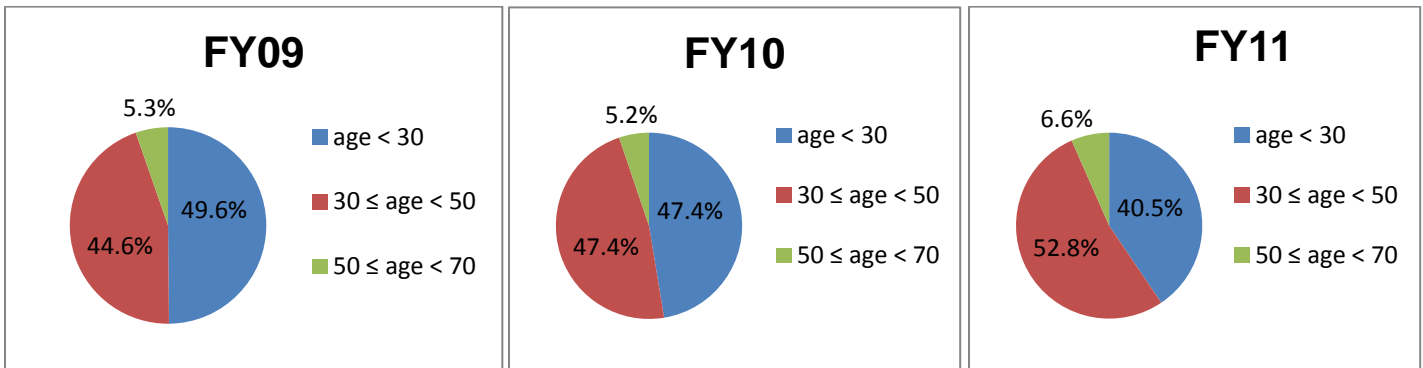
Data Source: VSSC OEF/OIF/OND Outpatient Utilization Cube

Data collected using 345.xx and 780.02, 780.3, 780.33, 780.39 as primary or secondary diagnosis for parent stations.

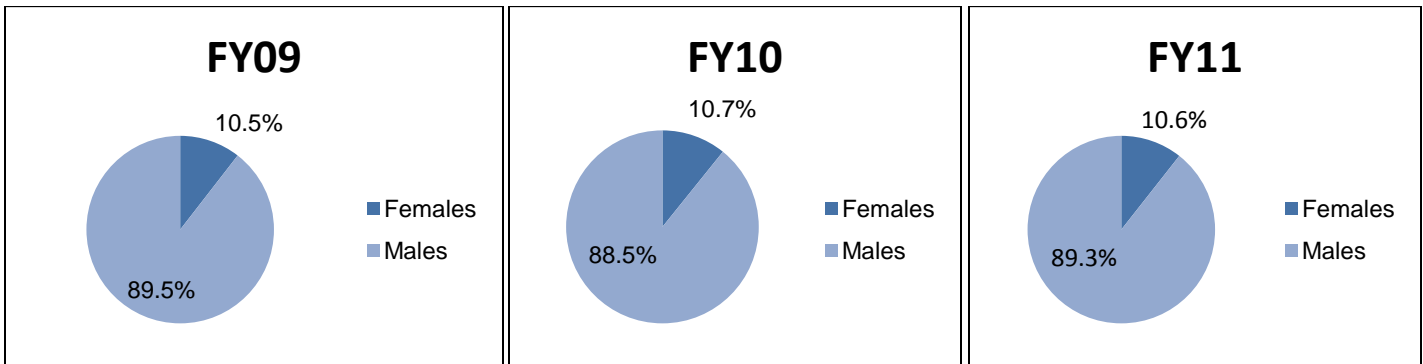
Unique Seizure OEF/OIF/OND Patients



Age Group (Percentages)



Gender (Percentages)



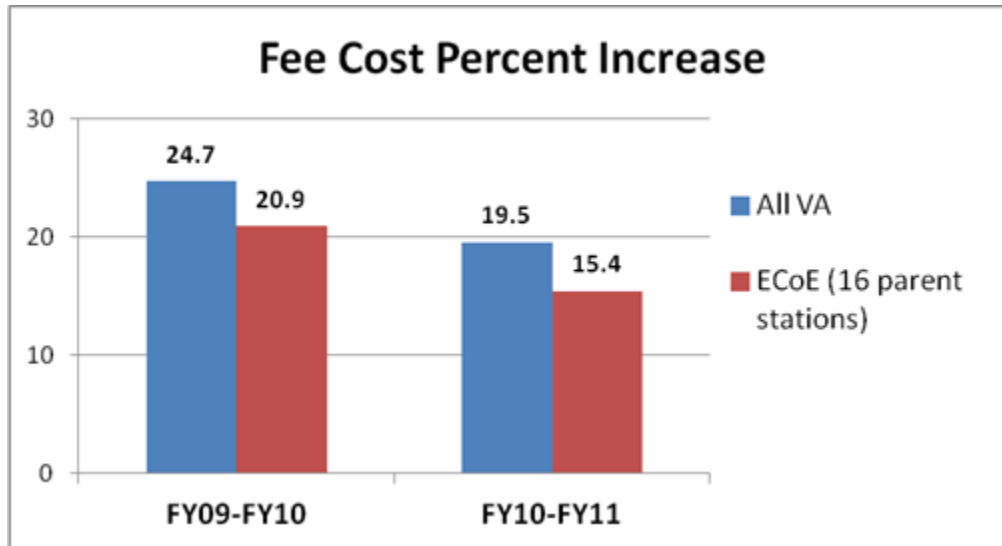
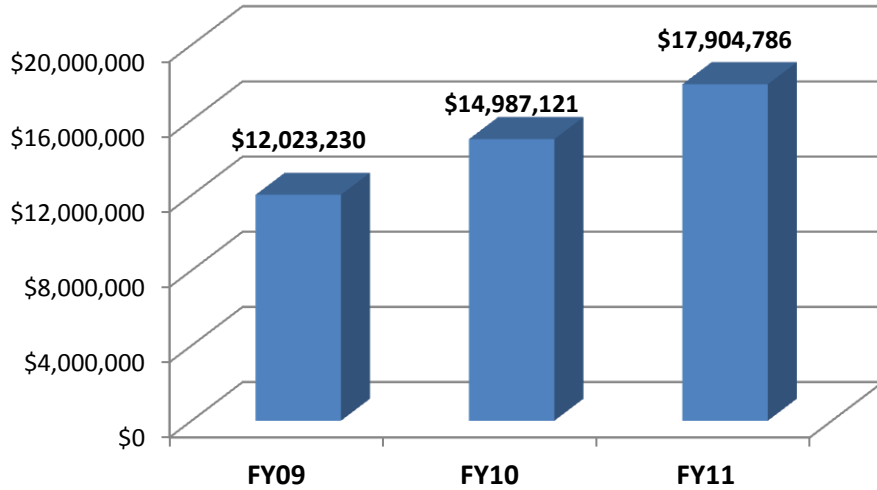
Numbers rounded to the nearest one decimal digit for percentages, Uniques with unknown ages/genders are not included in the analysis

VETERAN SEIZURE FEE COST

Data Source: VSSC Non VA Care Cube

Non VA Care compiled using selection of Primary ICD09 Diagnosis Codes, Disbursed Amount & Payment Location
Data selected using primary diagnosis of 345.xx, 780.02, 780.09, 780.3, 780.33, 780.39

Seizure Fee Care Cost



Paid Claims through Central Fee Only (Rejected, denied, or Non-VA claims not paid through Fee are not collected in the Non-VA Care cube. Additionally, data is not available until after the claim has been processed through Central Fee and paid by FMS.)

ECoE INVENTORY OF SERVICES

ECoE Inventory of Services*	Minneapolis, MN	West Los Angeles, CA	San Francisco, CA	VA Puget Sound, WA	Portland, OR	Albuquerque, NM	San Antonio, TX	Houston, TX	Madison, WI	Tampa, FL	Gainesville, FL	Miami, FL	Durham, NC	Baltimore HCS, MD	VA Connecticut HCS, CT	Richmond, VA
Outpatient EEG	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Specialty Epilepsy Clinics	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
V-tel Epilepsy Clinics	x	x	x			x			x	x	x		x			x
Epilepsy Inpatient Consultation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Scalp Video-EEG Telemetry (Phase 1), # of Beds	x,2	x,2	x,4	x,1	x,3			x,4	x,3	x,1	x,2	x,2	x,3	x,1	x	x,3
Ability to Perform Wada Testing		x	x		x			x	x		x		x	x		x
Ability for Pre-Surgical Neuropsych Testing	x	x	x		x	x	x	x	x	x	x	x	x	x		x
Placement of VNS	x	x	x		x	x	x	x	x		x	x	x	x		x
Epilepsy Surgery		x	x		x			x	x		x		x	x		
Epilepsy Protocol MRI Imaging	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
PET Scanning	x	x	x		x	x		x	x	x	x			x	x	x
Intra-Operative ECOG		x	x		x			x	x		x		x	x		x
Invasive Monitoring (Phase 2) Subdural Grids/ Strips		x	x		x			x	x				x	x		
Invasive Monitoring (Phase 2) Depth Electrodes		x	x		x			x	x				x	x		
Deep brain stimulation		x	x		x			x								x
Magneto encephalography																
Radio Surgery (Gamma Knife)								x								
Functional MRI (fMRI)			x					x		x						x
Ambulatory EEG	x	x			x			x			x	x	x	x	x	x
Primary ECoE Contact Phone Number	612.467.4265	310.268.3595	415.379.5599	206.277.4292	503.220.8262 x58330	505-265.1711 x6128	210.617.5161	713.794.7393	608.256.1901 x17728	813.972.7633	352.374.6082	305.575.7000 x7008	919.416.5982	410.60-.7414	203.932.5711 x4724	804.675.5000

*Service available at VA for clinical use, not at academic affiliate or research protocol

SOUTHWEST REGION

FY11 Accomplishments:

- SW regional meeting in Hawaii American Academy of Neurology (AAN) Meeting, 4/14/2011.
- Advisory Committee: Selected.
- Established referrals from regional VAMCs.
- Established remote video/EEG viewing capability
- Working with Epilepsy Foundations.
- Start to reach out to the Polytrauma Centers and in the process of establishing referral channels.

Education / Outreach Activity:

- Refer to the Education / Outreach Activity under each SW ECoE site.

Challenges / Barriers:

- V-Tel Crossing State Line and VISN line.
- Funding to expand clinical services and for research.

Future Initiatives:

- Outreach to Polytrauma Centers: Level I and II
 - Education programs: site visit, invited talks on epilepsy by epileptologists from ECoE.
 - Set up teleconference for Physical Medicine and Rehabilitation (PM&R) provider education.
 - Invite providers from the Polytrauma sites to participate in National ECoE provider's CME education audio conference.
 - Establish Referral Pathways: 1) Screening questions used by Houston (in testing phase); 2) onsite continuous EEG monitoring: San Antonio and Palo Alto; 3) Inter-Facility Consult (IFC).
 - Long term goal: To Standardize Clinical Practice.
- Epilepsy Telemedicine Clinic: V-Tel within the same VISN of ECoEs and beyond.
 - V-TEL: San Francisco, West Los Angeles, Houston, Albuquerque.
 - San Francisco Model: Eureka, Ukiah, Clearlake and Fresno, (Reno), mostly for follow-up cares, but could accept new patients. A nurse is available at the remote site.
 - WLA: Setting up V-Tel clinic with Loma Linda VA, intended for new patients for EMU referrals; plan to expand to San Diego, Las Vegas and Tucson. Rural outreach program to Bakersfield, Lancaster, Santa Maria.
 - Houston: setting up V-Tel clinic within VISN 16.
 - Albuquerque: V-TEL clinic infrastructure ready for satellite sites.
 - San Antonio: plan to set up the V-TEL capability.



SAN FRANCISCO VA MEDICAL CENTER

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www.epilepsy.va.gov/SouthWest/SanFrancisco



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FY11 Accomplishments:

- Video Telehealth Epilepsy Clinic at 4 sites: Eureka, Ukiah, Clearlake, and Fresno.
- Increased outreach to other VA sites with visits by our team: Martinez, Palo Alto, Hawaii, and Fresno.
- Started a database to track the clinical characteristics and treatments of our patients.
- Began an epilepsy counseling program, including screening for depression at clinic visits and case management.
- Increased EMU capacity to 4 beds (from 2), plus 2 portable machines.
- PET scanning capability made available.
- Additional 0.5 FTE EEG Technologist allowing 7 days a week coverage.
- Developed a Fellowship in Neuroimaging and Epilepsy (though position remains unfilled).
- Purchased cortical stimulator with intracranial recording software with 128-channel capacity LTM system.



Education / Outreach Activity:

- Educational lecture series for patients and caregivers: every other month, including video and slide archive on www.epilepsy.va.gov. Lectures are evaluated and continuing education credits are available.
- Awarded collaborative grant with the Epilepsy Foundation of Northern California for patient and provider Veteran outreach education. Distributed DVD of lecture “Epilepsy and TBI” to Veterans in Eureka, Ukiah, Fresno, Clearlake, Merced, and Redding.
- Veterans Living with Epilepsy monthly support group.
- Established local website for SFVA ECoE.

Challenges / Barriers:

- Referrals from other VA sites — historical affiliate relationships not easily adjusted (i.e. Salt Lake City, Utah).
- Travel costs not being covered adequately by referring VA sites always.
- Ensuring adequate mental health follow-up for patients from other VA sites.
- Difficulty for Veterans with epilepsy to access care and resources with limited transportation options.

Future Initiatives:

- Expand Video Telehealth services to additional sites, and not just for patients, but for providers.
- Begin a caregiver support group.

GREATER LOS ANGELES VA MEDICAL CENTER

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Vacant	Monitoring Technician			

FY11 Accomplishments:

- The West Los Angeles VA ECoE has completed the installation of the Epilepsy Monitoring Unit (EMU) with the state-of-the-art HD video EEG monitoring equipment for two monitoring inpatient beds with remote viewing capability. The EMU has been in operation with weekly admission of epilepsy patients since November, 2010.
- We have set up regular referral channels for the following VAs to send patients to West Los Angeles for epilepsy monitoring: Loma Linda VA, Las Vegas VA, Long Beach VA and San Diego VA.
- We have dedicated weekly seizure clinics with a team approach philosophy to provide cares to our patients. The patients are evaluated by a team of epilepsy fellows, attending epileptologist, neuropharmacist and EMU nursing coordinator in one visit. EEG study, if indicated, is completed in the same visit.
- We have completed two phase II studies with implanted intracranial electrodes.
- We have implanted vagus nerve stimulator in two patients.
- One patient had temporal lobectomy for tumor-associated epilepsy.
- One patient received cortical mapping with electrical stimulation using the implanted electrodes. We have acquired special equipment to perform this task with software controlled current stimulation.
- We have established a WADA service team at the West Los Angeles to run WADA study on site. The team includes a neurosurgeon, neuropsychologists, epileptologists, epilepsy fellows, EEG technician and pharmacists.
- We have established a regular "Epilepsy Surgical Conference" at West Los Angeles to make a group decision on epilepsy related surgical procedures. This conference occurs about 1-2 times per month.
- We have established two CPRS template based notes to convene all relevant information for seizure clinic and for EMU admission (Epilepsy Center Physician Monitoring Note).

Education:

- The education program is led by Dr. James Chen. He is the director of the West Los Angeles VA / UCLA ACGME accredited Clinical Neurophysiology Program with two PGY-5 trainees and the mentor of a non-ACGME VA Advanced Fellow in Epilepsy Research.
- The fellowship training program and the ECoE operation is fully integrated. The ECoE provides the infrastructure for the fellows' clinical trainings and the fellows have added manpower and dimensions to the services.

Outreach Activity:

The outreach activity is led by Dr. Christine Baca.

- Veterans Outreach Project: We worked in partnership with the Epilepsy Foundation of Greater Los Angeles (EFGLA) to develop and implement an educational outreach program for Veterans with epilepsy residing in rural areas, their families, in addition to primary care health care providers providing care to these Veterans in outlying Greater Los Angeles CBOCs.
- Outreach activities included the following:
 1. Visit to the following CBOCs to meet and give lecture to health care providers about the relationship between epilepsy and traumatic brain injury and introduce the new ECoE in LA:
 - Bakersfield ~ 12 providers.
 - Lancaster ~8 providers.
 - Santa Maria/ Santa Barbara/ San Luis Obispo quarterly meeting of providers ~60 providers.
 - During our visit to the Bakersfield and Lancaster CBOC we also provided educational materials about epilepsy to Veterans in the clinic.
 2. 2 Webinars by Dr. Christine Baca to patients/families ~ total of 10-12 patients.
 3. Provided educational materials about epilepsy to patients taking buses from outlying remote clinics to VA (EFGLA staff rode the bus) ~ connected with 63 Veterans and families residing in rural areas.
 4. Media campaign on VA Greater Los Angeles Intranet, VA Greater Los Angeles Facebook and Twitter page about epilepsy and TBI.
 5. Website developed www.Veteransandepilepsy.org
 6. Public service announcements of epilepsy by EFGLA and Women in Film tagged with VA logo.

Challenges / Barriers:

- Lack of a funding mechanism to reward cooperation in basic and/or clinical research between ECoEs. A “Center without walls” concept with even modest funding would help create an ECoE community in which the whole could be “greater than the sum of its parts”.
- Provide telemedicine care across state line and VISN line.

Future Initiatives:

- Telemedicine, specialty-subspecialty epilepsy care: between West Los Angeles VA and Loma Linda VA, and other VA sites.
- Telemedicine, remote sites: we plan to expand our services to outlying primary care facilities that do not have a neurologist.
- Establish referral channels for two Level 2 Polytrauma Centers: West Los Angeles VA and Tucson.
- Establish screening method for the patients in the Polytrauma Centers.
- Dr. Chen plans to establish EEG researches for post-traumatic epilepsy using advance quantitative EEG analysis algorithms.
- Dr. Wasterlain is working on developing a model of blast injury-induced epileptogenesis, and on finding research projects that could involve many ECoEs.
- Dr. Baca, in collaboration with the Southern California Epilepsy Foundation, is working on expanding the outreach programs.
- Dr. Escueta is working on setting up an epilepsy database for genetic studies.

Other Information:

- The faculty and fellows of the West Los Angeles ECoE are actively engaged in epilepsy research. The scope of research includes basic science research in studying the basic mechanism of seizures, epilepsy and status epilepticus and clinical outcome research. Among the different basic science research projects in the four laboratories, the techniques used include molecular, genetic, optogenetic, neurochemical and various electrophysiological methods. In addition, computational and quantitative techniques are employed for genetic studies and EEG analysis. Two faculty are funded by NIH R01 and VA merit review grant, and one junior faculty was funded by a NIH K08 career development award and one other faculty who has completed the NIH career development award. There is also funding from foundation grants, etc.

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Vacant	Epileptologist			

FY11 Accomplishments:

- The New Mexico VA Health Care System has one medical center located in Albuquerque whose clinical faculty is affiliated with the University of New Mexico, School of Medicine. It is the 5th largest size state in the US with a population of 2 million and is considered a southwest mountainous state. The Albuquerque medical center has 6 CBOC outreach clinics and 5 contract clinics located throughout the state and southern Colorado.
- Approximately 40% of the neurology patients currently being seen in Albuquerque must travel a distance of 100 to 300 miles requiring 1-5 hours to commute in one direction. We have long recognized that many of our Veterans with neurologic diseases cannot drive themselves because of their neurologic illness and must depend on a spouse or relative to take the day off to bring them to Albuquerque. Because much of New Mexico is mountainous and Albuquerque is at one mile elevation, any inclement weather makes the commute difficult and dangerous. As such, it is not rare for a Veteran to miss their neurologic appointment because of inability of the driver to be available that day or because of inclement weather.
- When televideo health care was adopted by the VA, our Neurology Service immediately recognized that it could be an ideal way to deliver remote health care to our Veterans with chronic neurologic illnesses. The Neurology Service made a decision to deliver follow up neurologic care to all Veterans living in remote parts of the state with neurologic illnesses. The Neurology Service focuses their teleneurology care to specialized types of patients such as those with epilepsy, Parkinson's disease, or multiple sclerosis.
- Teleneurology groups include all 6 of the NM CBOCs that have ongoing telehealth programs. Our ECoE staff has personally talked to the providers in every CBOC and we have visited about half the CBOCs. All staff and providers at the CBOCs have shown enthusiasm for seeing their patients by teleneurology. In addition, there are 5 contract clinics throughout the state.
- Our Neurology Service has been seeing patients at 4 CBOCs for six months to deliver follow up care. These patients have been initially evaluated at the Albuquerque medical center usually in our neurology clinic where they had a through workup that often included neuroimaging, EEGs, and a cardiac evaluation. During the visit the patient got to meet and know the neurology staff. At the end of the visit, we discussed with the patient and their family about the availability of teleneurology and the possibility of being seen in followup at their local CBOC by teleneurology. With one exception, all have enthusiastically agreed to this method of followup, a specific followup teleneurology visit was set up, and the patient was successfully seen at their local CBOC subsequently by televideo.
- We hold epilepsy clinic four afternoons a week with the nurse practitioner. We have the seizure specialist for epilepsy clinic one day a week. Teleneurology epilepsy clinic one morning a week.

Education / Outreach Activity:

- Developed handouts for the patients with medication information. Provide information to patients through epilepsy foundation and National patient literature.

Challenges / Barriers:

- Wait time to obtain VEEG's through the University of New Mexico, we do not have our own epilepsy monitoring unit.
- Nearing the end of a 1 ½ year remodeling project that has conflicted with completing EEG's because of the construction noise.

Future Initiatives:

- Work with psychiatry in treating non-epileptic seizures
- Develop method to send EEG's to University of New Mexico Health Sciences Center for reading and if need be to the West LA ECoE.

Other Information:

- Permanent location to be established in FY12.

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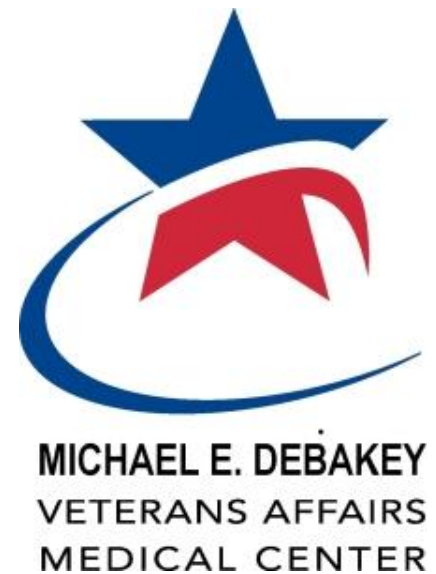
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Vacant	Health Systems Scientist			

FY11 Accomplishments:

- Increased EMU to 4 –bed Unit
- Continued to develop hub and spoke care model – established referral lines to the Epilepsy Monitoring Unit from VA hospitals in 9 states including Arizona, Kansas, Oklahoma, Arkansas, Louisiana, Mississippi, Alabama, Florida, and Texas.
- Coordinated 4 Epilepsy Surgeries
- Developed formal Resident education series
- We have established a closer working inter-working relationship with our local polytrauma center within Michael E. DeBakey VA Medical Center (Rehabilitation Care Line). Dr. Chen has given formal presentations to the rehabilitation service regarding the significance of epilepsy risk among Veterans with moderate and severe traumatic brain injury. We have developed a formal protocol delineating a decision tree to guide direct referrals to our epilepsy monitoring unit versus referral to our seizure clinic. Our close working relationship is further enhanced by the establishment of a clinical elective for which PM&R Fellows can rotate through our neurophysiology laboratory. Through these interactions, we aimed to elevate awareness and visibility of specialized treatment such as epilepsy surgery and advanced neurophysiologic technology available within our epilepsy center of excellence.



- Developed and implemented monthly Nonepileptic Stress Attack patient and caregiver education class. This class includes video demonstrations of epilepsy and non-epileptic stress attacks. Power-point presentation includes definition, pathophysiology, diagnosis, related testing, stress management, goals, and prognosis.
- Implemented monthly Nonepileptic Stress Attack Self-help Group Meeting is to promote mutual support, creative thinking, and information sharing.
- Established V-Tel capabilities with outlying CBOC's
- EEG Remote reading set-up nearing completion

Education / Outreach Activity:

- Resident Education Epilepsy Lecture Series
- Monthly Nonepileptic Stress Attack Patient Self-Help Support Group Meeting
- Monthly Nonepileptic Stress Attack Patient and Caregiver Education Class

Challenges / Barriers:

- Implementation of EEG Remote Reading was a challenge due to VHA Privacy regulations, Biomedical staffing inexperience and IT decentralization.
- Technologist staffing: Two of our technologists have decrease to intermittent status working less than 8 hours per week. Due to FTE ceiling restrictions the ECoE has been prohibited from actively recruiting for our vacant technologist positions. We are currently pursuing contract staff to fill these vacancies.
- Despite several checks the Austin database is not capturing all of the ECoE workload; we are working with DSS to correct the problems as they are identified.

Future Initiatives:

- Standardize patient educational materials
- Implement Seizure Clinic Templates
- Develop guidelines for referral
- Develop Interfacility consult for Seizure Clinic
- Implement Nursing Journal Review
- Develop Research projects including FMRI and Epilepsy & Pseudo-seizures. Also, we will partner with the local Polytrauma/PM&R physicians to submit a merit review grant investigating the long term outcomes in Veteran patients who have suffered mild TBI.

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Leary, Linda	Epileptologist – contract	0.00	0.01
Tolstikh, Gleb	Research Physiologist	0.00	1.00

FY11 Accomplishments:

- Construction of the Polytrauma Center has been completed.
- Conversion of Neuro Seizure clinics and EEG codes into ECoE codes.
- Research presentations at annual meeting of the American Epilepsy Society
- Several research manuscripts were published
- Lead site for submission of research grant (CDC-Up Lift project)

Education / Outreach Activity:

- Network with local chapter of Epilepsy Foundation (Epilepsy Foundation of Central and South Texas)
- Grant funding to EF chapter to outreach South Texas Veterans and increase awareness of post-traumatic epilepsy.
- The South Texas Comprehensive Epilepsy Center and the San Antonio ECoE presented a patient centered conference open to the public. The 4th annual Epilepsy Diagnosis and Management Symposium were presented at the Norris Conference Center in San Antonio on Saturday October 23, 2010.

Challenges / Barriers:

- Limited ECoE funding
- Old video EEG equipment (c. 2002) with repeated times been in-service

Future Initiatives:

- Institutional approval for upgraded equipment with more advanced capabilities.

- Funding of ECoE center commensurate to level of activity.
- Dr. Cavazos is presenting a national teleconference on AEDs and Drug Interactions sponsored by the National ECoEs on September 7, 2011.
- The 5th annual Epilepsy Diagnosis and Management Symposium is scheduled for November 19, 2011 at the La Quinta Medical Center.
- Conduct chart abstractions to validate and refine epilepsy identification algorithms using VA data.
- Work with ECoE biostatistician to conduct operational epilepsy surveillance that can guide staffing and examine the quality of care.

NORTHEAST REGION

FY11 Accomplishments:

- Epilepsy Monitoring Program initiated and/or expanded in Baltimore, Richmond, and West Haven with purchase of video EEG equipment and servers, emergency EEG availability 24/7, and provision of ambulatory EEG monitoring.
- Specialized imaging for epilepsy identified and consolidated at all three sites including epilepsy specific MRI protocols and PET scanning
- Surgical options, including focal resections and VNS, are available at Baltimore and Richmond. Also associated services including Wada testing and neuropsychological assessments prior to surgery established.
- Expansion and reorganization of outpatient clinics at Baltimore, Richmond and West Haven.
- West Haven piloted an innovative program for Cognitive Behavioral Therapy of Nonepileptic Seizures using Tele-Health type resources.
- Regional External Advisory Board meetings were held in Baltimore and West Haven in conjunction with local area conferences and with the involvement of local Epilepsy Foundation affiliates.
- Close collaboration of nurses, technologist, and physicians at the Richmond ECoE and Virginia Commonwealth University's Comprehensive Epilepsy Center, at the Baltimore ECoE and University of Maryland Epilepsy Center
- Network development: Richmond referrals from Hampton VAH, Louisville VAH, Salem VAH, and Beckley VAH; Baltimore outreach to Wash. DC; West Haven VA collaboration with Boston
- Staffing:
 - Epileptologist hired as Co-Director at West Haven
 - Fellowships filled at Richmond (full-time neurophysiology), and established at Baltimore (Clinical Polytrauma/Epilepsy)
 - EEG tech and RN hired at Baltimore,
 - Accredited symposia co-sponsored by Baltimore (U of MD/Johns Hopkins) and West Haven (Yale). Plans for a Spring 2012 Richmond (Hans Berger) conference, regional and Advisory Board meeting; and Fall 2012 conference in Baltimore are underway.
- Partnerships with various groups, such as the Wounded Warriors Program, the Virginia Brain Injury Consortium and the Virginia Department of Veterans in Richmond, the Epilepsy Foundation in Baltimore and West Haven



Future Initiatives:

Baltimore

- Expansion to two-bed EMU with construction of Progressive Care Unit.
- Expansion of research initiatives to include clinical research, with a special focus on FDA funded generic AED study
- Exploration of CVT (Clinical Video Telehealth) to expand clinical expertise into geographically underserved areas
- Expansion of clinical network for referrals and consultations
- Coordinate some activities, resources, and activities with MS CoE at our Baltimore site

West Haven

- Intends to further develop tele-health services (Scan-Echo), and is working out the logistics of space, billing, technical support at distance sites, and funding. Successfully piloted tele-health services for Newington, CT, and Richmond, VA, and will continue to collaborate with the National Tele-Mental Health program to develop a program to neuropsychiatric care for patients with epileptic as well as non-epileptic seizures.
- Intends to provide neuropsychiatric evaluations and management recommendations at a national level for both epileptic and non-epileptic patients through video tele-conferencing.
- Expand fixed epilepsy monitoring beds for EMU services
- Intends to recruit a needed additional EEG tech.
- Expand regional network of referrals to Mass., New York, and Rhode Island

Richmond

- Develop a Tele-Epilepsy program to screen geographically distant Veterans for the EMU and epilepsy clinics.
- Recruit an additional epileptologist supported by local funding.
- Build on strong relationship with our Polytrauma Center and staff
- Sleep monitoring capability has been established in the EMU. The Richmond ECoE is collaborating with the Sleep Center and the Polytrauma Unit to monitor sleep and video/EEG in polytrauma patients.
- A Transcranial Magnetic Stimulator (TMS) was recently purchased by the medical center and use to be expanded by the ECoE for cortical mapping in selected patients.
- Research proposals are being developed, including the clinical neurophysiology of TBI and PTSD, sleep and epilepsy in the polytrauma population and the development of a neuroscience research incubator for translational research, funded by Neurology and polytrauma funds. Sleep/Polytrauma/Epilepsy research initiated.
- Will continue to work closely with our neurosurgery department to assure that all surgical options are implemented at our center.
- Expanding the EMU, by adding two additional rooms for a total of four. This will enhance monitoring capability and increase availability of this service for Veterans.

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Vacant	NP			0.500
Vacant	Medical Instrument Tech			1.000

FY11 Accomplishments:

- The Medical Center Memorandum for the EMU was approved and the EMU had its first patient on February 15, 2011.
- Three portable video/EEG acquisition systems have been purchased to monitor patients with suspected seizures in the ICU's and inpatient services. They are currently being used to monitor patients with suspected or diagnosed epilepsy and/or status epilepticus.
- A two-bed video/EEG EMU with network server has been installed and is ready to accept patients.
- Ambulatory EEG recording has been established for outpatient EEG evaluation.
- We perform routine EEGs and evoked potential studies for outpatients and inpatients at our own medical center and for Veterans from other VA's located in our region.
- We have established 24/7 availability for emergency EEGs.
- Patients with suspected seizures who requiring neurophysiologic monitoring are being referred to the Richmond ECoE from the Hampton VAH, Louisville VAH, Salem VAH, and Beckley VAH.
- The epilepsy outpatient clinic has been expanded, due to the increased number of patients seen at out medical center.
- 83 new patient evaluations and 330 follow-up appointments occurred during FY 2011.
- There is close collaboration of nurses, technologist, and physicians at the Richmond ECoE and Virginia Commonwealth University's Comprehensive Epilepsy Center.
- We are working closely with our neurosurgery department to assure that surgical options for the treatment of epilepsy are available.

Education / Outreach Activity:

- Student, resident fellowship and faculty education has been enhanced by interdisciplinary conferences focusing on the evaluation and treatment of patients with epilepsy and seizures.
- We have a full-time clinical neurophysiology fellow, who participates in EEG interpretation, epilepsy patient care, and educational activities.
- An information center was created in the clinic area, where Veterans, care givers, and health care providers can select from a variety of brochures and handouts about epilepsy, seizure management, and safety.
- We have seizure pamphlets that we have available to give out to our patients for more information about their condition.
- We provide nurse/physician counseling to our patients to better help them understand their seizures and the medications that need to be taken to control the seizures.

- Our center has partnered with various groups, such as the Wounded Warriors Program, the Virginia Brain Injury Consortium and the Virginia Department of Veterans Affairs to disseminate information concerning the ECoE.
- In July, *The Richmond Times-Dispatch* published an article about Veterans with TBI, epilepsy and dementia, highlighting the Richmond ECoE.

Challenges / Barriers:

- There is limited space available for outpatient care and for ECoE personnel.
- We are working with the Richmond Polytrauma Service to increase our space for clinical and research programs.
- The need to share EMU beds with the polytrauma unit has limited the number of EMU admissions.

Future Initiatives:

- We are developing a Tele-Epilepsy program to screen geographically distant Veterans for the EMU and epilepsy clinics.
- Sleep monitoring capability has been established in the EMU. The Richmond ECoE is collaborating with the Sleep Center and the Polytrauma Unit to monitor sleep and video/EEG in polytrauma patients.
- A Transcranial Magnetic Stimulator (TMS) was recently purchased by the medical center and will be used by the ECoE for cortical mapping in selected patients.
- Research proposals are being developed, including the clinical neurophysiology of TBI and PTSD, sleep and epilepsy in the polytrauma population and the development of a neuroscience research incubator for translational research, funded by Neurology and polytrauma funds.
- We will continue to work closely with our neurosurgery department to assure that all surgical options are implemented at our center.
- We are expanding the EMU, by adding two additional rooms. This will enhance monitoring capability and increase availability of this service for Veterans.

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Vacant	Program Asst			0.500
Vacant	Medical Instrument Tech			1.000

FY11 Accomplishments:

- An Epilepsy Monitoring Program was established at the Baltimore facility
 - EEG monitoring equipment was purchased and installed in the CICU.
 - Planning for the PCU location for the EEG monitoring unit has begun with an estimated start date of October, 2011
 - CPRS interface is complete and server support has been purchased and installed
 - Nursing education has been completed in the CICU.
- Epilepsy surgery was initiated at the VAMHCS in May 2011, with 2 to 4 patients admitted yearly and others identified for referral. It is estimated that this surgery costs \$100,000 per patient when fee based.
- The ECoE hired an EEG tech effective ppd 1. This will allow for a decrease in the VAMHCS Neurology Service contract with the University of Maryland at an estimated cost savings of \$15-20,000 this fiscal year.
- Vagal Nerve Stimulation is now being referred to VAMHCS instead of fee based referrals.
- WADA testing is now available in collaboration with Neuropsychology and Imaging.
- The Executive Committee, Medical Staff (ECMS) accepted the ECoE Impact Statement at the June 2010 meeting. This was a culmination of months of collaboration and planning with leadership including those from Neurology, Medical Care, Surgery, Nursing, Imaging, Neuropsychology, Physical Medicine and Rehabilitation, and Information Resource Management.
- With the recruitment of a Nurse Case Manager in August 2011, clinical and utilization management programs will be expanded. Informatics has supplied a list of patients with seizure diagnoses to improve case management and follow-up.
- New clinics were added for the Fellow, Dr. Diane Thomas and Nurse Practitioner, Regina McGuire, to expand access for epilepsy patients.
- A contract with Digitrace has been secured for ambulatory EEG monitoring.
- The ECoE, NE administrator in Baltimore developed resources to assist the ECoE leadership and administration:
 - SharePoint site (<https://vaww.visn5.portal.va.gov/sites/RO/ECOE/default.aspx>) was created to be used by the national ECoE programs to post announcements, policies, standards and other documentation of interest to other ECoE centers.

- At the request of the National Neurology Director, the ECoE Baltimore administer prepared a manual: HYBRID TITLE 38, GUIDANCE FOR RECRUITMENT AND PROMOTION for MEDICAL INSTRUMENT TECHNICIAN (EEG) GS-649. This guide required classification of new levels of functional statements and a summary of VA policies and FAQ.
- The four ECoE regions were represented at a national ECoE meeting held in San Antonio in December 2010 during the annual American Epilepsy Society conference. Updates from the regions as well as the specialized work groups were extremely beneficial in strengthening the network and focusing on issues to be prioritized.
- The ECoE, NE, made strides to expand organizational format and structures
 - Baltimore continues to be the Coordinating Center for the ECoE NE, taking a leadership role in administrative responsibilities.
 - Monthly ECoE, NE, conference calls including the Directors, administrative and nursing staff
 - Reports to VACO, including budget and facility resources have been provided

Education / Outreach Activity:

- On October 29, 2010, the ECoE NE/Baltimore provided funding for the registration for 34 VA clinicians to attend a conference sponsored by the University of Maryland, Johns Hopkins and other local agencies: “Recent Advances in Epilepsy Treatment” at the Harbor Court Hotel, Baltimore, MD.
 - Dr. Elizabeth Barry was the Committee Chair. She and Dr. Jennifer Hopp represented the ECoE on the faculty.
 - The conference also included speakers from the Johns Hopkins School of Medicine, the University of Pennsylvania, and Columbia University Medical Center.
 - The ECoE staffed a booth to provide education about opportunities for care and research at the VA in addition to educating the community about the ECoE.
 - Richmond provided funds for two Polytrauma staff members to attend the conference in addition to three ECoE staff members.
- Nursing staff from Baltimore and Richmond confer regularly and have met during national conferences to further collaborate with nurses from ECoE NW and SW.
- Regina McGuire, NP, attended the MSCOE Caregiver/Community Board meeting in Baltimore on May 11, 2010.
- Dr. Krumholz presented the ECoE at the MSCOE strategic planning retreat in Baltimore on May 20, 2010, to identify mutual resources and goals to pursue potential collaborations.
- The ECoE collaborated with the local chapter to submit an Epilepsy Foundation grant
- As part of the accredited continuing education provided by the national ECoE for VA providers, on February 1 at 2pm EST, Dr. Allan Krumholz will present a lecture on “Intractable Seizures. This will be offered throughout the VA system via LiveMeeting with recordings available on-line.
- Dr. Diane Thomas has been awarded a 1-year Clinical Polytrauma (Epilepsy) Fellowship beginning July 2011 through the Office of Academic Affairs, VACO.
- Dr. Beth Jolly has been recruited to begin a 1-year Clinical Polytrauma (Epilepsy) Fellowship beginning July 2012
- Planning has begun for the ECoE to sponsor and collaborate with the Epilepsy Foundation and the University of Maryland and Johns Hopkins Schools of Medicine for a biannual clinical conference to be held in the Fall 2012. Dr. Ana Sanchez, ECoE, is the co-chair for this event.

Challenges / Barriers:

- Lack of space is an on-going barrier to program development.
 - Clinic space for all Neurology clinics has limited expansion and access. The VAMHCS is aware of this problem and seeking solutions including leased space and renovations to current building structures.
 - A similar problem exists for office space. Currently, the ECoE is sharing space (and some staff) within the MSCOE suite, but there is a need for physician offices.
 - The Epilepsy Monitoring Unit (EMU) has been assigned a room in the Coronary Intensive Care Unit, a temporary measure pending construction for a Progressive Care Unit
- Staffing issues:

- Approval of functional statements and Neurology/ECoE organizational structure has caused delays in hiring staff.
- Recruitment of an Epilepsy Fellow was accomplished through the TBI/Polytrauma program and required clarification of the process through the Office of Academic Affairs.
- Technological issues:
 - Purchase and installation of a server to be used with EMU equipment was delayed because of the need for IRM approval and assistance as well as local financial policies.
 - Installing and integrating IT and other equipment with CPRS and other IT systems (including off-site viewing capability) has been complicated, compounded by the need to coordinate with outside vendor support.
- A lack of standardized national guidelines for structures and operation (e.g., Medical Center Memoranda and other policies, training modules, consent forms, etc.) has resulted in a need to draft unique facility documents.
- Regional network development has been hindered by lack of clear lines of communication and referral responsibilities for various components, along with a lack of resources to develop outreach or satellite networks.

Future Initiatives:

- Expansion to two-bed EMU with construction of Progressive Care Unit.
- Expansion of research initiatives to include clinical research
- Exploration of CVT (Clinical Video Telehealth) to expand clinical expertise into geographically underserved areas
- Expansion of clinical network for referrals and consultations

Other Information:

- Advisory Board memberships have been developed for both Professional and Community/Caregiver groups.
- Directors and staff from the Richmond and West Haven sites assisted with the first ECoE NE Professional Advisory meeting in Baltimore on October 28, 2010, preceding the conference described above on October 29.
 - Membership of the Professional Advisory Board includes representatives from the MS Center of Excellence-East, Walter Reed Army Medical Center, Epilepsy Foundation, Richmond VAMC Polytrauma Center, Washington DC VAMC Neurology Service, Baltimore VAMC Neuropsychology and Research, and the Johns Hopkins Department of Neurology.
 - Advisors were pleased at the progress to date and offered advice and encouragement on the function of the advisory board, increasing involvement in research, education including fellowship opportunities and collaboration with the Department of Defense.
 - In addition to local participation, a conference call was provided for those unable to attend.
 - The ECoE at West Haven sponsored a similar Professional Advisory Board meeting on May 12, 2011, preceding a conference held on May 13.

VA CONNECTICUT HEALTHCARE SYSTEM

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Education / Outreach Activity:

Patient/Community Outreach:

- Guest appearance in the show “Sandbox Chronicle” Connecticut Public Broadcasting Network to discuss “Traumatic Brain Injury and Epilepsy” Aired July 7, 2011.
- Developed website with Epilepsy Foundation-Connecticut.
- Posted informational fliers in the Connecticut VA Health Care Center and West Haven Veterans Center with Epilepsy Foundation.

Professional/Academic Lectures and Presentations:

- Co-Hosted with Yale University School of Medicine Epilepsy Symposium, May 13th, 2011.
- “Long Term Depression Outcomes After Resective Epilepsy Surgery” Abstract presented at American Epilepsy Society 64th Annual Meeting, San Antonio, TX.
- “White Matter Changes in People with Epilepsy and Depression: A Diffusion Tensor Imaging Study” Abstract presented at 18th Annual Scientific Forum of the National EpiFellows Foundation December 3, 2010 San Antonio, TX.

Challenges / Barriers:

- Our two primary challenges, which may be universal to all ECoE, include space and recruitment of staff.
 - We do not have fixed room monitoring units at this time and continue to perform VEEG with portable units due to difficulty in identifying adequate space.
 - Without an additional EEG Technologist we are not able to provide weekend and night time emergency services.
- Once an additional EEG technologist and clinical coordinator are recruited, services will be expanded to other sites within the northeast region. We do intend to develop tele-health services but are working out the logistics of space, billing, and technical support at distance sites. We plan to pilot the tele-epilepsy evaluations in Connecticut this year.

Future Initiatives:

- We do intend to further develop tele-health services but are working out the logistics of space, billing, and technical support at distance sites. We successfully piloted tele-health services for Newington, CT, and Richmond, VA. We are continuing to collaborate with the National Tele-Mental Health program to develop a program to neuropsychiatric care for patients with epileptic as well as non-epileptic seizures.
- We intend to provide neuropsychiatric evaluations and management recommendations at a national level for both epileptic and non-epileptic patients through video tele-conferencing.

- Within three years we would like to develop a tele-mental health cognitive behavioral therapy program specifically for non-epileptic seizure patients, which will be eventually scaled up to a national level service.

Other Information:

Awards:

- Hamada Hamid, DO, MPH
 - Awarded the Young Investigator Award at American Epilepsy Society 64th Annual Meeting.
 - Top 10% of Abstracts for “Long Term Depression Outcomes After Resective Epilepsy Surgery” at American Epilepsy Society 64th Annual Meeting.

NORTHWEST REGION

FY11 Accomplishments:

- “Traumatic Brain Injury and Posttraumatic Epilepsy: A Prospective Study,” approved for funding by AES
- Merit Reviews
- Career Development Research Grant

Education / Outreach Activity:

- EES courses
- Grand Rounds at other VAMCs
- Veterans Outreach in Rural Communities, approved for funding by EF
- Epilepsy Inpatient Art Project
- Patient & Clinician Education
- Mini Fellowships
- Tele-EEG between Portland ECoE & Boise VAMC
- Jesse Brown VAMC Video-teleconferences
- Jesse Brown VAMC Mini Fellowship
- Video & EEG equipment Upgrades
- Fully operational EMU monitoring units & Epilepsy Clinics



Future Initiatives:

- Research
 - “Psychogenic Nonepileptic Seizures in U.S. Veterans.” (Dr. Marty Salinsky)
 - ECoE Post Traumatic Epilepsy database
- Service
 - Establish Tele-Epilepsy with Boise VAMC & Tele-EEG with Roseburg VAMC
 - Obtain EEG Lab ABRET Accreditation
 - Establish interconnectivity within NW ECoE Region using CITRIX Servers
 - Increase ECoE inpatient & outpatient services
 - Seattle ECoE will add EMU bed
 - OAA Epilepsy Fellowships, July 2012
 - Add FTE to Portland & Minneapolis
- Education
 - NW ECoE CME Course, October 2012
 - Nurse Manual Implementation & Training
 - Mini-Fellowships
 - Outreach Events
 - Patient and provider training sessions
- Advisory Board
 - Re-Organize Process
 - Nominate Veteran from NW ECoE Region

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Jastrab, Joann	Administrative Officer	Joann.Jastrab@va.gov	(608) 256-1901	1.000

FY11 Accomplishments:

- Recently, the Joint Commission named The William S. Middleton Memorial Veterans Hospital as a Top Performer on Key Quality Measures for 2010.
- The Madison Epilepsy Center of Excellence and Epilepsy Foundation Southern Wisconsin have been recently awarded a grant. The grant is for \$10,000 to perform Veterans Outreach in Rural Wisconsin Communities. The goal of the grant is to support returning service men and women, as well as their family members, in all Wisconsin communities by insuring adequate awareness of Post Traumatic Epilepsy following Traumatic Brain Injury.
- “Traumatic Brain Injury and Posttraumatic Epilepsy: A Prospective Study” was competitively reviewed and approved for funding in the amount of \$25,000 to the Madison ECoE from the Epilepsy Foundation.
- The Epilepsy Inpatient Art Project received 1st place Director’s Innovation Award. The project promotes public awareness and understanding of epilepsy and educates the public about the symptoms of epilepsy and seizure disorders.
- The ECoE completed a Rapid Process Improvement Workshop (RPIW) and is finalizing a hospital policy on Epilepsy Inpatient Care, which will hopefully be published and promoted within the hospital. This policy will improve the treatment of Veterans with epilepsy.
- A seizure screening questionnaire was created and is being used with OIF/OEF Veterans who may also have had a TBI.
- The ECoE provides state of the art evaluation and treatment of neurological disorders. This includes epilepsy evaluation through the epilepsy center of excellence, 24/7 emergency consultations, appropriate inpatient service evaluation, and timely neurodiagnostic evaluations (electroencephalography, electromyography, nerve conduction studies, and evoked potential studies).

Education / Outreach Activity:

- Ronda Tschumper, Neurodiagnostic Supervisor, presented on the topic of “Electroencephalography (EEG) Testing—A Practical Training,” on September 13, 2010 in the Patient Education Resource Center.
- Dr. Jack Jones, M.D. presented on the topic of “Introduction to Epilepsy & Seizures,” on January 10, 2011 in the Madison VAMC Auditorium.
- Dr. Barry Gidal, presented on the topic of “Generic anti-epileptic drugs, what are the issues,” on March 7, 2011 in the Madison VAMC Auditorium.

- Dr. Rutecki, M.D. and Madison ECoE personnel participated in the “Research Fair” at the Madison VAMC on May 3, 2011. He showed videos of rats with very subtle seizures and rat and human MRIs of traumatic brain injury. He also discussed about the risk of epilepsy after traumatic brain injury and who is most at risk.
- Ann Houdek presented on the topic, “Talking To Your Doctor About Epilepsy,” on May 9, 2011 in the Madison Patient Education Resource Center and she also has conducted Nursing In-Services on the topic of Epilepsy.
- Dr. Rutecki presented on the topic of “Traumatic Brain Injury & Epilepsy,” on May 16th at the Crowne Plaza Hotel in Madison, Wisconsin and May 4th via a national conference call for Continuing Education for Professionals - FY2011 Epilepsy Series.
- Joann Jastrab, AO presented at the County Veterans Service Officer Annual Conference on the topic of the Madison Epilepsy Center on May 18, 2011 in Waunakee, Wisconsin.
- The Madison ECoE hosted members of Jesse Brown VAMC, Neurology Service on Friday, May 20, 2011 for a day of activities related to the Madison Epilepsy Center of Excellence (ECoE) and conducted regular VTEL conferences with Jesse Brown VAMC personnel on the topics of Epilepsy.
- Joann Jastrab, AO presented at the Madison VAMC all provider meeting June 3, 2011 on the topic of the Madison Epilepsy Center of Excellence.
- Dr. Paul Rutecki, M.D. presented on the topic of “Epilepsy and the Implications of Diagnosis,” on August 9, 2010 in the Patient Education Resource Center
- Dr. Barry Gidal presented on the topic of “Traumatic Brain Injury & Epilepsy,” August 16, 2011 at 6:00 p.m. in Tomah, Wisconsin.

Challenges / Barriers:

- Many patients receive their day-to-day care by a neurologist close to home but come to Madison VA Medical Center for special tests or treatment. The need for continued communications will be paramount for continuity of care; therefore the role of technology, such as telehealth, cannot be underestimated for long-term treatment of chronic neurological problems.

Future Initiatives:

- Development of teleEpilepsy at remote sites (Tomah and Iron Mountain).
- Development of a TBI posttraumatic epilepsy data base,
- Monitor the diagnosis determined by EMU studies,

Other Information:

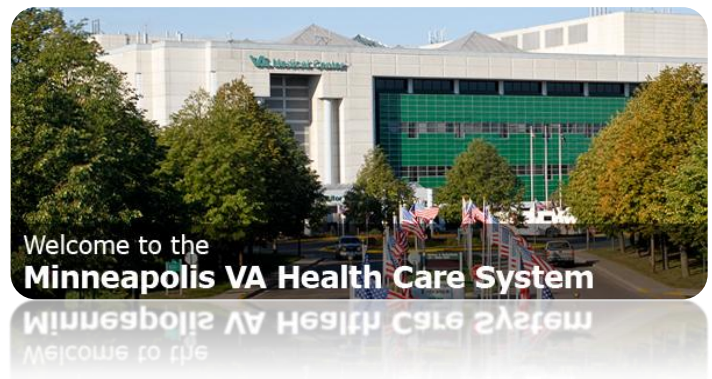
- The Neurology Service and ECoE have a strong and funded research program that includes 2 Merit Awards, and 1 VA Research Career Development Award, other funding includes grants from Epilepsy Foundation, American Epilepsy Society, CURE, and DoD.

MINNEAPOLIS VA HEALTH CARE SYSTEM

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Minneapolis ECoE Staff		
Name	Position	ECoE FTE
Hanson, Deb	EEG Tech	0.400
Holloway, Steven	Co-Director	0.125
Vacant	Neurologist	0.800
Vacant	Neurologist	0.300
Laymon, John	Nurse Practitioner	0.500

FY11 Accomplishments:

- Hired an additional full time EEG technologist.
- Increased volume of EMU by reducing the number of week that we were unable to admit patients.
- Three clinical neurophysiology fellows received extensive training in EEG during their VA rotation.
- Improved workload capture.
- All Neurology residents have a 4 week rotation in EEG and clinical neurophysiology at the VA
- All medical students rotating on Neurology received training in EEG basics
- Extensive upgrade of our Video and EEG equipment, including latest upgrade of software, new head boxes with ability to record more channels and record if disconnected, new faster computers, all monitors are 24 inches, increased server capacity and security and CITRIX server for offsite review.
- Assigned a nursing assistant who works night to the EMU. She received more in depth and extensive training by our technologist. She functions as a monitor tech with the ability to troubleshoot equipment and identify seizures during the night. This has improved our EMU quality during the night when our technologists are not on site.
- Residents assigned to VA Neurophysiology rotation and EEG now has no other ward duties which previously interfered with their education.
- Implemented process to achieve accurate workload capture.

Challenges / Barriers:

- We have lost our nurse practitioner assigned to the ECoE with replacement uncertain.
- Have advertised for an additional epileptologist, but have been unable to recruit.
- Worked with human resources to begin the process of increasing the grade level of one EEG technologists from an 8 to 9 and another from an 8 to a 10.
- EMU remodeling project evaluated and listed as a possible project for next year.

Future Initiatives:

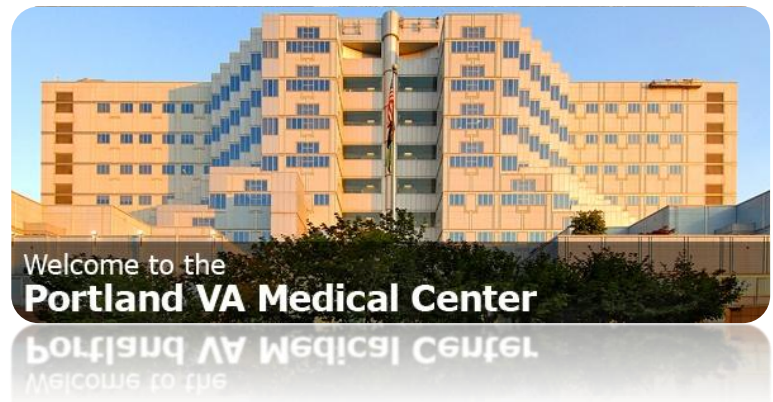
- Hire an additional epileptologist, either as a joint recruitment with the University of Minnesota or VA based.
- Replace Nurse Practitioner.
- Expand telehealth clinical services to CBOCs (Community based outpatient clinic) and to other facilities in VISN.
- Remodel EMU to a four bed unit with a central patient lounge area and dedicated nurse station.
- Increase collaboration with polytrauma and DVbic.

PORTLAND VA MEDICAL CENTER

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Vacant	Administrative Officer			1.0

FY11 Accomplishments:

- Initiated Tele-EEG program with Boise VAMC (on-line review/interpretation in Portland of EEGs acquired in Boise. First of its kind within the VA system)
- Completed/ published research study 'Psychogenic seizures in US Veterans (Neurology; 9/11).
- Presented poster on psychogenic seizures in Veterans at the American Epilepsy Society annual meeting; (San Antonio, Texas; 12/10).
- Submitted multicenter ECoE VA Merit Review grant 'Psychogenic seizures in US Veterans' (M. Salinsky PI).
- Acquired ambulatory EEG system. All ambulatory EEG records read 'in-house'.
- Replaced all EMU and EEG laboratory equipment with current generation equipment capable of networking with all other ECoE NW sites
- Initiated epilepsy fellowship through OAA.

Education / Outreach Activity:

- Presentation "Medically Refractory Epilepsy" Boise, Idaho VAMC (Salinsky)
- Case conference presentation/discussion; Boise VAMC (Salinsky)
- Presentation "Epilepsy, current Therapy" Roseburg, Oregon VAMC (Salinsky)
- Presentation "Psychogenic Seizures" Portland, Oregon VAMC (Salinsky)
- Dr. Salinsky presented "Psychogenic Seizures in Veterans" for the VA National conference Call (Continuing professional education 2011 series)
- Initiated monthly education meetings with Portland VAMC EMU nurses (Evrard)
- Patient education presentation 'Sleep and epilepsy' (Boudreau)
- Hosted M. Brown REEGT from Boise, Idaho for EEG training.

Challenges / Barriers:

- Due to hiring challenges associated with local juggling priorities and financial stewardship the hiring of the department Administrative officer has been delayed.

Future Initiatives:

- Begin tele-medicine epilepsy care programs in conjunction with the Boise, Idaho VAMC and the Roseburg, Oregon VAMC
- Expand tele-EEG program to Roseburg VAMC, possibly other sites

- Initiate new auditory alarming system at Portland VAMC EMU (technology development project with auditory engineering; to aid in patient safety)
- Acquire/install Citrix server to allow physicians to access EMU recordings from off campus (patient safety initiative).
- Add additional MD to expand outpatient clinic (P. Motika MD)
- HSR&D research project on epilepsy and TBI (CREATE award submission) with other ECoE sites.

PUGET SOUND VA HEALTHCARE SYSTEM

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FY11 Accomplishments:

- We have now implemented into CPRS a nursing seizure template (adapted from a template initially developed at the Madison VA ECoE). Education of the nurses in the use of the template is ongoing. The purpose is to promote complete and standardized documentation of seizures by the nurses in the LTM unit and to foster enhanced patient safety.
- We have now implemented fully functional remote access via the internet to our EEG data including live access to the video and EEG of patients on the LTM unit. We have begun to work with faculty in the ECoE at other VAs around the nation to assist them in navigating the complex set of security issues and technical barriers that must be overcome to get remote access up and running.
- We are near completion of revamping our inpatient LTM room to accommodate a second bed.
- We have set up the Puget Sound Health Care System web page for the ECoE.
- We have doubled our clinic capacity to accommodate an anticipated increase in Veterans with epilepsy returning from Iraq and Afghanistan.
- We now provide internet access for our LTM patients so that can use their own PCs on the internet during hospitalization.



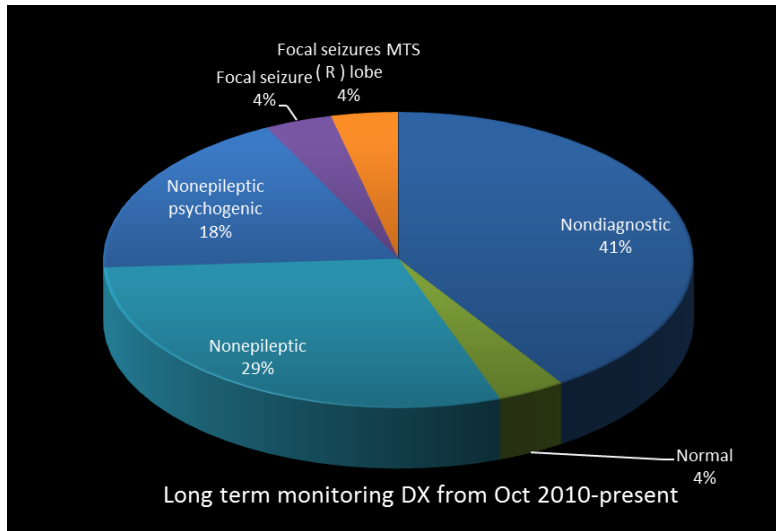
Education / Outreach Activity:

- We helped conduct an outreach program at Children's Hospital in conjunction the Epilepsy Foundation Northwest. One of the highlights of the daylong event was a presentation on living with epilepsy given by one of the Veterans who is followed in the epilepsy clinic at the VAPSHCS.
- We have initiated in-services and continuing education for nurses on the Neurology inpatient/LTM unit at the VAPSHCS. These sessions focus on issues related to the care of people with seizures and epilepsy. One of our long term goals is to have a core of Nurses who will champion seizure and epilepsy and perhaps become certified in that field of endeavor.
- The classes are being conducted by Chris Ransom MD, Judy Ozuna, NP, John Flaherty LPN, and Debbie Perkins and Larissa Ronich EEG technicians.
- We have and continue to distribute audio educational material aimed at Veterans with epilepsy, their families and health care professionals who treat people with epilepsy. Most of this material has been supplied by the ECoE.
- We have attached educational material from ECoE as well as the VA on our VA web page as well as tagging The Epilepsy Foundation Northwest

- We have been working with the national nursing and EEG tech committees on the LTM modules.
- Judy Ozuna NP presented lectures on “Seizure Disorder” for three sessions of the greater Seattle Critical Care Consortium

Challenges / Barriers:

- We think the LTM unit is not being efficiently utilized because a large number (41%) of monitored patients are discharged without resolution of the etiology of the spells for which they are being monitored (see chart below which shows the diagnosis solely based upon the interpretation of the LTM data). We are currently exploring ideas that we can test to see if they improve the efficient use of the LTM unit.



Future Initiatives:

- We will establish telehealth clinical services for Veterans with epilepsy within the coming months. The main hub in this region for the telehealth will be ECoE in Seattle at the VAPSHCS with satellites in Anchorage, Alaska and Walla Walla, Washington.
- We will add an additional bed to the LTM unit because we currently have a protracted waiting list of six to twelve weeks for an admission date.
- Establishing a working group and conduct a study into more comprehensive an updated criteria for admission of our LTM unit.
- Continue to and expand and improve our educational outreach both for staff and Veterans with epilepsy.

Other Information:

- The Neurology EEG Technicians at the VAPSHCS are working with the local community colleges and are establishing a curriculum for EEG technician students who will be rotating and conducting their preceptor ship through our service.
- Judy Ozuna, NP. Is the current chairperson for the Nursing Group of the ECoE. The group has:
 - Finalized the nursing protocol for Epilepsy Monitoring Unit (EMU)
 - Standardized the seizure assessment protocol
 - Is working on nursing competencies for the EMU
 - Is working to nationalize the seizure note template in CPRS (currently in use at 4 sites)

SOUTHEAST REGION

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FY11 Accomplishments:

- Completed Natus HL7 compatibility project. All SE ECoE slated to implement 1st QTR FY12
- Approximately 2-3 months from the completion of the database template project
- Completed usability testing for clinical standardization template
- Facilitated the completion of the Natus server remote access project
- Established monthly regional consultation calls



Education /Outreach Activities:

- Offered 8 week education series of statistics for clinicians
- Drafted action plan to monitor movement toward complete compliance with P.L.
- Organized the regional EEG technicians annual meeting
- Organized annual steering committee/strategic planning meeting for SE ECoE

Challenges/Barriers:

- Standardization of clinic set- up

Future Initiatives:

- Regional referral process (Hub and spokes model)
- Implementation of database template nationally
- Expand on Telemedicine options throughout the region



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FY11 Accomplishments:

- Established remote access process for EEG equipment data and images
- Upgraded and purchased new equipment to provide improved services
- Led national push to standardize encounters for appropriate workload capture
- Established agreement with nursing to provide sitters for long term monitoring
- Fellowship position for Epilepsy Neurophysiologist was approved.



Education / Outreach Activity:

- Supported EEG technicians participation in regional technician meeting during ASET national meeting
- Supported Nurse Practitioner participation in AET to gain additional knowledge in the care of patients

Challenges / Barriers:

- Utilization of family members during long term monitoring.
- Recruitment of specialty

Future Initiatives:

- Ground work laid to establish telehealth clinics
- Groundwork laid for the implementation of HL7 for Natus equipment
- Revamp clinic set-up for accurate workload capture and increase referral base.

Other Information:

- Instrumental in the completion of new proposed functional statements for EEG technicians and supervisors.

**BRUCE W. CARTER DEPARTMENT OF
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FY11 Accomplishments:

- Equipment upgrade for EEG outpatient and inpatient telemetry
- Recruitment of IOM/EEG tech
- Growth in IOM surgeries
- Recruitment of EEG fee-basis tech
- Institution of new coding system for technicians and physicians
- Creation of Epilepsy Clinic template with database/registry capabilities
- Access to diagnostic procedures and Epilepsy clinics have been improved to meet the target of scheduling patients within 14 days of desired date
- Establishment of clinical practice guidelines in CPRS
- Status Epilepticus hospital-wide protocol (CPRS) in progress
- Nurse and technician note templates for EMU

Education / Outreach Activity:

- IOM course accomplished during the month of May 2011

Challenges / Barriers:

- Bureaucratic processes and delays
- Budgetary constraints
- Limited amount of space
- Out-dated space

Future Initiatives:

- Improving the processes for diagnosing
- Improving access to clinics and diagnostic studies
- Improve marketing and outreach programs
- Cultural links with Puerto Rico & Virgin Islands : Referrals and Tele-health



- Residents & Fellows
- Clinical Research & Publications

Other Information:

- Epilepsy clinic is continuously providing the best possible care for Veterans with epilepsy.
- Treatment for epilepsy has been standardized.
- Capabilities that are readily available for epilepsy patients in the Miami VA:
 - Epilepsy Clinics with expert epileptologists
 - EMU
 - EEG
 - Vagal Nerve Stimulator
- Regional database committee communicates periodically.
- National CPRS disease-specific template is being created based on the Miami VAHCS model.
- Research projects have increased.

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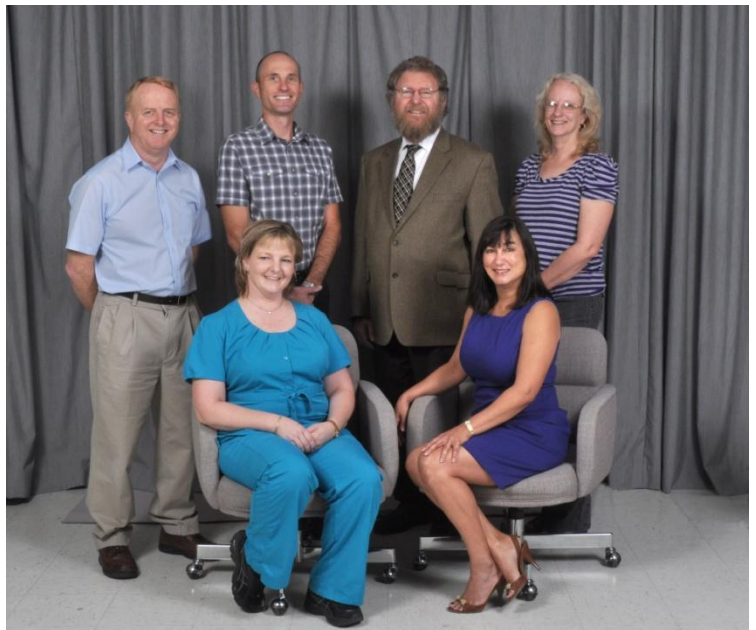
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FY11 Accomplishments:

- We have set up four Telemedicine clinics; two more to begin in September 2011; We hold five ½ day epilepsy clinics per week.
- One Vagus Nerve Stimulator implantation surgery was performed at the Gainesville VA Medical Center.
- We have updated all Epilepsy Monitoring Unit equipment
- We have increased the number of ambulatory units available from one to 3.

Education / Outreach Activity:

- Made ECoE presentation to VISN 8 Executive Leadership Council on 8/13/10
- ECoE open house 8/30/10
- epilepsy presentations to nursing students in the VA-UF Nursing Partnership Program; community outreach in conjunction with Epilepsy Foundation of Gainesville
- staff presentations on epilepsy in observance of Epilepsy Awareness Month (11/2010)
- poster presentation on Women with Epilepsy, Women's Health Fair 7/27/11
- We have initiated a weekly EEG/Epilepsy Conference.



Challenges / Barriers:

- We have no sitters for Veterans undergoing long term video EEG monitoring who have no companion
- We need to expand our referral base.

Future Initiatives:

- We are planning to open two additional Epilepsy Monitoring Unit beds for a total of four in the Fall of 2011.

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Vacant	Medical instrument Tech (EEG)			
Vacant	Administrative Officer			

FY11 Accomplishments:

- Established subspecialty epilepsy clinic.
- Established “floating” 1 bed long-term video EEG monitoring unit.
- Established portable continuous video EEG monitoring in the ICU.
- Purchased Ambulatory video-EEG equipment.
- Purchased V-Tel equipment for remote patient care and surgical conferencing within the SE ECoE region.
- Started Neurophysiology Fellowship with academic affiliate (University of South Florida).

Education / Outreach Activity:

- Established multi-disciplinary epilepsy rounds for polytrauma patients.
- Established educational lecture series for families of polytrauma patients with epilepsy.
- Established educational lecture series for polytrauma nursing staff.
- Participated in V-Tel case conferences with referring provider and SE ECoE directors.

Challenges / Barriers:

- Physical space limitations (limited space for EEG lab, epilepsy clinic and EMU beds).
- No dedicated EMU beds in the hospital; currently using “floating” beds with portable video EEG units.
- No dedicated EMU nursing staff.
- No agreed upon staffing for continuous observation of EMU patients (currently level of observation varies by case need i.e. 1:1 staff observation vs. nurses watching live video of patients vs. family member observation).
- No phase II or ECoG capability at present.

Future Initiatives:

- Have new capability to place VNS thanks to new hire in Neurosurgery (but have not yet placed one).
- In negotiations with neuropsychology and interventional radiology to begin Wada testing soon.
- In negotiations with nursing and hospital administration to define observation requirements by staff for EMU patients.
- In negotiations with nursing and hospital administration to obtain permanent beds and dedicated nursing staff for EMU patients.
- Expand V-Tel capabilities for remote consults/conferences for epilepsy patients.
- Expand outreach efforts to referring providers.

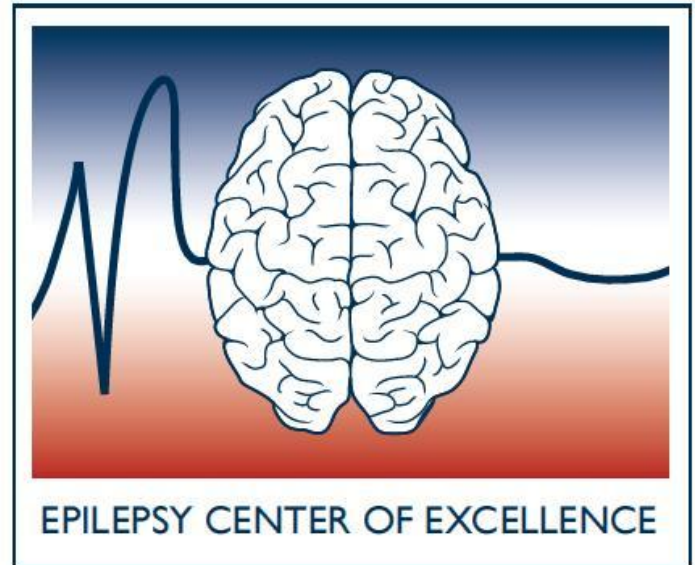
- Implementation of standardized patient visit templates in CPRS.
- Participate in cooperative ECoE research studies.
- Hire dedicated ECoE site administrator/research coordinator.
- Hire additional medical instrument technician.

ECoE WORKGROUPS

ECoE Clinical Procedures Workgroup

FY11 Progress and Accomplishments:

- Patient Travel Memorandum – Draft in VACO for review and approval
- EEG Technician Classification/Functional Statement – ECoE Guide for MIT developed in May 2011, distributed to ECoE and nationally*
- EMU Bed Utilization – issues/scope of problem not clarified.
- Remote Reading of EEG and EMU Studies – need to clarify IT and technical issues, share success stories. Portland/Boise set up clinic. Houston tried >2 years, may need encrypted laptops (have server and CITRIX). Florida is close to having remote reading.
- Pharmacy Formulary – Kathy Tortorice (VACO PBM based at Hines VAMC) recruited as liaison to ECoE, provided guidance on VA Formulary Management*, assisted with formulary issues and received field guidance for PBM decisions.
- VERA Reimbursement for Epilepsy Patients - data show reimbursement at lower levels (\$7500) unless combined with MS, TBI or Stroke diagnoses-MSCOE and PADREC compared national classifications and ARC costs – MSCOE successful in raising reimbursement levels.*
- Capture ECoE Workload (outpatient, EMU, and EEG) -formation of Workload Standardization Group to seek guidance from subject matter experts, pull and analyze Austin data, and recommend standardized process for tracking, reconciliation and reporting.
- Patient Satisfaction Survey – requested by NW Advisory Group for referrals to EMU. Not sure if needed nationally. Consider patient survey for inpatient monitoring, approval process for national questionnaires



FY12 Goals and Initiative:

- Expand EEG Tech guidelines
 - Methods of internal training (upward mobility)
 - Recruitment options (bonus at recruitment, retention)
- Remote EEG reading
 - Inside VA firewall (remote consultant)
 - Outside VA firewall
 - Consult/education – several site conference to view EEG (issue: access to server across VISN)
 - Read EEG for sites without epileptologist (issue: qualified EEG tech at site)
- Develop Pharmacy Specific Workgroup for formulary issues
- Explore possibility of a "white paper" outlining discrepancy between VERA allocations and ARC care costs with intent for VACO review of VERA classifications for epilepsy patients
 - Understand VERA system to maximize existing reimbursement
 - Track VERA reimbursements for Stop Code 345
 - After review, develop white paper if high cost categories warrant VERA increase (i.e., Epilepsy with TBI)
- Outreach of clinical care in forming hub and spoke network including telemedicine clinics
- Formation of consortium sites at non-ECoE sites
- Enhance Tele Epilepsy

ECoE Workload Standardization Workgroup

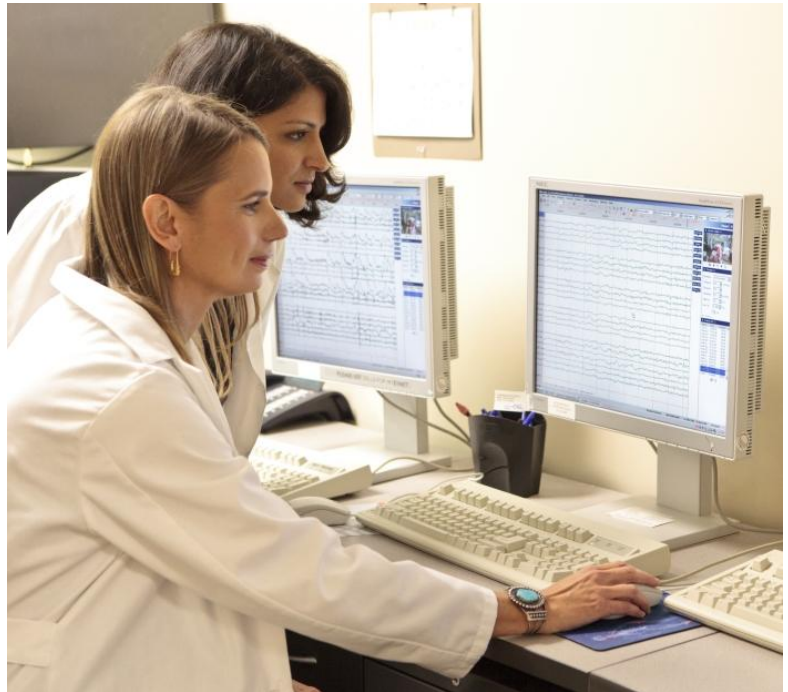
FY11 Progress and Accomplishments:

- Established a collaborative workgroup to include ECoE staff and HIMS , DSS and Coding representation

- Approval and implementation of 345 stop code
- Developed a standardized EMU protocol

FY12 Goals and Initiative:

- Homogenous patient care across ECoE to include standardization of workload coding (EEGs, prolonged video monitoring, epilepsy outpatient clinics, and telephone consultation)
- Improve the accuracy of workload capture
- Define accurate process in at least two sites
 - EEG, video EEG, outpatient clinic as priorities
 - Ambulatory monitoring, phone clinics next
- List CPT codes and clarify use
- Define all workload to be tracked
- Capture data correctly
- Standardize encounter form (ICD-9 codes)
- Develop guideline document and assist other ECoE sites



ECoE Database Workgroup

FY11 Progress and Accomplishments:

- Database Workgroup formed
- CAC volunteer, David Carter, from Miami ECoE identified
- IC approval process started
- Initial IC approval obtained
- New Epilepsy note and Follow Up Epilepsy Note template created and revised
- Usability testing performed with 6 volunteers and 2 test patients

FY12 Goals and Initiatives:

- Complete analysis of Usability Testing and apply findings to template
- HIMS and NTRT approval
- Pilot template (first phase in Durham and Miami, second phase in Gainesville, Tampa, West LA)
- Final approval
- National implementation
- Create database on SQL server
- Build SAS database
- Use SAS database for tracking and research

ECoE Research Workgroup

FY11 Progress and Accomplishments:

- “Traumatic Brain Injury and Posttraumatic Epilepsy: A Prospective Study,” funded by AES
- “Mindfulness Cognitive Behavioral Therapy for Veterans with Epilepsy & Depression: UPLIFT VA,” pending review.
- “Psychogenic Nonepileptic Seizures in U.S. Veterans,” pending VA Merit Review.
- Basic Science Journal Club
- Research Funding

FY12 Goals and Initiatives:

- Develop a collaborative spoke and hub organization across VA for researchers in epilepsy that includes both basic and clinical research.
- Define the diagnoses of patients evaluated at EMU and at ECoEs to determine potential collaborative projects (this would be the classification system proposed for the EMU outcomes).
- Consider multi-site pharmacy research initiative on AEDS in partnership with pharmacy service.
- Develop a relationship with DNA banking centers in the VA for potential genomic studies.
- Monitor ongoing research projects and opportunities for new projects.

ECoE Education Workgroup

FY11 Progress and Accomplishments:

- National ECoE Website: www.epilepsy.va.gov
- National ECoE Portal: <https://vaww.visn5.portal.va.gov/sites/RO/ECOE/default.aspx>
- National Patient Audio Conference Education
 - 6-30-11 “Introduction to Epilepsy and Seizures” – Dr. Nina Garga – 15 VANTS lines
 - 8-25-11 “Seizures First Aid and Other Safety Concerns for People with Epilepsy” – Denise Riley, ARNP – 36 VANTS lines
- National Provider Audio Conference CME Education
 - 1-21-11 “Introduction to Epilepsy and Seizures” – Dr. Karen Parko - 85 VANTS lines
 - 5-4-11 “Epilepsy and Traumatic Brain Injury” – Dr. Paul Rutecki – 85-90 VANTS lines
 - 7-6-11 “ Psychogenic Seizures” – Dr. Marty Salinsky – 61 VANTS lines
 - 9-7-11 “Drug Interactions of Antiepileptic Drugs” – Dr. Jose Cavazos – 75 VANTS lines

FY12 Goals and Initiatives:

- National Patient Audio Conference Education
 - 1-5-12 “Epilepsy and Sleep” –Dr. Eilis Boudreau
 - 4-5-12 “Epilepsy In The Geriatric Population” –Collette Evrard, NP
 - 7-12-12 “Epilepsy Medication” – Barry Gidal
 - 9-6-12 “Medication Compliance” – Judy Ozuna, NP
- National Provider Audio Conference CME Education
 - 11-2-11 “Treatment of Acute Seizures and Status Epilepticus” – Dr. Claude Wasterlain
 - 2-1-12 “Intractable Seizures” – Dr. Allan Krumholz
 - 3-7-11 “Safety in the Epilepsy Monitoring Unit” – Olujimi Faminu, NP
 - 5-2-12 “Posttraumatic Epilepsy and Treatment” – Dr. James Chen
 - 8-1-12 “Epilepsy and Depression” – Dr. Hamada Hamid
- National Standardized Patient Education Handout
- Epilepsy Single Topic Issue Journal Supplement
- EES Satellite Broadcast
- VA Consortium Symposium
- Support Local/Regional Education
 - Outreach
 - VA CBOC V-Tel Conference
 - VA Poly-Trauma Centers
 - Mini-Residency
 - Collaboration
 - Epilepsy Foundation
 - University Affiliates

ECoE Nursing Workgroup

FY11 Progress and Accomplishments:

- Seizure Note Template
- Telemetry Protocol

- Suspected Patient Event Guidance

FY12 Goals and Initiatives:

- Nursing Competency
- EMU Consent Form
- Nursing Training Modules

ECoE Pharmacy Workgroup

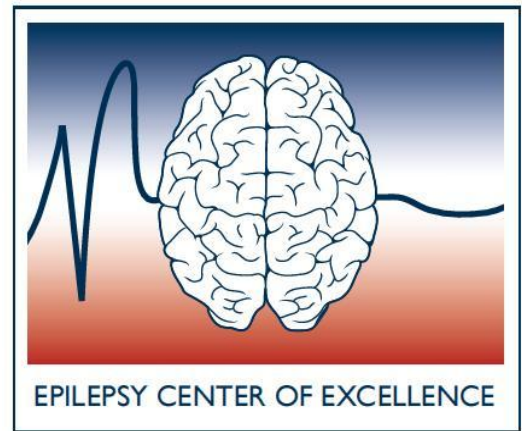
FY11 Progress and Accomplishments:

- Not Formed in 2011

FY12 Goals and Initiative:

- Seek membership with representation from each region. Elect Chair of Workgroup, Designate Administrative Support of Workgroup.
- Establish Specific Workgroup with intent to collaborate among ECoE centers other VA facilities with epileptologists and VA national pharmacy to come up with a national formulary for Epilepsy Centers,
- Standardize availability of AEDs throughout the VA system.
- Consider development of care maps for epilepsy patient seen in non-ECoE facilities.
- Establish Meeting date/time.
- Formulate Goals for FY12.

FY12 ECoE NATIONAL GOALS



1. Clinical care network – Evaluation and strengthening

A) Evaluate the integration of the ECoE in forming a network

1) National Policy (travel, formulary, telemedicine)

B) Strengthen the Network into Regional Hub and Spokes

1) Use Video-Telehealth Outreach

2) Develop Consortium with other VA epilepsy sites

3) Consider Telehealth Partnership

2. Collaboration - PTC/DVBIC

A) Develop tangible relationships with Polytrauma centers (level 1 and 2)

B) Develop relationship with DVBIC

C) Consider multi-site pharmacy research initiative on AEDs

D) Outreach to other VA non-ECoE sites (consortium also under goal 1)

3. Funding

A) Accurate workload data

B) Higher category for VERA reimbursement

C) Patient Satisfaction /Outcome survey

D) Cost Effective/Cost Saving – Reduce Fee Care

E) Remain on track with Public Law

PUBLICATIONS / MANUSCRIPTS / CHAPTERS

Baltimore, MD

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Los Angeles, CA

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ABSTRACTS / POSTERS / PRESENTATIONS

Baltimore, MD

Price MD, Anderson KE, Hopp JL, Gruber-Baldini, AL, Zhu J, Krumholz A, Shulman LM. A Comparison of Two Psychogenic Disorders: Nonepileptic Seizures and Psychogenic Movement Disorders, Washington DC, April 4, 2009.

Hopp J, Price M, Anderson K, Gruber-Baldini A, Zhu J, Hammers W, Krumholz A, Shulman L. Psychogenic Nonepileptic Seizures and Psychogenic Movement Disorders: Are They the Same Patients? S26.006, American Academy of Neurology Platform presentation, Seattle, Washington. April 29, 2009.

Durham, NC

Coordinator: Michael M. Haglund, M.D., Ph.D., Speakers: Saurabh R. Sinha, M.D., Ph.D., Gerald Grant Surgery: Work-Up and Surgical Treatment of "Non-Lesional Epilepsy" Annual Meeting of the American Epilepsy Society in San Antonio, TX, USA (December 2010).

Coordinator: Jonathan Halford, M.D., Speakers: Sunita Dergalust, Pharm.D., Mary Jo Pugh, Ph.D., Jonathan Halford, M.D., Aatif Husain, M.D., Paul Rutecki, M.D. "Military Epileptologists: Epilepsy Care Within the VA System" Annual Meeting of the American Epilepsy Society in San Antonio, TX, USA (December 2010).

Houston, TX

Izadyar, S., Chen, D.E., Collins, R.L., Benge, J.F., LeMaire, A.W., Hrachovy, R. A. Induction of psychogenic non-epileptic events: success rates vary with ictal semiology and neuropsychological profile. Annual Meeting of the American Epilepsy Society, 2010, Abstract 1.346.

Izadyar S, Franks R, and Chen DK. Correlation of diagnostic insight with short-term outcome of psychogenic non-epileptic events. Poster presented at the 63rd Annual Meeting of the American Academy of Neurology in Honolulu, HI, USA (April 2011)

Gill S, Mahadevan A, Franks R, and Chen DK. The efficacy of formal patient epilepsy educational programs: a prospective study with pre- and post-educational module questionnaires. Poster presented at the 63rd Annual Meeting of the American Academy of Neurology in Honolulu, HI, USA (April 2011)

Benge JF, Collins RL, Lemaire A., Chen DK, Franks R, Izadyar S. Performance on the structured inventory of malingered symptoms in known epilepsy and psychogenic nonepileptic event groups. Poster presented at the 39th Annual Meeting of the International Neuropsychological Society in Boston, MA, USA (February 2011).

Izadyar S, Chen DK, Collins RL, Benge JF, LeMaire AW, Hrachovy RA. Induction of psychogenic non-epileptic events: success rate influenced by prior induction exposure, ictal semiology, and psychological profiles. Poster presented at the 64th American Epilepsy Society meeting in San Antonio, TX, USA (December 2010).

Los Angeles, CA

JWY Chen (2010) Independent Component Analysis of EEG Burst Suppression Pattern in Coma Patients, American Clinical Neurophysiology Society 2010 Annual Meeting, San Diego, Abstr.

JWY Chen, C Chen (2010) Independent Component Analysis of EEG Reveals the Cerebral Generators and Propagation Pathways of Myoclonus, American Epilepsy Society 2010 Annual Meeting, San Antonio, Abstr.

Huy Tran, JWY Chen (2011) Using Independent Component Analysis of EEG to Quantify Treatment Effect of Anticonvulsants, American Academy of Neurology 2011 Annual Meeting, Honolulu, Abstr.

M Lee, JWY Chen (2011) Ambulatory but Refractory Complex Partial Status Epilepticus, American Clinical Neurophysiology Society 2011 Annual Meeting, New Orleans, Abstr.

V Shvarts, JWY Chen (2011) , American Clinical Neurophysiology Society 2011 Annual Meeting, New Orleans, Abstr

Baca CB, Vickrey BG, Vassar S, Berg A. Quality of life outcomes in adolescents with childhood-onset epilepsy in remission. Accepted to ANA/NINDS Junior Faculty Career Development Meeting and ANA Annual Meeting, San Diego, CA, September 24-27, 2011.

Baca CB, Vickrey BG, Vassar S, Berg A. The association of current and remote seizure burden with quality of life in children with epilepsy. Accepted to American Epilepsy Society Annual Meeting December 2-6, 2011.

Chen LL, Choe J, Baca CB, Chen J, Cheng E. Characteristics of Operation Iraqi Freedom/Operation Enduring Freedom Veterans with head trauma and post-traumatic seizures (accepted to American Epilepsy Society Annual Meeting, December 2-6, 2011.

San Antonio, TX

2.150 - Cross-Section Study of 389 Veterans Analyzing the Effect of AEDs on Cholesterol Levels and Simvastatin Dose Utilization in Clinical Practice... and Simvastatin Dose Utilization in Clinical Practice 2.150 Gina Jetter, L. Moreno, S. Rogers, S. Carlson, W. Gentry, S. Lee and J. Cavazos 2010 - University of Texas Health Science Center, Audie L Murphy VA. Posters at American Epilepsy Society (published in Epilepsy Currents, 11 (Suppl 1), 2011.

2.357 - Epilepsy Partnerships that Work: The South Texas Border--- Rio Grande Valley Region 12951 Epilepsy Partnerships that Work: The South Texas Border--- Rio Grande Valley Region 2.357 Sindi Rosales, J. Cavazos, C. Szabo and L. Morgan 2010 - Epilepsy Foundation Central & South Texas. Posters at American Epilepsy Society (published in Epilepsy Currents, 11 (Suppl 1), 2011.

3.011 - Increased Interconnectivity between Hippocampal Lamellae might contribute to Circuitry Hyperexcitability in Experimental Temporal Lobe Epilepsy... Hippocampal Lamellae might contribute to Circuitry Hyperexcitability in Experimental Temporal Lobe Epilepsy 3.011 Jose Cavazos and G. Tolstykh 2010 - University of Texas Health Science Center, Audie L. Murphy VAMC. Posters at American Epilepsy Society (published in *Epilepsy Currents*, 11 (Suppl 1), 2011).

3.247 - KCNQ channels in the nucleus tractus solitarius of the brainstem might be involved in SUDEP. Posters at American Epilepsy Society (published in *Epilepsy Currents*, 11 (Suppl 1), 2011).

13259 KCNQ channels in the nucleus tractus solitarius of the brainstem might be involved in SUDEP. 3.247 Gleb Tolstykh and J. Cavazos 2010 - University of Texas Health Science Center. Posters at American Epilepsy Society (published in *Epilepsy Currents*, 11 (Suppl 1), 2011).

Seattle, WA

Ransom, C.B., Wu, Y., Richerson, G.B. Multiple mechanisms rapidly regulate tonic GABA currents in cultured hippocampal neurons. *American Epilepsy Society*, 12/2-12/6/2010, San Antonio, TX.

Ransom, C.B., Ye, Z.C., Richerson, G.B. Modulation of tonic GABA currents by connexin hemichannel antagonists. *Winter Conference on Brain Research*, 1/23-1/27/2011, Keystone, CO.

West Haven, CT

Hamid H, Devinsky O, Vickrey BG, Berg AT, Bazil C, Langfitt JT, Walczak TS, Sperling MR, Shinnar S, Spencer SS, American Epilepsy Society 64th Annual Meeting, San Antonio, Tx "Long Term Depression Outcomes After Resective Epilepsy Surgery".

Hamid H, Wang F, Qadri U, Spencer L, Blumberg H. Annual Scientific Forum of the National EpiFellows Foundation San Antonio, Tx "White Matter Changes in People with Epilepsy and Depression: A Diffusion Tensor Imaging Study" .

Hamid H, Liu X, Cong O, Devinsky O, Berg AT, Vickrey BG, Sperling MR, Shinnar S, Langfitt JT, Walczak TS, Barr WB, Dziura J, Bazil C, Spencer SS Epilepsy & Depressive Disorders Conference, Chicago, Il. "Suicide Outcomes After Epilepsy Surgery".

RESEARCH

ECoE Collaborative Research Projects Funded:

- 1) RECORD (Mary Jo Pugh, PI)
- 2) Quiet Indicators (Mary Jo Pugh, PI)

ECoE Collaborative Research Projects Submitted:

- 3) UPLIFT (Mary Jo Pugh, PI)
- 4) Psychogenic Seizures (Martin Salinsky, PI)

EPILEPSY CENTERS OF EXCELLENCE - RESEARCH					
VA Site City	Principle Investigators Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
FY10					
Baltimore	Krumholz, Allan; Barry, Elizabeth - Co-Investigators	A double-blind randomized clinical trial of the efficacy of IM midazolam versus IV lorazepam in the pre-hospital treatment of status epilepticus by paramedics (RAMPART)	October-09	present	Multicenter NIH
Baltimore	Krumholz, Allan - Co-Investigator	"A multicenter, open-label trial to access the safety and tolerability of a single intravenous loading dose of lacosamide followed by oral lacosamide maintenance as adjunctive therapy in subjects with partial-onset seizures."	2009		
Baltimore	Krumholz, Allan - Co-Investigator	"A multicenter, open-label extension trial to access the long-term safety and tolerability of lacosamide as adjunctive therapy in subjects with partial-onset seizures."	2009		
Baltimore	Krumholz, Allan - Co-Investigator	"A historical-controlled, multicenter, double-blind, randomized trial to access the efficacy and safety of conversion to lacosamide 400mg/day monotherapy in subjects with partial-onset seizures."	2009		
Baltimore	Krumholz, Allan - Co-Investigator	"A multicenter, open-label extension trial to access the long-term use of lacosamide monotherapy and safety of lacosamide monotherapy and adjunctive therapy in subjects with partial-onset seizures."	2009		
Baltimore	Krumholz, Allan - Co-Investigator	"Progesterone therapy for women with epilepsy"	2009		Multicenter NIH protocol
Baltimore	Krumholz, Allan - Co-Investigator	"Psychosocial Status and Health Related Outcomes in Patients with Psychogenic Seizures Compared with Psychogenic Movement Disorders",			Collaborative project involving University of Maryland Epilepsy Center and Movement Disorders Center, Department of Neurology.
Baltimore	Krumholz, Allan - Co-Investigator	"Identifying risk factors for motor vehicle crashes in patients with seizures"	Jul-09	Jul-10	In collaboration with Johns Hopkins Epilepsy Center, Gregory Krauss, MD
Baltimore	Barry, Elizabeth - Co-PI	"Pharmacokinetic Studies of Epileptic Drugs: Evaluation of Brand and Generic Antiepileptic Drug Products in Patients"	Sep-10	Sep-13	DHHS/FDA/OAGS/DCGM
Baltimore	Barry, Elizabeth - Co-PI	Study Nurse Coordinator for a double-blind trial comparing the efficacy, tolerability and safety of monotherapy Topiramate versus Phenytoin in subjects with seizures indicative of new onset epilepsy.	January-06	January-08	

Baltimore	Barry, Elizabeth - Co-PI	Study Nurse Coordinator for a multi-center, double- blinded, randomized, placebo-controlled, parallel group trial to investigate the efficacy and safety of SPM927 (400 and 600 mg/day) as adjunct therapy in subjects with partial seizures with or without secondary generalization.	July-05	July-06	
Baltimore	Barry, Elizabeth - Co-PI	Study Nurse Coordinator for a multi-center, open-label trial to investigate the safety and tolerability of intravenous SPM 927 as replacement for oral 927 in subjects with or without secondary generalization.	July-05	April-06	
Baltimore	Tang, Cha-Min - PI	"Injury Induced Neuronal Hyperexcitability" To better understand how deafferentation result in dendritic hyperexcitability and post-traumatic epilepsy	June-08	May-12	VA Merit Review
Baltimore	Tang, Cha-Min - Co-Investigator	Pre- and Postsynaptic Consequences of Traumatic CNS Injury" To provide technical assistance in the optical aspects of this project (i.e. photolysis and imaging)	December-07	Nov-12	NINDS RO1
Baltimore	Tang, Cha-Min - Co-Investigator	"A Delivery System for Stem Cells" To develop an image-guided delivery system for stem cells.	November-07	Oct-09	State of Maryland MdStemCell Fund
Baltimore	Tang, Cha-Min - Co-Investigator	"Real-time monitoring of targeting, delivery, and spread of therapeutic agents in the brain" To develop optical coherence tomography as a drug delivery system to treat Parkinson's disease	December-08	Dec-10	Michael J Fox Foundation
Baltimore	Tang, Cha-Min - PI	"A computer vision system for the blind Veteran" To develop a computer vision system for the blind	April-09	Mar-12	VA RR&D
Baltimore	Tang, Cha-Min - PI	"Injury Induced Neuronal Hyperexcitability"	2009	2012	Merit Review
Durham	Husain, AM	A Historical-Controlled, Multicenter, Double-blind, Randomized Trial to Assess the Efficacy and Safety of Conversion to Lacosamide 400mg/day Monotherapy in Subjects with Partial-onset Seizures	2008		Schwarz Pharma
Durham	Husain, AM	A Multi-Center, Open-Label Extension Trial to Assess The Long-Term Use of Lacosamide Monotherapy and Safety of Lacosamide Monotherapy and Adjunctive Therapy in Subjects with Parital-Onset Seizures	2008		Schwarz Pharma
Durham	Husain, AM	A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, MULTICENTER, PARALLEL-GROUP STUDY TO EVALUATE THE EFFICACY AND SAFETY OF BRIVARACETAM IN SUBJECTS (≥ 16 TO 80 YEARS OLD) WITH PARTIAL ONSET SEIZURES	2011		Schwarz Pharma
Durham	Husain, AM	AN OPEN-LABEL, MULTICENTER, FOLLOW-UP STUDY TO EVALUATE THE LONG-TERM SAFETY AND EFFICACY OF BRIVARACETAM USED AS ADJUNCTIVE TREATMENT IN SUBJECTS AGED 16 YEARS OR OLDER WITH PARTIAL ONSET SEIZURES	2011		Schwarz Pharma
Durham	Husain, AM	PROMIS for Cancer – Sleep Domain	2006		NIH
Durham	Husain, AM	Utility of pregabalin in patients with frequent nonconvulsive seizures	2010		Pfizer
Durham	Husain, AM	Critical care EEG monitoring research consortium	7/3/05		American Epilepsy Society
Durham	David (Mike) Schooff, FNP-BC, Co-Investigator	Difference in Clinical Features and Psychiatric Co-Morbidities between Epileptic and Non-Epileptic Seizures among Veteran Population	5/13/10	4/27/2010	VA

Houston	Chen, David K - PI	Diffusion Tensor Imaging for Mesial Temporal Pathologies in Posttraumatic Epilepsy	1/1/2009	4/30/2011	AES Milken Family Foundation Award
Houston	Hrachovy, Richard - Co-Investigator	Infantile Spasms: Identifying the Central Generator	2006	2010	Vivian L. Smith Foundation
Houston	Hrachovy, Richard - Co-Investigator	Infantile Spasms: Tools for Therapies	2010	2012	NINDS
Houston	Hrachovy, Richard - Co-Investigator	The Mission Connect Mild TBI Translational Research Consortium's Integrated Clinical Protocol.	2008	2013	Department of Defense
Los Angeles	Claude Wasterlain, Principle Investigator	Neurochemistry of Epilepsy	4/1/2009	3/31/2013	VA Merit Review
Los Angeles	Claude Wasterlain, Principle Investigator	Rational polytherapy in the treatment of cholinergic seizures	7/1/2011	6/30/2016	NIH
Los Angeles	Claude Wasterlain, Principle Investigator	Brain development in experimental epilepsy	2/15/2003	1/31/2011	NIH
Los Angeles	Claude Wasterlain, Principle Investigator	Epileptogenesis after febrile status epilepticus: a role of hyperthermia	4/1/2008	3/31/2010	NIH
Los Angeles	Antonio Delgado Escueta, Principle Investigator	Discovering more Juvenile Myoclonic Epilepsy Genes by a Consortium	2010	2015	NIH
Los Angeles	Antonio Delgado Escueta, Principle Investigator	Persisting Grand Mal and Myoclonic Seizures in JME	2007	2012	VA Merit Review
Los Angeles	Christine Baca, Co-investigator	"Long-term outcomes of childhood-onset epilepsy"	6/1/2011	5/1/2014	NIH
Los Angeles	Christine Baca, Principle-investigator	"Risk factors for delayed pediatric resective epilepsy surgery over time"	7/1/2011	6/1/2012	Epilepsy Foundation of America Targeted Research Initiative for Youth Grant
Madison	Rutecki, Paul - Principal Investigator	Group I Metabotropic Glutamate Receptors and Epileptogenesis	2009	2013	VA Merit Review
Madison	Rutecki, Paul - Co-Principal Investigator,	Hypothesis Development Award DRMRP, Prediction, Detection, and Prevention of epilepsy and PTSD in genetically susceptible rats.	2009	2010	, Dept of Defense
Madison	Rutecki, Paul - Co-Principal Investigator.	Assessing Metformin as an Anti-epileptogenic Drug	2009	2010	CURE
Madison	Rutecki, Paul - Principal Investigator	Responsive neurostimulator system (RNS)			Neuropace
Portland	Boudreau, Ellis (Co-PIs Ellis Boudreau and Ruikang Wang)	Pilot Grants Mapping brain changes in alcohol withdrawal using optical microangiography	1/1/2010	12/31/2010	Portland Alcohol Research Center pilot grant

Portland	<i>Daniel Storzbach</i> - Principal Investigator. , \$738,500, 04/2010 – 03/2013.	Cognitive Rehabilitation of OIF/OEF Veterans with Cognitive Disorder	4/1/10	3/1/13	VA RR&D Merit Award
Portland	<i>Daniel Storzbach</i> - Principal Investigator	Multidiscipline Assessment of Blast Victims for Cognitive Rehabilitation	current		VA RR&D Merit Award.
Portland	<i>Daniel Storzbach</i> - co-Principle Investigator	MRI Markers of Mild Traumatic Brain Injury (mTBI) .	current		VA RR&D Pilot Study
Richmond	Towne, Alan R	Co-PI Rapid Anti-Epileptic Medication Prior to Arrival Trial (RAMPART) Neurological Emergencies Treatment Trials (NETT) Network Clinical Site Hubs.	9/7/10	present	NINDS/NIH/DHHS
Richmond	Towne, Alan R	A Phase 3, Randomized, Double-Blind, Parallel, Placebo-Controlled, Multicenter Study with Optional Open-Label Continuation of the Efficacy and Safety of Vanquix™ Auto-Injector (Diazepam Injection) for the Management of Selected Refractory Patients with Epilepsy who Require Intermittent Medical Intervention to Control Episodes of Acute Repetitive Seizures.	10/7/10	present	King Pharmaceuticals
Richmond	Towne, Alan R	A Multicenter, Open-Label, Long-Term Safety, Tolerability, and Efficacy Study of Retigabine in Adult Epilepsy Patients with Partial -Onset Seizures.	2/6/10	present	Valeant Pharmaceuticals North America
Richmond	Towne, Alan R	Pathophysiology and Mortality of Status Epilepticus. The overall goal of this study is to evaluate the effects of status epilepticus on mortality and morbidity in a controlled data base. .	9/6/10	11-Aug	NIH/NINDS
Richmond	Towne, Alan R	A Multicenter, Open-label Extension Trial to Assess the Long-term Use of Lacosamide Monotherapy and Safety of Lacosamide Monotherapy and Adjunctive Therapy in Subjects with Partial-onset Seizures.	2/8/10	present	Schwarz Biosciences Inc.
Richmond	Towne, Alan R	A Historical-controlled, Multicenter, Double-blind, Randomized Trial to Assess the Efficacy and Safety of Conversion to Lacosamide 400mg/day Monotherapy in Subjects with Partial-onset Seizures.	12/7/10	present	Schwarz Biosciences Inc.
Richmond	Towne, Alan R	A Double-Blind, Randomized, Placebo-Controlled, Study to Evaluate the Safety, Tolerability, and Efficacy of Ganaxolone as Add-on Therapy in Adult Subjects with Epilepsy Consisting of Uncontrolled Partial Onset Seizures.	2/7/10	present	Marinus Pharmaceuticals, Inc.
Richmond	Towne, Alan R	An Open-label Extension Study to Evaluate the Safety, Tolerability, and Efficacy of Ganaxolone as Add-on Therapy in Adult Patients with Epilepsy Consisting of Uncontrolled Partial-onset Seizures.	2/07 – present		Marinus Pharmaceuticals, Inc
Richmond	Towne, Alan R	A Sequential, Open-label Study of the Pharmacokinetics and Safety of Intravenous Carbamazepine Relative to Oral Carbamazepine in Adult Patients with Epilepsy.	1/7/10	present	Ovation Pharmaceuticals
Richmond	Towne, Alan R	An open-label, multicenter, follow-up trial to evaluate the long-term safety and efficacy of brivaracetam used as adjunctive treatment at a flexible dose up to a maximum of 150 mg/day in subjects aged 16 years or older suffering from epilepsy. .	1/8/10	present	UCB Pharma, Inc.

Richmond	Waterhouse, Elizabeth	An international, double-blind, parallel-group, placebo-controlled, randomized study: evaluation of the efficacy and safety of brivaracetam in subjects (\geq 16 to 70 years old) with Partial Onset Seizures.	10/7/10	present	UCB Pharma, Inc.
Richmond	Waterhouse, Elizabeth	Lamotrigine Extended-Release in Elderly Patients with Epilepsy.	9/7/10	present	GlaxoSmithKline
Richmond	Waterhouse, Elizabeth	A Historical-controlled, Multicenter, Double-blind, Randomized Trial to Assess the Efficacy and Safety of Conversion to Lacosamide 400mg/day Monotherapy in Subjects with Partial-onset Seizures.	12/7/10	present	Schwarz Biosciences Inc.
Richmond	Waterhouse, Elizabeth	A double Blind, Randomized, Placebo Controlled, Study to Evaluate the Safety, Tolerability, and Efficacy of Ganaxolone as Add on Therapy in Adult Subjects with Epilepsy Consisting of Uncontrolled Partial Onset Seizures	12/7/10	present Double A	Marinus Pharmaceuticals, Inc
Richmond	Waterhouse, Elizabeth	Double-blind, Placebo Controlled, Efficacy and Safety Study of Clobazam (0.25, 0.5, 1.0 mg/kg/day) in Patients with Lennox-Gastaut Syndrome.	10/7/10	present	Ovation Pharmaceuticals
Richmond	Waterhouse, Elizabeth	A Phase 3, Randomized, Double-Blind, Parallel, Placebo-Controlled, Multicenter Study with Optional Open-Label Continuation of the Efficacy and Safety of Vanquix TM Auto-Injector (Diazepam Injection) for the Management of Selected Refractory Patients with Epilepsy who Require Intermittent Medical Intervention to Control Episodes of Acute Repetitive Seizures.	10/7/10	present	King Pharmaceuticals
Richmond	Waterhouse, Elizabeth	An Open-label Extension Study to Evaluate the Safety, Tolerability, and Efficacy of Ganaxolone as Add-on Therapy in Adult Patients with Epilepsy Consisting of Uncontrolled Partial-onset Seizures.	2/07 – present		Marinus Pharmaceuticals, Inc.
Richmond	Waterhouse, Elizabeth	A Multicenter, Open-Label, Long-Term Safety, Tolerability, and Efficacy Study of Retigamine in Adult Epilepsy Patients with Partial -Onset Seizures	2/6/10	present	Valeant Pharmaceuticals North America
San Antonio	Pugh, Mary Jo - Principle Investigator	QUIET VA Quality Indicators research study	2011	present	VA HSR&D
San Antonio	Cavazos, Jose E. - Principal Investigator	A Retrospective, Prospective Study of How AEDs Impact Bone Health in Men	2004	present	U Texas Dept. Neurology
San Antonio	Cavazos, Jose E. - Principal Investigator	Effects of CYP450 – Inducing AEDs on Cholesterol Levels in Patients on Statin Therapy for Hyperlipidemia	2005	present	U Texas Dept. Neurology
San Antonio	Cavazos, Jose E. - Co-Principal Investigator	Efficacy of Certain Dual Therapy Combinations of Anti-epileptic drugs (AEDs) in Patients with Epilepsy	2006	present	U Texas Dept. Neurology
San Antonio	Cavazos, Jose E. - Co-Investigator	Quality of Life in Neurological Disorders	2006	Sep. 2010	NIH - HHSN265200423601
San Antonio	Cavazos, Jose E. - Principal Investigator	Pharmacogenomics of Hepatic Metabolism in Elderly Patients with Epilepsy	2006	present	U Texas Dept. Neurology

San Antonio	Cavazos, Jose E. - Principal Investigator	Hippocampal Neuronal Injury after Status Epilepticus during Development	Jan.2005	present	U Texas Dept. Neurology
San Antonio	Cavazos, Jose E. - Principal Investigator	Seizure-induced Synaptic Reorganization in CA1 Projection to Subiculum	Sep.2008	Sep. 2011	VA Merit Award
San Antonio	Cavazos, Jose E. - Co-Principal Investigator	BK Channel B4 Subunit in the Dentate Gyrus and Seizures	Apr.2007	Mar. 2013	NIH - R-01 NS052574
San Antonio	Cavazos, Jose E. - Co-Principal Investigator	KCNQ K+ channels in NTS region of brainstem that control cardiovascular function	Jul.2008	present	AHA award South Central (funding ended 06/10)/U. Texas Dept. Neurology
San Francisco	Manu Hegde, M.D., Ph.D.	Magnetoencephalographic detection of high-frequency activity in epilepsy patients.	9/1/2010	9/1/2012	Ruth L. Kirschstein National Research Service Awards (NRSA) for Individual Postdoctoral Fellows (F32) from NINDS
San Francisco	John Betjemann, M.D.	Disparities in the surgical treatment of patients with temporal lobe epilepsy	7/1/2010	7/1/2011	National EpiFellows
San Francisco	Mueller, Susanne PI	Role of Thalamic GABA Levels in Seizure Control in TLE	7/1/2008	6/30/2011	COE/DOD
San Francisco	Mueller, Susanne Co-investigator	High Field Neuroimaging in Epilepsy	6/30/2008	6/30/2011	NINDS/NIH
San Francisco	Karen Parko, M.D.	Population based epidemiological study of epilepsy among Native Americans.	2003		CDC National Center for Chronic Disease Prevention and Health
San Francisco	Karen Parko, M.D.	Epidemiologic follow-up study of newly diagnosed epilepsy among seniors from different ethnic groups			CDC
San Francisco	Karen Parko, M.D.	Telehealth networks improving access to quality care for epilepsy for patients residing in medical underserved areas.			HRSA CER grant
Seattle	Ransom, Christopher B - PI	"Voltage-dependent properties of extrasynaptic GABA _A receptors."			National Epifellows Foundation
Seattle	Spain, William	Mechanisms of synaptic integration in central neurons.	4/1/2009	3/31/2013	VA Merit Review,
West Haven	Hamid, Hamada- PI	White matter changes in depression and epilepsy a DTI study	July-09	present	National EpiFellows, Epilepsy Foundation, Yale School of Medicine
West Haven	Hamid, Hamada- Co PI	Psychiatric outcomes after resective surgery: A Multicenter Prospective Study	July-08	present	NIH, Yale School of Medicine
West Haven	Hamid, Hamad	Magnetic Resonance Imaging and Spectroscopy of Neurologic and Psychiatric Disorder- Preventing Explosive Neurotrauma II	5/1/2010	present	Department of Defense

SOUTHEAST REGION ECoE ADVISORY COMMITTEE

Wednesday, December 1, 2010, 10-11 am EST
1.800.767.1750 Access Code 290470

Members Present:

Members Absent:

Aatif M. Husain, MD , Director	Charles Brock, MD Chief of Neurology, Tampa
L. Scott Oatman , Regional Administrative Director	Stephen Nadeau, MD, Chief of Neurology, Gainesville
Angel Colon-Molero, Associate Chief of Staff, Miami	Mohamad Mikati, MD, Pediatric Epileptologist, Professor of Pediatrics & Neurobiology, Duke University Medical Center
Patricia Gibson , President, Epilepsy Foundation of N.C.	

Others Present: Ms. Rizwana Rehman, Regional Biostatistician and Ms. Winona Finley, Regional Administrative Support Assistant

Agenda Item/Topic	Discussion/Conclusion/Recommendation	Action/Follow-up
<p>1. Overview of Structure of SE ECoE</p> <p>a. Introduction of Regional Staff.</p> <p>b. SE ECoE Site Staff</p> <p>c. Mandates from National / Congress</p>	<p>1. Dr. Husain stated in opening remarks the establishment of ECoE's temporary funding through Congress due to recognized need for enhancing epilepsy care for Veterans. Four ECoE sites in the southeast region were created based on their substantial amount of epilepsy care and expertise and other VA Hospitals within their locality are under their umbrella. The goal of the ECoE is to convince congress of the necessity of this program becoming a permanent position within the VA system.</p> <p>a. Dr. Husain introduced SE Regional Staff which consists of himself as Director, Mr. L. Scott Oatman, Regional Administrative Director; Ms. Rizwana Rehman, Biostatistician and Ms. Winona Finley, Administrative Support Assistant.</p> <p>b. The SE Region Site Directors consists of Dr. Aatif Husain – Durham VAMC; Dr. James Sackellares – Gainesville VAMC; Dr. Enrique Carrazana – Miami VAMC and Dr. A. Tom Frontera -Tampa VAMC.</p> <p>c. Dr. Husain stated the requirements for the advisory committee are to maximize collaboration between SE VA site facilities and university affiliates, enhance referral for entire region, establish performance measures with emphasis on measurable outcomes for the ECoE and provide oversight for clinical and educational research. Mr. Oatman described the objectives and mandates of ECoE from congress which is to establish a national system of care for all Veterans, provide epilepsy education and training for health care professionals, patients and others, utilize national VA and other</p>	<p>- Work with the Military Medical Centers in the Southeast Region. Womack Army Medical Center and Camp Lejeune Marine Corps Base to get TBI and Epilepsy patients referrals and to collaborate with them to provide epilepsy care of those active duty members with TBI and Seizures.</p>

Agenda Item/Topic	Discussion/Conclusion/Recommendation	Action/Follow-up
	databases to inform providers and policy makers in Central Office about health care delivery and policy decisions, conduct state of the art epilepsy research and implement an informatics backbone to meet the above objectives.	
<p>2. Overview of Steering committee Meeting in Tampa.</p> <p>a. Budget</p> <p>b. Coding</p> <p>c. Projects</p>	<p>a. Congress allotted 1.5 million dollars to the SE sites which has been distributed equally among the four sites (\$275, 000 each). The budget has been met at all four sites for the past two years without any of the sites creating a deficit due to over spending. There are plans to capture indirect costs associated with non funded employees that provide care and services to the Veterans being seen in the ECoE programs.</p> <p>b. Mr. L. Scott Oatman stated that there has been a big discrepancy (in the 100s) in the capture of workload through our Data System as opposed to actual workload which generates non appropriate reimbursement via vera dollars. This discrepancy constituted a national mandate to create clinics using 345 stop codes to identify workload and assign secondary codes to pull data from regional and national level. Also labor mapping of employees who provide care to our epilepsy patients is being established with the generation of four cost centers (epilepsy clinic, admin., teaching and research) by National to show indirect costs to Congress which exceeds the 1.5 million dollar allocation for ECoE . The deadline for the labor mapping and new clinic establishment with stop codes is January 1, 2011.</p> <p>c. A list of projects have been sent to each committee member, therefore, Dr. Husain stated that he will not go over all of them. One of the current projects include national Database template for doctors to enter standardize fields in CPRS which will populate database and be used for tracking and merge note to cut down on duplicate data entry. A template which originated at Miami VAMC and has rolled to the regional and national levels has been sent to the sixteen ECoE site directors. Ms. Rehman has been working with project, along with SE ECoE site directors and template team in Miami to produce a final product. An initial and follow up template has been sent to sixteen ECoE directors for entire ECoE program for feedback. A meeting has been setup between SE regional staff, Miami ECoE staff and Template /CAC personnel in Miami to prepare for testing with goal of rolling out regionally in six</p>	<p>Mr. Oatman will provide follow ups to the advisory committee as needed during future meetings.</p>

Agenda Item/Topic	Discussion/Conclusion/Recommendation	Action/Follow-up
	<p>months. Ms. Gibson stated that it would be good to for patient to rule out epilepsy and take another look at them later. Other goals are to maintain registry for epilepsy patients and roll out to primary care doctors as well to get good history in order to make sound decisions. Another project which is being done at Miami is the ability to have EEGs available in CPRS system. Miami has been communicating with company to come up with HL7 capability that would allow which would allow snipping of the EEG to be saved in the patient's CPRS record. These are main short term projects been worked out and some national long term projects will be discussed at AES conference and next advisory committee meeting.</p>	
Questions/ Prospective	<p>-Ms. Pat Gibson stated that she will be doing a talk at AES conference on Friday in regards to post traumatic epilepsy which would be helpful and beneficial to goals and objectives. Also Dr. Chan in LA will be doing a talk on Vitamin D.</p>	<p>-Dr. Husain suggested that committee members send concerns or comments in regards to ways to better serve our Veterans patients.</p>
Next Call	<p>A call will be setup for early summer in regards to updates on southeast ECoE progress over the last 6 months.</p>	<p>Email will be sent to each committee member.</p>

NORTHEAST REGION ECoE ADVISORY COMMITTEE

Thursday, October 28, 2010
International Harbor Court Hotel, Baltimore, MD

Present:

Gregory Krauss, MD, Marc Testa, PhD, Christopher Bever, MD, MBA, W. Joel Culpepper, Ph.D., Michael Balish, MD, Allan Krumholz, MD, Elizabeth Barry, MD, Paul Fishman, MD, PhD, Regina McGuire, NP, Jane Stolte, Alan Towne, MD, Heather Hodges, RN, Juanita Parson, Hamada Hamid, DO, George Gregoire, Ryan Rieger, Patricia Banks, RN, Mary Wontrop

Participating by Conference Call :

Shane McNamee, MD, Huned Patwa, MD

Unable to Attend:

Dave McCarthy, MD, John Booss, MD, Richard Mattson, MD, Mill Etienne, MD, MPH, Howard Eisenberg, MD

HANDOUTS:

ECoE Background and design, mission and implementation plan

ECoE, NE Accomplishments, Year One

Epilepsy Centers of Excellence Organizational Chart

The meeting began at 5:45 PM with introductions, followed by the following presentations:

ECoE BACKGROUND - Dr. Krumholz

REGIONAL PERSPECTIVE -

Baltimore - Dr. Barry

Richmond - Dr. Towne

West Haven - Dr. Hamid

NATIONAL PERSPECTIVE - Mr. Rieger and Ms. Banks

DISCUSSION:

Q: How do patients transfer from military to the VA?

A: VA has liaisons for active duty staff. Some patients are still active duty when seen at Richmond (from Walter Reed). After discharge, VA can be accessed at different levels. (OEF/OIF Veterans get free care at the VA for 5 years, income based on means tests, and service connection for injuries/conditions initiated during military service).

VA/DoD integration has been difficult. Research funding has not been well coordinated.

West Haven has taken advantage of the strengths in Mental Health programs.

Q: What is the function of the ECoE NE Professional Advisory Board?

- A. The MS Center of Excellence has utilized advisory committees to review RFP requirements against progress to date, per Dr. Bever (Director, MSCOE East, and ACOS/Research and Development, VA Maryland Health Care System)
- External Advisory Committee (non-VA professionals) and Steering Committee (VA leadership) eventually combined into one group for annual meetings of approximately 6 hours.
 - Caregiver Committee (MS patients and others involved in patient care) and Community Board (NMSS, PVA) members combined into one group for annual meetings of approximately one and a half hours.
 - Associate Directors present progress, issues, concerns to Board members with time allotted for discussion
 - Boards have a closed meeting following presentations and discussions and report back to the Director with feedback and suggestions .

Discussion: ECoE is different from MSCOE in that they will provide more direct patient care and less development of network.

- Dr. Balish noted that the DC VAMC has EEG monitoring, Seizure clinic, VNS and does not anticipate referrals for surgery. What is desired from participation in the ECoE is collaboration in research.

- Dr. Krumholz identified the challenge of providing increased services and educational training within the current budget. Beyond monitoring and surgery, education is critical.
- Dr. Bever noted that although the MSCOE was mandated to use the hub and spoke approach, the ECoE should also consider using this model
 - Faculty within the network for collegial relationships
 - Draw on strengths of facilities in region
 - Primary objective of ECoE is Epilepsy Surgery within VA facilities, but there is much variability of Epilepsy care in the system. The goal should be more uniform care
- Dr. Fishman noted that Baltimore had not been eligible to become a PADREC because surgery was not available at that time. The benefit for his participation as a PADREC “spoke” has been education – monthly conference call and patient education developed by PADREC.

Q: Where are opportunities to enhance patient care and education:

- A. ECoE work closely with VACO programs to supplement funding
- Mr. Rieger noted that partnership with EES has begun and noted experience through PADREC:
 - EES has partnered with fairly simple programs such as CME over the VANTS system and Live Broadcast
 - Patient education programs are more local but San Francisco has videotaped patient conferences for DVD or to put on the Web.
 - Dr. Bever experience through MSCOE:
 - EES has provided funding for educational programs including satellite programs and face-to-face training. EES staff and budget should be assigned to ECoE (Dr. Ruff needs to champion)
 - Patients have monthly national conference calls through VANTS system with brief presentation by MS professional (no visual aids) followed by general discussion. 80-100 lines are used monthly.
 - Fellowship through Office of Academic Affairs
 - Expand GME residency, potential fellowship
 - collaborate with affiliate
 - Ms. Banks reported on attempts to expand budget
 - Surveys of resources available in ECoE, PADRECC and MSCOE compiled to develop needs assessment, data to support increased budget
 - Hope for funding under Polytrauma umbrella
 - Epilepsy Foundation was advocate for ECoE foundation – collaborations are encouraged
 - Dr. Bever noted that Research funding should be pursued
 - Cooperative Study Program
 - Rehabilitation Research
 - Clinical research through Polytrauma
 - ECoE leaders should contact Drs. Tim O’Leary and Joel Kupersmith at VACO to discuss potential links with funding for TBI grants
 - Dr. Fishman indicated in a discussion following the meeting that it would be important for ECoE develop a collaboration with the DOD. In order to leverage research opportunity, assistance from VACO will be necessary to designate someone at DoD with insight into epilepsy research development and RFP notification.

APPROVED:
 ALLAN KRUMHOLZ, M.D.
 ECoE, NE Regional Director

NORTHEAST REGION ECoE ADVISORY COMMITTEE

Thursday, May 12, 2011
Omni Hotel at Yale, New Haven, CT

Present:

John Booss, MD, Richard Mattson, MD, Dave McCarthy, MD, Huned Patwa, MD, Hamada Hamid, DO, George Gregoire, Jean Bruno, Alison Gamber, Denise Hirschfield, Allan Krumholz, MD, Elizabeth Barry, MD, Regina McGuire, NP, Jane Stolte, Alan Towne, MD,

Participating by Conference Call:

Christopher Bever, MD, MBA, Ryan Rieger

Unable to Attend:

Gregory Krauss, MD, Marc Testa, PhD, Mill Etienne, MD, MPH, Howard Eisenberg, MD, W. Joel Culpepper, Ph.D., Michael Balish, MD, Shane McNamee, MD, Heather Hodges, RN, Juanita Parson, Dennis Spencer, MD

HANDOUTS:

ECoE, NE Accomplishments, July 2009 to April 2011
ECoE Guide for EEG Tech Recruitment and Promotion

The meeting began at 5:00 PM with introductions and ended at 8:30 PM with Advisory Board recommendations for the ECoE NE Directors.

Dr. Booss provided background for the development of the Epilepsy Centers of Excellence.

- In the early 1970's, Epilepsy Monitoring Units were beginning – primarily at West Haven and Durham, later followed by Los Angeles, Seattle, Bronx, Madison and Dallas, as per Dr. Mattson.
- With VHA reorganization into Veteran Integrated Service Networks (VISN), the support base for EMU declined, causing closures. There was no Congressional authority to mandate support.
- An advisory panel appointed by Dr. Booss and led by Dr. Gregory Carter convened at the Northport VA. The panel submitted a report that detailed the decline of epilepsy services in VA and made recommendations for restitution of services for Veterans with epilepsy. The report was submitted to VACO but no action was taken.
- A coalition of Parkinson's Action Network, NMSS, PVA and AAN led to legislation for the creation of the PADREC and MSCOE programs.
- AAN has recognized that with the increase in TBI (from OEF/OIF injuries), something needed to be done for Epilepsy. The development of the ECoE program was driven by AAN (Mike Amery) and EF (Donna Meltzer and Dr. Brien J. Smith) with legislative support from both the Senate and House. Congressman Ed Perlmutter (Colorado) and Senator Patty Murray (WA) were especially helpful. Alec Garnett in Congressman Perlmutter's office helped considerably in communications with the House Committee.

Regional Perspective & Updates

West Haven:

- Clinical - No clinical beds = CHALLENGE
 - Before ECoE, 4-5 patients per year were monitored as inpatients. Have done 50 patients so far this year. Two portable units
 - Seizure clinic workload of 400 patients to be expanded with pseudo seizure telehealth pilot with Richmond.
- Staffing – one tech, posted for another tech. No nurse coordinator
- Education – Resident lectures plus PA and Neuropsych program (collaborative care/research). Applying for ACGME neurophysiology fellowship with Yale
- Research – Yale SOM. MRS imaging with TBI

Baltimore:

- Clinical - Before ECoE, existing seizure clinics and close connection with University of Maryland. Fee basis often used.
 - With ECoE, expanding services. No inpatient unit as Neurology is a consulting service.
 - Epilepsy monitoring in one CICU bed starting February 2011 (only one staffed with Neurology residents) and soon to have a bed in the PCU being renovated. Monitoring one patient per week. One portable unit.
 - Ambulatory EEG monitoring available (previously fee based)

- Epilepsy Surgery available – first patient done in May 2011
- Seizure clinic 2xmonth plus NP clinic staffed by residents and medical students
- WADA testing
- Staffing – one tech, .5 NP. Plan to recruit RN. Neuropsychologist is screening in Seizure clinics for depression and psychopathology
- Education – Awarded one year non-ACGME Polytrauma fellow to begin July 2011
- Research – University of MD/VA participating in FDA study – generic vs. Lamotrigine including PK studies
- CHALLENGES
 - Resources from Medical Center – space, staff to support direct patient care
 - How to develop a hub and spoke network
 - How to structure Advisory Board – separate boards for Professionals and Consumers or combined?

Richmond:

- Clinical –
 - EMU now open in Polytrauma Unit after difficulty in approval of paperwork. Ribbon cutting next month. One, sometimes two, patients per week. Mobile EEG for ICU (3 EMU units)
 - Have ambulatory monitoring
 - First surgery to be done in near future. Also have VNS, Transcranial magnetic stim
 - Outreach to active duty from WRAMC
 - Hub and spoke system is mature (WV, East and West VA, NC) with more patients being referred. Tele mental health MOU in process
 - Intraoperative monitoring
 - CITRIX server access for monitoring from different areas. Difficulties being resolved
- Staffing - two techs provided by hospital (EEG and EMG/EEG), RN
- Education – 3 ACGME neurophysiology fellows with UVA (one is VA so always one FTE)
- Research – Sleep in Polytrauma population. Pilot to be approved through IRB within week
- CHALLENGE – Polytrauma has inpatient precedence over EMU

Boston:

Dr. McCarthy noted that when he arrived in 2005, there was a discrepancy in care. Multi-site campus posed problems but there was space as a resource. 4 bed EMU, ICU wired and portable units. Expanded to Brockton. Limited by physician staff (second one has been recruited). Happy to work with ECoE network.

Working Group Updates

Research:

- Dr. Hamid noted that a collaborative group is working with the TBI consortium.
- Mary Jo Pugh has a grant looking at quality of care in epilepsy
 - Post TBI
 - Impact of ECoE on quality of care
 - PNES – no ICD9 code. Using extraction software to do keyword extraction
- Basic research: Rutecki models for PTE
- Bever: No research funding for clinical ECoE and MSCOE programs. Look for outside sources. Booss: implicit in the "RECCs", eg GRECC, is the incorporation of research and education with clinical activities. While there is the legal requirement that research and clinical funding streams be kept separate, there has been an appreciation in the Congress that there is considerable overlap in these activities.
- DOD – potential. Who are contacts?

Database:

- Dr. Towne noted difficulty with too much data to parse through easily.
- Centralized database with statistician
 - Hidden boxes in data tool in development.
 - How long to complete to be worthwhile (half hour)
 - Intended for outpatient but could be used for inpatient

- Aim: for all ECoE after VACO approval but everyone could use it.
- Want to integrate data like PBM.
- Booss: important to know how widely to be used. Be careful not to get out of hand administratively. Only used by epileptologists. Possible quality indicator and research tool, pull in TBI data.
- Bever: Need central aggregation of outcomes registry

Education & Fellowships:

Dr. Patwa discussed that there is no ACGME fellowship for epilepsy.

- VA has non-ACGME special neuroscience fellowships.
 - Intend for every site to have one, although Dr. Gilman is hesitant to assign funding.
 - Issue: appointment decisions not made until May prior to July start. Timing should start a year earlier. Mattson: interviewing now for 2012
 - Best combination: VA non ACGME and University ACGME. Baltimore uses first year neurophysiology and then second year for non-ACGME funded by VA
 - Booss: Another mechanism – PVA has funded fellowships through their education office, giving funding to the VA. Suggest Epilepsy Foundation or other organizations be consulted.

Clinical Practice & Policy:

Jane Stolte reviewed the progress toward goals for this work group.

- Development of a hub and spoke network for Epilepsy clinical care and Develop outreach programming including telemedicine clinics and exploring remote EEG reading - In progress. Exploring use of Clinical Video Telehealth for specialists to provide consultation to remote/rural areas. West Haven and Richmond are piloting a telehealth pseudo seizure program.
- Develop and Implement Procedure for EMU Workload Tracking – assigned to special work group utilizing subject matter experts from VACO (i.e., DSS, billing)
- Develop and Implement National Formulary for Epilepsy- Kathy Tortorice, VACO Pharmacy Benefits Specialist for Neurology, has been recruited to serve on this work group. She has provided support and information for ECoE needs and concerns and is now able to solicit feedback from the ECoE subject matter experts for VACO PBM concerns.
- Gain Approval for Travel Policy for ECoE Patients – Letter is in VACO for approval. Dr. Booss suggested contact with SCI Coordinators to see how they have managed this issue.
- Reclassify EEG Technician position description. GS9 and GS10 positions have been approved at Baltimore. Guidelines for recruitment and promotion have been assembled into a document to be approved by this work group prior to distribution to ECoE.

ECoE Funding: When asked about permanence of funding, Dr. Booss stressed the importance of obtaining generalized data for cost savings. Seek higher category for VERA reimbursement.

Veteran Outreach – Epilepsy Foundation of CT : Allison Gamber noted that EF services include informational referral, educational outreach, on-line training for EMT on epilepsy management in the field, support groups with phone networks, advocacy in schools, legislation (recent success: pharmacies may not switch to generics) summer camp, Board of Directors, materials and presentations.

Dr. Booss noted that the VA cannot advocate Congress so that the EF and other organizations play a vital role. The national EF office is in Landover, MD.

Advisory Board Feedback:

Dr. Richard Mattson, Dr. John Booss, Dr. David McCarthy (including comments later added by Dr. Christopher Bever)

- Good initiatives: EEG tech classification and patient travel. Suggest talking discretely to SCI coordinators to learn how that program handles patient travel.
- Levels of Care issues are huge.
 - New AAN guidelines should be used as a tool
 - Seizure Type(s) and Current Seizure Frequency(ies)
 - Documentation of Etiology of Epilepsy or Epilepsy Syndrome
 - Electroencephalogram (EEG) Results Reviewed, Requested, or Test Ordered
 - Magnetic Resonance Imaging/Computed Tomography Scan (MRI/CT Scan)

- Results Reviewed, Requested, or Scan Ordered
 - Querying and Counseling about Anti-Epileptic Drug (AED) Side Effects
 - Surgical Therapy Referral Consideration for Intractable Epilepsy
 - Counseling About Epilepsy Specific Safety Issues
 - Counseling for Women of Childbearing Potential with Epilepsy
- Match complexity of patient care to VERA reimbursement by working with the Allocation Resource Center (ARC).
- Document how ECoE is saving the VA money
- Independent of government cost savings, provide studies showing a shrinking in the difference in quality of care
- Building networks: West Haven main issue is modest catchment area. Across network, the problem is that referrals incur costs for travel as well as provision of care. Easier to manage if within VISN.
 - Probably all ECoE sites have travel and reimbursement issues
 - Services across network, VISN, lines need attention at national level
 - Difficult to travel without supportive family
 - Funding issues for families to stay with patients for monitoring, surgery
 - Consider “Ronald McDonald House”
 - Potential area for Epilepsy Foundation support
 - If sending patients for fee-based surgery, family support not provided
- Who advocates for Polytrauma? Need to strengthen relationships
 - Potential: DAV, VFW, American Legion, Wounded Warriors (Congressionally chartered with voluntary connection)
 - Dr. Towne has connections to several of the organizations through his military experience
 - Give recognition to legislators who have championed epilepsy programs
- Additional funding is necessary for ECoE sustainability, possibly through VERA
 - Each ECoE site requires more than \$1 million - \$2Million per center is realistic based on Dr. Mattson’s experience with the early West Haven program.
 - EMU structures ideally would have at least 4-6 beds with staffing to include nursing and technicians
- Response to individual site issues:
 - Baltimore
 - Patient referrals and network development
 - Seek advice from Dr. McCarthy to promote hub and spokes based on his experience in Boston area. He suggested
 - Calling medical centers to talk to neurologists
 - Go to medical centers to give lectures
 - Word of mouth important
 - “Neurology day” – invite others in to see programs
 - Start small and build gradually
 - Consider putting consumers on advisory board. MS has a different population so that the MSCOE model of two advisory boards may not be appropriate for Epilepsy
 - Space issues may require higher level intervention
 - Ask Dr. Ruff to speak to Medical Center Director about supporting program
 - ?Medical School support
 - Bever: Prepare a proposal of what is needed, describing what should be available for monitoring and surgery based on anticipated patient volumes. Include estimated costs, VERA reimbursement and resources.
 - Richmond
 - EMU and Polytrauma issues cannot be resolved
 - Polytrauma should be multi-disciplinary
 - National issue: DoD has provided acute care while in the VA, Polytrauma has been managed by Rehab
- Research: Should not have trouble getting research VA funding for individual investigators
 - Why not pursue epidemiology as indicated in work group report?
 - Epidemiology should not be ignored
 - Emphasize research as clinical if using ECoE funding
- Fellowship: Encourage foundation(s) to support
- Database: Important for epidemiology
 - EEG/long term monitoring database

- Each individual facility enter results
- Same template
- Measure outcome and impact
- Potential model – Massachusetts General Hospital database
- Fields: need to agree on what to track
 - Long term monitoring: Diagnosis codes and Diagnosis (i.e., NES focal or epileptiform findings)
 - Changes in diagnosis?
 - Indeterminate?
- Data should not just be collected from ECoE. For example, Dr. McCarthy would be interested in access and sharing Boston data.
- Bever: Should have centralized registry
 - All monitored and surgical patients
 - Outcomes for both
 - Start with ECoE sites, but should include network of all centers with monitoring capability
- Sustained funding (beyond initial five year authorization)
 - Unlikely that congressionally mandated program will end (without legislation, previous programs suffered slow death)
 - Important to get Epilepsy Foundation and Veteran Service Organizations engaged
 - Support and thanks for Perlmutter and Murray - ?award
 - Important to document workload and cost savings: # = \$\$

APPROVED:

RICHARD MATTSON, M.D.

CHAIR, ECoE NE ADVISORY BOARD

NORTHWEST REGION ECoE ADVISORY COMMITTEE

May 17, 2011

To: Paul Rutecki, MD
From: Bruce Hermann, PhD on behalf of ECoE Advisory Committee
Re: Annual review

The ECoE Advisory Committee met by telephone conference on two occasions, the first time with the directors of the NW sites, and the second time for internal discussion. The following is a summary of our discussion and recommendations.

First and foremost, the committee recognizes that individual medical centers may have severe budgetary constraints, and that some centers have initiated hiring freezes and/or frozen FTEE levels. Nonetheless the committee wishes to emphasize that all new positions under the Centers of Excellence program are centralized positions, and are centrally funded, and should not be counted as part of the local VAMC's FTEE level. The committee also wishes to emphasize that the local VAMCs that host the ECoEs are critical for the success of this Congressionally mandated program (S.2162, SEC 404), and are urged to support these programs.

Second, the advisory committee wishes to commend the ECoE for their progress over the first year, and for successfully addressing not only the goals outlined in their original proposal, but the mandates of senate bill S.2162.

Finally, the advisory committee has several minor concerns and suggestions we would ask that the Centers consider:

1. Document the effectiveness of the ECoE by rigorous tracking of referrals by source, documenting attendance at educational programs, and documenting provider satisfaction.
2. Include a Veteran representative on the Advisory Board.
3. Take advantage of the common data base being developed, and leverage the power of the common data base to secure other funding such as through the Cooperative Studies Program, HSR&D, Industry, and private foundation funding.
4. Expand telemedicine usage, exploring feasibility of telemedicine to remote clinics, and remote EEG transmission.
5. Address cost effectiveness of the diagnosis of epilepsy in the Veteran population (e.g., treatment, quality of life, disability claims).
6. Consider a short evaluation form for referring doctors to see how we are doing.
7. Consider following-up with patients to characterize outcomes (e.g., general satisfaction, how was our service, what can we do better). Consider an anonymous random sampling and send out before the next meeting.
8. Coordinate patient care within the region.
9. Determine rules and regulations regarding virtual consultation and credentialing processes. Determine benefits that accrue to remote sites.
10. Consider initiating telemedicine within 6 months within Portland.
11. Determine diagnostic related expenses the year before and after monitoring.

We hope this feedback is helpful. We are extremely pleased with the progress to date and think that the ECoE is a superb program that is significantly advancing care of Veterans with epilepsy.

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

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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

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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.”

ABBREVIATIONS / ACRONYMS

AAN	American Academy of Neurology
ACGME	Accreditation Council for Graduate Medical Education
AED	Antiepileptic drugs
AES	American Epilepsy Society
CAC	Clinical Application Coordinator
CBOC	Community Based Outpatient Clinic
CDC	Centers for Disease Control and Prevention
CICU	Coronary Intensive Care Unit
CoE	Center of Excellence
CPRS	Computerized Patient Record System
CPT	Current Procedural Terminology
CVT	Clinical Video Telehealth
DOD	Department of Defense
DRMRP	Department of Defense Deployment Related Medical Research Program
DSS	Decision Support System
DVBIC	Defense and Veterans Brain Injury Center
ECMS	Executive Committee, Medical Staff
ECoE	Epilepsy Center of Excellence
EEG	electroencephalography
EES	Employee Education System
EF	Epilepsy Foundation
EFGLA	Epilepsy Foundation of Greater Los Angeles
EMG	Electromyography
EMU	Epilepsy Monitoring Unit
FDA	Food and drug Administration
FTE	Full-time Equivalent
FTEE	Full-time Employee Equivalent
FY	Fiscal Year
GABA	Gamma-Aminobutyric Acid
GLA	Greater Los Angeles
GRECC	Geriatric Research, Education and Clinical Center
HCS	Health Care System
HIMS	Health Information Management System
HL7	Health Level Seven (technology standard for exchanging information between clinical applications)
HSR&D	Health Services Research and Development
IC	Informatics Council
ICD	International Classification of Diseases
ICU	Intensive Care Unit
IFC	Inter-Facility Consult
IOM	Integrated Operating Model
IRM	Information Resources Management
IT	Information Technology
LTM	Long Term Monitoring
MIT	Means Indicator Test
MRI	magnetic resonance imaging
MSECoE	Multiple Sclerosis Center of Excellence
NIH	National Institutes of Health
NTRT	New Term Rapid Turnaround
OAA	Office of Academic Affiliation
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OND	Operation New dawn
PADRECC	Parkinson's Disease Research, Education and Clinical Center
PET	Positron emission tomography
PGY	Post Graduate Year
P.L.	Public Law

PM &R	Productivity Measurement and reporting or Physical Medicine and Rehabilitation
PNES	Psychogenic non-epileptic seizures
PROMIS	Patient-Reported Outcomes Measurement Information System
PTC	Polytrauma Centers
PTSD	Post-traumatic epilepsy
QUIET	Quality Indicators in Epilepsy Treatment
QTI	Question and Test interoperability
R&D	Research and Development
RBM	Roll Back Malaria
REEGT	Registered Electrocephalographic technician
RFA	Request for Application
RFP	Request for Proposal
RPIW	Rapid Process Improvement Workshop
S.2162	{110the} Veterans' Mental Health and other Care
TBI	Traumatic brain injury
TMS	Transcranial Magnetic Stimulator
UF	University of Florida
USF	University of South Florida
V-Tel	Video Teleconference
VACO	VA Central Office
VAHCS	VA Health Care System
VAMC	VA Medical Center
VANTS	VA Nationwide Conferencing System
VAGLAVAMC	VA Greater Los Angeles VAMC
VAMiaVAMC	VA Miami VAMC – Bruce W. Carter – Miami, Florida
VAMHCS	VA Maryland Health Care System
VANMHCS	VA New Mexico Health care System – Raymond G. Murphy VAMC
VAPSHCS	VA Puget Sound Health Care System – Seattle, Washington
VARICHVAMC	Richmond VAMC – Hunter Holmes McGuire – Richmond Virginia
VASTVAMC	VA South Texas VAMC – Audie L. Murphy VAMC – Tampa, Florida
VATampa	VA Tampa VAMC – James A. Haley
VAWIVAMC	VA Wisconsin VAMC – William S. Middleton - Madison, Wisconsin
VEEG	Video Electroencephalogram
VERA	Veterans Equitable Resource Allocation
VetPop	Veteran Population Projections Model
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
VNS	Vagus Nerve Stimulator
VSSC	VISN Support Services Center
WADA	Intracarotid Sodium amobarbital procedure named after Canadian epileptologist Juhn Atsushi Wada
WLA	West Los Angeles