FY22 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. www.epilepsy.va.gov



U.S. Department of Veterans Affairs Veterans Health Administration Epilepsy Centers of Excellence

Epilepsy Centers of Excellence ANNUAL REPORT FISCAL YEAR 2022

October 1, 2021 – September 30, 2022



U.S. Department of Veterans Affairs

Epilepsy Centers of Excellence

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2022 Annual Report Project Manager: Jennifer Bonds

In addition to the ECoE Directors and staff, special thanks go out to those who went above and beyond to assist in bringing this annual project to fruition: Linda Benson, MPH; Winona Finley; Rizwana Rehman, PhD; April Mizell; Keninthe Davis, MSA-HCA; Joseph Peterson; and Denetra Robinson.

Mission

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

Message from the VA National Neurology Program Office

The year-end summary for the Epilepsy Centers of Excellence (ECoE) Annual Report gives us a chance to reflect and to review the program's goals, accomplishments, and challenges over the past year. Fiscal Year 2022 (FY22) has been a year of planning and anticipation. Enhanced funding secured midway through FY20 has been used to purchase equipment and plan for the expansion of tele-electroencephalography (tele-EEG) and epilepsy telehealth throughout the Epilepsy Centers and sites. In addition, the Epilepsy Centers will receive an unprecedented additional \$9+ million in FY23, of which nearly all will be maintained as continuing funding in future years. Expansion of remote care, institution of continuous real-time EEG monitoring, and in-home monitoring, among other technological advances, would not be possible without these new resources. The Centers will require increased staffing, attention to overall administrative structure, and careful consideration of expansion to fill geographic gaps and to engage those eager to join or closely affiliate with the ECoEs.

Although the situation is much improved from two years ago, the COVID-19 pandemic remains stubbornly persistent. In-person services have yet to recover fully to pre-Covid levels. This situation is offset by continued increased reliance on telehealth services, which will likely evolve further through the new ECoE initiatives. The "new normal" will probably be a blend of face-to-face and remote care to give Veterans the most options to obtain epilepsy workup and treatment.

This fiscal year saw the retirement of Dr. Marty Salinsky, who led the Portland and Northwest Region ECoE for many years. He was succeeded by Dr. Jack Jones from the Madison, WI VAMC. With Dr. Alan Towne continuing as the ECoE National Clinical Director, his leadership of the Northeast Region ECoE passed to Dr. Hamada Altalib at VA Connecticut. We also acknowledge the accomplishments of Dr. Karen Parko, the inaugural National Director of the VA ECoEs, on the occasion of her retirement. It was her leadership that set the Epilepsy Centers on a firm foundation, established the national structure of the Centers, and helped secure ongoing funding beyond the initial five years of support. Although we will miss the wisdom and warmth of colleagues who have moved on, we are encouraged by the many talents of the epileptologists advancing to assume new leadership roles and helping to drive the expanded efforts of the Centers.

As the saying goes, "Careful what you wish for." Now the task before the Epilepsy Centers is to bring to fruition the promises and expectations the enhanced investment of resources warrants. This will help ensure that FY23, and the years that follow, will be both exciting and challenging. In addition, it will take effort and a paradigm shift to achieve the congressional charge to improve collaboration among the neurology centers, both within and across subdisciplines. Our challenge in the National Office is to find a way to replicate the ECoE success by obtaining much needed resources for the other neurology centers (including the Headache Centers of Excellence, which moved under Neurology at the start of FY23) so they, too, can achieve their full potential.

To all the ECoE Directors and staff, thank you for your dedication and hard work to ensure the ongoing progress and success of the ECoEs.



Sharyl R. Martini, MD PhD Executive Director, National Neurology Program, Veterans Health Administration



Glenn D. Graham, MD PhD Deputy Executive Director, National Neurology Program, Veterans Health Administration

Message from the National Director

It has been an honor to serve as the National Director of the Epilepsy Centers of Excellence (ECoE). This year has been eventful, with a number of remarkable changes. The increase in funding to \$10 million for FY22 has enabled the ECoE to build upon and expand our services to Veterans. One of our program goals was to complete the hiring of national and regional administrators. We recently a hired National Administer and filled all our regional administrator positions. We have also added new ECoE site directors in Minneapolis and Richmond. Virtual site visits were accomplished this year by the National Neurology Office, with valuable feedback from the reviewers.

Clinical Care in the past year has undergone changes with the continued expansion of the Tele-EEG initiative. A proposal to expand access for Tele-EEG was accepted and will provide extra funding to provide this needed service to Veterans, across the nation, who currently do not have EEG capabilities at their centers. The VA Mind Brain Program (MBP) was launched in 2022 to provide training and collaboration among VA clinicians and researchers to further the study and treatment of common neuropsychiatric conditions. This program has developed an accredited continuing education series reviewing the use of Neuro-Behavioral Therapy (NBT) in epilepsy and psychogenic nonepileptic seizures for VA clinicians. It has also established training partnerships with other VA Centers of Excellence.

Research is one of our core ECoE missions, and we have been very active in both the clinical and basic science domains. Enclosed in this annual report are the numerous grants, publications, and seminars that have been produced by the ECoE team. Some of the research projects include EMU outcomes research, research on drug-resistant epilepsy, use of epilepsy medications in women, analyzing EPRP and AMCMS data, epidemiology of epilepsy and traumatic brain injury, home-based technologies to improve diagnosis in Veterans with epilepsy, biomarkers in epilepsy, and basic mechanisms of epilepsy.

Education is another one of our core missions. The focus for FY22 was to create an infrastructure for education dissemination at multiple levels. This includes education for neurologists, epilepsy experts, nurse practitioners, pharmacologists, nurses, caregivers, patients, primary care, EEG technologists, and general neurology. Educational programs included the Hope in Epilepsy Series for patients and caregivers, the Journal Club for Epilepsy Experts, Grand Rounds for Epilepsy Experts, a nursing education series, women with epilepsy education, and EEG technologists training programs.

I am grateful for the support given by Dr. Sharyl Martini, Executive Director for Neurology, and Dr. Glenn Graham, Deputy Executive Director for Neurology, in navigating the intricacies of the Veterans Affairs Central Office (VACO) and in providing the ECoE with sound advice.

I would also like to acknowledge the outstanding work of two of our retiring members, Dr. Marc Dichter and Dr. Karen Parko.

Dr. Dichter has been the chair of the National Peer Review Committee since the inception of the ECoE. He is the Emeritus Professor of Neurology at the Perelman School of Medicine at the University of Pennsylvania and a noted epileptologist. His seminal research centered on the basic mechanisms of epilepsy, the physiology and pharmacology of synaptic transmission between hippocampal neurons, methods for brain stimulation to prevent epileptic seizures, mechanisms of epileptogenesis, and preventing epilepsy after traumatic brain injury.

Dr. Parko was the inaugural national director of the ECoE. Under her leadership, she created a comprehensive national program in epilepsy. She established ECoE collaborations with multiple organizations, including the Institute of Medicine, Interagency Collaborative to Advance Research in Epilepsy, Epilepsy Leadership Council, CDC, ILAE, and the Defense and Veterans Brain Injury Center. In 2017, she received American Epilepsy Society (AES) National Service Award, and she has served as a mentor to many of us. You can read more about Dr. Karen Parko's outstanding contributions to ECoE at the back of this report, in the section titled "In Honor of Dr. Karen Parko, M.D."



Alan R. Towne, M.D, M.P.H. National Director Epilepsy Centers of Excellence

Introduction

In 2008, under Public Law S. 2162, the Department of Veterans Affairs (VA) set out on a mission to revolutionize services for Veterans afflicted by epilepsy and other seizure disorders. The VA founded the Epilepsy Centers of Excellence (ECoE), establishing sixteen sites that are linked to form four regional centers.

The ECoE seeks 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 to further the understanding of this chronic condition. The ECoE offers a range of services in both the outpatient and inpatient realms and provides outpatient epilepsy clinics with a staff of neurology sub-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 who require more intensive testing or attention, the ECoE also provides inpatient units for examining certain seizure types more closely, changing medications in a monitored setting, and presurgical evaluation.

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

If you are a Veteran with seizures and are interested in seeking services at one of the Epilepsy Centers, please inquire with your local VA primary care physician. Your doctor will be able to determine if you might benefit from the services provided by ECoE and assist you with scheduling an appointment. You can also contact your local ECoE site directly for assistance in connecting to services. For more information, please visit our website at www.epilepsy.va.gov.

National Program Goals

The goals of the ECoE National Program are as follows:

- Establish 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.
- Collaboratively develop a national consortium of providers with interest in treating epilepsy at VA healthcare facilities lacking an epilepsy center of excellence to ensure better access to state-of-the-art diagnosis, research, clinical care, and education for traumatic brain injury and epilepsy throughout the VA healthcare system.
- Collaborate with the VA Polytrauma/TBI System of Care that provides research, education, and clinical care to Veteran patients with complex multi-trauma associated with combat injuries.
- Use national VA and other databases to inform providers and policymakers in the VA Central Office about healthcare delivery and health policy decisions, conduct state-of-the-art research in epilepsy, and implement an informatics backbone to meet the above objectives.
- Ensure an affiliation with accredited medical schools, provide education and training in neurology, and diagnose and treat epilepsy (including neurosurgery).
- Provide professional health education and training to nursing staff, medical students, house staff, fellows, and referring physicians to deliver the highest quality of standard of care to Veterans with epilepsy.

FY22 National ECoE Goals & Accomplishments

The following goals and accomplishments were outlined in FY21 to serve as a road map for the ECoE in 2022:

Program/Operations

- Established regional advisory committees and initiated the review process.
- Launched, promoted, and validated the VHA Support Service Center Capital Assets (VSSC) Cube.
- Paid special attention to diversity, inclusion, and advocacy; reviewed health equality and outcomes.
- Updated the organization chart.
- Completed virtual site visits.

Clinical Care

- Expanded the tele-EEG program; focused on rural access.
- Completed the transition to the tele-epilepsy platform; determined metrics.
- Continued Cerner migration.
- Reviewed materials that would be appropriate to send to the community under the Mission Act.
- Focused on the transition from the consortium to the ECoE sites.
- NBT for Psychogenic Non-Epileptic Seizures MBP/PNES.
- Expanded collaboration for Tele-Mental Health.

Research/Surveillance

- Continued to pursue various research awards, including Merit.
- Considered other projects (clinical and basic science).
- Reviewed drug-resistant epilepsy.
- Evaluated Veterans Equitable Resource Allocation (VERA) funding.

Education

- The Education Workgroup was chaired by Drs. Waterhouse and Khan.
- Created online education, patient care webinars, journal clubs, grand rounds, Boston Epilepsy education, non-neurologist webinars, and educational materials.
- Created basic training videos.
- Launched nursing and technologist education.
- Deployed Epilepsy Education, Care Systems, and Health Outcomes via National, Regional, and Community Partners.

Outreach

- Continued to engage consortium members with clinical research and initiatives.
- Determined the role of pharma collaboration.
- Planned and launched Purple Day events.
- Conducted outreach to other organizations.

FY23 National ECoE Goals

Operations:

- Develop governance structure
- Redefine roles and responsibilities within ECOE structure
 - Minimum guidelines for ECOE consortiums
 - Minimum guidelines for ECOE centers
- Pursue comprehensive program evaluation for ECOE and Tele-EEG
- Deploy national CPRS template via pilot at certain ECOE sites and compare to other ECOE sites via EPRP program chart review to see if template/powerform improves documentation
- Customize nursing seizure assessment and documentation in EHR

Clinical

- Continue Mental Health Initiatives NBT for PNES, Tele-Mental Health, and Suicide Prevention
- Increase access using VVC and e-consults through tele-epilepsy program
- Expand tele-EEG platform, focus on rural and ICU access

Education:

- Partners with Caregiver Support Program to disseminate our caregiver webinars to their coordinators and explore the Inclusive Care Initiative program to see how we might better engage with caregivers in the ECOE beyond webinars
- Look for ways to provide them with data on how many veterans have epilepsy
- Identify and develop strategic partnership within the VA and outside
- Develop Caregiver education series
- Review and finalize Self-Management Booklets for printing and distribution to Veterans

Outreach:

- Coordinator events with outside speakers, DoD speakers, consultants and University affiliates (Technology work group)
- Determine role of pharma collaboration and other non-profit partners

Research:

- Review infrastructure required to complete mission
- Complete data collection for FND (functional neurological disorders) study survey
- QI on Drug Resistant Epilepsy complete cefepime toxicity study
- Continue evidence-based practice and research project taskforce (Nursing workgroup)

Centers of Excellence

Northeast								
5	Vest Virginia, Ohio, Pennsylvania, Delaware, Massac icut, Rhode Island, New Hampshire, Massachusetts, ichmond	-						
Baltimore	VA Maryland HCS	(410) 605-7414						
Boston	VA Boston HCS	(857) 364-4745						
Richmond	Hunter Holmes McGuire VAMC	(804) 675-5000, ext. 5127						
West Haven	VA Connecticut HCS	(203) 932-5711, ext. 2420						
Northwest								
	ashington, Oregon, Idaho, Montana, Wyoming, No ndiana, Michigan, and Wisconsin linneapolis	rth Dakota, South Dakota,						
Madison	William S. Middleton Memorial VA	(608) 256-1901, ext. 17728						
Minneapolis Minneapolis VA HCS (612) 467-2047								
Portland Portland VA HCS (503) 220-8262, ext. 58334								
Seattle	Seattle Puget Sound (206) 764-2021							
Southeast								
States covered: Florida, Al Arkansas, Louisiana, North Linked Polytrauma Site: Ta		South Carolina, Puerto Rico,						
Durham	Durham VAHCS	(919) 416-5982						
Gainesville	Malcom Randall VAMC	(352) 376-1611, ext. 6082						
Miami	Miami VAHCS	(305) 575-7000 ext. 3192						
Tampa	James A. Haley Veterans' Hospital	(813) 972-7633						
Southwest								
Oklahoma, and Philippine	States covered: California, Utah, Colorado, Kansas, Nebraska, Nevada, Hawaii, Arizona, New Mexico, Texas, Oklahoma, and Philippines. Linked Polytrauma Sites: Palo Alto and San Antonio							
Albuquerque	New Mexico VAHCS	(505) 256-1711, ext. 2752						
Houston	Michael E. DeBakey VAMC	(713) 794-8835						
San Antonio	Audie L. Murphy Memorial VA Hospital	(210) 617-5300, ext. 14372						
San Francisco	San Francisco VAMC	(415) 379-5599						
West Los Angeles	Greater Los Angeles HCS	(310) 268-3595						

Definition of Centers

ECoE sites and Regional Centers will be designated by the ECoE National Program as ECoE *program sites* or *centers*.

ECoE Sites

Each ECoE, referred to as an "ECoE site," accomplishes the following:

- Offers weekly specialty Clinics in Epilepsy (not seen within a general neurology clinic).
- Trains providers for these clinics specifically in epilepsy care.
- Provides V-tel epilepsy consultations.
- Provides epilepsy monitoring.
- Has a single director who is an epileptologist.
- Has a designated administrative support person who works within the ECoE and participates on a national level.
- Participates in national ECoE initiatives and workgroups.

ECoE Regional Centers

Each region, referred to as an "ECoE Regional Center," accomplishes the following:

- Composes an established network covering all Veterans in its region, with a specified pathway for referral of Veterans with epilepsy to a surgical center, if needed.
- Sees Veterans in a timely manner, in accordance with VA policy and procedures.
- Has at least one surgical center that is comparable to a NAEC level 4 center, to include:
 - 1. An interdisciplinary and comprehensive diagnostic team approach
 - 2. A team that includes epileptologists, neurosurgeons, neuropsychologists, nurse specialists, and EEG technologists
 - 3. Complete evaluation for epilepsy surgery, including Wada testing
 - 4. Neuropsychological and psychosocial treatment
 - 5. Specialized brain imaging
 - 6. Fixed EMU beds that can provide Video EEG telemetry that includes intracranial electrode, functional cortical mapping, and electrocorticography
 - 7. A broad range of surgical procedures for epilepsy
- Is involved in clinical trials.
- Has a dedicated full-time epilepsy AO who serves as part of the national team.
- Offers opportunities for specialized education in clinical epilepsy care.

Consortium Sites

Each consortium site accomplishes the following:

- Applies to the National ECoE for site designation and is recognized locally and nationally as an ECoE consortium site.
- Has a provider specifically trained in treating and managing epilepsy.
- Is linked to the ECoE network and has established an administrative pathway to refer patients to ECoE.
- Provides ECoE epilepsy resources to Veterans.
- Is available to participate in collaborative research projects.
- Participates in ECoE educational programs for clinical epilepsy care.
- Can participate in national ECoE initiatives and workgroups.



Epilepsy Centers of Excellence Regional Map

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IOL	4 1 1 2	Mer P	1 .	-

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

*States Covered: Alaska, Idaho, Illinois, Indiana, Iowa, Michigan, Minnesota, Montana, North Dakota, Oregon, South Dakota, Washington, Wisconsin, and Wyoming.

Southwest Sites

5 Albuquerque	New Mexico VA HCS	(505) 265-1711 x2752
6 Houston	Michael E. DeBakey VAMC	(713) 794-8835
⑦ San Francisco	San Francisco VAMC	(415) 379-5599
West Los Angeles	Greater Los Angeles HCS	(310) 268-3595
(9) San Antonio	Audie L. Murphy VA Hospital	(210) 617-5300 x14372
	rizona, California, Colorac New Mexico, Oklahoma, 1	

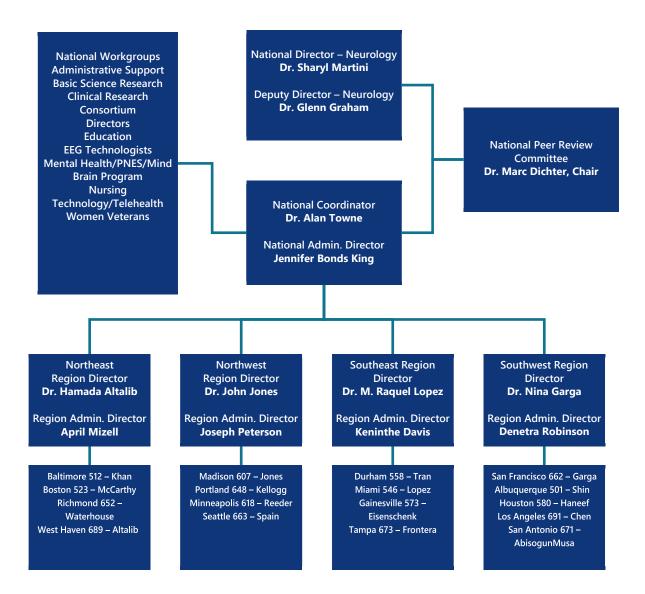
Manut			
Nori	inea	ST SI	Tes

CS	(804) 675-5000 x2531
aryland HCS	(410) 605-7414
onnecticut HCS	(203) 932-5711 x4724
ston HCS	(857) 364-4750
	cs aryland HCS onnecticut HCS oston HCS

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

Southeast Sites								
(14) Durham	Durham VAMC	(919) 416-5982						
(15) Miami	Miami VAHCS	(305) 575-3192						
(16) Gainesville	Malcom Randall VAMC	(352) 548-6058						
(17) Tampa	(813) 972-7633							
(17) TampaJames A. Haley VAMC(813) 972-7633*States Covered: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, Tennessee, and Puerto Rico								

Epilepsy Centers of Excellence Organization Chart



National VA Epilepsy Consortium

The goal of the National VA Epilepsy Consortium is to support the delivery of optimal care for Veterans diagnosed with epilepsy and seizure disorders through professional education, collaboration, and peer support across the collective VA Healthcare System. All interested VA clinicians, including epileptologists, neurologists, gerontologists, general internists, and other allied health professionals who serve Veterans with epilepsy and related seizure disorders (regardless of capacity) are invited to participate.

Together with the Epilepsy Centers of Excellence (ECoE), the National VA Epilepsy Consortium will create a huband-spoke model of care across the VA Healthcare System, expanding and streamlining the referral network for specialized epilepsy treatment, advanced neuro-diagnostics, and surgical evaluation. The Epilepsy Consortium will ensure accessibility and continuity of specialized care for Veterans regardless of locality, thus broadening the impact of the ECoE network. The National VA Epilepsy Consortium serves as a direct link to the 16 ECoE sites, which are staffed by epilepsy specialists or neurology clinicians and provide administrative assistance, professional collaboration, and educational offerings in epilepsy care.

Members of the National VA Epilepsy Consortium will be offered a variety of epilepsy educational resources and updates on state-of-the-art epilepsy care from the ECoE. Also, consortium members who provide more comprehensive epilepsy services to Veterans can engage with the ECoE sites to assist in the development of standardized clinical processes and procedures to ensure consistent quality of care across the VA Healthcare System.

Inventory of Services

(x indicates that services are offered)

ECoE Inventory of Services FY22	San Francisco, CA	Los Angeles, CA	Houston, TX	San Antonio, TX	Albuquerque, NM	Baltimore, MD	Boston, MA	Richmond, VA	West Haven, CT	Madison, WI	Minneapolis, MN	Portland, OR	Seattle, WA	Durham, NC	Miami, FL	Gainesville, FL	Tampa, FL
Outpatient EEG	х	х	х	х	х	х	х	х	х	х	Х	х	х	х	х	х	х
Specialty Epilepsy Clinics	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Epilepsy Inpatient Consultation	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Scalp Video-EEG Telemetry (Phase 1), # of Beds	4	3	4	3		3	5	1	2	3	2	3	2	3	2	4	2
Epilepsy Protocol MRI Imaging	х	х	х	х	х	х	х	х	х	х	Х	х	х	х	х	х	х
PET Scanning	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Magneto encephalography						х		х	х								
Radio Surgery (Gamma Knife)										х							
Functional MRI (fMRI)				х		х	х	х				х					х
Ambulatory EEG		х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	
Epilepsy Video Telehealth Clinics	х	х	х		х	х	х	х	х	х	х	х	х	х	х	х	х
eConsult	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Telephone Clinics	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
SCAN-ECHO						х	х	х	х	х	х	х	х				
Patient Home Telehealth	х	х	х		х	х	х	х	х	х	х	х	х	х			х
Store-and-Forward Remote EEG Rdg.	х			х			х	х	х	х		х	х	х		х	
On-Site Therapy for PNES	х		х			х	х	х	х			х	х	х	х		
NTMHC Tele-NES Provided	х		х				х	х	х	х		х	х				
Ability to Perform Wada Testing	х		х	х		х		х		х		х		х			
Ability for Pre-Surgical Neuropsych. Testing	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
Resection Surgery	х	х	х	х		х	х	х		х		х		х		х	
Intracranial Recordings: Grids/Strips	х	х	х			х		х		х				х			
Intracranial Recordings: Std. Depth	х	х	х			х		х		х		х		х			
Intraoperative Electrocorticoraphy (ECoG)	х	х	х			х	х	х		х		х		х		х	
Intraoperative Cortical Stimulation/Mapping	х	х	х			х		х		х				х			
Extraoperative Cortical Stimulation/Mapping	х	х	х			х		х		х		х		х			
Placement of VNS	х	х	х	х		х	х	х		х	х	х		х		х	
Placement of NeuroPace		х	Х			х		х		х		х					
Programming NeuroPace	х	х	х			х	х	х	х	х							
Deep Brain Stimulation	х	х	х	х		х		х				х		х			
Primary ECoE Contact Phone Number	415.379.5599	310.268.3595	713.794.7596	210.617.5300 x14372	505.265.1711	410.605.7414	857.364.4745	804.675.5012 x5012	203.932.5711 x4724	608.256.1901 x17044	612.467.4236	503.220.8262 x58330	206.277.1449	919.416.5982	305.575.7000 x3192	352.376.1611 x6082	813.972.7633

ECoE Workload

FY22 Clinical Workload

	Outpa	tient Clinic		EEG	LTM			
Facility	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters		
(V01) (523) Boston, MA HCS	411	686	162	176	68	216		
(V01) (689) Connecticut HCS	145	275	120	121	28	46		
(V05) (512) Baltimore, MD HCS	351	718	200	322	23	114		
(V06) (558) Durham, NC HCS	124	162	194	205	2	2		
(V06) (652) Richmond, VA HCS	470	776	234	350	24	90		
(V08) (546) Miami, FL HCS	315	571	270	372	81	177		
(V08) (573) Gainesville, FL HCS	408	625	380	424	86	165		
(V08) (673) Tampa, FL HCS	241	343	351	360	19	42		
(V12) (607) Madison, WI HCS	222	345	175	190	53	168		
(4V16) (580) Houston, TX HCS	698	1,222	530	602	110	212		
(4V17) (671) San Antonio, TX HCS	657	930	607	705	49	56		
(5V20) (648) Portland, OR HCS	489	1,027	244	353	48	97		
(5V20) (663) Puget Sound, WA HCS	540	749	141	147	39	152		
(5V21) (662) San Francisco, CA HCS	231	461	91	94	60	190		
*(5V22) (501) New Mexico HCS	155	247	90	95				
(5V22) (691) Greater Los Angeles, CA HCS	133	223	238	280	122	56		
(V23) (618) Minneapolis, MN HCS	279	412	253	266	24	56		
Total	5,855	9,772	4,227	5,062	834	2,101		

Data source: VSSC Encounter Cube. Combined outpatient and inpatient workload. Data were collected using ECoE stop code 345 (in the primary or credit-stop code position).

Unduplicated encounters: A count of clinic stops made by patients where duplicates have 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 station 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.

*If data are missing, no workload was reported.

Psychogenic Non-Epileptic Seizure Workload

Facility	Unique Patients	Encounters
(V01) (523) Boston, MA HSC	18	102
(V01) (650) Providence, RI HCS	14	46
(V06) (652) Baltimore, MD HCS	18	149
(V06) (558) Durham, NC HCS	4	28
(V06) (652) Richmond, VA HCS	30	60
(V08) (546) Miami, FL HCS	9	70
(V20) (648) Portland, OR HCS	16	45
(V20) (663) Puget Sound, WA HCS	49	120
(V21) (662) San Francisco, CA HCS	23	149
Total	172	769

Ambulatory and Tele-EEG Workload

	Routir Tele-E		Ambı EEG	ılatory	Tele- Ambu EEG	ulatory		Home EEG with Video		without	
Facility	Outpatient	Inpatient	Unique Pts.	Total #24-hr days	Unique Pts.	Total #24-hr days	Exten-ded EEG	Unique Pts.	Total #24-hr days	Unique Pts.	Total #24-hr days
(V01) (523) Boston, MA HCS	136	10	6	12	31	80	1	18	47	3	7
*(V05) (512) Baltimore, MD HCS	2		30	78.5				18	70		
*(V06) (558) Durham, NC HCS	84	5	29	87				2	9		
*(V06) (652) Richmond, VA HCS			62	112				5	17	53	92.5
*(V08) (546) Miami, FL HCS			68	77				7	21		
* ¹ (V08) (573) Gainesville, FL HCS	21		2	4				49	134		
*(V12) (607) Madison, WI HCS	4	10					4				
^(V20) (648) Portland, OR HCS	36	6	91	125	25	36		11	29	4	10
*(V20) (663) Puget Sound, WA HCS			5	10							
Total	63	8	293	505.5	56	116	5	110	327	60	109.5

¹Also performed three in-home standard EEGs prior to VEEG (Stratus).

[^]Combined inpatient and outpatient routine tele-EEG counts.

Data source: The sites self-reported their data. *If data are missing, no workload reported.

FY22 Telehealth Workload

Facility		TeleHealth ocal Station	Clinic	TeleHealth Different tation	Home Video TeleHealth		
	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters	
*(V01) (523) Boston, MA HCS					159	262	
*(V01) (689) Connecticut HCS					49	83	
*(V05) (512) Baltimore, MD HCS					97	193	
*(V06) (558) Durham, NC HCS					40	53	
(V06) (652) Richmond, VA HCS	12	14	5	6	131	206	
*(V08) (546) Miami, FL HCS					213	345	
*(V08) (573) Gainesville, FL HCS					107	141	
*(V08) (673) Tampa, FL HCS					78	88	
(V12) (607) Madison, WI HCS	18	22	4	5	32	56	
*(V16) (580) Houston, TX HCS	1	1			82	136	
*(V17) (671) San Antonio, TX HCS					519	718	
*(V20) (648) Portland, OR HCS			18	23	235	430	
*(V20) (663) Puget Sound, WA HCS					171	216	
*(V21) (662) San Francisco, CA HCS	3	4			152	315	
*(V22) (501) New Mexico HCS					11	15	
*(V22) (691) Greater Los Angeles, CA HCS							
(V23) (618) Minneapolis, MN HCS	5	9	3	4	41	58	
Total	39	50	30	38	2,116	3,315	

Data were collected using appropriate credit stop code with primary stop code 345.

*If data are missing, no workload was reported.

FY22 Telehealth Workload (continued)

En cilitar	Telepł	none Clinic	e-C	Consults		nd-Forward EEG**
Facility	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters
^(V01) (523) Boston, MA HCS	231	634	19	19	199	370
*(V01) (689) Connecticut HCS	63	93				
*(V05) (512) Baltimore, MD HCS	268	566	7	7		
(V06) (558) Durham, NC HCS	18	20	11	11	66	67
*(V06) (652) Richmond, VA HCS	125	166	10	11		
^*(V08) (546) Miami, FL HCS	93	104			28	28
^(V08) (573) Gainesville, FL HCS	120	189	24	24	21	21
*(V08) (673) Tampa, FL HCS	168	258				
(V12) (607) Madison, WI HCS	90	149	4	4	16	17
*(V16) (580) Houston, TX HCS	10	10	12	12		
*(V17) (671) San Antonio, TX HCS	25	40	21	20		
(V20) (648) Portland, OR HCS	243	483	43	45	367	393
*(V20) (663) Puget Sound, WA HCS	251	334	22	23		
*(V21) (662) San Francisco, CA HCS	149	353	15	15		
*(V22) (501) New Mexico HCS	101	136				
*(V22) (691) Greater Los Angeles, CA HCS	112	169	50	51		
*(V23) (618) Minneapolis, MN HCS						
Total	2,066	3,704	238	242	697	896

^Site-reported data.

**For Store -and-Forward EEG local station and different station, data are combined.

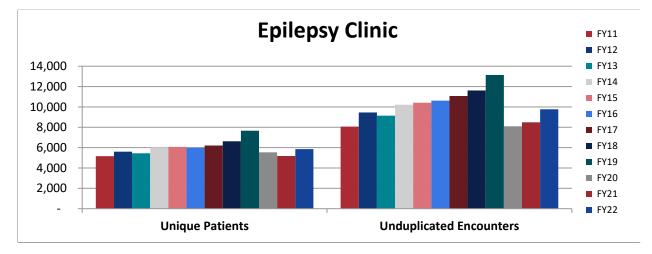
*If data are missing, no workload was reported.

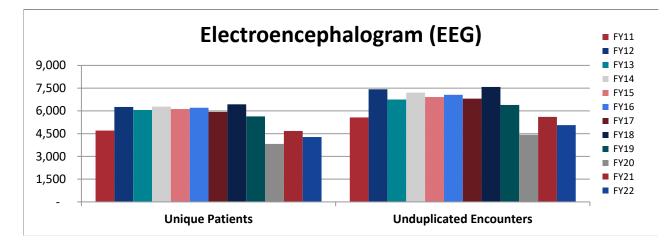
ECoE Surgery Workload

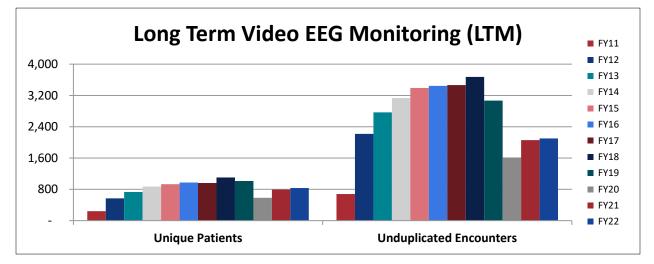
ECoE Surgery Workload FY21 to FY22		кезесноп эшдегу		וחנדמכומחומו אפכסרמוחפא - שחמ סערוף	Intracranial Recordings: Standard	ueptn (ггее папа апа Neuro- Navigation	Intracranial Recordings: SteroEEG	Depths- Sterotactic Frame	Intraoperative	Electrocorticography (ECoG)	Intraoperative Cortical	Stimulation/Mapping	Extraoperative Cortical	Stimulation/Mapping		CNIA	NeuroPace	Implantation		UBS Implantation	Foramen ovale electrode	implantation
FY	21	22	21	22	21	22	21	22	21	22	21	22	21	22	21	22	21	22	21	22	21	22
(V01) (689) VA Connecticut HCS, CT																						
(V05) (512) Baltimore HCS, MD		1	1	2	1	2	1	2					1	2		2		1				
(V01) (523) Boston HCS, MA															1	7	0	8				
(V06) (558) Durham, NC																						
(V06) (652) Richmond, VA								1		1				1	3	1	2					
(V08) (546) Miami, FL																						
(V08) (573) Gainesville, FL	1														2	2						
(V08) (673) Tampa, FL																						
(V12) (607) Madison, WI							2										1					
(V16) (580) Houston, TX	1	2					1	4						2				2		1		
(V17) (671) San Antonio, TX																						
(V18) (501) Albuquerque, NM																						
(V20) (648) Portland, OR							1								1							
(V20) (663) VA Puget Sound, WA							1										1					
(V21) (662) San Francisco, CA															1	2						
(V22) (691) West Los Angeles, CA		1						3		2				1		1	1	1				
(V23) (618) Minneapolis, MN																						
Total	2	4	1	2	1	2	6	10		3			1	6	8	15	5	12		1		

ECoE Workload Trends

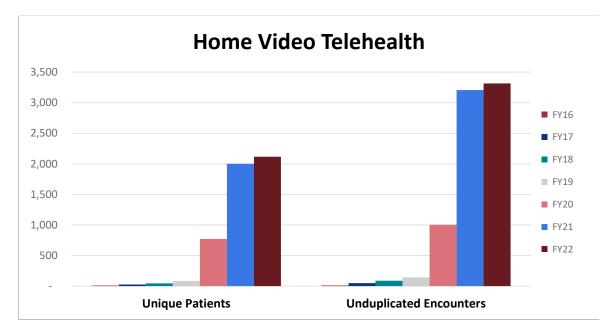
Epilepsy Clinic Visits

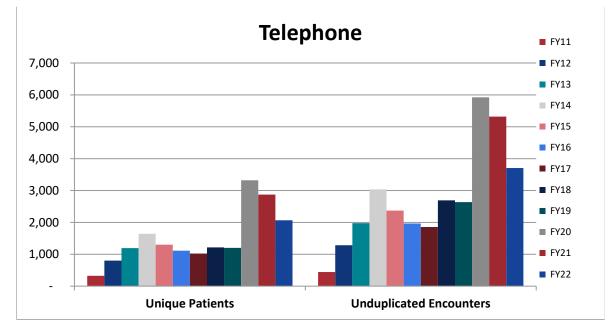


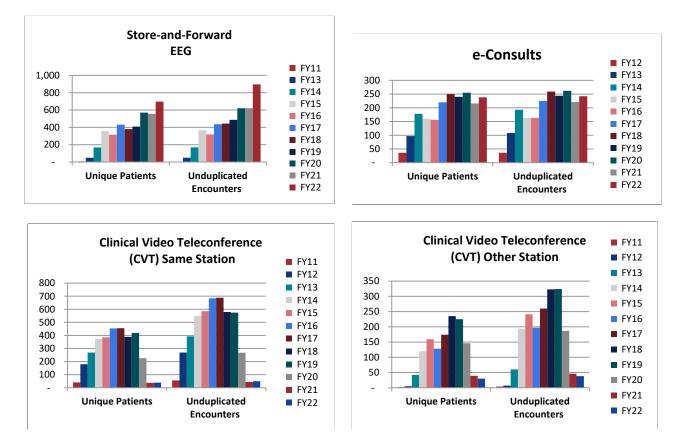




Outreach: Tele-Epilepsy



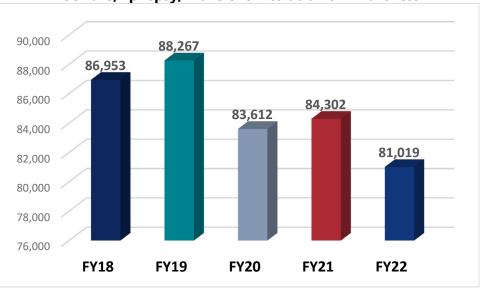




Outreach: Tele-Epilepsy (continued)

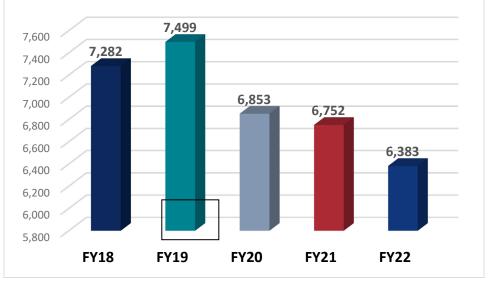
Data source: VSSC Encounter Cube. Numbers for FY11–FY12 may be underreported due to workload capture issues. FY18–22 data include self-reported workload from Boston VAMC.

VHA Seizure, Epilepsy, and Other Events Unique Patient Counts



¹Seizure, Epilepsy, Transient Alteration of Awareness





Data source: VSSC Diagnosis Cube: VA patients.

Algorithm: Data collected using ICD-10-CM codes: ¹G40.xx Epilepsy, R56.9 Unspecified Convulsion, R40.4 Transient Alteration of Awareness, R56.1 Post-traumatic seizures. ²F44.5 Conversion disorder with seizures or convulsions.

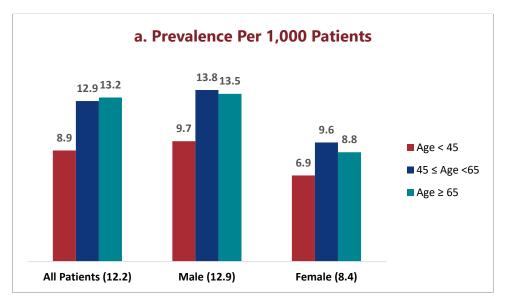
VHA FY22 Patient Counts

Cohort	Epilepsy I	Patients, %	All VA Pati	ents, %		
All Patients	78,	,785	6,462,	6,462,301		
Age <45	11,807	15.0%	1,325,029	20.5%		
Age 45–65	24,151	30.6%	1,875,755	29.0%		
Age ≥ 65	42,917	54.4%	3,261,517	50.5%		
Male	70,	,800	5,500,9	900		
Age <45	9,334	13.2%	966,935	17.6%		
Age 45–65	20,364	28.8%	1,419,403	26.9%		
Age ≥ 65	41,102	58.1%	3,054,562	55.5%		
Female	8,	075	961,4	01		
Age <45	2,473	30.6%	358,094	37.2%		
Age 45–65	3,787	46.9%	396,352 4			
Age ≥ 65	1,815	22.5%	206,955	21.5%		
Epilepsy: Male 89.8%, Female	10.2% All VA: Male 8	5.1%, Female 14.9%	-	•		

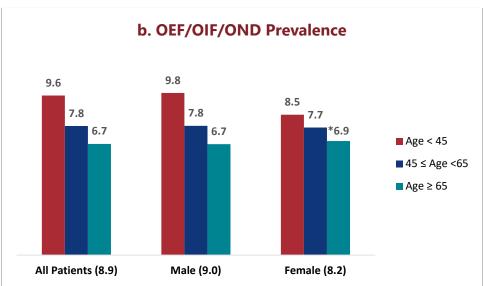
All Patients	5,7	38	642,046			
Age <45	3,935	68.6%	408,827	63.7%		
Age 45–65	1,721	30.0%	220,996	34.4%		
Age ≥ 65	82	1.4%	12,223	1.9%		
Male	5,1	28	567,5	40		
Age <45	3,524	68.7%	360,296 63			
Age 45–65	1,530	29.8%	196,184	34.6%		
Age ≥ 65	74	1.4%	11,060	1.9%		
Female	61	0	74,50	6		
Age <45	411	67.4%	48,531	65.1%		
Age 45–65	191	31.3%	24,812	33.3%		
Age ≥ 65	8	1.3%	1,163	1.6%		

Data sources: VSSC Neurology Cube & Unique Patients Cube

Algorithm: Patients were included (i) if prescribed an anti-seizure medication (ASM) in FY22 cross-matched with a seizure diagnosis (ICD-10-CM G40.*, R40.4, R56.1, R56.9) during FY20-FY22; (ii) with an inpatient encounter with seizure diagnosis G40* during FY22, no cross-match with an ASM required; (iii) with at least two outpatient encounters on two different dates with seizure diagnosis G40* during FY22, no cross-match during FY22, no cross-match with an ASM required. Diagnoses data from EEG and LTM clinics were excluded. Unknowns have been excluded from the analysis.



VHA FY22 Epilepsy Prevalence Estimates



Data Sources: VSSC Neurology Cube & VSSC Unique Patients Cube.

Algorithm: Patients were included (i) if prescribed an anti-seizure medication (ASM) in FY22 cross matched with a seizure diagnosis (ICD-10-CM G40.*, R40.4, R56.1, R56.9) during FY20-FY22. (ii) with an inpatient encounter with seizure diagnosis G40.* during FY22, no cross match with an ASM required (iii) with at least two outpatient encounters on two different dates with seizure diagnosis G40.* during FY22, no cross match during FY22, no cross match with an ASM required. Diagnoses data from EEG and LTM clinics were excluded.

Unknowns have been excluded from the analysis.

*Estimate is unstable due to low count (n=8)

Review of the Four ECoE Regions

The following is a review of the four Regional Centers of Excellence. Staffing is funded at various levels of FTE with specialty-care funds and is supported by the local fiscal departments at the individual sites.



Northeast Region

Regional Director: Hamada Altalib, DO

Regional Administrative Officer: **April Mizell**





VA Maryland Health Care System

VA Maryland Health Care System (127) 10 N. Greene St, Baltimore, MD 21201 410-605-7414 | 410-605-7906 www.maryland.va.gov

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JPVA Medical Center, Dept. Neurology (127) 150 S. Huntington Ave., Boston, MA 02130-4817 857-364-4745 https://vaww.visn1.portal.va.gov/intranet/boston

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VACANT	Clinical Nurse Coordinator		

VA Connecticut Healthcare System

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Rodriguez, Dominica	EEG Tech	Dominica.Rodriguez@va.gov	203-932-5711, ext. 2420

Northeast Region Accomplishments, and Future Initiatives

Regional Director: **Hamada Altalib, DO** Regional Administrative Officer: **April Mizell**

FY22 Accomplishments

Shared best practices:

- Baltimore communicated with consortium members during EMU admissions.
- Developed the Boston Resident EEG teaching curriculum, an automated program with 50+ residents per year.
- Conducted West Haven behavioral health screens.
- Developed a Richmond QI Project for quality-of-life screening.
- Performed the first invasive EEG monitoring for presurgical monitoring.
- Boston Rapid EEG Ceribell expansion: 15 cases since start of pilot FY21, 2 cases FY22 of status epilepticus managed with Ceribell.
- Established a new EEG spoke site (Lebanon) in NE Region with training.
- Retested the NE Region Tele-EEG.
- Baltimore EEG Technologist training.
- Submitted grants to partner with the Managing Epilepsy Well Network.
- Completed the TMS Curriculum for the Mind Brain Program.
- Boston: Became part of a new VA multicenter award (PI Leeman-Markowitz) study for methylphenidate in Epilepsy.
- Boston: Dr. Tobochnik was awarded CDA2.

Future Initiatives, Goals, and Outreach

Clinical

- Services/Access
 - Geomap Veterans with epilepsy in the NE, and overlay epilepsy providers (with Jason Sico's help) to produce a gap in care analysis.
 - Calculate the number of epilepsy providers and neurologists per 1000 Veterans with epilepsy in each state.
 - Assess and improve IFC referral pathways from VA consortiums and remote sites to ECoEs.
 - Integrate home based EEG and the new Ambulatory Video EEG pilot.
- Epilepsy Service Gap Analysis: In FY23, geomap to identify service gaps.
 - $_{\odot}$ $\,$ Visualize the density of providers per Veterans with epilepsy using heat mapping.
 - Develop an EEG Coverage network.
 - Test the EEG store-and-forward transfer with a live patient across at least one site.
 - Have each ECoE and Consortium site share one store-and-forward EEG by end of FY23.
- Spoke a tele-EEG connection to each NE site. Calculate the baseline gap in EEG coverage:
 - Successfully test each NE site, to include inputting IFC consult.

- Establish AutoEEG coverage.
- Time the consult from input to completion.
- Quality Improvement
 - Report specific facility performance metrics for each facility in the Northeast region.
 - Improve by 10% respectively in each site across at least three quality improvement measures as provided by EPRP by end of FY23.
 - Prepare and pilot an EEG template in FY23.
 - Calculate the gap in EEG coverage through time to consult.

Research

• Submit a PCORI grant proposal for MEW services.

Education

- Patient Education:
 - Host Purple Day.
 - o Have one or two sites (Richmond and/or Baltimore) host the conference.
 - Host a non-epilepsy physician patient conference where metrics will be tracked.
 - Epilepsy Journal Club.
 - Host a Ground Round lecture series.
 - In the NE Region, coordinate the Advanced Fellowship Program.

Northeast Region Fellowships

Baltimore Fellowships

Number of Fellows: 0

Boston Fellowships

Number of Fellows: 4, combined VA-Brigham and Women's Hospital; 2 ABPN Epilepsy; 2 Clinical Neurophysiology

Richmond Fellowships

Number of Fellows: 0

West haven Fellowships

Number of Fellows: 0

Northeast Region Research Grants

Baltimore

None

Boston

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
McCarthy, David C (site PI)	A Device to detect and quantify Seizures.	9/2019	10/2023	DoD Subaward Dartmouth
Smirnakis, Stelios	Network Plasticity in Acquired Epileptogenesis	2021	2025	VA lon:101Bx00472 7
Smirnakis, Stelios	Probing the Cell-Specific Control of Focal Cortical Seizure Events in-Vivo.	2021	2024	VA ion:101 Bx0044729
Smirnakis, Stelios	Cell-Specific Functional and Transcriptomic Dissection of Plasticity Pathways in the MECP- 2 Duplication Syndrome	9/1/2022	8/31/2024	R21 NS127299- 01A1
Smirnakis, Stelios	Cell-Specific Plasticity Pathway Dysfunction as a Result of Amyloid Deposition in Alzheimers Disease	9/1/2022	8/31/2026	VA Merit Award
Tobochnik, Steven	Translating the Molecular Profile of Peritumoral Hyperexcitability to Target Glioma-Related Epileptogenesis	9/1/2021	8/31/2022	BWH Neuroscience
Tobochnik, Steven	Effect of Glioma Genetic Variation and Local Neuronal Activity on Peritumoral Epileptogenicity	10/1/2022	9/30/2024	V1 CDA 2022-68

Richmond

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Waterhouse, Elizabeth, J. Site Pl	Testing a Novel Dry Electrode Headset for Electroencephalography Telehealth	12/22	12/26	HSR&D
Towne, Alan R. Site Pl	Chronic Effects of Neurotrauma Consortium (CENC) Award. Study 1. Observational Study on Late Neurologic Effects of mTBI in OEF- OIF Veterans	10/2019	Ongoing	DoD
Towne, Alan R. Site Pl	Epidemiology of Epilepsy and Traumatic Brain Injury: Severity, Mechanism, and Outcomes Foundation for Advancing Veterans' Health Research	7/2017	Ongoing	DoD
Towne, Alan R. Collaborator	Post-Traumatic Epileptogenesis: Role of Neocortical-Hippocampal Interactions, U.S.	1/2020	Ongoing	Dept of Veterans Affairs
Towne, Alan R. Collaborator	Focused Biomarker Discovery of Prediction of Post-Traumatic Epilepsy in TBI Patients: A Prospective Study Using an "Enriched" Patient Population	Submitted		DoD
Towne, Alan R. Collaborator	Mechanistic Studies of Post- Traumatic Epilepsy Associated with Repetitive Blast Exposure. CDMRP W81XWH-18-ERP-IDA.	Submitted		DoD
Towne, Alan R. Collaborator	Multidimensional Evaluation of Neural Dynamics in Patients with Disorders of Consciousness Using EEG	2019	Ongoing	Dept of Veterans Affairs

West Haven

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Altalib, Hamada	PNES Epidemiology	10/01/2017	01/30/2022	DoD

Northwest Region

Northwest ECoE Regional Director Jack Jones, MD

Northwest ECoE Regional Administrative Officer Joseph Peterson





Epilepsy Centers of Excellence

Annual Report FY22

William S. Middleton Memorial Veterans Hospital

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Northwest Region Accomplishments, and Future Initiatives

Regional Director: **Jack Jones, M** Regional Administrative Officer: **Joseph Peterson**

FY22 Accomplishments

Program/Operational

- Hired Joseph Peterson as NW AO.
- Hired Sandra Joos, PhD, as Program Specialist for Quality Improvement, Portland VA.
- Completed NW ECoE Advisory Committee Virtual Site Visit Review (chair: S. Martini) as per Federal Advisory Committee guidelines Directive 1215, published 2/14/2017.
- Completed the report and received feedback; results included.
- Halted reopening of EMUs (3 sites) and OP EEG labs following closure for COVID-19.
- Fulfilled vacancies of 2 epileptologists at Minneapolis VA, including new Site Director, Stephanie Reeder, MD.
- Twice culled NW Consortium leaders/providers to identify Veterans for diagnostic and advanced EMU referrals.

Clinical Care

- Expanded tele-EEG throughout NW ECoE, including Minneapolis, Omaha, Sioux Falls, Lovell, Saginaw, Roseburg, Boise, Sheridan, and Spokane.
- Provided neurobehavioral therapy for PNES treatment clinics (Portland, Seattle).
- Added Julie Min, ARNP, as a Seattle ECoE provider.

- Placed RNs in Madison and Portland.
- Expanded VVC programs (in-home) by 550% from FY20 goal of 100%.
- Increased in store and forward EEGs (Portland, Madison) by 350% vs FY19. Stable from FY20.
- Completed the VA EEG Utilization Operations Project.
- Data analyst created a VINCI database/query of all Veterans who have undergone EEG in the VA since 2001.
- Program specialist pulled all data on all community care long term/ambulatory EEGs >12 hrs. duration performed in 2021.
- Collaborated with National MIRECC on suicide prevention: instituted iPad-administered mental health screening in the EMU.
- Portland ECoE started up a telehealth epilepsy support group to improve access to support for remote/non-driving Veterans.

Research/Surveillance

- Achieved a Research (Research Operations) Score of 1.25.
- Completed 20 epilepsy-related publications (71 total publications) over five years.
- Five currently funded research grants (NIH and VA).
- Received \$6.87M in research grant funding over the five-year review era.
- VA cooperative study (PNES) was not funded.
- Completed and published EMU Quality Improvement project.
- Amber Nolan-Munn, MD, PhD, joined Ransom Lab (Seattle) to study dysfunction of neocortical GABAergic interneurons in experimental TBI.
- Run Basic Research Workgroup meetings through Puget Sound.
- POR VA will serve as one of four enrolling sites for the recently funded VA Merit RCT of Methylphenidate for Veterans with Epilepsy and Cognitive Complaints.

Education

- Added a patient-support group (Minneapolis) and continued (Portland), considering regionalizing those gathering on Zoom or similar platforms.
- Held monthly Scan-Echo case conferences (all sites + consortium sites). Expanded Scan-ECoE outside NW Region.
- Delivered educational/outreach lectures to MITs nationwide, led by Madison/Boston MIT leads.
- Helmed Basic Science Research group didactics in PS.
- Held inpatient nursing education/training sessions (all sites).
- Continued training of EEG/Epilepsy fellows (6 currently in NW ECoE training programs).
- Continued training of clinical pharmacists in epilepsy therapeutics (6–8/year).
- Established a new VA OAA Neuro-Psych-focused polytrauama fellowship in Portland.

Future Initiatives, Goals, and Outreach

Services/Access

- Transition to new directorship in Minneapolis.
- Add a new (5th) NW ECoE hub site at Jesse Brown VA.
- Continue to lead ECoE in Merit and Grant support.
- Initiate QI studies in MH/Suicide Prevention in Veterans with epilepsy and similars (Portland-led).
- Continue to lead Basic Research Group, EEG Technology Group.
- Expand tele-EEG footprint and capacity for research sharing and second opinion.
- Continue to create enduring and accessible educational products.

Clinical Care

- Expand Ambulatory tele-EEG to Central and Western US (MI to WA).
- Expand VVC (25%).
- Increase tele-EEG to multiple additional sites (in progress).

Research/Surveillance

- Fund grants!
- Continue research productivity.

Education

- Offer fellowship program in Seattle; continue fellowships in Neurophysiology and Pharmacy Therapeutics in Madison and Portland.
- Expand educational portfolio and recurring lectures with Primary Care and Medicine providers.

Northwest Region Fellowships

Madison Fellowships 2 Minneapolis Fellowships 0 Portland Fellowships

2

Seattle Fellowships

1

Northwest Region Research/Grants

Madison

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Struck, Aaron	Juvenile Myoclonic Epilepsy Connectome Project (JMECP)	2021	2025	NINDS-NIH

Minneapolis

None

Portland

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Kellogg, Marissa A (Site PI)	Phase II Multicenter RCT of Methylphenidate for Cognition in Veterans with Epilepsy	8/1/2022 pending JIT IRB	8/31/2026	VA Merit

Seattle

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Ransom, Christopher	Regulation of extrasynaptic GABA-A receptors in health and disease Awarded VA Clinician Scientist Investigator Award, provides 2 additional years of funding)	5/1/2021	4/30/2027	Veterans Administration Merit Review
Dembrow, Nikolai	Multimodal analysis of primate infragranular pyramidal neurons and their modulation	8/1/2021	7/31/2026	NIH HHS
Spain, William	Dynamics of Kv channel function in identified populations of pyramidal neurons in neocortex	2/1/2018	1/31/2023	NINDS

Southeast Region

Regional Director Maria Raquel Lopez, MD

Regional Administrative Director **Keninthe Davis**





Southeast Regional Staff

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Southeast Region Accomplishments, and Future Initiatives

Regional Director: **Maria Lopez, MD** Regional Administrative Officer: **Keninthe Davis**

FY22 Accomplishments

Program/Operational

- Began the process of Hiring AO.
- Made progress on Stop Code standardization.
- Improved workload capture.

Clinical Care

- Expanded Tele-EEG care with other VAs:
 - o Jacksonville, Lake City, Atlanta, Asheville, Greenville
- Provided Clinical Epilepsy Care with other VAs:
 - Fayetteville, Salisbury, Bay Pines, West Palm Beach
- Expanded PNES treatment to National Level.
- Initiated home based EEG.
- Trained other epileptologist as providers of NBT for PNES treatment.

Research/ Surveillance

- Grants:
 - American Rescue Plan: Integration of Tele-EEG in Remote Clinical Settings Through Store-Forward EEG: \$ 275,000

- o ZETO Merritt Grant: \$491,000
- Publications: 21
- Abstracts/Posters: 5
- QI Projects (DRE mortality, psychiatric comorbidities among DRE, gender disparity of care, race disparity of care)

Education

- Training Fellows: 8
- Presented Educational Webinars for patients and caregivers:
 - Dr. Tran: SUDEP Risk Factors (06/09/2022)
 - Dr. Eisenschenk: Driving and Epilepsy (07/14/2022)
 - Dr. Lopez: Stigma and Epilepsy (08/11/2022)

Future Initiatives:

Clinical Care

- Improve documentation of quality measures among ECoE and consortium sites:
 - Identify drug-resistant epilepsy cases to be referred to ECoE.
 - Expand care of PNES patients.
 - Expand Tele-EEG Network.
 - Restart EMU: Get new servers.
 - Create FND Division involving multidisciplinary care at the Miami VA.

Research/Surveillance

- QI on drug resistant epilepsy.
- Cefepime toxicity study.
- Antiseizure medication trends in women Veterans.

Education

- Host PCP grand rounds for seizures vs. paroxysmal events.
- Conduct four webinars per year for patients and care providers (Dr. Frontera: TBI & Epilepsy, 10/13/2022).
- Launch patient outreach programs (Florida Epilepsy Foundation).
- Make four National case presentations for neurologists to guide management and increase referrals to ECoEs.

Southeast Region Fellowships

Durham Fellowships

Number of Fellows: 8

Gainesville Fellowships

Number of Fellows: 2

Miami Fellowships

Number of Fellows: 4

Tampa Fellowships

Number of Fellows: 4

Southeast Region Research/Grants

Gainesville

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Eisenschenk, Stephan	Store-Forward Tele-EEG for Remote VAMC Sites	Sept 2021	August 2022	American Rescue Plan
Eisenschenk, Stephan	Post-Stroke Seizures	June 2018	Present	

Miami

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Lopez, Maria Raquel	Testing a Novel Dry Electrode Headset for Electroencephalography Telehealth	Sep 2022	Sep 2026	Federal Identifier/Protocol Number: HX003107

Southwest Region

Southwest ECoE Regional Director Nina Garga, MD

Southwest ECoE Regional Administrative Director **Denetra S. Robinson**



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Southwest Region Accomplishments, and Future Initiatives

Regional Director: **Nina I. Garga, MD** Regional Administrative Officer: **Denetra S. Robinson**

FY22 Accomplishments

Program/Operational

- Hired SW AO position: Denetra Robinson.
- Conducted a Virtual Site Visit on 3/4/22; received a "very good" rating in all domains.
- Convened the SW ECoE Advisory Subcommittee on 4/21/22.
- Executed MOAs and backfilled multiple vacancies; received approval to recruit additional positions for FY23.
- Purchased equipment: Houston, ABQ, SF (software), Consortium sites for tele-EEG.
- Re-established regional director meetings.
- Incorporated feedback from Neurology Program Office Group Practice manager to improve metrics in access and to standardize workload capture.

Clinical Care

- Integrated Neuro-pharmacists and provided support for:
 - Access to restricted/non-formulary meds
 - 90-day exemptions for controlled substances
 - Titration/Med Rec/Adherence Support
- Established ambulatory EEG, inpatient LTM acute monitoring (SA, ABQ).
- Established new partnerships for in-home ambulatory video EEG monitoring with ECoE interpretations.
- Increased advanced epilepsy care procedures during pandemic recovery:
 - o Surgical resections
 - Stereo-EEG implantations
 - RNS programming, including designated RNS clinic days
 - DBS implantations
 - Training of RNs in EEG care
- Recovered outpatient epilepsy, neurobehavioral therapy, and EEG clinic volume during pandemic recovery, including expansion of virtual clinics with faculty and learners.
- Developed Southwest tele-EEG hub infrastructure and staffing.
- Achieved interdisciplinary collaboration with Vascular Medicine to perform combined Tilt table/EMU admissions for appropriately selected patients (Houston).

Research/Surveillance

- Faculty contributed to a diverse array of research and surveillance projects:
 - Mortality in DRE (Houston)
 - Access to care in VA (Houston)

- Gender-specific care patterns (Houston)
- Basic science epileptogenesis, genetics (LA)
- NES biomarkers (SF)
- Epilepsy in Dementia, biomarkers (SA)
- Wearable devices in Epilepsy with machine learning
 - Integrated an affiliate researcher and established long term collaboration.
- Achieved epidata software integration and SQL training to develop a patient registry (Houston).

Education

- Continued RN training and assessments using best practices for EMU patient safety.
- Continued training learners at multiple levels in epilepsy care:
- Fellows (Epilepsy, Clinical Neurophysiology, Sleep)
 - New addition to ABQ
- Pharmacy residents
- Physician residents (Neurology and interdisciplinary)
- Students (Medical, Pharmacy)
- Nurses:
 - Nurse training for Phase II patients (Houston)
 - Contributed to VA Mind Brain Program as APRN reviewer (Fadipe-Houston)
- Launched EEGmaster.com, a website for EEG education for Neurology trainees (residents and fellows) with participation from Baylor (Houston), U. Louisville (Kentucky), Massachusetts General/Brigham (Massachusetts), and UT Southwestern (Dallas).
- Continued patient/caregiver support groups, webinars (Houston).
- Engaged with advocacy organizations for patient outreach, education, and special events:
 - o Anita Kaufmann foundation, Epilepsy Foundation of America

Future Initiatives

Program/Operational

- Continue Advisory Subcommittee meetings.
- Establish case conference and drop-in hours for collaboration between SW sites and outreach to consortium.
- Develop a consortium and referral network with updated contacts.
- Expand IFC access to new sites and for new services being established at San Antonio and Albuquerque.
- Establish a Special Salary Rate for EEG techs (SF).
- Hire remaining approved positions: RN (SF), EEG techs, programmer, epileptologists (ABQ/SA).
- Purchase surgical EEG acquisition systems (Houston).
- Establish EMU policies, planning, and RN training; pursue additional epileptologist FTE (ABQ).

Clinical Care

- Expand Neurobehavioral therapy clinic in Houston and in San Francisco via Mind Brain Program collaboration for improved access.
- Tele-EEG:
 - Install equipment and initiate Store-and-Forward telehealth EEG with Las Vegas and Honolulu.
 - Interconnect regional sites in FY23.
 - Houston: Establish Tele-EEG to interfacility sites with support from EEG supervisor: Arkansas VA, San Antonio VA, New Orleans VA.
- Open elective EMUs (SA/ABQ) w/RN training.
- Conduct an Epilepsy Pharmacy E-consult Pilot within Southwest Region:
 - Create limited IFC consult pathways to WLA.
 - Once established, pursue additional funding for clinical pharmacists.
- Establish RNs programming clinic and MRI safety protocols (SF).
- Increase volume of IFC referrals from new and existing pathways.
- Improve access and reduce wait times for all epilepsy care.
- Facilitate ICU continuous EEG recording via utilization of MRI-compatible EEG electrodes.
- Leverage Mission Act and local contracting for access to magnetoencephalography in selected presurgical patients (Houston).
- Increase Phase 2 studies to meet current clinical demand and reduce community care costs (Houston).

Research/Surveillance

- Explore co-investigator pathway to establish research at ABQ.
- Evaluate quality measures and intervention pilot collaborations with national program.
 - Mental health screening, side-effect counseling, seizure frequency
- Continue ongoing research projects:
 - Minimally invasive implants for long-term seizure monitoring
 - Multimodal sensors in diagnosis of drug-resistant epilepsy
 - Memory enhancement by cortical stimulation
 - Basic science epileptogenesis, genetics
 - Epilepsy in dementia, biomarkers
- Apply for HSR&D and NIH funding for continuing research projects.
- Expand Epidata software footprint to other sites within region/ECoE.

Education

- Collaborate with Transgender Center and Women's Health Program to develop educational programs and materials on gender-specific care.
- Achieve caregiver outreach through collaborations with community-based organizations, advocacy groups, and VA programs to address wellness.
- Adapt RN training following WLA simulation model at other sites in region.
- Advocate with Office of Academic Affiliations to revise/maintain polytrauma physician fellowship programs.

- Continue ACGME epilepsy/CNP fellowships, neuropharmacy resident/fellow education, resident and student precepting across disciplines.
- Organize surgical patient support groups for past and potential surgical patients (Houston).
- Participate in ECoE educational Seminars.
- Develop EEG education with Consortium sites through case conferences.
- Continue developing EEGmaster website.

Southwest Region Fellowships

Albuquerque Fellowships

Number of Fellows: 2

Houston Fellowships

Number of Fellows: 3

San Francisco Fellowships

Number of Fellows: 4

WLA Fellowships

Number of Fellows: 3

San Antonio Fellowships

Number of Fellows: 2

Southwest Region Research/Grants

Albuquerque

None

Houston

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Haneef, Zulfi	Next Generation Minimally Invasive Implants for Long Term Seizure Monitoring	10/2021	09/2022	Aquestive Pharma unrestricted grant
Haneef, Zulfi	Multi-modal sensors in diagnosing drug-resistant epilepsy	10/1/2020	09/30/2022	MEDVAMC Bridge and Seed Fund
Haneef, Zulfi	Memory enhancement by direct brain electrical stimulation.	01/01/2021	06/30/2022	Mike Hogg Fund
Sheth, Sameer, A	U01 NS121472 "Mapping Algorithmic State Space in the Human Brain."	06/01/2021	03/01/2026	NINDS
Sheth, Sameer, A	I01 CX001122 "Multisensory Processing of Human Speech Measured with msec and mm Resolution."	10/01/2020	12/01/2023	VA
Sheth, Sameer, A	R24 MH117529 "RAVE: A New Open Software Tool for Analysis and Visualization of Electrocorticography Data."	09/01/2018	05/01/2022	NIMH
Sheth, Sameer; Goodman, Wayne; Pouratian, Nader	UH3 NS103549 "Deep Brain Stimulation for Depression Using Directional Current Steering and Individualized Network Targeting."	09/01/2017	08/01/2022	NINDS
Sheth, Sameer, A	R01 MH106700 "Cognitive Control Mechanisms in Human Prefrontal Cortex."	04/01/2016	01/01/2022	NIMH
Sheth, Sameer, A	R25 NS070694 "Baylor Research Education Program in Neurosurgery." (Training grant)	03/01/2010	06/01/2025	NINDS
Beauchamp, Michael; Sheth, Sameer A (Co- I)		06/01/2021	05/01/2024	NINDS

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Gault, Judith, M Davis, Rachel, A Saks, Elyn, R Sheth, Sameer, A (Co-I)	RF1 MH121362 "Leveraging Ethical Dissension Among Capacity, Beneficence, and Justice in Clinical Trials of Neurotherapeutics in the Severely Disabled: Lessons From Schizophrenia."	09/01/2019	08/01/2023	NIMH
Dorn, Jessy, D Yoshor, Daniel Pouratian, Nader Sheth, Sameer, A (Co-I)	UH3 NS103442 "Early Feasibility Clinical Trial of a Visual Cortical Prosthesis."	03/01/2018	03/01/2024	NINDS
Goodman, Wayne, K Sheth, Sameer, A (Co-I)	UH3 NS100549. "Adaptive DBS in Non-Motor Neuropsychiatric Disorders: Regulating Limbic Circuit Imbalance."	12/01/2016	11/01/2022	NINDS

San Francisco

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Parko, Karen	Characteristics of Veterans with Epilepsy (COVE)	08/12/2012	2021	VA Merit Review Award (CSR&D)
Parko, Karen	Novel Group Treatment for Patients with Non-Epileptic Seizures	08/30/2016	2022	Non funded clinical
Hixson, John	Peer Support for U.S. Veterans with Epilepsy	01/01/2018	09/30/2021	UCB Inc.
Hixson, John	Use of an Ingestible Digital Sensor and Mobile Application for Improving Adherence in Epilepsy	2018	present	UCB Inc.
Mueller, Susanne Garga, Nina	The Imprint of Psychogenic Nonepileptic Seizures on the Brain: A New Model and Imaging Biomarker	09/01/2017	09/01/2022	CDMRP/DoD

West LA

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Chen, James	The Genetic Factor and Altered EEG Network in the Development of Posttraumatic Epilepsy	09/30/2020	09/29/2023	CDMRP/DoD
Wasterlain, Claude	Perampanel in the Treatment of Status Epilepticus			Eisai, Inc
Delgado-Escueta, Antonio	A Prospective, Longitudinal Observational Study of the Natural History and Functional Status of Patients with Lafora Disease	2019	2022	Valerion Therapeutics LLC
Langevin, Jean- Philippe	Responsive Neurostimulation for Post-Traumatic Stress Disorder	10/01/2019	09/30/2022	NIH UH3NS107673
Langevin, Jean- Philippe	Intracranial Recordings of Emotional Memory	07/01/2021	06/30/2026	NIH 1RO1MH124761
Bari, Ausaf	Deep Brain Stimulation of the Subgenual Cingulate Cortex for the Treatment of Medical Refractory Low Back Pain	2019	2024	NIH UH3NS113661
Golshani, Peyman	VA Collaborative Merit Award: Neural dynamics underlying epileptogenesis	01/01/2020	12/31/2024	Merit
Golshani, Peyman	Epilepsy related cell loss and cognitive dysfunction	07/01/2017	06/30/2022	NIH
Golshani, Peyman	Miniaturized open source devices for calcium imaging, electrophysiology, and real-time control of neural activity	07/01/2017	06/30/2022	NSF Neurotech hub
Golshani, Peyman	Inhibitory neuron circuit organization and function in prefrontal cortex	01/01/2015	12/31/2021	NIH
Golshani, Peyman	An open source, wireless, miniature microscope for monitoring neuronal activity	01/01/2018	12/31/2021	NIH
Golshani, Peyman	Neural dynamics underlying epileptogenesis	2020	2024	VA Cooperative Merit Review
Golshani, Peyman	Multiplexing working memory and timing: Encoding retrospective and prospective information in transient neural trajectories	04/01/2020	03/31/2025	NIH R01NS116589

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Golshani, Peyman	Hippocampal neural dynamics driving affiliation and attachment	04/01/2021	03/31/2024	U01 NS122124 NIH BRAIN Initiative
Golshani, Peyman	UCLA Intellectual Developmental Disabilities Research Center (UCLA IDDRC)	2020	2025	1P50HD103557-01, NICHD
Golshani, Peyman	VA Collaborative Merit Award: Neural dynamics underlying epileptogenesis	2020	2024	I01 BX005202-01
Naylor, David	GABAergic and Glutamatergic Synaptic and Extrasynaptic Effects on Hippocampal Circuit Activity during Status Epilepticus	07/01/2005	Present	Intramural Lundquist Institute- Harbor-UCLA

San Antonio

Principal Investigator Last, First, MI	Grant/Study Title	Project Start Date mm/dd/yyyy	Project End Date mm/dd/yyyy	Name of Funding Source
Musa, Adetoun Abisogun	Disentangling Dementia Patterns Using Artificial Intelligence on Brain Imaging and Electrophysiological Data	01/01/2020	12/31/2022	2020 San Antonio Medical Foundation (SAMF) Subaward for Bioscience Research

National ECoE Workgroups



Basic Science Research Seminar Group

VA Puget Sound Health Care System 1660 S. Columbian Way, Seattle, WA 98108

Chair: **Nikolai Dembrow, PhD** Admin Support: **Linda L. Benson, MPH, CCRC**

Workgroup Members			
Nikolai Dembrow PhD, Chair— Seattle	Christopher B. Ransom, MD, PhD—Seattle	William Spain, MD—Seattle	
Claude Wasterlain M—Los Angeles	Peyman Golshani MD, PhD—Los Angeles	David Naylor MD, PhD—Los Angeles	
Andre Lagrange MD, PhD— Nashville	Cha-Min Tang MD, PhD— Baltimore	Alan Towne, MD—Richmond	
Robert Kotloski MD, PhD— Madison	Jack Parent MD—Michigan	James Chen, MD, PhD— Los Angeles	

Workgroup Mission

- The Epilepsy Center of Excellence (ECoE) Basic Research Workgroup is a national resource for scientists and clinicians studying epilepsy and epileptogenesis and associated comorbidities.
- Initiated with the formation of the ECoE, the Basic Research Workgroup mission is to keep VA research scientists up-to-date on the advances in basic science epilepsy research relevant to acquired epilepsy in veterans and its comorbidities.
- Workgroup meetings are designed to foster collaborative, multisite research programs across ECoE centers, promote discussion among epilepsy researchers nationwide, and provide a platform for VA epilepsy researchers to present recent findings.

FY22 Accomplishments

- The monthly ECoE Basic Science Research Group Series continues to attract a national audience from both within and outside the VA system and provide high-quality scientific presentations from accomplished investigators that are of broad interest to epilepsy clinicians and researchers.
- These meetings have helped foster collaborations and have formed the basis of collaborative merit awards in basic research proposals on traumatic brain injury and epileptogenesis.
- This workgroup targeted three main topics due to their relevance to acquired epilepsy in veterans:
 - Cellular mechanisms and channelopathies that contribute to epilepsy
 - o Neuronal and network mechanisms contributing to epilepsy in human tissue
 - Animal models of traumatic brain injury with a focus on post-traumatic epilepsy and its comorbidities.
- List of Workgroup Seminars from FY22:
 - 0 09/08/2021: Workgroup discussion Animal TBI models of Post-Traumatic Epilepsy

- 10/13/2021: Journal Club Targeting Aberrant Dendritic Integration to Treat Cognitive Comorbidities of Epilepsy
- 11/19/2021: Journal Club Pardoxical Hyperexcitability from Nav1.2 Sodium Channel Loss in Neocortical Pyramidal Neurons
- 12/15/2021: Journal Club Complement Factor C1q Mediates Sleep Spindle Loss and Epileptic Spikes After Mild Brain Injury
- 01/12/2021: Seminar presentation by Chris Ransom: Suppression of in vitro epileptiform activity with vigabatrin: dependence on GABA-B receptors and GABA transporter type 1
- 02/16/2022: Seminar Presentation by Nikolai Dembrow: Input Rate Encoding and Gain Control in Dendrites of Neocortical Neurons
- 04/12/2022: Journal Club Local Connectivity and Synaptic Dynamics in the Mouse and Human Cortex
- 05/11/2022: Journal Club Bursting of Excitatory Cells Is Linked to Interictal Epileptic Discharge Generation in Humans
- 06/08/2022: Seminar Presentation by Dr. Eric Schnell: Functional Dentate Circuit Rearrangements in Epilepsy
- 07/11/2022: Journal Club Amazon Rainforest Rodents (Proechimys) Are Resistant to Post-Stroke Epilepsy

Future Initiatives

- Enhance *cross-talk between Clinical Science and Basic Science Groups* to future collaborative proposals with a FY2023 joint meeting.
- Develop a funding timeline for VA researchers and hold annual white board *meetings to brainstorm collaborative research projects* timed around the VA funding cycle.
- Develop *list of VA research trainees* performing Basic Science epilepsy research from each region, based on Merit and Development awards to provide them with a platform to present.
- Make a VA Sharepoint/Teams repository to keep track of previous meeting slides and associated references.

Clinical Research Workgroup

Chair: Alan Towne, MD, MPH Admin Support: Linda L. Benson, MPH, CCRC

Workgroup Members			
Alan Towne, Richmond, Chair	Anne Van Cott, Pittsburgh	Steven Tobochnik, Boston	
Linda L. Benson, Richmond, Admin	Alfred Frontera, Tampa	Vikas Singh, Kansas City	
Curt LaFrance, Providence	Huned Patwa, West Haven	Tracy Broomhead, Seattle	
Tung Tran, Durham	Zulfi Haneef, Houston	Adetoun Abisogun Musa, San Antonio	
Rizwana Rehman, Durham	Hamada Altalib, West Haven	Aaron Struck, Madison	
Chris Ransome, Seattle	David McCarthy, Boston	Marissa Kellogg, Portland	
Omar Khan, Baltimore	Raquel Lopez, Miami		
Benjamin Tolchin, West Haven	Mary Jo Pugh, Salt Lake City		

Workgroup Mission

- Developed to facilitate & promote clinical research funding and programs among the sites and collaborators.
- Facilitate and advise on protocol discussions.
- Support and promote diagnostic and treatment studies among sites and expand research sites.
- Collaborate and share best practices on clinical research studies and trials.

FY22 Accomplishments

- EPRP: Abstracted chart data for program evaluation.
- AMCMS: For the Neurology Community Care Dashboard project, analyzed Community Care data with development of epilepsy quality measures; developed an Advanced Medical Cost Management Solution (AMCMS).
- EMU: Published 10-year admission data; majority PNES—Zulfi.
- Launched the Mind Brain Program. Made training videos and site available ; recruited psychologists for CBT—LaFrance.
- EMU outcomes: Seizure control and reduced rates of mortality—Kellogg
- Use of epilepsy medications in Women—Van Cott and Lopez
- LIMBIC/CENC collaboration: Longitudinal epi project examining TBI and epilepsy—Towne
- Epidemiology of Epilepsy and Traumatic Brain Injury: Severity, Mechanism, and Outcomes project—Pugh
- Phenotypes of Comorbidity in Epilepsy: Variation by TBI Severity and Deployment Status—Pugh
- Biomarkers: Military Injuries—Understanding Post-Traumatic Epilepsy [MINUTE] to examine multi-modal PTE biomarkers—Pugh
- CSRD submission: Innovative Home-Based Technologies to Improve Diagnosis in Veterans with Epilepsy—Haneef
- Drug-resistant epilepsy (DRE)—Haneef, Rehman

Future Initiatives/Goals FY23

- Decide whether to develop Arctic protocol and EEG—Van Cott; VA
- Decide whether to develop Epilepsy RFA—Pugh and mild and penetrating TBI epilepsy.
- Decide whether to develop pain protocol—Frontera; Nexus10.
- Explore research opportunities and shared resources between the ECoE and other CoEs.
- Find funding for Deploying Epilepsy Education, Care Systems, and Health Outcomes via National, Regional, and Community Partners—LaFrance.
- Test a Novel Dry Electrode Headset for Electroencephalography Telehealth—Waterhouse, Lopez, Halford.
- Study the effectiveness of Tele EEG—QI project.
- Study automatic detection of seizures—Talos, Advanced Global Clinical Solutions, Inc.
- Continue to study drug-resistant epilepsy.

Education Workgroup

Co-Chairs: Omar Khan, MD, Baltimore ECoE Director Elizabeth Waterhouse, MD, Richmond ECoE Director

Workgroup Members			
Berry, Alisha	Kellogg, Marissa, MD, Portland ECoE Director	Riley, Carol (Cookie) L.	
Bonds, Jennifer, ECoE National Administrative Director	Leppla, Donna L.	Rimel, Kimberly R.	
Broomhead, Tracy, Nurse Coordinator, Seattle	Mapp, Cristina	Robinson, Denetra, SW ECoE AO	
Cabrales, Victor	Matthews, Joyce S.	Scheid, Guiomar Program Specialist, San Francisco	
Coutts, Marcella A., Neurologist, Miami	McClain, Katelynn J.	Shouse, Meredith A., Social Worker, Richmond	
Crisan, Elena, Physician, JBVAMC	McGuire, Regina M.	Shukla, Anna M., NP	
Davis, Keninthe., AO SE ECoE	Meeks-Gordon, Cornelia	Spencer, Janet, Social Worker, Portland	
Dearn, Samantha, AO West LA	Miller, Khristine	Thebaud, Melissa B.	
Fadipe, Melissa, Nurse Practitioner, Houston	Milligan, Suzanne, Accreditation Technician, Salt Lake City	Tobin, Jill A.	
Farheen, Amtul S.	Mizell, April, NE ECoE AO	Tschumper, Ronda J.	
Finley, Winona, Administrative Support Assistant, SE ECoE	Narechania, Aditi, MD, Neurologist, Chicago	Tyan, Natalya K., RN, West LA	
Gamble, Sean, Project Manager EES	Nicholas, Shari A.	Tran, Tung MD, Durham ECoE Director	
Garga, Nina MD, SW ECoE Regional Director	Ocansey, Mary	Walker, Kenith, Program Support Assistant, Baltimore	
Haneef MD, Zulfi, Houston ECoE Director	Parko, Karen, MD, San Francisco	Watson, Heidi C, Lead Nurse, Philadelphia	
Hollis, Bethany A.	Pugh, MaryJo, Research Health Scientist, Salt Lake City	Welch, Jason W. EES	
Kanthathin, Tiat	Rehman, Rizwana, Statistician, SE ECoE	Weldekirstos, Yonathan H., MIT, Baltimore	
Kaska, Rebekah	Reliford, Rhonda L.		

Workgroup Mission

- To provide education and resources to Veterans and those involved in the care of Veterans with epilepsy
- In recent years, the Education Committee has provided webinars, TMS courses, and a series of brief YouTube videos called "Veterans and Epilepsy: Basic Training."
- Brochures, an epilepsy manual, and other published resources are available on the ECoE website.

Current Structure and Functioning:

- 1. Meets once a month.
- 2. Meetings are attended by neurologists, epilepsy experts, nurse practitioners, pharmacologists, nurses, and EEG technologists.
- 3. Multiple smaller committees have been established to focus on specific programs; these committees meet multiple times, defined by task needs.
- 4. The group works closely with EES Services, which manages programs and accreditations/TMS access for various disciplines.
- 5. Representatives from each discipline are appointed on a rotating basis to review content.

FY22 Accomplishments

- Identified information gaps and determined the following:
 - Despite much effort, dissemination of our materials was not sufficiently widespread.
 - Some efforts were being duplicated.
 - o Outcomes were not measurable.
 - Efforts were not always in sync with yearly national goals.
- Focused on creating infrastructure for education dissemination at multiple levels.
- Offered educational programs/series that are open to all:
 - Hope in Epilepsy Series: For patients and caregivers
 - Increased attendance to >35 per seminar.
 - Created local site/s for live patient attendance and to facilitate participation.
 - For Primary Care and General Neurology:
 - A smaller committee of General Neurologists identified a series of four important topics.
 - Journal Club For Epilepsy Experts:
 - Epilepsy Guidelines publications and discussion from the VA Epilepsy Centers' perspective.
 - Grand Rounds for Epilepsy Experts:
 - Veteran epilepsy disease-specific topics for state of the art that may lead to research collaborations.
- Produced educational materials.
- Updated and expanded the website, videos, and printed materials.
- Conducted education outreach:
 - Purple Day
 - Anita Kauffman Foundation
- Achieved many additional regional and site accomplishments.

Future Initiatives/Goals FY23

- Perform a needs assessment of providers and Veteran epilepsy patients.
- Expand education outreach.
- Increase awareness of ECoEs and our services available to all Vas.
- Make current presentations more accessible to Veterans.
- Expand and strengthen community partnerships (Epilepsy Foundation, Anita Kaufman, Cure Foundation).
- Create a centralized reference calendar that lists all VA epilepsy-related education events and endeavors.
- Review and update the "Self-Management for Epilepsy" material.
- Develop and improve training programs at various levels, including fellowships with focused outcomes (e.g., retaining fellows within the VA).

EEG Technologist Workgroup

Northwest	Northeast	Southwest	Southeast		
ECoE Authorized Staff (ECoE Funded FTE)					
Madison, WI:	Baltimore, MD:	Albuquerque, NM:	Durham, NC:		
Ronda Tschumper (.125)	Kimberly Rimel (1.0)	Dana Spears	Angela Cook (1.0)		
Vonda Elmer	Yonathan Weldekirstos		Lisa Sisk		
Joan Schultz		Houston, TX:	VACANCY		
VACANCY	Boston, MA:	Candi Behro			
	Carol Riley	Adam Haggerty	Gainesville, FL:		
Minneapolis, MN:	Adele Mirabella	Katrina Reichardt	Paula Crew (1.0)		
Melanie Seal (.490)	VACANCY	Behzad Rahimi	Adam Shugan		
Yuliya Volkov		Harold Walker	Gerald Hayes		
Valerie Howard	Richmond, VA:	Rodney Hall (1.0)			
	Rachel Van Aken		Miami, FL:		
Portland, OR:	Robert Baybutt	San Antonio, TX:	Rosario Carballo		
Michael Wilson	Brenda Robert-Wilson	Deborah Hernandez	Michael Perez		
Bryanna Lilies	Amanda Squires	Norma Ferguson			
Robert Dorsett		_	Tampa, FL:		
	West Haven, CT:	San Francisco, CA:	Christopher Holt (1.0)		
Seattle, WA:	Dominica Rodriguez (.860)	Christina Mapp	VACANCY?		
Debra Marwitz-Perkins	Sharon Carballo	Jeffrey Reznic			
Colleen Foldvik					
		West Los Angeles, CA:			
		Joaquin Barreda			

Names shown in italics are ECoE Directors.

Consortium	Medical	Instrument	Technologists	(MITs)
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Northwest	Northeast	Southwest	Southeast	
ECoE Authorized Staff (ECoE Funded FTE)				
Boise, ID:	Albany, NY:	El Paso, TX:	Asheville, NC:	
Susan Harbison/J.P. Osler	Joyce Collins	Elva Richey	Anthony Chambers	
Chicago, IL:	Augusta, ME:	Honolulu, HI:	Atlanta, GA:	
Valerie Krasne – Capt. J. Lovell Barbara Kocol – Hines	Jon Lewis (Resp. Therapist)	Michelle Russo	James Coleman	
Hussien Dika – Hines		Loma Linda, CA:	Augusta, GA:	
Paz Martinez – Hines Mary Ocansey – Jesse Brown	Cleveland, OH: Galina Kutoryan	Roy Batiste	Sonja McGhee	
Victor Cabrales – Jesse Brown		Long Beach, CA:	Birmingham, AL:	
	Lebanon, PA:	Eleanor Ancheta	Anna Tucker	
Des Moines, IA:	Austin Beller		Kathy Johnson	
Jennifer Kimmel		Omaha, NE:		
Jennifer Huff	Manchester, NH:	Rochelle Buhrman	Kansas City, KS:	
	Ana Pierre-Phillips		Rhonda Reliford	
Fargo, ND:		Palo Alto, CA:	Twila Walters	
Pamela McKinnon	Pittsburgh, PA:	Susan Rincones		
	Donna Leppla		Lexington, KY:	
Iowa City, IA:	Bethany Hollis	Rocky Mountain, CO:	Marshall Williams	
David McKinney		Tesia James		
Denise Hayes	Providence, RI:		Little Rock, AR:	
Morgan Brenneman	Ann Richard		Corena Johnson (Dawn)	
Stacy Hester				
		Sacramento, CA:	Orlando, FL:	
Milwaukee, WI:		Travis Clem Mohammed Shaaban	Wonya Mitchell	
Juba Mattice		Monammed Shaaban		
Portland, OR:		Salt Lake City, UT:	St. Louis, MO:	
Inrun Kaur		Alisha Berry	Ruby McClean	
Kenneth McCollum		Alisha berry	Ruby McClean	
Kenneth Weebluth		San Diego, CA:	Salisbury, NC:	
Saginaw, MI:		Richie Secody	Ashley Torres	
David Morgan				
Satia morgan				
Sheridan, WY:				
Jeremiah Cummings				
Sioux Falls, SD:				
Stacy Cheeseman				

FY22 Accomplishments

- New EEG Tech Workgroup Members = 23 (15 Consortium Members)
- Education committee: *Exploring SkillBridge *4 Students in Cross-training ASET Core Curriculum *Sharing Case Presentations with *actual* video EEG recordings shared *Miami VA shared EEG Bootcamp opportunity with EEG Tech workgroup for five weeks, which included lectures, didactics, case presentations *California END Society: online courses (EEG/LTM/IOM) *Natus: Webinars (free CEUs)
- Quality Standards using ACNS guidelines across all ECoEs: <u>Confirmed using ACNS Guidelines</u> Madison, Minneapolis, Albuquerque, Houston, San Antonio, Seattle, San Francisco, Richmond, Baltimore, West Haven, Boston, Gainesville, Durham, Miami (No response from Tampa VA or West LA)
- Able to **connect with several consortium EEG technologists** who have joined the EEG Tech Workgroup: Barbara Kocol and Hussien Dika (Hines VA), Jeremiah Cummings (Sheridan VA), Joyce Collins (Albany Stratton VA), Austin Beller (Lebanon VA), Ana Pierre-Philippe (Manchester VA), Susan Rincones (Palo Alto CA), SMohammed Shaaban (Sacramento VA), Alisha Berry (Salt Lake City VA), Anthony Chambers (Asheville VA)
- *Multiple inquiries offering continued support and data in these many diverse areas: Stop codes, Encounters, Hiring process, Equipment inventory lists (EILs), Equipment purchasing, Qualification standards, Protocols, Competencies, Performance plans, Hiring, Functional statements, On-Call assessment/memos, Tech assessment, Calendar, Scheduling, Sharing "Best Practices", etc.





Future Initiatives

- Gain ECoE Directors support for their technologists to become active members of the EEG Technologist Workgroup
- Further EEG Workgroup Meeting collaborations schedule each region to sponsor a Technologist Workgroup Meeting
- From our Quality Assurance Initiative: Assist interested EEG Labs in preparing for EEG Lab Accreditation in 2024

2023/2024 Ongoing Projects

- Updating MIT Qualification Standards Framework in development
- Education/EEG Training
- VA Cross training initiatives (Polysomnography EEG)
- Reach out to VA employees interested in EEG training
- ASET Core Curriculum
- Tech opportunities for additional (advanced) Registries
- Identifying clinical training sites
- Creating future VA Employee Lists:
 - Techs interested in future Tele-EEG opportunities
 - o Techs interested in VA employment

Mental Health Workgroup

Chair: Hamada Altalib, MD Admin Support: Linda Benson, MPH, CCRC

Hamada Altalib, DO, MPH	W. Kurt LaFrance, Jr., MD, MPH	Kristen Mordecai, PhD
Natasha Depesa, PhD	Raquel Lopez, MD	Ariana Ortega, PhD
Linda Benson	Marissa Kellogg, MD	Joseph Peterson
Sharon Bottomley, NP	Janice Marceaux	

Mental Health Workgroup Mission

• The mission of the VA ECoE Mental Health Workgroup is to promote the mental health of Veterans with epilepsy and functional seizure disorders through education, training, research, and clinical care coordination.

FY22 Accomplishments

Clinical:

• Conducted Quality Improvement (EPRP) of behavioral health assessment.

Education:

• Launched the Mind Brain Program in September 2022. The mission of the VA Mind Brain Program is to provide training and collaboration among VA clinicians and researchers to further the study and treatment of common neuropsychiatric conditions

Research:

- Submitted LaFrance & Altalib PCORI Managing Epilepsy Well clinical trial.
- The LaFrance & Salinsky VA COOP RCT Study PNES was not funded.
- PNES, AED outcomes, and wearable device grants to DoD were not funded.

VA Mind Brain Program Accomplishments FY22

- Developed a three-course/8.5-hour, online, accredited continuing education series reviewing the use of Neuro-Behavioral Therapy (NBT) in epilepsy and psychogenic nonepileptic seizures for VA clinicians. Courses include overviews of these conditions and the evidence base for NBT, clinical vignettes, and a session-by-session review of NBT.
- Created a training program for VA clinicians that includes the following:
 - o Individualized supervision during provision of NBT for two Veterans with lone PNES
 - Weekly supervision with an MBP staff member
 - A twice-monthly clinical conference meeting with multiple trained NBT clinicians and clinicians/seizure counselors-in-training, for peer supervision
- Established training partnerships with VA ECoE, NTTTP, PADRECC, and WRIISC.
- Drs. LaFrance and Mordecai gave numerous lectures to the VA community, nationally, and internationally, to provide education about functional neurological disorders, TBI, PNES, and epilepsy.

MBP Accomplishments: Clinical

- Treated patients with ES and PNES via VA NTMHC.
- Developed Clinical Manuals for NBT for other neuropsychiatric disorders:
 - Functional Movement Disorder manual: Finalizing draft (Mack and LaFrance)
 - Functional Cognitive Disorder manual: Finalizing first draft (Cotton, Mordecai, LaFrance, et al.)
- Made progress in the coordination and recruitment of patients for seizure counselors-in-training.
- Held a twice-monthly clinical peer supervision meeting.
- Facilitated VA National Library access to the Oxford University Press *Treatments That Work* series.

MBP Accomplishments: Research and Administrative

- Obtained an MEWN PCORI grant (LaFrance, Altalib, Kiriakopoulos, Sajatovic).
- Made progress on the Functional Cognitive Disorders (FCD) workbook project (Cotton). This is a pilot project to establish the feasibility of the newly created FCD workbook
- Submitted a DoD grant proprosal; resubmitted a grant proposal to NIH.
- Made progress on the Functional Neurological Disorders (FND) Survey project (Garrett).
- Prepared a submission to collect survey data from VA mental health clinicians to examine knowledge of and attitudes about FNDs.
- Mentored an early-career neuropsychologist in submitting CDA examining cognition in Veterans with PNES (Van Patton).
- Conducted regular meetings with the VA Mental Health Workgroup and VA Clinical Research Workgroup to discuss collaborative proposals and link the VA MBP resources with clinicians and researchers.

MBP Future Initiatives/Goals FY2023

Training:

- Establish a regular flow of clinicians in the training program
- Build partnerships with additional VA programs.

Clinical:

- Continue to establish standard of care for treatment of neuropsychiatric conditions beyond PNES (e.g., functional movement disorder, functional cognitive disorder, migraine).
- Establish MOAs with VA sites to increase access to care, as appropriate.

Research:

- Establish funding for MEWN (Merit, ERP submissions) and FCD (NIH, DoD) projects.
- Complete data collection for the FND Survey study.
- Continue to develop collaborations and address specific questions with extant data.

Administrative:

- Hire an administrative officer and other personnel.
- Establish a QA/QI program for training sites.

Nursing Workgroup

Co-Chair: Natalya Kan Tyan, BSN, RN, CNRN Co-Chair: Tracy A. Broomhead, MN, RN, SCRN, CNRN, CMSRN

Workgroup Members			
Adriana Valadez, San Antonio	Esmeralda Sanchez, San Antonio	Candida Behro, Houston	
Amanda Everhart, Durham	Greg Head, Boston	Regina McGuire, Baltimore	
Anna Shukla, Minneapolis	Huda Terraz, San Antonio	Roanna Bamford, Boston	
Joyce Matthews, Baltimore	Katherine McMillan, San Antonio	Ronda J. Tschumper, Madison	
Brooke L. Keenan, Madison	Kathy Browning, Richmond	Sharon Bottomley, West Haven	
Carol Riley, Boston	Linda Benson, Richmond	Sheela Sajan, Durham	
Collette Evrard, Portland	Lynne Bailey-Hammel, Kansas	Tracy Broomhead, Seattle	
David (Mike) Schoof, Durham	Maria Quiane, San Francisco	Winona Finley, Durham	
Denise Riley, Gainesville	Mary Jo Pugh, San Antonio	Yvonne Davila, San Antonio	
Doug South, San Francisco	Melissa Fadipe, Houston	Angela Young, VHA	
Elise Boucher, San Antonio	Natacha Jean-Noel, Richmond	Charisse Grande Bieniek, Madison	
Elizabeth Aprile, Charleston	Natalya Kan Tyan, Los Angeles	Kayla Darnick, Madison	
Tracy Roub, Madison	Melissa Thebaud, Chicago	Khristine P. Miller, San Francisco	
Joan Schultz, Madison	Diane Maloof, Boston	April Mizell, Richmond	
Brianna Hurley, Madison	Heidi Watson, Philadelphia	Denetra Robinson, Houston	
Candida Behro, Houston	Keninthe Davis, Durham	Nikki Caraveo, Kansas	
Jennifer Bonds, Atlanta	Rebekah Kaska, Richmond		

Nursing Workgroup Mission

- Improving the health of Veterans with epilepsy and seizure disorders is our ultimate hope.
- We want to integrate clinical care, nursing care, outreach, research, diagnostics, & education for our staff, Veterans, & caregivers about epilepsy.
- Home, community, and our hospitals & clinics can become accessible places, because of our creative and persistent efforts.
- Our goal is to increase each patient's quality of life, to leave our Veterans *healthier* and *safer* in their journey.

FY22 Accomplishments

• Continued to work with stakeholders to customize the nursing seizure assessment & documentation for ECoE nursing on Cerner.

- Continue the Epilepsy Nursing Educational presentations and resource sharing on additional topics of interest that were identified.
- Initiate an evidence-based practice/research project taskforce with the nursing workgroup.
- Explore updating ECoE EMU nursing curriculum.
- Support Dr. Khan with the ECoE Caregiver series for FY 2021-2022.
- Update/Revise two major educational tools from our previous nursing workgroup, Self Management for Veterans for the healthcare provider from 2015 and for Veterans with epilepsy from 2017.
- Customizing the nursing seizure assessment on Cerner. The implementation has been deferred on this goal.
- Continue to work with stakeholders to customize the nursing seizure assessment & documentation for ECoE nursing on Cerner.
- Continue the Epilepsy Nursing Educational presentations and resource sharing on additional topics of interest that were identified.
- Conducted Epilepsy Nursing Educational presentations:
 - My Seizure Home Plan (Tracy Broomhead, 12/21)
 - Neurostimulation Devices (Collette Evrard, 2/22)
 - Psychogenic Non Epileptic Seizures (Melissa Fadipe, 6/22)
 - Epilepsy Surgery (Anna Shukla, 8/22)
- Initiated an evidence-based practice/research project task force.
- Made significant progress in resource sharing (Melissa Fadipe, Coordinator). There is a great feeling of
 comraderie and sharing of resources within the workgroup and consortium. For example, we reviewed
 the links on the website and made the link of the batch of slides available to our nursing workgroup and
 added several resources each month. Our hope it to continue to extend those resources and
 communications to all sites. We also shared resources on EB projects, discussed ideas and topics, and
 discussed articles to review.
- Initiated an evidence-based practice/research project task force.
- Shared curriculum sites.
- Explored updating the ECoE EMU nursing curriculum.
- Coordinated Caregiver Webinars with the Education Workgroup.
- Supported Dr. Khan with the ECoE Patient/Caregiver & ECoE series for FY 2021–2022.
- Meticulously updated two major educational pamphlets:
 - Self-Management in Epilepsy
 - o Self-Management for Veterans with Epilepsy

Future Initiatives and Goals for FY23

- Finish reviewing and finalizing the Self-Management Booklets x2 for printing and distribution.
- Continue our very successful Epilepsy Nursing Educational Presentations in our workgroup meetings.
- Conduct a new needs assessment.
- Continue our evidence-based practice and research project task force.
- Continue to support ECoE for both the ECoE Patient/Caregiver and the ECoE Clinician Webinar series for FY 2022–2023.

Technology/Telehealth Workgroup

Workgroup Members			
David McCarthy (Bos)	Ann Van Cott (Pitt)	Rachel Van Aken (Rich)	
Marissa Kellogg (Port)	Maria Muzfeldt (BRX NY)	Angela Young (VHA)	
Stephan Eisenchenk (GN)	Aditi Narechania (JB CHI)	Sheela Sajan (Dur)	
Omar Khan (Bal)	Vikas Singh (KC)	Steven Castaneda (Orl FL)	
Kenichiro Ono (Rich)	Lisa Ortiz (WI)	Michael Perez (Mia)	
Alan Towne (Rich)	Cookie Riley (Bos)	Deborah Marwitz-Perkins (Sea)	
Steven Tobochnik (Bos)	Ronda Tschumper (Mad)	Zulfi Haneef (Hou)	
Hae Won Shin (Abq)	Rizwana Reyhman (Dur)	Angela Peters (SLC)	
Jack Jones (Mad)	Winona Finley (Dur)	Jennifer Bonds (ECoE)	
James Chen (WY)	Tung Tran (Dur)	Brian Johnson	
Nina Garga (SF CA)	Paul Fishman (Bal)	Stephanie Reeder (Minn)	
James Chen (LA CA)	Victor Cabrales (JB Chi)		

Technology/Telehealth Workgroup Mission

- Assess technological barriers in the ECoE Network.
- Review and disseminate technology and telehealth topics important to the ECoE Network.
- Provide open channels of communication between ECoE/Consortium sites and ECoE topic experts to help with problem solving and implementation.
- Review new technologies, both FDA-approved and investigational, with potential impact to VA Epilepsy.
- Review select vendor technologies before referral to ECoE Research workgroup.
- Facilitate early pilots for new technologies and gauge clinical impact.

FY22 Accomplishments

- Nelli Neuro Event Labs: Al Video analysis seizure detection (Haneef)
- VA DoD Collaborations (Eisenschenck)
- Rhythmlink, MRI-compatible quick electrodes (Van Aken)
- HL7 Revisited (McCarthy, Khan, Van Cott)
- Lessons from National Tele-Stroke Program (Martini)
- Rapid EEG Devices:
 - o Zeto (Ono), Ceribell (Tobochnik, McCarthy), Vital EEG (Narechaniaa)
- Corticare skull caps (Narechania)
- Cadwell Amb EEG pilot (Riley)
- EEG Technologist Development Programs (Riley, Tschumper)

- Talos seizure detection system: Vendor presentation
- ECoE EEG databases (Kellogg, Haneef)
- Cerner integration (Khan, Kellogg): ECoE-specific Oracle Cerner accomplishments:
 - ECoE/Seizure PowerForms (i.e., note templates)
 - Dynamic Documentation (i.e., autotext, note-building processes)
 - PowerPlans (i.e., admission order sets) for Status epilepticus and Epilepsy/EMU floor admission
 - o EEG orders
 - Routine EEG (under revision)
 - Continuous EEG (under revision)
 - Ambulatory EEG (under revision/production)
 - EMU Referral Pathway (in process)
- Tele-EEG (McCarthy)
- Epilepsy telehealth initiatives (Narechania)
- Summary of 14 Talos events: 14 events, 12 actual seizures, 12 talos-detected seizures, processing time of 7.98 seconds
- Multivendor presentation: Stratus, NeuroTech, RSC, Corticare
- Increased attendance from consortium sites
- Member service on National Councils for Cerner Integration, HL7, and Tele-EEG/Epilepsy
- New Pilots: Skull Caps (Corticare), Rapid EEG (Zeto, Ceribell), Cadwell Ambulatory Video EEG
- Tele-EEG services offered:
 - Tele-EEG Store-and-Forward EEG (routine outpatient, in-patient EEG, video EEG, ambulatory 24-hour EEG +/- video)
 - Tele-EEG Synchronous: Continuous Monitoring (in-patient video EEG, ICU EEG)
 - Home-based EEG: Continuous monitoring (Active vendors: Stratus Alliance, RSC, NeuroTech, Corticare)
 - o Rapid EEG devices
- Established the pros and cons of home-based EEG:
 - Pros: Home VEEG hookup, no Technologist needed, remote continuous monitoring, VA staf interpretation option
 - Cons: No in-patient studies, limited or no routine EEG support, no clinical assessments, cost, further depletion of EEG Technologists
- Developed the ANNIE Epilepsy Protocol and conducted the beta testing phase. ANNIE is named after Lieutenant Annie G. Fox, the first woman to receive the Purple Heart for combat. She was Chief Nurse in the Army Nurse Corps at Hickman Field, Pearl Harbor. ANNIE uses SMS text messaging to promote selfcare in Veterans. Patients receive automated prompts to track/monitor health, as well as motivational and educational messages. The ANNIE Epilepsy Protocol includes the following:
 - A simple seizure tracker that tracks the presence or paucity of seizures weekly and the number of seizures weekly
 - An educational tip repository that releases two educational tips per week; some tips include links to learn more.

Future Initiatives/Goals for FY23

- Succession planning
- Pending topics: DBS, non-cerebral seizure detection devices, SUDEP Technology, long-term EEG electrode systems, EEG signal analysis, more Persyst and machine learning systems, more ANNIE and other new Telehealth tools.
- DoD participation, speakers
- Outside speakers/consultants, university affiliates
- Regulated vendor and multivendor presentations
- Restructuring: New workgroups for Active Topics
- Further development of MS Teams topic channels
- Continue Oracle Cerner EHRM Transition (Marissa Kellogg, MD, MPH)
- ECoE Updates
- Oracle-Cerner ECoE work to be done:
 - Ensure that suggested edits/feedback to prior work are enacted/integrated.
 - Conduct hands-on testing of the product to ensure usability. Only one VA neurologist has hands-on experience with VA Cerner to date.
 - Enhance our e-consult capability. Currently, there is no way of coding/workload credit for e-consults.
 - Improve order routing. Currently, EEG orders can be sent to any Cerner-live VA or DoD site. Orders are frequently lost, deleted, or misrouted.

Women Veterans with Epilepsy (WVE) Workgroup

Chair: Anne C. Van Cott, MD, FAAN (Pittsburgh) Admin Support: Winona Finley (Durham)

Workgroup Members			
Hamada Altalib, DO, MPH FAES (West Haven	(Maria) Raquel Lopez, MD, FAES (Miami)		
Jennifer Bonds King, MHA, FACHE (National AO)	April Mizell (Northeast AO)		
Keninthe Davis (Southeast AO)	Karen Parko, MD, FAES (retired, San Francisco)		
Sunita Dergalust, PharmD, BCPS (West LA)	Kamakshi Patel, MD, MPH (Houston)		
Elizabeth Felton, MD, PhD (University of Wisconsin)	Mary Jo Pugh, PhD, RN (SLC, Utah)		
Nina Garga, MD, FAES (San Francisco)	Rizwana Rehman, PhD (Durham)		
Barry Gidal, PharmD, RPh (Madison)	Denise Riley, ANP-BC, CNRN (Gainesville)		
Natacha Jean-Noel, DNP, APRN, ANP-C, GNP-BC (Richmond)	Divya Singhal, MD, FAAN (San Antonio)		
Rebekah Kaska, MSN, AGACNP, CNRN (Richmond)	Kathy Tortorice, PharmD, BCPS (retiring, National PBM, Chicago)		
Marissa Kellogg, MD, MPH (Portland)			

WVE Workgroup Mission

Address issues unique to WVE with the goal of improving clinical care and educating patients, caregivers, and healthcare providers (est. 2015).

FY22 Accomplishments

Selected Prior Completed Projects

- TABLE 3 of ASM guide on special considerations for WWE
- AAN Course and Boston/National ECoE Webinars
- Presentations to Women's Health Initiative
- Bone Health QI project
- WWE quality measure assessment across ECoEs
- Collaborations within ECoE and across VA silos

Research

Peer-Reviewed Publications:

Kirkpatrick L, Collins A, Patterson C, Harrison E, Miller E, Sogawa Y, Van Cott AC, Kazmerski TM. Pediatric Neurologists' Perspectives on Sexual and Reproductive Healthcare for Adolescent and Young Adult Women with Epilepsy and Intellectual Disability (2021). **Journal of Child Neurology** 2022 Jan;37(1):56–63.

Kirkpatrick L, Van Cott AC, Kazmerski TM, Bravender T. Contraception and Reproductive Healthcare for Adolescent and Young Adult Women with Epilepsy. **Journal of Pediatrics** Feb 1, 2022, Volume 241, pp. 229–236.

Sullivan-Baca E, Modiano YA, Miller BI, Fadipe M, Van Cott AC, Haneef Z. Characterizing Women Veterans Receiving Seizure Care in the Veterans Affairs Healthcare System. Epilepsy Research February 1, 2022, Volume 180, Article 106849.

Kirkpatrick L, Harrison E, Borrero S, Davis AR, Miller E, Sogawa Y, Stransky OM, Talabi MB, Urban A, Van Cott AC, Kazmerski TM. Preferences and Experiences of Women with Epilepsy Regarding Sexual and Reproductive Healthcare Provision. **Epilepsy and Behavior** April 1, 2022, Volume 129, Article 108631

Posters/Abstracts/Presentations:

Sullivan-Baca E, Modiano Y, Miller B, Van Cott A, Haneef Z. Psychiatric Factors and Trauma Types Differentiate PNES from ES in a Female Veteran Sample. **AES** Dec 2021 Abstract number: 2.131.

Van Cott A, Panahi S, Amuan M, Henion A, Lopez R, Pugh MJ. Antiseizure Medications Prescribed for Women Veterans with Epilepsy and Potential Association with Comorbid Health Conditions. **AES** Dec 2021. Abstract number: 2.129.

Kirkpatrick L, Harrison E, Borrero S, Davis, A, Miller E, Sogawa Y, Stransky O, Talabi M, Urban A, Van Cott A, Kazmerski T. Preferences and Experiences of Women with Epilepsy Regarding Sexual and Reproductive Health Care. **AAN** April 2022. P17.005.

Health Systems Initiatives

• Completed Cerner power form development using WVE Quality Standards:

Template BRIEF	Template EXTENDED
Do you have a women's health provider?	Brief plus:
Fertility status?	Menstrual cycle?
Use of birth control?	Complications during the pregnancy?
Previous pregnancies?	Takes Vit D for bone health?
Currently planning pregnancy?	Takes Calcium for bone health?
Taking daily folic acid?	Sexual dysfunction?

- In progress: CPRS VA teratogenic alerts (T drugs Phase 2) for CPRS v31b:
 - Experienced more than 18 months of coding/version release delays.
 - o Incorporated view alerts if pregnancy status changes or seizure disorder is added to problem list.
 - o Incorporated order checks if patient may become pregnant or becomes pregnant.

Condition	Med Group	Message (95-character limit including spaces)	Who receives view alert?
Seizure Disorder added	ASM	Rx folate. Neurology consultation advised for contraceptive and seizure med optimization.www.epilepsy.va.gov	PCP/person who put the code on the system
"No" to "yes" pregnant	ASM	Consult Epilepsy Ctr for seizure med dosing & optimization. Rx folate. www.epilepsy.va.gov	Ordering Provider
"Yes" pregnant to "No" pregnant	ASM	Pt delivered; seizure med level may rise; may need adjustment. www.epilepsy.va.gov	Ordering Provider
From low likelihood of pregnancy to high	ASM	Rx folate. Consult Epilepsy Ctr to optimize seizure med & contraceptive. www.epilepsy.va.gov	PCP and Ordering Provider

Future Initiatives/Goals FY23

Education

- Made a presentation at AANN annual conference on caring for women with epilepsy (Natacha Jean Noel).
- Adapted WVE: Beyond Seizure Control to a Case-Based Didactic for UCSF Residents (Nina Garga).

Health Systems Initiatives and Clinical:

- VA National Osteoporosis Advisory Board—Van Cott member focusing on ASM use and bone health.
- Awaiting CPRS TDrug Phase 2 rollout.
- OMHSP team has a similar CPRS Tdrug alert delay and may want to collaborate on creating/disseminating more accurate info on their SharePoint.
- Consider tele-epilepsy branch point: e-consult service or even virtual care specifically for people capable of pregnancy/WVE.

Research:

- Review article about WWE (Haneef, Sullivan-Baca, Rehman, Van Cott, et al.)
- Complete a research project examining difference psychiatric comorbidities in WVE vs. MVE (Haneef, Sullivan-Baca, Rehman, Van Cott, et al.).
- Maintain ECoE WVE SharePoint site and expanded WVE library reference on ECoE website.

Education:

- Develop a TMS module for APRNs on caring for women with epilepsy (Natacha Jean-Noel).
- Develop a gender-specific care webinar/talk, collaborating with SFVA Women Veterans Program Manager and Director of the Trans Health Clinic.
- Establish a Quickseries, building on the patient educational material that Laura Kirkpatrick and Anne Van

Cott prepared for adolescents/women with epilepsy (Felton, Van Cott, others).

- Develop a budget.
- Submit a course proposal for FY24 to AAN, APA, AES, or AANN.
- Consider gender specific epilepsy care or psychiatric comorbidities in WVE vs. MVE.
- Investigate conducting a patient webinar in FY23.

Special Thanks

- Karen Parko, MD
- Kathy Tortorice
- Anne Van Cott, MD

Publications and Presentations

Northeast Region Publications/Presentations (VA-effort only)

Baltimore

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

None

ABSTRACTS/POSTERS/PRESENTATIONS

None

Boston

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

Dussault, P, **McCarthy, D**, Davis, SA, Thakore-James, M, Lazzari, A. High Prevalence of Vertebral Fractures in Seizure Patients with Normal Bone Density Receiving Chronic Anti-Epileptic Drugs. Osteoporosis International 2021. DOI 10.1007/s00198-021-05926-2.

Yue Y, Xu P, Liu Z, Sun X, Su J, Du H, Chen L, Ash RT, **Smirnakis S**, Simha R, Kusner L, Zeng C, Lu H. Motor Training Improves Coordination and Anxiety in Symptomatic *Mecp2*-null Mice Despite Impaired Functional Connectivity Within the Motor Circuit. **Sci Adv.** 2021 Oct 22;7(43):eabf7467. DOI 10.1126/sciadv.abf7467. Epub 2021 Oct 22. PubMed PMID: 34678068; PubMed Central PMCID: PMC8535852.

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Ash RT, Palagina G, Fernandez-Leon JA, Park J, Seilheimer R, Lee S, Sabharwal J, Reyes F, Wang J, Lu D, Sarfraz M, Froudarakis E, Tolias AS, Wu SM, **Smirnakis SM**. Increased Reliability of Visually Evoked Activity in Area V1 of the MECP2-Duplication Mouse Model of Autism. **J Neurosci**. 2022 Jul 13: JN-RM-0654-22. DOI 10.1523/JNEUROSCI.0654-22.2022. Online ahead of print.

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Tobochnik S, Lapinskas E, Vogelzang J, Ligon KL, Lee JW. Early EEG Hyperexcitability Is Associated with Decreased Survival in Newly Diagnosed IDH-Wildtype Glioma. **J Neurooncol** 2022;159(1):211-218. DOI 10.1007/s11060-022-04059-8. PubMed PMID: 35715666.

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Richmond

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Mary Jo Pugh, W. LaFrance, Sidney Hinds, **Alan Towne**, Anne Van Cott, Christine Baca, Hamada Altalib, Chen-Pin Wang. Comorbidity Phenotype Trajectories in Veterans Before and After Emergence of Epilepsy. **Neurology** May 2022, 98 (18 Supplement) 1055.

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West Haven

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

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Madison

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Minneapolis

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Ransom CB. Suppression of In Vitro Epileptiform Activity by Vigabatrin: Dependence on GABA-B Receptors and GABA Transporter Type 1 (GAT1). VA Epilepsy Centers of Excellence Basic Science Workgroup, 1/2022.

Ransom CB. Use of Rapid EEG: A Quick and Simple EEG Test to Exclude Status Epilepticus. Neurology noon conference, VA Puget Sound, 3/1/2022.

Ransom CB. Diagnosis and Treatment of Status Epilepticus. Chief of Medicine Conference, VA Puget Sound, 11/17/2021.

Ransom C.B. GABA and Glycine Receptors. Dept of Physiology and Biophysics graduate student course, University of Washington (NBIO 502, Molecular and Cellular Neurobiology), 11/2021.

Ransom CB. Stroke Pathophysiology; Parkinson's Disease and Other Movement Disorders; Disorders of Consciousness: Sleep, Seizures, and Coma. Series of lectures for Dept of Physiology and Biophysics undergraduate course, University of Washington (NBIO 402, Neurobiology of disease), 3/2022.

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Ransom CB. Suppression of In Vitro Epileptiform Activity by Vigabatrin: Dependence on GABA-B Receptors and GABA Transporter Type 1 (GAT1). VA Epilepsy Centers of Excellence Basic Science Workgroup, 1/12/2022.

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Ransom CB. Use of Rapid EEG: A Quick and Simple EEG Test to Exclude Status Epilepticus. Neurology noon conference, VA Puget Sound, 3/1/2022.

Ransom CB. Stroke Pathophysiology, Parkinson's Disease, and Other Movement Disorders; Disorders of Consciousness: Sleep, Seizures, and Coma. Series of lectures for Dept. of Physiology and Biophysics undergraduate course, University of Washington (NBIO 402, Neurobiology of disease), 3/2022.

Dembrow NC. Key Differences in the Local Connectivity and Synaptic Dynamics in the Mouse and Human Cortex. VA Epilepsy Centers of Excellence Basic Science Workgroup, 04/12/2022.

Dembrow NC. Bursting of Excitatory Cells Is Linked to Interictal Epileptic Discharge Generation in Humans. VA Epilepsy Centers of Excellence Basic Science Workgroup, 05/11/2022.

Dembrow NC. Amazon Rainforest Rodents (Proechimys) Are Resistant to Post-Stroke Epilepsy. VA Epilepsy Centers of Excellence Basic Science Workgroup, 07/11/2022.

Southeast Region Publications/Presentations (VA-effort only)

Durham

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Dergalust, Sunita. Grand rounds at West LA: "Antiseizure medications: A focus on Traditional ASMs," July 2022

Dergalust, Sunita. Grand rounds at West LA: "Antiseizure medications: A focus on Second generation ASMs," July 2022

Dergalust, Sunita. Clinical Neurophysiology lecture series at UCLA: "Antiseizure medication related ADRs," March 2022

Dergalust, Sunita. USC School of Pharmacy: "Synchronous lecture on Epilepsy," February 2022

National Peer Review Committee

The National Peer Review Committee is an important part of the ECoE overall team. This committee is responsible for providing guidance and direction to the ECoE It will assist in the planning phases of the ECoE to maximize cooperation among 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.

Peer Review Committee Members

Marc Dichter, MD, PhD, University of Pennsylvania – ECoE Advisory Committee Chair John Booss, MD, Professor Emeritus, Yale University School of Medicine (Departments of Neurology and Laboratory Medicine) Derek Brandt, Esq., Director Congressional Affairs, American Academy of Neurology Joseph Brown, MD, Chief of Epilepsy—Walter Reed National Military Medical Center David Cifu, MD, Senior TBI Specialist, U.S. Dept. of Veterans Affairs; PI, VA/DoD Long-term Impact of Military-Relevant Brain Injury (LIMBIC-CENC) Ramon Diaz-Arrastia, MD, Professor of Neurology, University of Pennsylvania Sandy Finucane, Executive Vice President, Epilepsy Foundation Phil Gattone, CEO, Epilepsy Foundation Lauren Harte-Hargrove, PhD, Associate Research Director, Citizens United for Research in Epilepsy (CURE) Pat Horan (Veteran) and Patty Horan (Military Officers Association of America) Debra Josephs, Executive Director, The Anita Kaufmann Foundation Rosemarie Kobau, MPH, MAPP, Centers for Disease Control and Prevention, Epilepsy Division Laura Lubbers, PhD, Chief Scientific Officer (CURE) Richard Mattson, MD, Yale Epilepsy Program Steve Owens, MD, Epilepsy Foundation Karen Parko, MD, Inaugural ECoE National Director - Retired Robert Ruff, MD, Former VA Director of Neurology – Retired Paul Rutecki, MD, Former VA National ECoE Director - Retired Brien Smith, MD, Spectrum Health Medical Group, Michigan State University William (Bill) Theodore, MD, Neurologist, NH Tim Tilt, Veteran Laura E. Weidner, Esq., Vice President, Government Relations & Advocacy, Epilepsy Foundation Francis White III, Esg., Veteran

The Epilepsy Centers of Excellence were mandated by Public Law S. 2162. Here is the law in its entirety.

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 posttraumatic 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.

In General—Subchapter II of chapter73 is amended by adding at the end following new section: '§ 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-
 - 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-

- The Under Secretary for Health shall establish a peer review panel to assess the scientific and clinical merit of proposals that are submitted to the Secretary S. 2162—18 for the designation of epilepsy centers of excellence under this section.
 - (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:

- An affiliation with an accredited medical school that provides education and training in neurology, including an arrangement with such school under which medical residents receive education and training in the diagnosis and treatment of epilepsy (including neurosurgery).
- (2) The ability to attract the participation of scientists who are capable of ingenuity and creativity in health care research efforts.
- (3) An advisory committee composed of Veterans an appropriate health care and research representatives of the facility and of the affiliated school or schools to advise the directors of such facility and such center on policy matters pertaining to the activities of

the center during the period of the operation of such center.

- (4) The capability to conduct effectively evaluations of the activities of such center.
- (5) The capability to assist in the expansion of the Department's use of information systems and databases to improve the quality and delivery of care for Veterans enrolled within the Department's health care system.
- (6) The capability to assist in the expansion of the Department telehealth program to develop, transmit, monitor, and review neurological diagnostic tests.
- (7) The ability to perform epilepsy research, education, and clinical care activities in collaboration with Department medical facilities that have centers for research, education, and clinical care activities on complex multi-trauma associated S. 2162— 19 with combat injuries established under section 7327 of this title.
- (e) NATIONAL COORDINATOR FOR EPILEPSY PROGRAMS—
 - (1) To assist the Secretary and the Under Secretary for Health in carrying out this section, the Secretary shall designate an individual in the Veterans Health Administration to act as a national coordinator for epilepsy programs of the Veterans Health Administration.
 - (2) The duties of the national coordinator for epilepsy programs shall include the following:
 - (A) To supervise the operation of the centers established pursuant to this section.
 - (B) To coordinate and support the national consortium of providers with interest in treating epilepsy at Department health care facilities lacking such centers in order to ensure better access to state-of-the-art diagnosis, research, clinical care, and education for traumatic brain injury and epilepsy throughout the health care system of the Department.
 - (C) To conduct, in conjunction with the peer review panel established under subsection (c), regular evaluations of the epilepsy centers of excellence to ensure compliance with the requirements of this section.
 - (D) To coordinate (as part of an integrated national system) education, clinical care, and research activities within all facilities with an epilepsy center of excellence.
 - (E) To develop jointly a national consortium of providers with interest in treating epilepsy at Department health care facilities lacking an epilepsy center of excellence in order to ensure better access to state-of- the-art diagnosis, research, clinical care, and education for traumatic brain injury and epilepsy throughout the health care system of the Department. Such consortium should include a designated epilepsy referral clinic in each Veterans Integrated Service Network.
 - (3) In carrying out duties under this subsection, the national coordinator for epilepsy programs shall report to the official of the Veterans Health Administration responsible for neurology.
- (f) AUTHORIZATION OF APPROPRIATIONS-
 - (1) There are authorized to be appropriated \$6,000,000 for each of fiscal years 2009 through

2013 for the support of the clinical care, research, and education activities of the epilepsy centers of excellence established and operated pursuant to subsection (a) (2).

- (2) There are authorized to be appropriated for each fiscal year after fiscal year 2013 such sums as may be necessary for the support of the clinical care, research, and education activities of the epilepsy centers of excellence established and operated pursuant to subsection (a) (2).
- (3) The Secretary shall ensure that funds for such centers are designated for the first three years of operation as a special purpose program for which funds are not allocated through the Veterans Equitable Resource Allocation system.
- (4) In addition to amounts authorized to be appropriated under paragraphs (1) and (2) for a fiscal year, the Under Secretary for Health shall allocate to such centers from other funds appropriated generally for the Department medical services account and medical and prosthetics research account, as appropriate, such amounts as the Under Secretary for Health determines appropriate.
- (5) In addition to amounts authorized to be appropriated under paragraphs (1) and (2) for a fiscal year, there are authorized to S. 2162—20 be appropriated such sums as may be necessary to fund the national coordinator established by subsection (e).".

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

Acronyms

AAN	American Academy of Neurology
ABPN	American Board of Psychiatry and Neurology
ACGME	Accreditation Council for Graduate Medical Education
AED	Antiepileptic Drugs
AES	American Epilepsy Society
ASET	American Society of EEG Technicians
CAC	Clinical Application Coordinator
CBOC	Community-Based Outpatient Clinic
CBT	Cognitive Behavioral Therapy
CDC	Centers for Disease Control and Prevention
CICU	Coronary Intensive Care Unit
CoE	Center of Excellence
COVID-19	Coronavirus Disease 2019
CPRS	Computerized Patient Record System
СРТ	Current Procedural Terminology
CURE	Citizens United for Research in Epilepsy
CVT	Clinical Video Telehealth
DoD	Department of Defense
DSS	Decision Support System
DVBIC	Defense and Veterans Brain Injury Center
ECMS	Executive Committee, Medical Staff
ECoE	Epilepsy Centers 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
HCOE	Headache Centers of Excellence
HCS	Health Care System
HIMS	Health Information Management System
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

MBP	Mind Brain Program
MIT	Means Indicator Test
MRI	Magnetic Resonance Imaging
MSECoE	Multiple Sclerosis Centers of Excellence
NIH	National Institutes of Health
NINDS	National Institute of Neurological Disorders and Stroke
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
PIP	Improvement in Medical Practice
PL	Public Law
PNES	Psychogenic Nonepileptic Seizures
PTSD	Post-Traumatic Stress Disorder
QI	Quality improvement
TBI	Traumatic Brain Injury
VA	Veterans Administration
VACO	Veterans Affairs Central Office
VANF	VA National Formulary
VERA	Veterans Equitable Resource Allocation
VHA	Veterans Health Administration
VVC	VA Video Connect
VSSC	VHA Support Service Center Capital Assets

In Honor of Karen Parko, M.D.



Dr. Karen Parko, former National Director of the ECoE, retired from VA service. She trained at UCSF for her neurology residency and then worked for 10 years serving as the only neurologist for the Navajo Nation in New Mexico before returning to UCSF and the San Francisco VA Healthcare System as faculty. While serving in New Mexico, she established the role of a permanent neurologist for the Indian Health Service clinic in Shiprock and studied neuropathy and seizures among the Navajo people. She also served on the New Mexico State Stroke Task Force to address health disparities in access to acute stroke care, advocating for underserved, rural Native Americans.

Under her leadership, San Francisco VA was selected to be one of the first 16 VA Epilepsy Centers of Excellence (ECoEs). She not only directed the San Francisco site and Southwest region; she was quickly elected by her peers to be the inaugural national director of the VA ECoEs based on her strong skills in leadership and program development. She created a cohesive national program to pool resources and efforts in provider and patient education, nursing education and policies, clinical procedures, clinical databases, and research. She ensured all sites had input into the program, and she had the foresight to assemble a professional advisory board for annual program review. She garnered permanent funding for our centers at the end of our five-year initial approval with her perseverance and creativity.

Under her leadership, the VA ECoE actively participated in the Institute of Medicine: Epilepsy Across the Spectrum: Promoting Health and Understanding; both Dr. Parko and Dr. Pugh were asked to provide VA reports for the IOM regarding this report. She also collaborated and contributed to ICARE (Interagency Collaborative to Advance Research in Epilepsy), the Epilepsy Leadership Council, Centers for Disease Control Epilepsy Special Emphasis Panel, and the Defense and Veterans Brain Injury Center. Along with the regional directors, she was instrumental in providing evidence to congress to establish the DoD CDRMP Epilepsy Research Program and served as the elected panel chair. She received an American Epilepsy Society (AES) National Service Award and was elected a Fellow of the American Epilepsy Society in 2017. She served on several task forces for the International League Against Epilepsy (ILAE) evaluating disparities, stigma, and prevention of epilepsy. She now serves as the chair of the Global Health Task Force of the ILAE-North America Region.

She was an early advocate to adopt the SCAN-ECHO model of provider-to-provider education and consultative care for epilepsy, ensuring rural and underserved Veterans received the highest quality care for epilepsy. She facilitated a national collaboration with renowned clinician and researcher William Curt LaFrance in non-epileptic seizures (NES), leading to increased access to CBT-informed therapy for our patients with NES. This was approached in a sustainable way with a process for training additional providers to deliver therapy. Furthermore, she then took the initiative to become trained herself. She has been a co-PI for research looking at characteristics of Veterans with NES and studies to evaluate the efficacy of group and individual CBT-informed therapy in patients with NES. These advances are particularly meaningful in this group of marginalized patients with significant barriers to care.

She has been a valued educator for the UCSF School of Medicine and Department of Neurology, earning the coveted Robert B. Layzer Award for Resident Teaching in 2007 and the Haile T. Debas Academy of Medical Educators Excellence in Teaching Award in 2017. She served as a career mentor to numerous residents and junior faculty and helped establish the Dr. Cheryl Jay Master Clinician Awards for Clinical Excellence in Neurology. In addition, Dr. Parko was active on the Women in Neurology Committee that worked to improve the training environment for women and to improve gender equity in faculty compensation.

Purple Day Photos







U.S. Department of Veterans Affairs

Veterans Health Administration Epilepsy Centers of Excellence