VA

U.S. Department of Veterans Affairs

Veterans Health Administration

Epilepsy

Centers of Excellence

Annual Report
Fiscal Year
2023

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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.

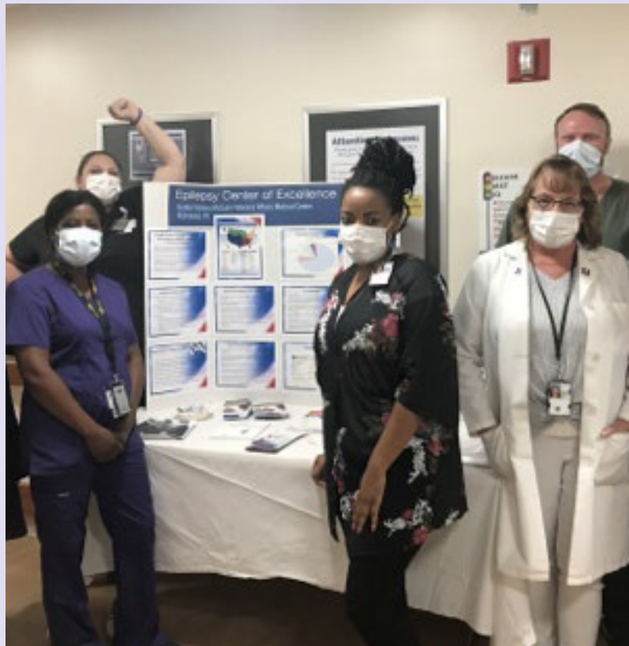
Who We Are

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 16 linked sites that 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. 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 linked with the Polytrauma Centers to mutually follow Veterans with moderate and severe traumatic brain injury who are at the greatest risk for posttraumatic epilepsy. The sites are developing protocols to identify Veterans with epilepsy and to develop referral networks that enable Veterans to obtain specialized treatment, such as epilepsy surgery and advanced electro-diagnosis, within the Veteran health care 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.**



Message from the VA National Neurology Program Office

Reflecting on the accomplishments outlined in this year's Epilepsy Centers of Excellence (ECoE) Annual Report, fiscal year 2023 (FY23) has been a year of growth, opportunity, and change. Augmentation of ECoE budgets by over $9 million in FY23 allowed tremendous growth. ECoE was delighted to welcome new sites at the Birmingham VA and the Jesse Brown VA in Chicago. Individual tele-EEG networks coalesced into an integrated National Tele-electroencephalogram (EEG)/Tele-Epilepsy Program (NTEEG/EP), doubling both hubs and spokes in FY23—an unprecedented accomplishment in its first year. Infrastructure acquired for tele-EEG this year lays the foundation for future expansion in new hub and spoke sites as well as in new services, such as emergency EEG and continuous EEG monitoring. The VA Mind Brain Program expanded both its community of practice and developed training materials for psychogenic movement and cognitive disorders.

Growth is slated to continue this year, with an additional $4 million in funding in FY24. Most importantly to the long-term future of the Centers, the ECoEs are now part of the President's Annual Budget for VA, removing some of the historical uncertainties in annual funding and adequacy of budgets. Judicious consideration of expansion to fill geographic gaps and to engage those eager to join or closely affiliate with the ECoEs is now possible. In return, the ECoEs will need to develop and track metrics to demonstrate their ongoing value to the VHA and to Veterans.

During FY23, the neurology enterprise within VHA has undergone significant reorganization. The ECoEs, along with the other Neurology Centers of Excellence and tele-programs, are being separated from the Neurology Program Office (NPO). Like the other program offices in Specialty Care, the NPO will focus on development of quality metrics, oversight/monitoring, policies, and compliance without the potentially conflicting role of running field clinical programs. Going forward, all of the Neurology Centers will be clearly based in VA medical centers rather than in VA Central Office. To assist the Centers, we will be introducing a limited number of shared positions to help manage this large neurology clinical enterprise and to foster increased collaboration among the Neurology Centers and programs. These changes are an ongoing process that we hope will be completed in 2024. We are grateful to the multiple personnel within the ECoEs who have assisted us in this journey or who have served as "change champions."

It is with mixed emotions that we acknowledge the decision of Dr. Alan Towne to step down as the national director of the Epilepsy Centers of Excellence. Dr. Towne graciously stepped in to lead the Epilepsy Centers on short notice when a gap in experienced leadership loomed. He has led the Centers for more than three years during a period of unprecedented growth, opportunities, and challenges, and has been an active contributor to the change processes affecting the entire neurology enterprise. Fortunately, the VA neurology community isn't losing Dr. Towne completely. He will continue to be active as the Headache Center of Excellence Director at the Richmond VA and will continue to provide clinical care in their Epilepsy Center.

In closing, the Epilepsy Centers now have the resources and potential to become what you, the experts, think they should be. We welcome (and need) your input into the strategic planning for the Centers to ensure a successful future. To all the ECoE directors and staff, thank you for your continued efforts on behalf of Veterans with epilepsy and related disorders.

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

Glenn D. Graham, MD, PhD
Executive Director of the
Neurology Clinical Programs,
Veterans Health Administration

Message from the National Director

Alan R. Towne, MD, MPH
National Director
Epilepsy Centers of Excellence

Fiscal Year 2023 (FY23) has been eventful, with several significant changes. The increased funding for FY23 has enabled the Epilepsy Centers of Excellence (ECoE) to build upon and expand our services to Veterans. Two new ECoE sites were added in Chicago and Birmingham. Clinical care has undergone changes with the continued expansion of the Tele-EEG initiative. For those Veterans who currently do not have EEG capabilities at their facilities, Tele-EEG is continuing to develop a network of hub and spoke sites—along with partnerships with ambulatory EEG companies—to provide better access with high quality interpretation.

The VA Mind Brain Program (MBP) continues to grow and provides training and collaboration among VA clinicians and researchers to further the study and treatment of 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 (COEs), including the Headache, Multiple Sclerosis, and Parkinson's COEs. Collaboration has also been established with the National Tele-Neurology Program (NTNP) and National Tele-Epilepsy Program (NTEP). We continue to partner with epilepsy-centered organizations such as the American Epilepsy Society, Epilepsy Foundation of America, Epilepsy Alliance America, and the Anita Kaufmann Foundation. We have completed the reorganization of our governance structure to focus resources more efficiently.

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 external peer review program (EPRP) data, epidemiology of epilepsy and traumatic brain injury, home-based technologies to improve diagnosis in Veterans with epilepsy, and biomarkers and basic mechanisms of epilepsy.

Education is another one of our core missions. The focus for FY23 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 physicians, 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, Boston Epilepsy Lectures, and EEG technologist 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, for their expertise and for providing the ECoE with sound advice. In closing, it has been an honor to serve as the national director of the Epilepsy Centers of Excellence.

Goals and Accomplishments

National ECoE
Program Goals

The goals of the ECoE National Program are as follows:

- Establish a national system of care for 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.
- Develop seizure-specific mental health care models and deploy and execute these at ECoE sites.
- Collaboratively develop a national association of providers with interest in treating epilepsy at VA health care 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 health care system.
- Collaborate with the VA Polytrauma/TBI System of Care to provide 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 health care 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 through neurosurgery).
- Provide professional health education and training to EEG technologists, pharmacists, nursing staff, medical students, residents, fellows, and referring physicians to deliver the highest quality standard of care to Veterans with epilepsy.

FY23–24 *Strategic Goals*

VA Strategic Goals	
VA Goal 1	
VA consistently communicates with its customers and partners to assess and maximize performance, evaluate needs, and build long-term relationships and trust.	
VHA Long-Range Plan Framework Goals	
VHA Goal 1	
GOAL 1: Veterans choose VHA as their health care provider and coordinator, built on trusted, long-term relationships.	
VHA Level III Actions	
1.1. Understand and employ what matters most to the Veteran and their care team.	
ECoE Actions	**Status**
a. Deploy national CPRS template (and Cerner if rolled out) via pilot at certain ECoE centers and compare to other ECoE centers via EPRP program chart review to see if template/powerform improves documentation.	Assigned to Research and Program Evaluation Council for pilot in Northeast region with national roll out using implementation science evaluation, if funding available.
b. Add EPRP epilepsy measures to Network Directors Performance Plan or other formal VA quality measurement system. Compare the success of these goals with the community.	
c. Create a patient Qualtrics or Redcap or similar format link to gauge if they perceive we met these quality measures and to see if we are just not educating or just not documenting.	
d. Analyze Community Care data with development of epilepsy quality measures.	

VA Strategic Goals	
VA Goal 2	
Veterans receive highly reliable and integrated care, support, and excellent customer service that emphasizes their well-being and independence throughout their life journey.	
VHA Long-Range Plan Framework Goals	
VHA Goal 2	
GOAL 2: VHA delivers high-quality, accessible, and integrated health care.	
VHA Level III Actions	
2.1: Enhance Veterans' care by building an integrated delivery network with internal and external partners.	**2.2:** Provide greater choice for care across the VA system at facilities and through virtual care, community care, and collaborative opportunities.
VHA Level III Actions	
2.1.1: Foster information exchange and organizational alignment with government and non-government partners to establish a high-performing integrated health care delivery network.	**2.2.1:** Expand virtual care, giving Veterans the choice to receive appropriate care at home and in the community.
ECoE Actions	**Status**
Increase access using VVC and E-consults through the tele-epilepsy program. Use FY23 to hire and set up the infrastructures.	Infrastructure hired by Tele-EEG-Epilepsy Program
Expand the tele-EEG platform; focus on rural and ICU access.	Focus on Tele-EEG-Epilepsy Program
Pay special attention to diversity, inclusion, advocacy; review health equity and outcomes, suicide in epilepsy, race, and care for non-white Veterans.	Focus for FY24
Strengthen relationships and increase outreach with associate sites. Spoke tele-EEG connection to each Northeast site.	Goal refined in FY24
Determine the role of pharma collaboration and other non-profit partners.	Partnership survey developed for 2023 American Epilepsy Society meeting with follow-up by national administrator
a. Update national map to right-size Veteran populations amongst regions. **b.** Add Jesse Brown as new ECoE site. **c.** Epilepsy Service Gap Analysis: Geomap to identify service gaps.	**a.** Map developed by Strategic Policy Evidence-Based Evaluation Center (SALIENT) to be refined in FY24 **b.** Jesse Brown added as ECoE site **c.** Map being refined for further analysis

VA Strategic Goals
VA Goal 3
Veterans trust VA to be consistently accountable and transparent.
VHA Long-Range Plan Framework Goals
VHA Goal 3
GOAL 3: VHA maximizes performance through shared ownership and is on the forefront of innovation.
VHA Level III Actions
3.1. Fully transform VHA into a High Reliability Organization by deepening a culture of shared ownership, accountability, stewardship, and collaboration.
VHA Level III Actions
3.1.1. Cultivate a positive climate and foster a safety and improvement culture with movement toward zero harm.

ECoE Actions	Status
Develop taskforce to look at diversity within the epilepsy group/ECoE.	Focus for FY24
Pursue comprehensive program evaluation for ECoE and Tele-EEG.	Completed in FY23 and ongoing; evaluation included Mind Brain Program
Determine what infrastructure is needed to support our research mission.	Worked on research coordinator position description in FY23

VA Strategic Goals		
VA Goal 4		
VA will transform business operations by modernizing systems and focusing resources more efficiently to be competitive and to provide world-class customer service to Veterans and employees.		
VHA Long-Range Plan Framework Goals		
VHA Goal 4		
GOAL 4: VHA optimizes assets across the enterprise.		
VHA Level III Actions		
3.1. Fully transform VHA into a High Reliability Organization by deepening a culture of shared ownership, accountability, stewardship, and collaboration.	**4.3:** Optimize the use of physical resources and infrastructure modernization efforts.	**4.5:** Improve coordination, communication, and transparency across VHA.
VHA Level III Actions		
4.1.1: Modernize electronic health records.	**4.3.1:** Advance the alignment of health care infrastructure needs through the appropriate implementation of market assessment recommendations.	**4.4.1:** Streamline and standardize HR processes for recruitment, increased retention and competitive employee incentives, development, and recognition.	**4.5.1:** Refine the governance structure and cooperative work across Program Offices and VISNs.

ECoE Actions	Status
1) Evaluate workload capture, productivity, and VERA. 2) Develop business rules for ECoE clinic builds.	Business rules created and being implemented in FY24
Develop a succession management approach: clinical including EEG technologists and leadership positions.	Succession planning incorporated into governance structure; various leadership/training programs are being rolled out across the enterprise
Restructure ECoE workgroups into a governance structure.	Completed in FY23; governance structure being refined ongoing
Change management from individual memorandums of agreement (MOAs) to facility MOAs in FY24 to include org chart modifications.	Main focus on FY24; site MOAs completed for Jesse Brown and Birmingham; MOA pending release for other sites

VA Strategic Goals		
VA Goal 4		
VA will transform business operations by modernizing systems and focusing resources more efficiently to be competitive and to provide world-class customer service to Veterans and employees.		
VHA Long-Range Plan Framework Goals		
VHA Goal 4		
GOAL 4: VHA optimizes assets across the enterprise.		
VHA Level III Actions		
4.1: Modernize and enhance business and health information systems and enterprise data.	**4.3:** Optimize the use of physical resources and infrastructure modernization efforts.	**4.5:** Improve coordination, communication, and transparency across VHA.
VHA Level III Actions		
4.1.1: Modernize electronic health records.	**4.3.1:** Advance the alignment of health care infrastructure needs through the appropriate implementation of market assessment recommendations.	**4.4.1:** Streamline and standardize HR processes for recruitment, increased retention and competitive employee incentives, development, and recognition.

ECoE Actions	Status
Redefine roles and responsibilities in ECoE structure: • Minimum guidelines for ECoE • Associate site criteria • National, regional, site director, and administrator responsibilities	Completed in FY23 as a part of the site MOA change management initiative
Develop and implement hiring plan to support Tele-EEG-EP initiative.	FY23 priority of the Tele-EEG-EP Program
Expand on neurology chief's survey to create a DUSHOM memo to determine what our stakeholders need from us. This suspense will ensure review by Medical Center leadership, completion compliance, and help with preparation for the site MOAs. Survey elements: 1. POCs 2. Do they have an IFCs with ECoEs 3. Connection to tele-epilepsy 4. What haven't we thought of 5. Understanding of COEs 6. Access to neurology in general	Goal being re-evaluated

Future Goals: *FY24-25*

VA Strategic Goals	
VA Goal 2	
Veterans receive highly reliable and integrated care, support, and excellent customer service that emphasizes their well-being and independence throughout their life journey.	
VHA Long-Range Plan Framework Goals	
VHA Goal 2	
GOAL 2: VHA delivers high-quality, accessible, and integrated health care.	
VHA Level III Actions	
2.1: Enhance Veterans' care by building an integrated delivery network with internal and external partners.	**2.2:** Provide greater choice for care across the VA system at facilities and through virtual care, community care, and collaborative opportunities.
VHA Level III Actions	
2.1.1: Foster information exchange and organizational alignment with government and non-government partners to establish a high-performing integrated health care delivery network.	**2.2.1:** Expand virtual care, giving Veterans the choice to receive appropriate care at home and in the community.

ECoE Actions	Status
Given that there is reduced engagement and numerous barriers to providing optimal care, how might associate sites effectively identify and refer to epilepsy subspecialties so Veterans can access state-of-the-art care? To reduce associate site care burden, ECoE will develop an implementation plan that enhances engagement with associate and non-associate sites.	Assigned to research and program evaluation council
Given that ECoE committed to developing the ECoE seizure-specific mental health care model in a 2021 Congressional Tracking Report, each ECoE site will implement integrated mental health services into their clinics for either functional seizures or psychiatric co-morbidities. The results of this implementation will be re-evaluated by the SALIENT QUERI.	Included in SALIENT QUERI MOA for FY24; assigned to Mental Health Committee

VA Strategic Goals		
VA Goal 4		
VA will transform business operations by modernizing systems and focusing resources more efficiently to be competitive and to provide world-class customer service to Veterans and employees.		
VHA Long-Range Plan Framework Goals		
VHA Goal 4		
GOAL 4: VHA optimizes assets across the enterprise.		
VHA Level III Actions		
4.1: Modernize and enhance business and health information systems and enterprise data.	**4.3:** Optimize the use of physical resources and infrastructure modernization efforts.	**4.5:** Improve coordination, communication, and transparency across VHA.
VHA Level III Actions		
4.1.1: Modernize electronic health records.	**4.3.1:** Advance the alignment of health care infrastructure needs through the appropriate implementation of market assessment recommendations.	**4.4.1:** Streamline and standardize HR processes for recruitment, increased retention and competitive employee incentives, development, and recognition.	**4.5.1:** Refine the governance structure and cooperative work across Program Offices and VISNs.

ECoE Actions	Status
Given the lack of access to quality epilepsy care, how might we help patients, local providers, and epilepsy providers establish awareness of ECoE services and facilitate connecting patients to those services so they can receive quality epilepsy care? ECoE plans to develop a marketing/ outreach program for ECoE to increase referrals.	Assigned to Business Processes Committee
Given that there is reduced engagement and numerous barriers to providing optimal care, how might associate sites effectively identify and refer to epilepsy subspecialties so Veterans can access state-of-the-art care? To reduce associate site care burden, ECoE plans to increase awareness of ECoE services and educational materials available to clinicians and patients.	Assigned to Education Council

Centers of Excellence

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 video telehealth 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 National Association of Epilepsy Centers (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 electrodes, 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 administrator who serves as part of the national team
- Offers opportunities for specialized education in clinical epilepsy care

National VA *Epilepsy Association*

National Administrative Director:
Jennifer Bonds King, MHA, FACHE

The goal of the National VA Epilepsy Association 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 health care 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 Association will create a hub-and-spoke model of care across the VA health care system, expanding and streamlining the referral network for specialized epilepsy treatment, advanced neuro-diagnostics, and surgical evaluation. The Epilepsy Association will ensure accessibility and continuity of specialized care for Veterans regardless of locality, thus broadening the impact of the ECoE network.

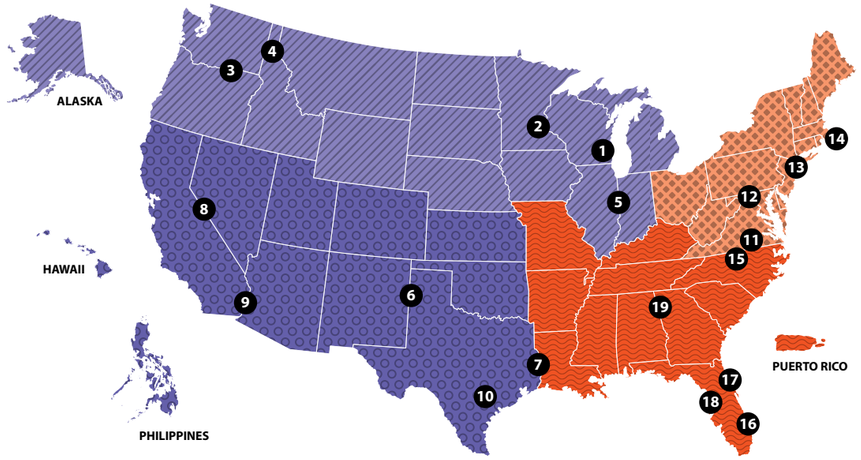
The National VA Epilepsy Association serves as a direct link to the 19 ECoE sites, which are staffed by epilepsy specialists or neurology clinicians and provide administrative assistance, professional collaboration, and educational offerings in epilepsy care.

Members of the National VA Epilepsy Association will be offered a variety of epilepsy educational resources and updates on state-of-the-art epilepsy care from the ECoE. Also, association 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 health care system.

Each associate site accomplishes the following:

- Applies to the National ECoE for site designation and is recognized locally and nationally as an ECoE associate 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



Northwest Sites		
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
5. Chicago	Jesse Brown Department of Veterans Affairs Medical Center	(312) 569-8387
*States covered: Alaska, Idaho, Illinois, Indiana, Iowa, Michigan, Minnesota, Montana, Nebraska, North Dakota, Oregon, South Dakota, Washington, Wisconsin, and Wyoming		

Southwest Sites		
6. Albuquerque	New Mexico VAHCS	(505) 265-1711 x2752
7. Houston	Michael E. DeBakey	(713) 794-8835
8. San Francisco	San Francisco VAMC	(415) 379-5599
9. West Los Angeles	Greater Los Angeles HCS	(310) 268-3595
10. San Antonio	Audie L. Murphy VA Hospital	(210) 617-5300 x14372
*States covered: Arizona, California, Colorado, Kansas, Hawaii, Nebraska, Nevada, New Mexico, Philippines, Oklahoma, Texas, and Utah		

Northeast Sites		
11. Richmond	Central Virginia VA HCS	(804) 675-5000 x2531
12. Baltimore	VA Maryland HCS	(410) 605-7414
13. West Haven	VA Connecticut HCS	(203) 932-5711 x2420
14. Boston	VA Boston HCS	(857) 364-4750
*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		
15. Durham	Durham VAMC	(919) 416-5982
16. Miami	Miami VAHCS	(305) 575-3192
17. Gainesville	Malcom Randall VAMC	(352) 548-6058
18. Tampa	James A. Haley VAMC	(813) 972-7633
19. Birmingham	VA Birmingham Health Care	(205) 933-8101
*States covered: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, Tennessee, and Puerto Rico		

Functional
Organization Chart

National Director-Neurology
Dr. Sharyl Martini

Deputy Director-Neurology
Dr. Glenn Graham

National Director
Dr. Alan Towne

Deputy Director
Dr. Nina Garga

National Admin. Director
Jennifer Bonds King

National Peer Review Committee
Dr. Ramon Diaz-Arrastia, Chair

Northeast Region Director
Dr. Hamada Altalib

Region Admin. Director
April Mizell

Baltimore 512 - Khan
Boston 523 - McCarthy
Richmond 652 - Waterhouse
West Haven 689 - Altalib/Medin

Northwest Region Director
Dr. John Jones

Region Admin. Director
Joseph Peterson

Madison 607 - Jones
Portland 648 - Kellogg
Minneapolis 618 - Reeder
Seattle 663 - Spain
Chicago 537 - Narechania

Southeast Region Director
Dr. M. Raquel Lopez

Region Admin. Director
Keninthe Davis

Durham 558 - Tran
Miami 546 - Coutts
Gainesville 573 - Eisenschenck
Tampa 673 - Frontera
Birmingham 521 - Ver Hoef

Southwest Region Director
Dr. Nina Garga

Region Admin. Director
Denetra Robinson

San Francisco 662 - Garga/Mefford
Albuquerque 501-Shin
Houston 580 - Haneef
Los Angeles 691 - J. Chen
San Antonio 671 - Abisogun-Musa/Birnbaum

Inventory *of Services*

ECoE Inventory of Services FY23	San Francisco, CA	Los Angeles, CA	Houston, TX	San Antonio, TX	Albuquerque, NM	Baltimore, MD	Boston, MA	Richmond, VA	West Haven, CT	Chicago, IL	Madison, WI	Minneapolis, MN	Portland, OR	Seattle, WA	Birmingham, AL	Durham, NC	Miami, FL	Gainesville, FL	Tampa, FL
Outpatient EEG	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Specialty Epilepsy Clinics	x	x	x	x	x	x	x	x	x		x	x	x	x		x	x	x	x
Epilepsy Inpatient Consultation	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x
Scalp Video-EEG Telemetry (Phase 1), # of Beds	4	3	4	3		3	5	2	2		3	2	3	2		3	4	4	2
Epilepsy Protocol MRI Imaging	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
PET Scanning	x	x	x	x	x	x	x	x	x			x	x	x		x	x	x	x
Magneto Encephalography									x										
Radio Surgey (Gamma Knife)							x												
Functional MRI (fMRI)			x	x		x	x	x						x					
Ambulatory EEG		x	x	x		x	x	x	x		x	x	x	x		x	x	x	x
Epilepsy Video Telehealth Clinics	x	x	x		x	x	x	x		x	x	x	x	x	x	x	x	x	x
eConsult	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Telephone Clinics	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SCAN-ECHO						x	x	x		x	x	x	x	x					
Patient Home Telehealth	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Store & Forward Remote EEG Reading	x		x	x	x	x	x		x	x	x		x	x	x	x	x	x	
On-Site Therapy for PNES	x		x			x	x		x					x		x			
NTMHC Tele-NES Provided	x		x			x		x	x	x	x			x		x	x	x	
Ability to Perform Wada Testing	x		x	x		x		x			x					x			
Ability for Pre-Surgical Neurophsych. Testing	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x		x	x
Resection Surgery	x	x	x	x				x			x		x			x		x	
Intracranial Recordings: Grids/Strips	x	x	x								x		x			x			
Intracranial Recordings: Standard Depth	x	x	x					x								x			
Intraoperative Electrocorticoraphy (ECoG)	x	x	x				x	x			x							x	
Intraoperative Cortical Stimulation/Mapping	x	x	x			x												x	
Extraoperative Cortical Stimulation/Mapping	x	x	x					x			x								
Placement of VNS	x	x	x	x	x	x	x	x	x	x	x	x	x			x		x	x
Placement of Responsive Neurostimulation (RNS)		x	x					x					x						
Programming RNS Device		x	x		x	x	x	x	x	x	x		x						
Deep Brain Stimulation		x	x										x						

ECoE Workload

FY23 Clinical *Workload*

Facility	Epilepsy Clinic		EEG		LTM	
	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters
(V01) (523) Boston, MA HCS	418	664	269	285	108	320
(V01) (689) Connecticut HCS	175	363	181	190	29	35
(V05) (512) Baltimore, MD HCS	416	782	172	311	22	142
(V06) (558) Durham, NC HCS	192	266	212	217	30	33
(V06) (652) Richmond, VA HCS	499	898	252	337	16	67
(V08) (546) Miami, FL HCS	323	727	242	272	149	380
^(V07) (521) Birmingham, AL HCS	104	160	169	169	57	128
(V08) (573) Gainesville, FL HCS	392	584	391	441	109	196
(V08) (673) Tampa, FL HCS	408	680	458	478	48	86
^*(V12) (537) Chicago, IL HCS	104	225	312	384		
(V12) (607) Madison, WI HCS	246	481	160	176	58	211
(V16) (580) Houston, TX HCS	778	1,378	529	560	177	493
(V17) (671) San Antonio, TX HCS	242	280	579	706	23	25
(V20) (648) Portland, OR HCS	506	1,193	282	460	53	83
(V20) (663) Puget Sound, WA HCS	535	745	140	145	37	128
(V21) (662) San Francisco, CA HCS	248	546	87	88	51	153
*(V22) (501) New Mexico HCS	207	314	148	158		
(V22) (691) Greater Los Angeles, CA HCS	108	203	246	279	114	242
(V23) (618) Minneapolis, MN HCS	409	763	311	325	72	79
Total	**6,300**	**11,252**	**5,135**	**5,981**	**1,153**	**2,801**

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.

^Site-reported data
*If data are missing, no workload reported.

FY23 Telehealth *Workload*

Facility	Video Telehealth Clinic Local Station		Video Telehealth Clinic Different Station		VA Video Connect (VVC)	
	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters
*(V01) (523) Boston, MA HCS					139	218
*(V01) (689) Connecticut HCS					64	146
*(V05) (512) Baltimore, MD HCS					132	242
*(V06) (558) Durham, NC HCS					70	90
(V06) (652) Richmond, VA HCS	5	7	2	3	190	348
*(V08) (546) Miami, FL HCS					191	340
^*(V07) (521) Birmingham, AL HCS					20	31
*(V08) (573) Gainesville, FL HCS					87	132
*(V08) (673) Tampa, FL HCS					186	262
^*(V12) (537) Chicago, IL HCS	22	92			16	32
(V12) (607) Madison, WI HCS	23	34	7	9	65	119
*(V16) (580) Houston, TX HCS					92	160
*(V17) (671) San Antonio, TX HCS					149	172
(V20) (648) Portland, OR HCS	1	1	20	27	272	527
*(V20) (663) Puget Sound, WA HCS					196	255
*(V21) (662) San Francisco, CA HCS	5	5			172	396
*(V22) (501) New Mexico HCS					9	9
*(V22) (691) Greater Los Angeles, CA HCS						
(V23) (618) Minneapolis, MN HCS	7	9	3	9	88	165
Total	**63**	**148**	**32**	**48**	**2,135**	**3,644**

Data collected using appropriate credit stop code with primary stop code 345.
*If data are missing, no workload reported.
^Site-reported data

Facility	Telephone Clinic		e-Consults		Store & Forward EEG**	
	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters	Unique Patients	Unduplicated Encounters
(V01) (523) Boston, MA HCS	127	233	19	19	150	158
*(V01) (689) Connecticut HCS	53	89				
(V05) (512) Baltimore, MD HCS	213	452	8	8	85	89
(V06) (558) Durham, NC HCS	304	410	8	8	70	70
*(V06) (652) Richmond, VA HCS	162	218	7	7		
*(V08) (546) Miami, FL HCS	111	136			41	41
^*(V07) (521) Birmingham, AL HCS			3	3		
(V08) (573) Gainesville, FL HCS	100	152	28	29	121	125
*(V08) (673) Tampa, FL HCS	6	8				
^*(V12) (537) Chicago, IL HCS	2	2				
(V12) (607) Madison, WI HCS	42	55	2	2	25	25
(V16) (580) Houston, TX HCS	130	169	3	3	60	67
*(V17) (671) San Antonio, TX HCS	1	1	17	17		
(V20) (648) Portland, OR HCS	260	485	46	47	663	729
*(V20) (663) Puget Sound, WA HCS	186	238	47	49		
*(V21) (662) San Francisco, CA HCS	138	361	9	9		
*(V22) (501) New Mexico HCS	70	89				
*(V22) (691) Greater Los Angeles, CA HCS	88	139	17	17		
*(V23) (618) Minneapolis, MN HCS	42	55	3	3		
Total	**2,035**	**3,292**	**217**	**221**	**1,215**	**1,304**

^Site-reported data
*If data are missing, no workload reported.
**For Store & Forward EEG, local station and different station to provider site data are combined.

Psychogenic Non-Epileptic Seizure *Workload*

PNES workload not through VA National Expert Consultation & Specialized Services – Mental Health (NEXCSS-MH)/Mind Brain Program

Facility	Unique Patients Treated with NBT	Number of NBT Encounters	Unique Patients Who Completed Full Course of NBT	Unique Patients Treated in Other Ways for PNES	Number of Non-NBT Encounters
(V01) (523) Boston, MA HCS	0	0	0	20	54
(V01) (689) Connecticut HCS	3	17	0	0	0
(V05) (512) Baltimore, MD HCS	14	54	1	2	50
(V06) (558) Durham, NC HCS	4	40	2	0	4
(V06) (652) Richmond, VA HCS	2	26	1	2	6
(V07) (521) Birmingham, AL HCS	12	70	5	0	0
(V08) (546) Miami, FL HCS	12	30	12	14	26
(V16) (580) Houston, TX HCS	3	26	1	0	0
(V20) (648) Portland, OR HCS	2	4	0	16	40
(V20) (663) Puget Sound WA	5	45	4	20	50
(V21) (662) San Francisco, CA HCS	14	99	3	0	0
*(V23) (618) Minneapolis, MN HCS	0	0	0	3	
Total	**71**	**411**	**29**	**77**	**230**

*Number of encounters unavailable when the FY23 Annual Report was published.
Data Source: The sites self-reported their data.

PNES workload through NEXCSS-MH Mind Brain Program

Facility	Unique Patients	Encounters
(V01) (650) Providence, RI HCS	8	35
(V05) (512) Baltimore, MD HCS	19	105
(V08) (546) Miami, FL HCS	17	74
(V21) (662) San Francisco, CA HCS	25	179
Total	**60**	**393**

Data Source: VA National Expert Consultation & Specialized Services – Mental Health (NEXCSS-MH)

ECoE Surgery
Workload

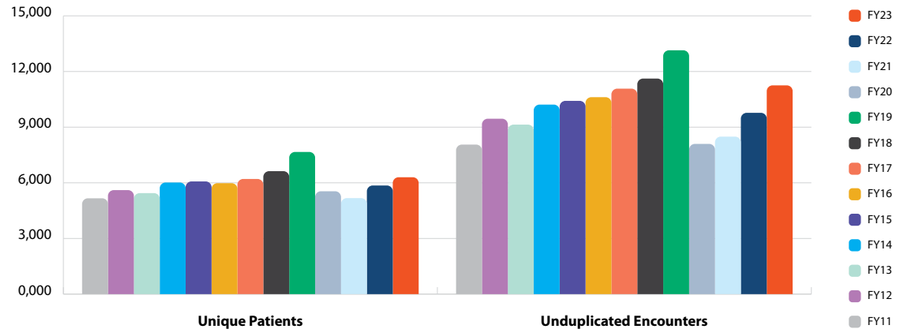
FY23 ECoE Surgery Workload

	Resection Surgery	Intracranial Recordings - Grid Strip	Intracranial Recordings: Standard Depth (Free Hand and Neuro- Navigation	Intracranial Recordings: SteroEEG Depths- Sterotactic Frame	Intraoperative Electrocorticography (ECoG)	Intraoperative Cortical Stimulation/ Mapping	Extraoperative Cortical Stimulation/ Mapping	VNS Implantation	VNS Generator Replacement	RNS Implantation	DBS Implantation	DBS generator replacement	Foramen ovale electrode implantation	RNS generator replacement
(V01) (689) VA Connecticut HCS, CT														
(V05) (512) Baltimore HCS, MD	1	2	2	2	1	1	2	1	1	1				
(V01) (523) Boston HCS, MA														
(V07) (521) Birmingham, AL														
(V06) (558) Durham, NC														
(V06) (652) Richmond, VA			1					1	4					
(V08) (546) Miami, FL														
(V08) (573) Gainesville, FL									1					
(V08) (673) Tampa, FL														
(V12) (537) Chicago, IL														
(V12) (607) Madison, WI				3			1			3				
(V16) (580) Houston, TX	3		4				4	1		2	2			
(V17) (671) San Antonio, TX														
(V18) (501) Albuquerque, NM														
(V20) (648) Portland, OR								2	1	1				
(V20) (663) VA Puget Sound, WA														
(V21) (662) San Francisco, CA					1	1								
(V22) (691) West Los Angeles, CA														
(V23) (618) Minneapolis, MN														
Total	**4**	**2**	**7**	**5**	**2**	**2**	**7**	**5**	**7**	**7**	**2**	**0**	**0**	**0**

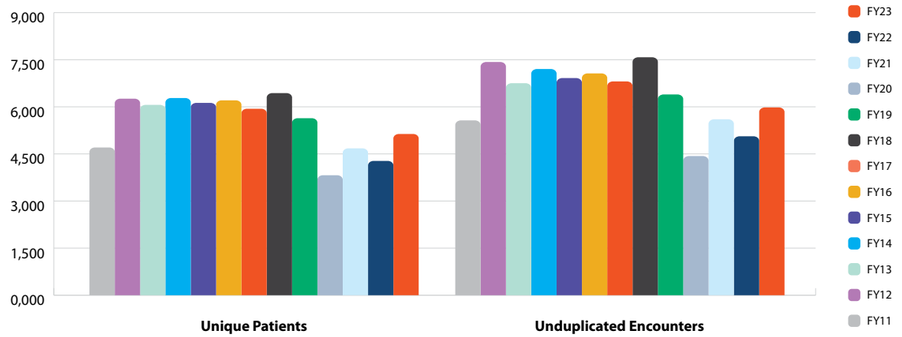
Data Source: The sites self-reported their data.

ECoE
Workload Trends

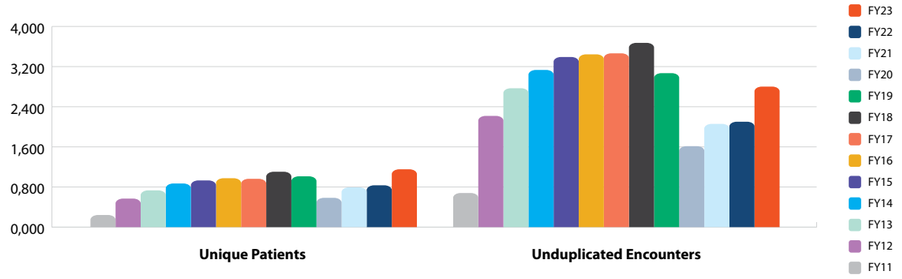
Epilepsy Clinic



Electroencephalogram (EEG)

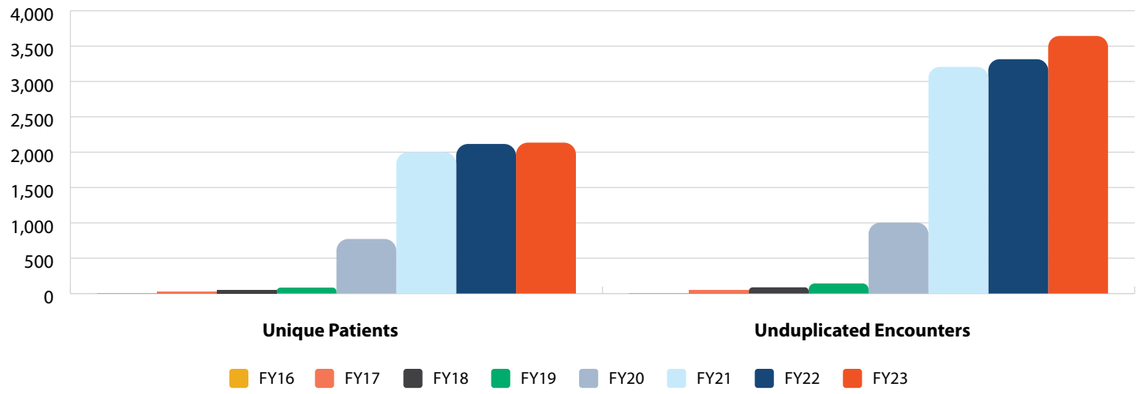


Long Term Video EEG Monitoring (LTM)

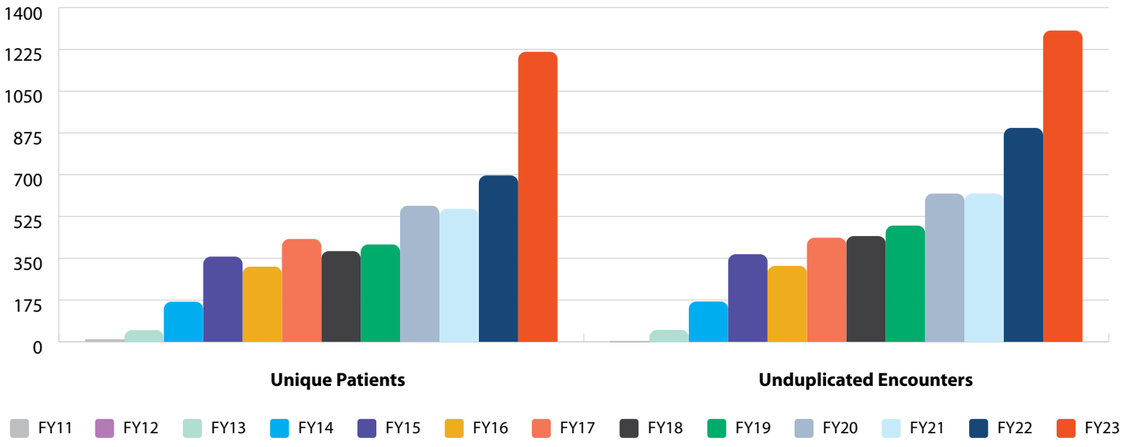


Telehealth

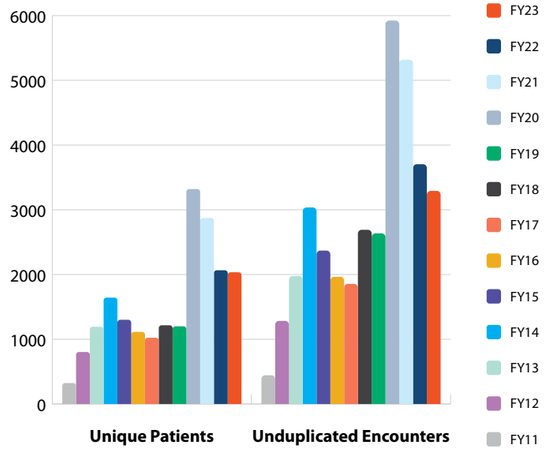
VA Video Connect (VVC)



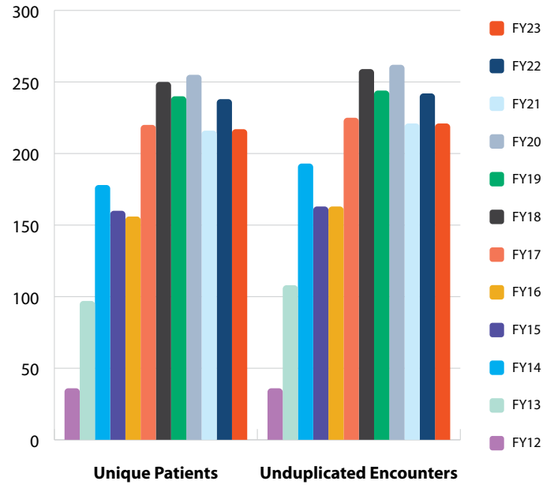
Store & Forward EEG



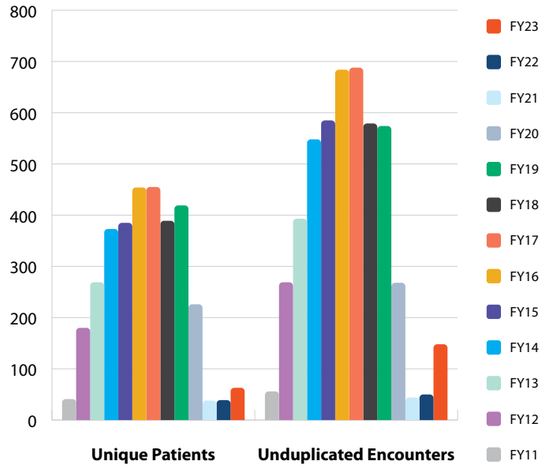
Telephone



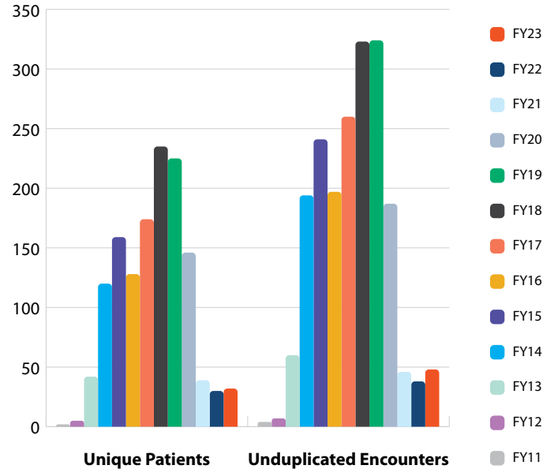
e-Consults



Clinical Video Teleconference (CVT) Same Station



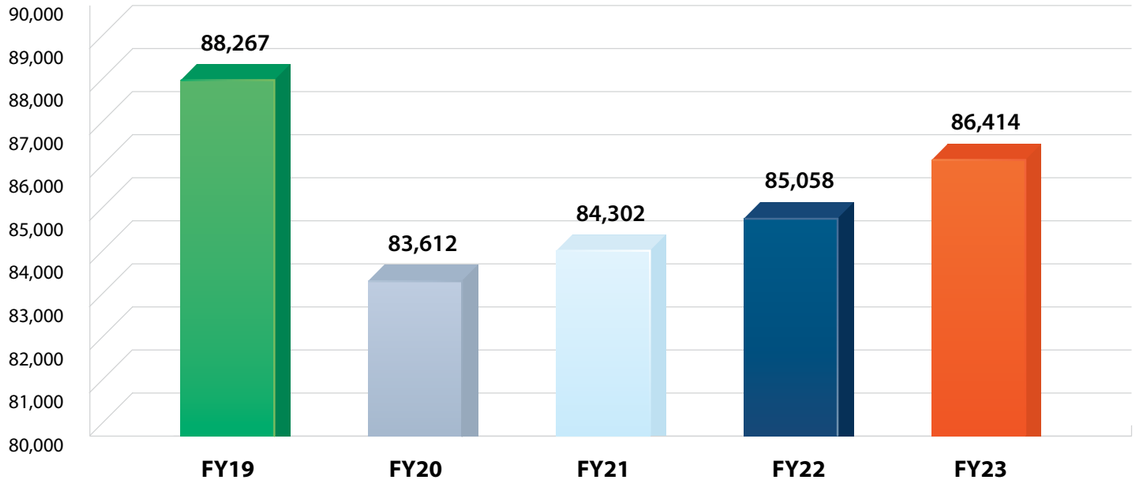
Clinical Video Teleconference (CVT) Other Station



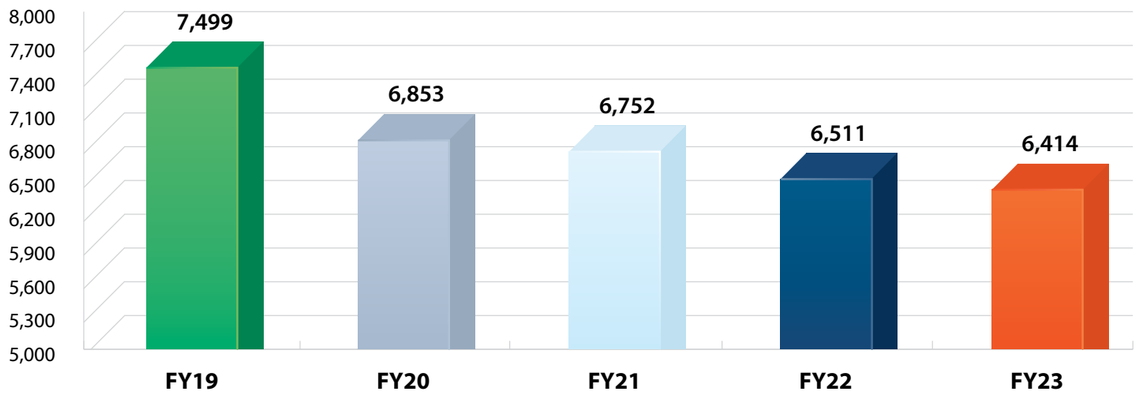
Data Source: VSSC Encounter Cube
Numbers for FY11-FY12 may be underreported due to workload capture issues.
FY18-23 data include self-reported workload from Boston, Chicago, & Birmingham VAMCs.

VHA Seizure, Epilepsy, and Other Events
Unique Patient Counts

[1]Seizure, Epilepsy, Transient Alteration of Awareness



[2]Conversion Disorder with Seizures or Convulsions



Data Source: VSSC Diagnosis Cube: VA patients
Algorithm: Data collected using ICD-10-CM codes: 1) G40.xx Epilepsy, R56.9 Unspecified Convulsion, R40.4 Transient Alteration of Awareness, R56.1 Posttraumatic seizures. 2) F44.5 Conversion disorder with seizures or convulsions.

Ambulatory and
Tele-EEG Workload

Ambulatory EEG Workload

Facility	With Video		Without Video	
	Unique Patients	Total #24hr days	Unique Patients	Total #24hr days
(V01) (523) Boston, MA HCS	29	56	6	14
(V05) (512) Baltimore, MD HCS	21	61	19	54
(V06) (558) Durham, NC HCS	0	0	31	92
(V06) (652) Richmond, VA HCS	0	0	67	101
(V08) (546) Miami, FL HCS	86	108	3	3
(V08) (573) Gainesville, FL HCS	65	185	0	0
(V20) (648) Portland, OR HCS	0	0	60	74
(V20) (663) Puget Sound, WA HCS	0	0	4	8
(V23) (618) Minneapolis, MN HCS	33	61	4	7
Total	**234**	**471**	**194**	**353**

Data Source: The sites self-reported their data.

Tele-EEG Workload

Facility	Routine Tele-EEG Uniques		Tele-Ambulatory EEG with Video		Tele-Ambulatory EEG without Video		Home EEG Routine		Home EEG with Video		Home EEG without Video	
	Outpatient	Inpatient	Unique Patients	Total #24hr days	Unique Patients	Total #24hr days	Unique Patients	Total # Encounters	Unique Patients	Total #24hr days	Unique Patients	Total #24hr days
(V01) (523) Boston, MA HCS	127	5	9	27	19	44	0	0	11	31	0	0
(V01) (689) Connecticut HCS	0	0	0	0	0	0	0	0	10	27	0	0
(V05) (512) Baltimore, MD HCS	76	3	0	0	0	0	0	0	27	66	0	0
(V06) (558) Durham, NC HCS	59	4	0	0	0	0	0	0	4	12	0	0
(V06) (652) Richmond, VA HCS	0	0	0	0	0	0	0	0	38	116	0	0
(V07) (521) Birmingham, AL HCS	0	0	0	0	0	0	0	0	10	40	1	3
(V08) (546) Miami, FL HCS	44	0	0	0	0	0	0	0	4	8	0	0
(V08) (573) Gainesville, FL HCS	84	72	3	3	10	20	5	5	88	242	2	6
(V08) (673) Tampa, FL HCS	0	0	0	0	0	0	53	53	82	242	0	0
(V12) (537) Chicago, IL HCS	0	0	0	0	0	0	0	0	12	21	6	12
(V12) (607) Madison, WI HCS	18	8	0	0	0	0	0	0	7	21	0	0
(V16) (580) Houston, TX HCS	57	35	0	0	0	0	0	0	17	51	0	0
(V20) (648) Portland, OR HCS	663	0	0	0	9	15	0	0	8	15	1	1
(V21) (662) San Francisco, CA HCS	0	0	0	0	0	0	0	0	26	70	0	0
Total	**1,128**	**127**	**12**	**30**	**38**	**79**	**58**	**58**	**344**	**962**	**10**	**22**

Data Source: The sites self-reported their data.

VHA FY23
Patient Count

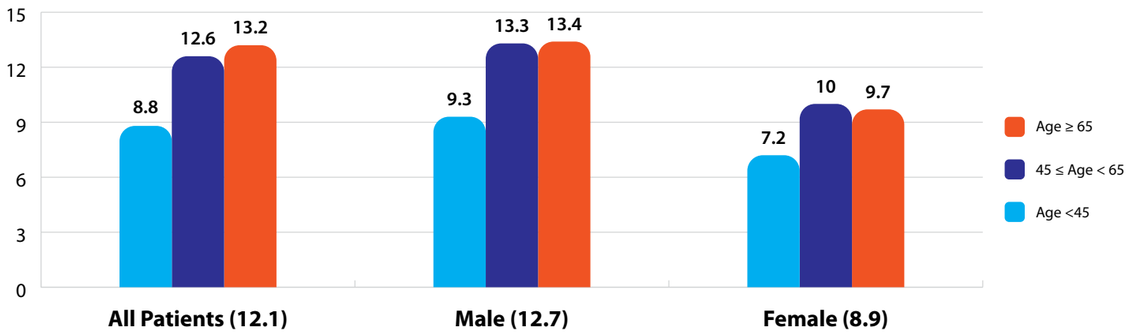
VHA FY23 Patient Counts

Cohort	Epilepsy Patients, %		All VA Patients, %	
All Patients	**78,828**		**6,507,507**	
Age <45	11,945	15.2%	1,359,810	20.9%
45≤ Age<65	23,753	30.1%	1,884,169	29.0%
Age ≥ 65	43,130	54.7%	3,263,528	50.2%
Male	**70,497**		**5,568,220**	
Age <45	9,400	13.3%	1,006,310	18.1%
45≤ Age<65	19,889	28.2%	1,497,222	26.9%
Age ≥ 65	41,208	58.5%	3,064,688	55.0%
Female	**8,331**		**939,287**	
Age <45	2,545	30.5%	353,500	37.6%
45≤ Age<65	3,864	46.4%	386,947	41.2%
Age ≥ 65	1,922	23.1%	198,840	21.2%
Epilepsy: Male 89.4%, Female 10.6%; All VA: Males 85.6% , Female 14.4%				
OEF/OIF/OND PATIENT COUNTS				
All Patients	**6,022**		**791,488**	
Age <45	3,950	65.6%	470,520	59.4%
45≤ Age<65	1,961	32.6%	300,416	38.0%
Age ≥ 65	111	1.8%	20,552	2.6%
Male	**5,332**		**695,395**	
Age <45	3,500	65.6%	411,921	59.2%
45≤ Age<65	1,730	32.4%	264,928	38.1%
Age ≥ 65	102	1.9%	18,546	2.7%
Female	**690**		**96,093**	
Age <45	450	65.2%	58599	61.0%
45≤ Age<65	231	33.5%	35,488	36.9%
Age ≥ 65	9	1.3%	2,006	2.1%
Epilepsy: Male 88.5%, Female 11.5%; All VA: Male 87.9%, Female 12.1%				

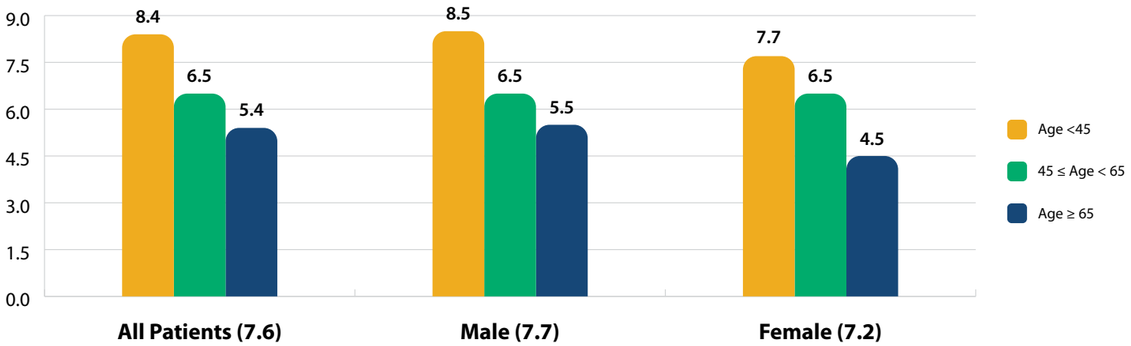
Data Sources: VSSC Neurology Cube & VSSC Unique Patients Cube
Numbers rounded to the nearest one decimal digit for percentages.
Algorithm: Patients were included (i) if prescribed an anti-seizure medication (ASM) in FY23 cross matched with a seizure diagnosis (ICD-10-CM G40.*, R40.4, R56.1, R56.9) during FY21-FY23. (ii) with an inpatient encounter with seizure diagnosis G40.* during FY23, no cross match with an ASM required (iii) with at least two outpatient encounters on two different dates with seizure diagnosis G40.* during FY23, no cross match with an ASM required. Diagnoses data from EEG and LTM clinics were excluded.
Unknowns have been excluded from the analysis.
OEF/OIF/OND: Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND)

VHA FY23 Epilepsy
Prevalence Estimates

a. Prevalence Per 1,000 Patients



b. OEF/OIF/OND Prevalence



Data Sources: VSSC Neurology Cube & VSSC Unique Patients Cube (VA data only).
Algorithm: Patients were included (i) if prescribed an anti-seizure medication (ASM) in FY23 cross matched with a seizure diagnosis (ICD-10-CM G40.*, R40.4, R56.1, R56.9) during FY21-FY23. (ii) with an inpatient encounter with seizure diagnosis G40.* during FY23, no cross match with an ASM required (iii) with at least two outpatient encounters on two different dates with seizure diagnosis G40.* during FY23, 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=9)*

Outreach

Managing and Persevering:
How the ECoE Is Changing Veteran Lives

In 1994, **Jackie Reszetar** experienced her first tonic-clonic (formerly known as "grand mal") seizure while enlisted in the Army as an environmental science officer engineer. Reszetar continued to have seizures that would impact her life and profession but, all the while, health care providers were not able to explain much about her epilepsy, and many of the anti-seizure medications she was prescribed caused challenging side effects.

Reszetar was able to find care and answers at the VA Epilepsy Center of Excellence (ECoE) in Baltimore, Maryland. By working with Dr. Omar Iqbal Khan, Director, ECoE, and his staff, they were able to diagnose Reszetar with occipital lobe epilepsy.

"Dr. Khan and the Baltimore ECoE are like no other," Reszetar said. The team made the discovery that Reszetar could not have surgery because it could potentially render her blind. Instead, the team has helped Reszetar manage her epilepsy through self-management and minimal medication.

"It is nice to know they are on my side, and Dr. Khan was always there for me. I think it is part of the aura management, just knowing that they understand me and other patients. We worked together to get the results," Reszetar said.

Since working with Dr. Khan and his team, Reszetar has been able to give back to the epilepsy community by getting involved in leadership and advocacy roles. She is an advocate for the Anita Kaufmann Foundation and is participating in a General Dynamics consumer research study as a consumer advocate. She helps monitor grant projects and provides consumer feedback on the impacts of epilepsy-related grant projects.

Reszetar also serves as the Northeast Region VA Veteran Representative for the ECoE. Reszetar says that she finds all of these experiences very rewarding.

"I just want to help others, and then we have to get to other Veterans to speak about the benefits of the ECoE and the impact that it can have," Reszetar said.

To help her gain confidence and learn how to take care of herself, Reszetar participated in the BRAINS program. This is an eight-week program that consists of teleconferences that teach Veterans how to work and live with epilepsy. The program helps the participants develop self-management tools.

Reszetar wants the work of VA's ECoE to go national and for more Veterans to know about it.

"The ECoE team started understanding me and what I was going through," Reszetar said. "The whole thing has just been an absolute blessing and change to my life."

Rosario Carballo, Lead Medical Instrument Technologist (EEG), ECoE Tele-EEG Hub Monitor Tech and Education Lead, at the Bruce W. Carter Miami VA Healthcare System attending the Annual Purple Day for Epilepsy Awareness Around the World Expo, sponsored by The Anita Kaufmann Foundation & The Epilepsy Association of Central Florida.

Dr. Stephan Eisenschenk, ECoE Site Director & Tele-EEG East Clinical Director at the Malcolm Randall VA Medical Center in Gainesville, FL attending the Annual Purple Day for Epilepsy Awareness Around the World Expo sponsored by The Anita Kaufmann Foundation & The Epilepsy Association of Central Florida.

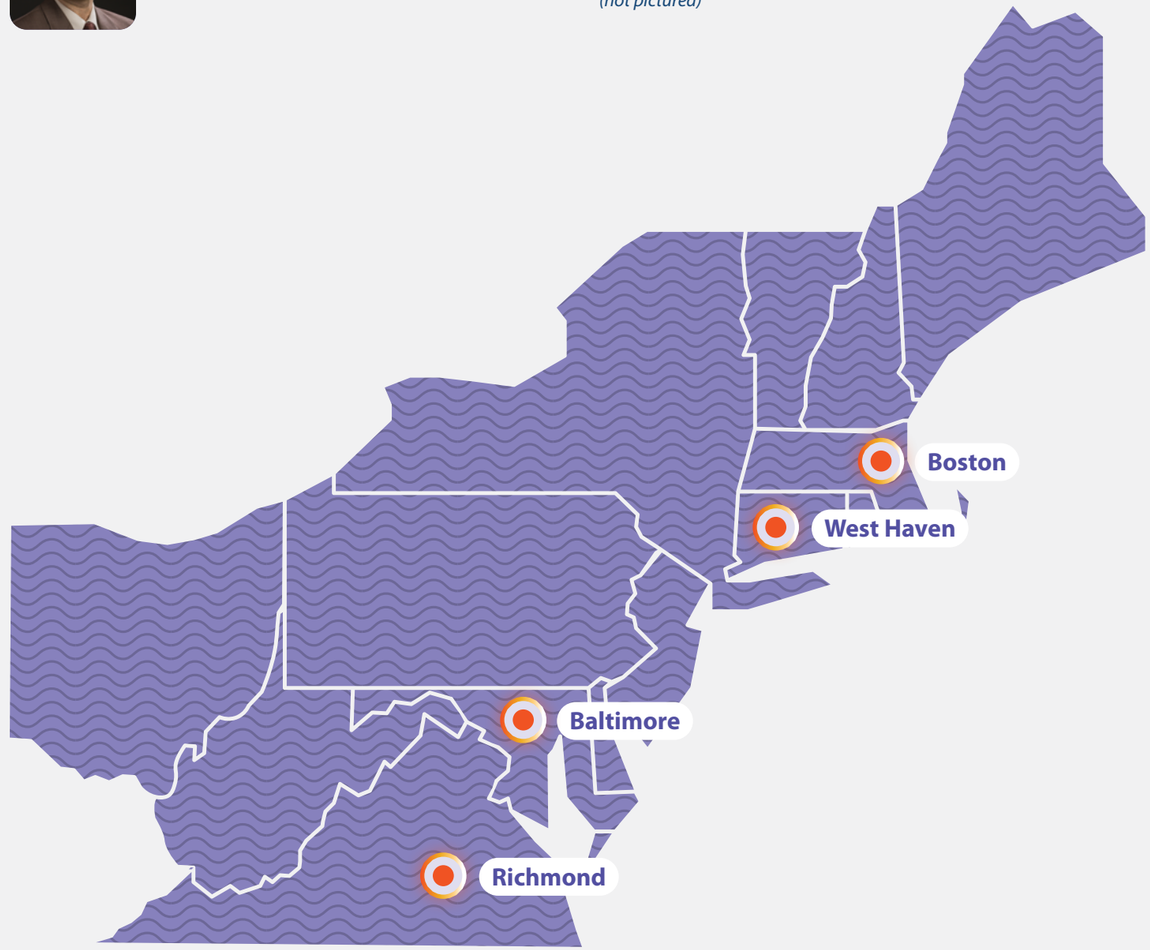
Purple Day display by the EEG Technologists at the Richmond VA Medical Center.

ECoE Regions

Northeast *Region*

Regional Director:
Hamada Altalib, DO, MPH, FAES

Regional Administrative Officer:
April Mizell, MHA (c)
(not pictured)



- VA Maryland Health Care System
- VA Boston Health Care System
- Hunter Holmes McGuire VA Medical Center
- VA Connecticut Health Care System

Northeast Region Self-Assessment Results, *Accomplishments, and Future Initiatives*

FY23 Self-Assessment Results

- **Final score:** 174
- **Highlights:** The Northeast region takes a national leadership role with TeleEEG-Epilepsy (Boston) and the VA Mind Brain Program (Providence). We partner with the Research and Program Evaluation Council for quality and delivery of care nationally. Several QI projects were launched this year.
- **Concerns/issues:** We experienced challenges with recruitment/retention of EEG technologists and epilepsy faculty.

FY23 Initiatives, Goals, and Outreach

Clinical

- Services/Access – Epilepsy Service Gap Analysis:
  - Geomapped epilepsy patients
  - Geomap of teleEEG coverage network developed
- We tested EEG store and forward transfer with a live patient across at least one site.

Research

- Submitted PCORI grant for Managing Epilepsy Well (MEW) services
- A member of our region was awarded a career development award—under the supervision of Drs. Altalib and LaFrance.

Education

- Patient education/conferences
- Purple Day
- Baltimore hosted onsite caregiver conferences
- Acute Seizure Management Series for non-epilepsy providers
- Epilepsy Journal Club
- Grand Round lecture series

FY23 Accomplishments

Baltimore

- Became tele-EEG hub site
- Became tele-Epilepsy participant
- Functional neurological disorder clinic
- Diet therapy clinic
- Drug resistant epilepsy clinic
- Merit Award: Cha-min Tang
- Support for the QI ECOE DRE Project under Zulfi Haneef

FY23 Accomplishments

- BRAINS Program
- Hub for Mind Brain Program
- Research collaborations with NIH

Boston

- Pathmanathan rejoins Boston ECoE part time
- NYHCS and Boston: Site participation for VA multicenter award (PI Leeman-Markowski) Methylphenidate for the treatment of epilepsy-related cognitive deficits: a randomized, double-blind, placebo-controlled trial study for methylphenidate in epilepsy, started September 2023
- Proposal submitted for new functional neuro surgical epilepsy program
- Transcranial magnetic stimulation equipment upgraded and operational for mapping
- Implementation of new ambulatory EEG with video (Cadwell) at Brocton VA and Jamaica Plain VA campuses
- Boston automatic EEG teaching program 50 residents per year
- Boston weekly epilepsy conference
- Major revision of Boston EEG database and report template
- Collaboration with Houston and Portland for national EEG reporting template

Richmond

- Services now include EMU, EEG, ambulatory EEG, and SEEG studies
- Telemonitoring MOA completed
- New patient education programs planned and initiated in Richmond: HOBSCOTCH (Home-Based Self-Management and Cognitive Training Changes Lives) and VA Calm Training
- Collaboration with Headache CoE and Parkinson's Disease Research, Education, and Clinical Centers (PADRECC)
- EMU cameras upgraded for better visualization of seizure activity
- Phase 2 EMU evaluation resulting in left amygdala/hippocampus LITT
- RNS programming available

West Haven

- Established tele-Epilepsy participant
- Established tele-EEG participant
- HOBSCOTCH program implemented
- Implemented suicide screening program
- Hub for Mind Brain Program
- Continued research and program evaluation collaboration with Mind Brain Program and MJ Pugh's StrAtegic PoLicy EvIdence-Based Evaluation CeNTer (SALIENT) QUERI

Future Goals

Baltimore

Research

- Increase merit applications
- Provide clinical expertise for a VA Merit-funded research project measuring EEG and evoked potentials in patients experiencing pain

Education

- Research fellowship program

Boston

Clinical

- Services/access
- Fill vacancies for two epileptologists
- Create and hire new admin officer
- Expand EEG operations at Brockton VA campus
- Develop functional neurosurgical program and infrastructure; new integrated Epilepsy Surgery Clinics at VA
- New TMS surgical mapping service for motor and language
- Complete integration of National Tele-EEG, Tele-Epilepsy clinics and workload through Boston
- New programs for neuropsychology and MH involvement in epilepsy and PNES clinics
- Further revisions to Boston EEG database, including wave form pictures
- Ceribell cloud Pilot with Simlearn

Research

- New projects:
  - Smirnakis: VA BLR&D VA Merit Award: I01 BX006131: Cell-specific plasticity pathway dysfunction as a result of amyloid deposition in Alzheimer's disease. Start January 2023.
  - McCarthy: VA Multisite Methylphenidate Study
- New grants

Education

- Weekly Epilepsy Conference: Expand audience and invited speakers outside VISN 1
- Automated EEG Teaching program: Revision and new datasets. Semiology pilot.

Richmond

- Participate in Stratus Tele-EEG reader pool to cover referrals from several states

West Haven

Clinical

- Updating EMU video equipment
- Addition of ambulatory EEG

Research

- Quality performance of epilepsy care
- Anti-seizure medication tolerability
- Health equity in VA epilepsy care
- Functional seizure epidemiology and outcomes
- Posttraumatic epilepsy epidemiology (with MJ Pugh)

Education

- Neurophysiology fellowship program
- Patient educational video for EMU admissions

Northeast Region
Fellowships

Boston Fellowships:

04

*Number of Fellows: 4 Fellows, VA Boston Pays 1 FTE

Baltimore Fellowships:

00

Number of Fellows:

Richmond Fellowships:

00

Number of Fellows:

West Haven Fellowships:

00

Number of Fellows:

*Combined VA-Brigham and Women's Hospital
2 ABPN Epilepsy

2 Clinical Neurophysiology
All ACGME

Northeast Region
Research Grants

Baltimore

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Cha-Min Tang	Validation of a novel animal model of posttraumatic epilepsy	6/2020	6/2024	Biomedical Laboratory R&D **$710,000**

Boston

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
McCarthy, David C	Merit Award, Multisite VA: (New York, Boston, Portland, Miami) Methylphenidate for the treatment of epilepsy-related cognitive deficits: a randomized, double-blind, placebo-controlled trial	9/2023	9/2028	Merit Award Beth Leeman Markowski-NYHCS
McCarthy, David C	A device to detect and quantify seizures	9/2019	10/2023	DoD Subaward Dartmouth
PI Diomedes Logothetis Smirnakis, Stelios Co-I	Dravet syndrome anti-epileptic control by targeting GIRK channels NINDS R01 NS131467 (PI: Diomedes Logothetis, co-I Stelios Smirnakis) The aim of this study is to investigate whether targeting GIRK channels ameliorates the epilepsy phenotype in a mouse model of Dravet syndrome.	2023	2028	NINDS ROI NS131467 Co-I (Directs: ~$170,000/ year; Total award amount: $3,458,222)
Smirnakis, Stelios	Network plasticity in acquired epileptogenesis	2021	2025	VA Ion:101Bx004727
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 Alzheimer's disease	9/1/2022	8/31/2026	VA Merit Award
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	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Towne, Alan R	Site-PI focused biomarker discovery of prediction of posttraumatic epilepsy in TBI patients: a prospective study using an "enriched" patient population	2020	2023	DoD/CURE
Waterhouse, Elizabeth J Site PI	Testing a novel dry electrode headset for electroencephalography telehealth	1/2023	2/2025	VA Merit grant

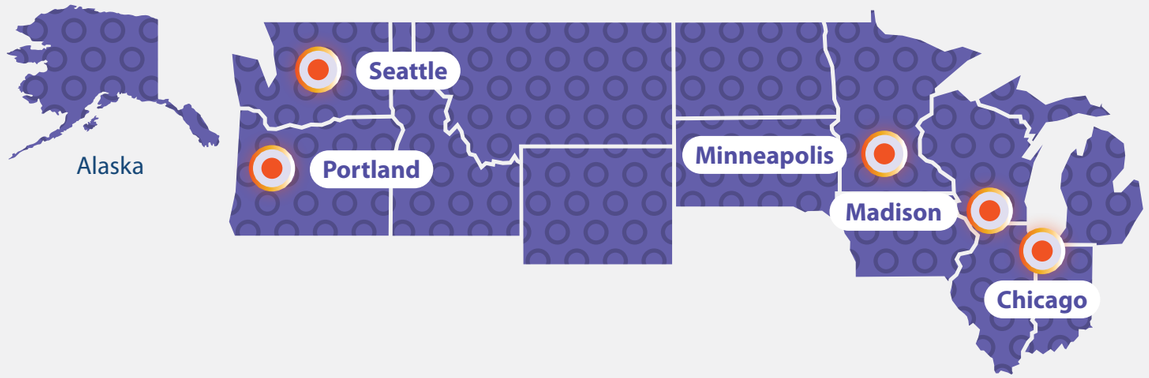
West Haven

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
French, Jacqueline	The Human Epilepsy Project	7/1/2021	6/30/2026	Epilepsy Study Consortium, Inc

Northwest
Region

Regional Director:
John C. Jones,
MD, FACP, FAASM, FANA

Regional Administrative Officer:
Joseph Peterson



- William S. Middleton Memorial Veterans Hospital
- Minneapolis Veterans Administration Medical Center
- VA Portland Health Care System
- VA Puget Sound Health Care System
- Jesse Brown Department of Veterans Affairs Medical Center

Northwest Region Self-Assessment Results, *Accomplishments, and Future Initiatives*

FY23 Self-Assessment Results

- **Final Score:** 132
- **Highlights:** Elevated Jesse Brown VAMC in Chicago, IL from consortium to ECoE site status and funding. Expanded SCAN-ECHO conferences to consortium sites in Ann Arbor, Iowa City, Sioux Falls, and St. Louis, including additional professional disciplines. Continuing to lead ECoE in merit and grant support.
- **Concerns/Issues:** Access to educational materials and increasing content output. Standardization of neurological imaging protocols for pre-surgical patients. Identifying and tracking DRE patients at consortium sites and referring to surgery as appropriate.

FY23 Accomplishments

Program/ Operational

- Twice culled Northwest Consortium leaders/providers to identify Veterans for diagnostic and advanced EMU referrals
- Hired certified EEG Tech Lead Inrun Kaur in Portland
- Expanded authorized EEG tech positions in Madison from 3 to 4 and successfully filled all positions
- Added fifth ECoE site at Jesse Brown VAMC in Chicago, Illinois

Clinical Care

- Expansion of tele-EEG throughout Northwest ECoE including Minneapolis, Omaha, Sioux Falls, Lovell, Saginaw, Roseburg, Boise, Sheridan, and Spokane
- Neurobehavioral therapy for PNES treatment clinics (Portland and Seattle)
- RNS placement (Madison and Portland)
- VA EEG Utilization Operations Project
- Data analyst has created a VINCI database/query of all Veterans who have undergone EEG in the VA since 2001
- Collaboration with National MIRECC on suicide prevention: 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

- EMU Quality Improvement project completed/published
- Basic Research Workgroup meetings run through Puget Sound
- Portland VA serving as 1 of 4 enrolling sites for the recently funded VA Merit RCT of Methylphenidate for Veterans with Epilepsy and Cognitive Complaints

Education

- Patient support group added (Minneapolis), and continuing (Portland), considering regionalizing these gatherings on Zoom or similar
- Monthly Scan-Echo case conferences (all sites + consortium sites), Scan-ECoE expanded outside Northwest region
- Educational/outreach lectures to MITs nationwide led by Madison/Boston MIT leads
- Basic Science Research group didactics helmed in Puget Sound
- Inpatient nursing education/training sessions (all sites)
- Continued training of EEG/Epilepsy fellows (6 currently in Northwest ECoE training programs)
- Continued training of clinical pharmacists in epilepsy therapeutics (6-8/year)
- New VA OAA Neuro-psych focused polytrauama fellowship in Portland

Future Initiatives, Goals, and Outreach

Clinical Care

- Continue to lead ECoE in merit and grant support
- Initiate QI studies in MH/suicide prevention in Veterans with epilepsy and similar (Portland-led)
- Continue to lead Basic Research and Nursing Committees
- Expand tele-EEG footprint and capacity for research sharing and second opinion
- Continue to create enduring and accessible educational products

Research/ Surveillance

- Expand ambulatory tele-EEG to Central and Western U.S.
- Expand VVC (25%)
- Increase tele-EEG to multiple additional sites (in progress)

Education

- Fund grants
- Continue research collaboration across centers and maintain high productivity

- Fellowship program in Seattle, continued 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

Number of Fellows: 02

Minneapolis Fellowships

Number of Fellows: 00

Portland Fellowships

Number of Fellows: 02

Seattle Fellowships

Number of Fellows: 01

Chicago Fellowships

Number of Fellows: 00

Northwest Region
Research Grants

Madison

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Struck, Aaron	Acute inflammation from focal seizures using [18F]-FEPPA PET/MR	7/1/2019	7/31/2023	Lily Fund, Grace Grant
Struck, Aaron	Quantitative electrophysiology and functional neuroimaging in epilepsy and acute brain injury	2019	2023	University of Wisconsin Department of Neurology and University of Wisconsin School of Medicine and Public Health
McMillan, Alan (Struck CO-I)	PET/MR correlates of accelerated aging in chronic epilepsy	4/15/2012	3/31/2026	NINDS, NIH
Struck, Aaron (Co-PI)	Prospective validation of neurophysiological outcome prediction in acute brain injury	12/29/2022	Ongoing	NIH-NINDS R01NS126282

Portland

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Kellogg, Marissa A	Phase II multicenter RCT of methylphenidate for cognition in Veterans with epilepsy	2/1/2023	1/1/2026	VA Merit
Kellogg, Marissa (Co-I)	Phase III multicenter RCT of a neurosteroid (ganaxolone) for refractory status epilepticus	8/1/2020	Ongoing	Marinus Pharmaceuticals
Kellogg, Marissa (Director of Neurology Partnership)	OHSU Global Southeast Asia & BDMS Neurology Partnership	2018	Ongoing	BDMS (Bangkok Dusit Medical Services)

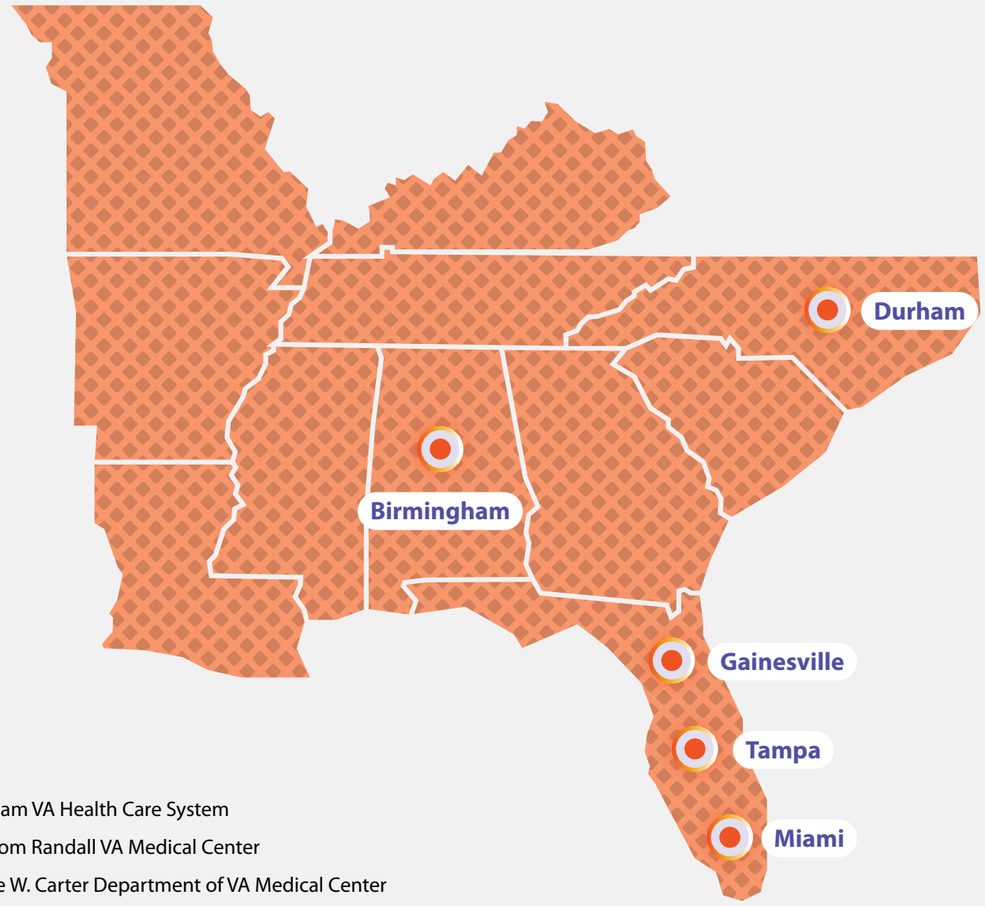
Seattle

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Ransom, Christopher	Regulation of extrasynaptic GABA-A receptors in health and disease *Awarded VA Clinician Scientist Investigator Award	5/1/2021	4/30/2027	Veterans Administration Merit Review
Dembrow, Nikolai	Neuromodulation of dendritic integration in the prefrontal cortex of primates	3/2023	2/2024	Royalty Research Fund
Spain, William	Dynamics of Kv channel function in identified populations of pyramidal neurons in neocortex	2/1/2018	1/31/2024	NIH
Dembrow, Nikolai Spain, William	Multimodal analysis of primate infragranular pyramidal neurons and their modulation	8/1/2021	7/31/2026	NIH

Southeast
Region

Regional Director:
M. Raquel Lopez, MD

Regional Administrative Officer:
Keninthe Davis, MSA



- Durham VA Health Care System
- Malcom Randall VA Medical Center
- Bruce W. Carter Department of VA Medical Center
- James A. Haley Veterans' Hospital
- Birmingham VA Health Care System

Southeast Region Self-Assessment Results,
Accomplishments, and Future Initiatives

FY23 Self-Assessment Results

- **Final Score:** 54
- **Highlights:** The Southeast region was part of the expansion of Tele-EEG, PNES, and FND clinics this year as well as multi-site collaborative QI projects. We recruited two epileptologists in two sites, increased the salary rate of MIT-EEG techs in one site, and received approval to hire three additional MIT-EEG techs in the Southeast region. We have continued education training for fellows and have held international, national, and local lectures. We also received two federal grants.
- **Concerns/Issues:** Overall, we need to improve our education efforts to the community as well as increase funded research. We temporarily had limited EMU access in two sites due to lack of MIT-EEG techs, but that issue is now resolved. We are also in need of a site administrative POC to change stop codes in epilepsy clinics in Birmingham, Gainesville, and Tampa.

FY23 Accomplishments

Program/Operational

- Tele-EEG:
  - Gainesville connections with Miami and Atlanta
  - Durham making progress with Fayetteville to establish connection and training MIT
- MIT EEG:
  - Durham hired a new MIT
  - Miami was approved for hiring a third EMU tech
  - Miami approved 40% of 1-year retention bonus
  - Miami approved 23% salary rate increase
  - Tampa waiting for approval of salary rate change

Research/ Surveillance

- Three quality improvement projects and an ECoE multi-site workgroup algorithm of DRE dx

Education

- Site lectures (Miami, Tampa) primary care doctors, psychiatry residents, and general neurologist
- Poster: Guidelines for Women Taking Anticonvulsants, Women's Fair, 8/25/2023
- EMU Standard Care and Guidelines on SharePoint (Gainesville)
- Veteran support groups educational talks:
  - Keeping Your Brain Healthy, Vet Center, 6/2023
  - Understanding the Gut Brain, Vet Center, 7/2023
- Proposal of national educational vignettes was submitted to ILEADS

Future Goals

Program/Operational

- Expand Tele-Epilepsy and Tele-EEG to integrate Veteran care among Southeast ECoE
- Establish DoD collaboration ("officially")
  - Tele-EEG
  - White paper Joint Incentive Fund (JIF) submission for seizure vs. syncope vs. PNES
- Coordinate synchronous Tele-EEG for EMU and ICU coverage
- Mentor junior Southeast ECoE members in areas of expertise to develop careers (i.e., critical care EEG, ketogenic diet)

Clinical Care

- Improve outcome measures
- Increase workload with EMU
- Expand and increase PNES intakes and NBT clinics

Research/Surveillance

- Completion of publication of three QI projects
- Completion of post-anoxic brain injury outcomes
- Initiate projects including genetics protocol and effects on ASDs for outpatients and status epilepticus

Education

- University of Florida/Tele-EEG Critical Care EEG Symposium series (Initial Feb 27)
- Annual to biannual symposium
- Expand CNP and epilepsy fellowships
- Develop critical care EEG fellowship
- Develop FND fellowship

Southeast Region
Fellowships

Durham Fellowships

Number of Fellows: 03

Gainesville Fellowships

Number of Fellows: 02

Miami Fellowships

Number of Fellows: 04

Tampa Fellowships

Number of Fellows: 03

Birmingham Fellowships

Number of Fellows: 01

Southeast Region
Research Grants

Miami

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Lopez, Maria, R.	Testing a novel dry electrode headset for electoencephalography telehealth	2/27/2023		Veterans Administration HSR&D Merit Award
Coutts, Marcella A.	Methyphenidate for the treatment of epilepsy-related cognitive deficits: a randomized, double blind, placebo-controlled trial	7/1/2023	7/1/2028	VA CSRD Merit Clinical Trial

Birmingham

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Ver Hoef, Lawrence W.	Understanding hippocampal internal architecture in human temporal lobe epilepsy—from MRI to epigenetics	8/1/2016	6/30/2023	NIH/NINDS
Allendorfer, Jane B. Ver Hoef, Co-I	Exercise for memory rehabilitation in epilepsy	4/10/2021	3/31/2026	NIH/NICHD
Smith, Rachel J. Ver Hoef, Co-I Cox, Co-I	Neural resonance as a biomarker of the epileptogenic network	9/1/2023	8/31/2024	American Epilepsy Society
Nelson, Matthew Ver Hoef, Consultant	Neurophysiological mechanisms of language comprehension	4/8/2022	3/31/2027	NIH/NIDCD
Cox, Benjamin	EEG signal processing of intracranial and scalp EEG	11/29/2022	8/1/2025	UAB Department of Neurology
Cox, Benjamin	Seizure duration effect on epilepsy surgery outcomes	4/4/2023	8/1/2025	UAB Department of Neurology
Lam, Alice Gaston	Understanding the causes and consequences of unexplained seizures in older adults	9/1/2023	8/31/2028	NIH/NINDS

Southwest
Region

Regional Director:
Nina I. Garga, MD

Regional Administrative Officer:
Denetra S. Robinson

- New Mexico VA Health Care System
- Michael E. DeBakey VA Medical Center
- Audie L. Murphy Memorial VA Hospital
- San Francisco VA Medical Center
- Greater Los Angeles Medical Center

Southwest Region Self-Assessment Results, *Accomplishments, and Future Initiatives*

FY23 Self-Assessment Results

- Final score: 157
- Highlights: The Southwest region leads the ECoE regions in best practices for Epilepsy Monitoring Unit (EMU) safety, including use of simulation for training. Clinical contributions include sophisticated pre-surgical evaluations, robust clinical referral networks, and high volume of EMU admissions and outpatient epilepsy care. We established a clinical pharmacist training program and a new regional neuropharmacy e-consult service. We are actively hosting Neuro Behavioral Treatment (NBT) programs for psychogenic non-epileptic seizures (PNES) and two tele-EEG hubs. We have robust educational training programs for interprofessional and interdisciplinary learners at undergraduate and graduate levels.
- Concerns/Issues: We are enhancing referrals from existing associate sites and outreach to new sites. We are working on special salary rate and retention rates for EEG techs. New research projects and programs are needed.

FY23 Accomplishments

Program/Operational

- Neuropharmacist hired in Greater Los Angeles: Dr. Jennifer Nguyen
- New Veteran member added to Southwest ECoE Advisory Subcommittee
- Re-established quarterly Southwest Associate site meetings

Houston

- Hired two new full-time epilepsy faculty: Dr. Mohamed Hegazy and Dr. Francisca Ahn
- Hired an epilepsy/ECoE program specialist: Tocarra Harris
- Techs being hired
- Purchased two Natus machines (two for EMU) and one Nihon Kohden review station (for San Antonio studies)
- Melissa Fadipe contributed to VA Mind Brain Program as APRN reviewer
- Integrated Epidata, a locally developed software to develop an Epilepsy/EEG registry
- Programmer (Sruthi Karicheri) has been developing SQL skills for future work on the registry, attending the SQL/CDW bootcamp

San Antonio

- ECoE site director hired: Daniel Birnbaum, D.O.

FY23 Accomplishments

Albuquerque

- New hire of EEG tech
- Identifying the potential EMU location and the facility leadership agreement
- Recruitment of Dr. Padin as the second epileptologist
- Recruitment of CNP fellowship-trained neurologist who would be the backup reader for the EEG and EMU in FY24

Greater Los Angeles

- Equipment purchased: fMRI/DTI add-on module and software, high-density EEG amplifiers to expand the capacity for surgical workup and treatment, one unit of new ambulatory EEG device for up to four days of home recording

San Francisco

- ECoE site director transitioned to Anthony Mefford, M.D.
- Tele-EEG hub director transitioned to John Hixson, M.D.
- Tele-EEG hub connections established with Hawaii and Las Vegas
- Installed Persyst software purchased in FY22 and staff training completed

Clinical Care

Houston

- Tele-EEG connection made to San Antonio VA, currently in progress with El Paso VA
- Expanded resident epilepsy clinic capacity
- New clinics started:
  - Neuromodulation clinic for RNS/DBS
  - Faculty Epilepsy Clinic (Dr. Hegazy)
  - Faculty VVC clinic (Dr. Hegazy)
- New MSA/PSAs have been hired by Care Line to help with scheduling
- Outreach to Jackson, Mississippi, and San Antonio VA for epilepsy telehealth service agreement
- Year-on-year increased EMU admissions volume
- Maintaining increased SEEG implant volume
- Nurse training for phase II patients (Fadipe)
- Started obtaining MEG studies from UAB, Birmingham and UTSW, Dallas
- Increased surgical workload including resection, RNS, and DBS
- Full-time functional neurosurgeon recruited: Dr. Garrett Banks

FY23 Accomplishments

San Antonio

- Maintained epilepsy/EEG services despite loss of epileptologist with support from local neurology providers, community care, and Portland/Houston VAMCs
- Keto Clinic initiated with dietitian support, initial encounters successfully engaged

Albuquerque

- Clinic outpatient care, in-person, VVC, and telephone visits
- EEGs: outpatient routine and 2–4-hour video LTM, inpatient routine and inpatient LTM

San Francisco

- Initiated neurobehavioral therapy clinic via Mind Brain Program collaboration
- Resumed epilepsy psychiatry clinic hosting SFVA psychiatry fellows
- Improved performance in quality improvement metric communicating anti-seizure medication changes both in clinical documentation and patient instructions: 100% compliance in last two quarters
- Started interpreting local ambulatory EEGs through Stratus Neurodiagnostics
- Added software (Persyst) for EEG quantitative analysis
- Resumed intraoperative electrocorticography for neurosurgical procedures
- Re-engaged with pre-pandemic referring sites beyond VISN to increase EMU referrals and access to VA ECoE services

Greater Los Angeles

- Integrated neuropharmacists provided support for establishing the first phase of IFC tele-neuropharmacist e-consult at GLA ECoE. They will provide consultations to the neurologists and pharmacists of selected VA medical centers and associate sites in the ECoE Southwest region in FY23, with a planned, phased future expansion in FY 24-25 to all VA Medical Centers and ECoE associate sites nationwide.
  - This service will cover the local pharmacists' known knowledge and experience gaps due to the complexity of using over 20 anti-seizure medications. The tele-neuropharmacist service is expected to provide an integrated service of neuropharmacist support in epilepsy care—similar to the current model in practice at the GLA ECoE for over 10 years—to facilitate improved medical management of Veterans with intractable epilepsy.

FY23 Accomplishments

  - Patients with refractory epilepsy will be on a faster track to be prescribed with the most effective FDA-approved anti-seizure medications, with an expected overall cost saving to the VA due to reduced ED visits for breakthrough seizures. In addition, because of the high chance of encountering refractory cases in the tele-neuropharmacist service, these refractory cases will be referred to the ECoE surgical sites for further assessment and treatment, such as resection surgery or neurostimulation therapy (RNS, DBS, VNS).
- Increased advanced epilepsy care procedures during pandemic recovery through intra-op or extra-op cortical stimulation and mapping
- Differentiation of three levels of clinics to provide care to Veterans with seizures or epilepsy:
  - General neurology clinic: provides care to patients whose seizures are well controlled with medications
  - Seizure clinic: provides care to patients with a new onset seizure, clinical events requiring a differential diagnosis, or epilepsy that is well controlled but requires using a complex regimen of anti-seizure medications
  - Epilepsy clinic: provides care to patients with neurostimulation therapy (RNS, DBS, VNS)
  - A new consult is reviewed by a neurologist/epileptologist to assign the case to the most appropriate type of clinic without a tired escalation to facilitate the speed of starting advanced care for Veterans with refractory epilepsy.

Research/Surveillance

Houston

- Obtained one foundation grant to continue research work
- Programmer (Sruthi Karicheri) was supported by ECoE funds to develop local and national EEG and epilepsy databases

San Antonio

- Epilepsy in dementia, AI analysis of CNS imaging and electrophysiology

Greater Los Angeles

- Faculty contributed to diverse array of research and surveillance projects:
  - Basic science epileptogenesis, genetics
  - Genomic study of posttraumatic epilepsy
  - Development of a new method of dynamic EEG network analysis using clinical EEGs
  - PTSD and emotional network research
  - Setup of a brain bank to initiate a deposit of surgically resected human epileptic brain tissue for research under the Basic Science Committee

FY23 Accomplishments

Education

Houston

- 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)

San Antonio

- Continued training EEG technician students, medical students, and neurology residents

Albuquerque

- Clinical neurophysiology fellowship: Dr. Jonathan Daniels graduated in June 2023
- Clinical Neurophysiology and Epilepsy Fellows: Epilepsy Surgery – Rational/Outcome, University of New Mexico, Albuquerque, NM 3/30/2023
- Neurology Grand Round Presentation on Epilepsy Surgery: past and current, Louisiana State University, Shreveport, LA, 3/3/2023

San Francisco

- Continued training learners on multiple levels in epilepsy care
  - Fellows (epilepsy, sleep, psychiatry)
  - Physician residents (neurology)
  - Pharmacy residents and students
- Participated in giving residency and fellowship didactics through affiliate (UCSF)

Future Initiatives

Program/Operational

- Continue advisory subcommittee meetings, adding a Veteran Service Organization/ Advocacy Group member in FY24
- Establish case conference and drop-in hours for collaboration between Southwest sites and outreach to consortium
- Revamp associate sites membership and referral network with updated contacts
- Expand IFC access for tele-epilepsy consultation either through NTEP or directly to sites
- Strengthen and expand long-term monitoring and EMU for Albuquerque and San Antonio
- Work on partnership with Epilepsy Foundation of America (EFA) and Anita Kaufmann Foundation (AKF) to improve access to support groups with Veteran-centric focus and to share patient/caregiver education programs
- Continue to develop neuropharmacy program within the Southwest region, eventually expanding nationwide

Future Initiatives

Houston

- Hire new EEG technologist
- Obtain funding for site/regional programmer
- Obtain funding for site research coordinator

San Antonio

- Purchase new EEG equipment to support opening of EMU for Phase 1 studies
- Add second epileptologist

San Francisco

- Refreshing consult templates and expanding IFC access for additional sites
- Hiring of nurse and neurodiagnostic technologist

Greater Los Angeles

- To expand the teleneuropharmacist service in phases in FY24-25 to all VA medical centers and associate sites nationwide per the matching FTEs of neuropharmacists
- To bring the fMRI/DTI service to a standard operational condition: establishing SOPs, imaging consult request in CPRS, imaging data processing, and the development of research protocols
- With the newly ordered high-density EEG amplifiers, the surgical capacity for intracranial recordings and implantation of neurostimulators in the EMU, OR, and ICU will be expanded to be able to provide epilepsy surgical service for up to three patients concurrently. For instance, with one patient in the EMU for invasive monitoring, a surgical implantation can be scheduled at the same time and there is still capacity for invasive monitoring in the ICU.

Clinical Care

Houston

- Anticipate increased cEEG workload
- Purchase MRI compatible EEG electrodes for facilitating ICU EEG
- fMRI being planned on all epilepsy patients
- Expand to local sites: San Antonio VA, El Paso VA, Jackson VA
- Involvement of intermittent EEG technologist in tele-EEG program
- Increase Phase 2 studies in EMU
- Organize surgical patient support groups for past and potential surgical patients
- Establish telehealth with other VISN 16 sites and Southwest region
- Participate in NTEP
- Neurobehavioral therapy for epilepsy patients
- MEG analysis software (Curry) being purchased
- HD-EEG equipment will be purchased

Future Initiatives

San Antonio

- Open EMU
- Neuro-pharmacist provided support for follow-up ECoE visits and medication adherence checking

Albuquerque

- Two bed part-time EMU in FY24

Greater Los Angeles

- Newly established fMRI/DTI imaging services

San Francisco

- Continue to expand tele-EEG services to Palo Alto and one to two additional sites in FY24
- Develop MRI protocol for RNS implanted patients at SFVA

Research/Surveillance

Houston

- Apply for HSR&D and NIH funding for continuing research projects
- Expand Epidata software footprint to other sites within region/ECoE

Albuquerque

- Continuation of the research collaboration with University of New Mexico Hospital

Greater Los Angeles

- Genomic study of posttraumatic epilepsy
- Dynamic EEG network analysis for various clinical EEG patterns
- Treatment of intractable PTSD in Veterans with RNS
- Study of the emotional network using subjects with intracranial implantation

San Francisco

- Participate in one multicenter research program or submit one new grant application
- Adopt Epidata software from Houston

Education

Houston

- Participate in ECoE educational seminars
- Consider EEG review sessions with associate sites
- Continuing work on developing EEG website

Future Initiatives

San Antonio

- Initiate Epilepsy Subspecialty Clinic for neurology residents
- Increase EEG educational time for neurology residents

Albuquerque

- Clinical neurophysiology fellowship

San Francisco

- Continue robust collaborations with affiliates to train medical and pharmacy students (UME), neurology, psychiatry, and pharmacy residents (GME), and epilepsy, psychiatry consult-liaison and sleep medicine fellows (GME)
- Train new RNs on EMU safety and update simulation materials

Southwest Region
Fellowships

Albuquerque Fellowships

Number of Fellows: 01

Houston Fellowships

Number of Fellows: 05

San Francisco Fellowships

Number of Fellows: 07

Greater Los Angeles Fellowships

Number of Fellows: 03

San Antonio Fellowships

Number of Fellows: 00

Southwest Region
Research Grants

Houston

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Fadipe, Melissa	Clinician guided online group neurobehavioral therapy for Veterans with epilepsy and major depressive disorder	08/01/2023	08/31/2024	Council for Nursing Science Advancement/ Southern Nurses Research Society
Haneef, Zulfi	Next generation minimally invasive implants for long term seizure monitoring	10/2021	12/31/2023	Mike Hogg Fund
Haneef, Zulfi	Memory enhancement by direct brain electrical stimulation	01/01/2021	12/31/2023	Mike Hogg Fund
Haneef, Zulfi	Prospective multi-site study of video-audio device (Nelli) diagnosis in patients with seizures	08/01/2022	12/31/2023	Neuro Event Labs

San Francisco

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Mueller, Susanne Garga, Nina	The imprint of psychogenic nonepileptic seizures on the brain: a new model and imaging biomarker	09/01/2017	08/31/2023, no cost extension	CDMRP/DOD

Greater Los Angeles

Principal Investigator	Grant/Study Title	Project Start Date	Project End Date	Name of Funding Source
Naylor, David	Traxoprodil blockade of excitotoxic increases of N2B subunit-containing NMDA receptors during DFP-induced status epilepticus protects internerons and reduces epilepsy and cognitive disabilities	05/31/2023	pending	NIH CounterACT
Chen, James	The genetic factor and altered EEG network in the development of posttraumatic epilepsy	09/30/2020	09/29/2023	EP190044, CDMRP
Naylor, David	Network plasticity in acquired epileptogenesis	09/12/2022	pending	VA Collaborative Merit
Naylor, David	Excitotoxicity during status epilepticus mediated by N2B-subunit-containing NMDARs contributes to selective vulnerability of somatostatin interneurons and development of epilepsy	09/07/2023	pending	VA Merit

Golshani, Peyman	Miniaturized open-source devices for calcium imaging, electrophysiology, and real-time control of neural activity	09/01/2017	08/31/2023	NSF Neurotech Hub
Golshani, Peyman	VA Collaborative Merit Award: Neural dynamics underlying epileptogenesis	04/01/2020	03/31/2024	I01 BX005202-01
Golshani, Peyman Vaziri Aharoni Blair Silva Shtrahman Churchland	Open-source 2-photon miniaturized microscopes for large field of view and volumetric imaging	08/01/2022	07/31/2026	U01NS128664
Baraban, Scott (UCSF) Golshani, Peyman	An interneuron-based cell therapy for epilepsy	06/01/2022	05/31/2027	R01 NS071785-13
Golshani, Peyman Hong	Unstable nucleus accumbens social representations underlying decreased social motivation in models of autism			1R01MH132736-A1
Langevin, Jean-Philippe	Responsive neurostimulation for posttraumatic stress disorder	10/01/2019	07/31/2014	NIH 1UH3NS107673-01A1
Langevin, Jean-Philippe	Intracranial neurophysiological signatures of fear and anxiety in humans	07/01/2021	06/30/2026	NIH 1RO1MH124761

San Antonio

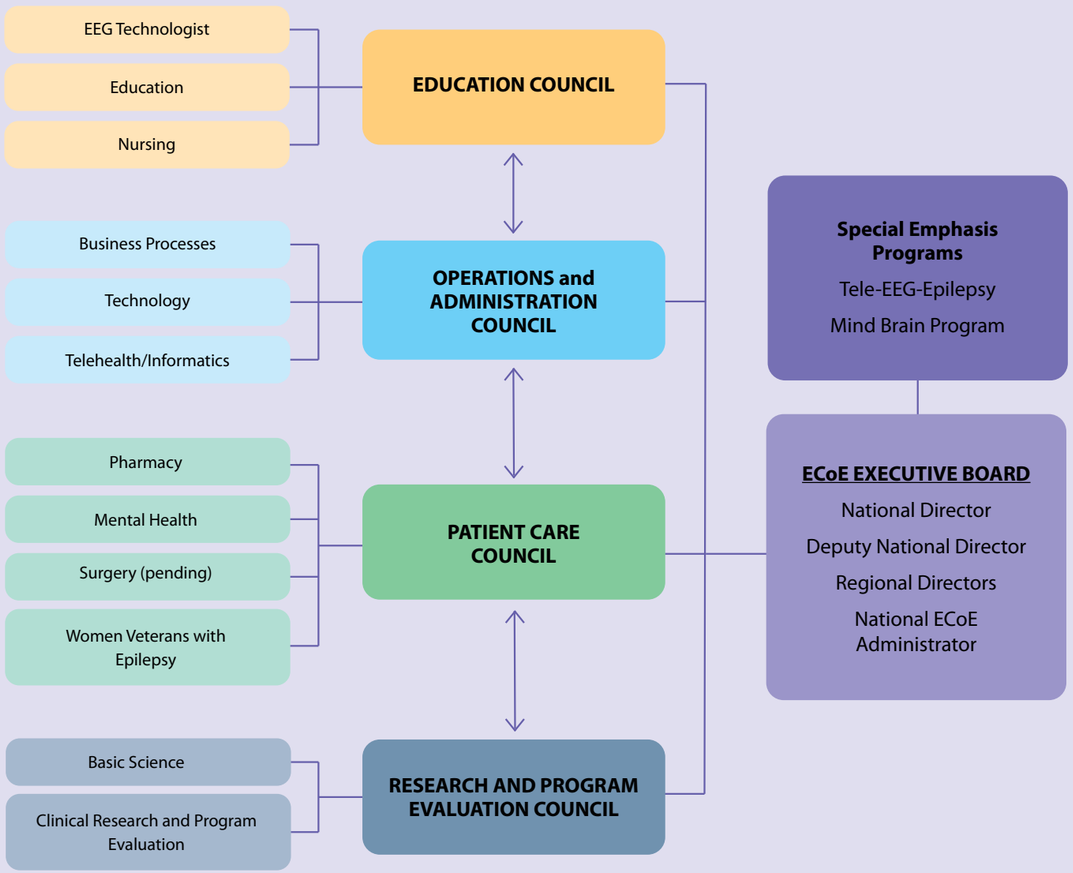
Rodriguez, Justin in collaboration with Biggs Institute	Disentangling dementia patterns using artificial intelligence on brain imaging and electrophysiological data	01/01/2020	present	2020 San Antonio Medical Foundation (SAMF) Subaward for Bioscience Research

National ECoE Governance

National ECoE Governance
Organization Chart

National Administrative Assistant:
Winona Finley

Governance is defined in VA Directive 0214, Department of Veterans Affairs Enterprise Governance Structure and Process, dated May 14, 2019, as the process by which VA Senior Leadership makes decisions, provides strategic direction and maintains accountability in a transparent and collaborative manner. It enables informed decision-making based on current strategic objectives, VA's risk appetite, and responsible resources allocation.



National ECoE
Committees

ECoE EEG Technologist Committee

Co-Chair:
Rosario Carballo

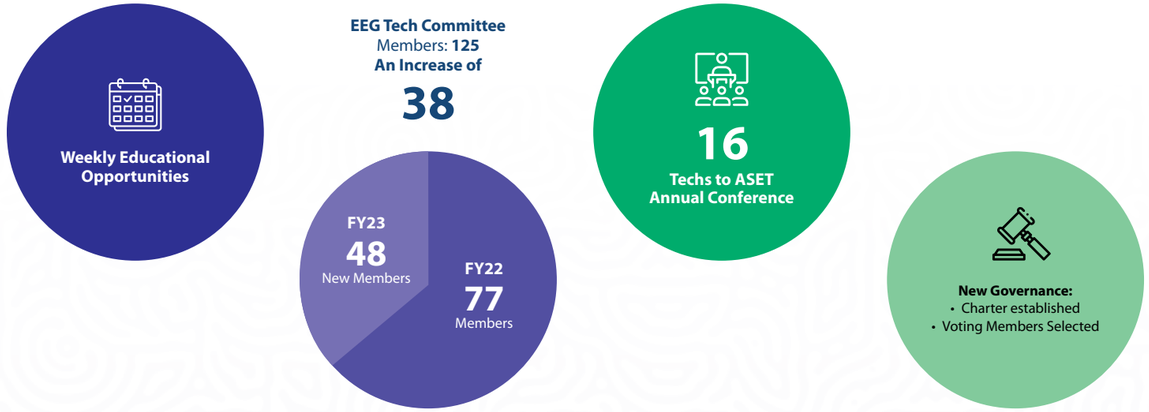
Co-Chair:
Angela Cook

Admin Support:
Tocarra Harris

Mission statement: To advance the field of neurodiagnostics by creating opportunities for education, growth, support, and the sharing of best practices.

1. Summary and major accomplishments for the year:

FY23 Accomplishments



2. Succession planning accomplishments for the year:

Rosario Carballo and Angela Cook succeeded Carol Riley as the co-chairs of this committee. Potential future leaders of our committee have been identified as voting committee members. These members have actively participated in our committee either by their attendance or serving as guest lecturers.

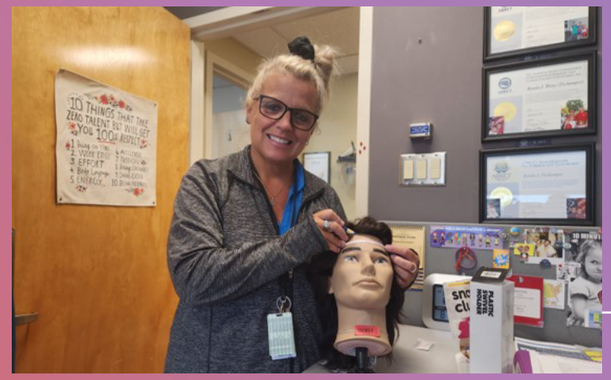
3. Strategic planning accomplishments for the year:

Our goals for FY23 included raising awareness of and increasing membership in our committee. We accomplished this goal through VA EEG tech outreach, which increased our committee membership by 38%. We also increased awareness of the ECoE by attending and participating as exhibitors at the Purple Day Around the World Conference and at the American Society of Electroneurodiagnostic Technologists (ASET) Annual Conference. We engaged 32 EEG technologists who were interested in working as VA EEG or future remote tele-EEG technologists.

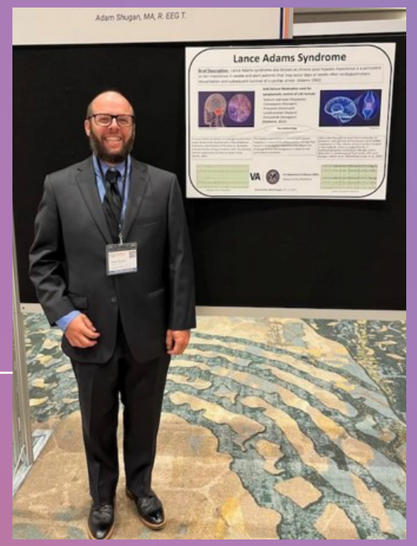
4. How we have applied Change Management principles:

We identified three to four techs in each ECoE and associates region who were asked to participate as voting members of our committee. At our most recent EEG Tech Committee meeting held on August 4, 2023, we communicated to our membership the governance changes that were taking place, that voting members had been identified, and the new format of our meetings. We stressed the efficiency that these new governance rules would afford our meetings and how they would allow us to have more visibility under the Education Council. After our regular EEG Tech Committee meeting, we held a meeting with our voting members where we introduced our proposed charter for their review and suggestions. The proposed charter was voted on by the voting committee members and was approved and sent to the Education Council Chair for review.

FY23 Committee Goals	FY24 Committee Goals
Goal: Gain ECoE Director's support for their technologists to become active members of the EEG Technologist Committee. **Objective:** Increase membership and awareness of our committee. **Outcome:** With the assistance of ECoE lab directors, and with outreach by Co-Chair Angela Cook, we were able to identify new VA hires and current VA techs who were unaware of our committee, enabling us to increase membership by 38%.	**Goal:** Increase EEG Technologist Committee attendance and increase participation of EEG technologists and physicians through guest lecturers.
Goal: Further EEG Workgroup meeting collaborations by having each region sponsor an EEG Tech Committee meeting. **Objective:** Increase participation from physicians and techs as guest lecturers for our meetings. **Outcome:** Three technologists, Yonathan Weldekirstos (NE), Adam Shugan (SE), and Ronda Tschumper (NW) gave lectures this year. Adam Shugan presented a poster of this lecture at our ASET Annual Meeting. Three physicians—Dr. Hussein, Dr. Melo Bicchi (SE), and Dr. Baldwin (NE)—also gave lectures this year.	**Goal:** Encourage professional development of EEG technologists to obtain registries through our weekly emails promoting continuing education units (CEUs) and through attendance of the ASET Annual Conference or similar educational opportunities.
Goal: Assist interested EEG techs to prepare for registry or recertification and assist EEG labs to prepare for lab accreditation or reaccreditation. **Objective:** To emphasize the importance of ensuring quality EEG technologists and EEG labs by encouraging tech registry and EEG lab accreditation. **Outcome:** Six ECoE technologists became recertified as R. EEGT—Heather Cardella/Hampton VA, Rosario Carballo/Miami VA, Joan Schultz/Madison VA, Robert Baybutt/Richmond VA, Travis Clem/Mather VA in Sacramento, and Melanie Seal/Minneapolis VA. Two techs were recertified for REEGT/EP—Ronda Tschumper and Vonda Starks/Madison VA. One EEG lab is in the process of reaccreditation—Pittsburgh VA.	**Goal:** Continue to spread awareness of the ECoE through participation as exhibitors in events such as Purple Day Around the World and the ASET Annual Conference.
	Goal: Continue to provide guidance for EEG labs seeking accreditation and promoting best practices for the neurodiagnostic profession.
	Goal: Collaborate with other ECoE committees such as the Nursing and Education Committees.



Ronda Tschumper pictured at the William S. Middleton Memorial VAHC with the Sam Head. Ms. Tschumper won the Sam Head in a raffle held by the ECoE/Tele-EEG exhibition table at the 2023 American Society of Electroneurodiagnostic Technologists (ASET) Annual Conference in Orlando, FL.



Adam Shugan, R. EEGT, Health Science Specialist at the Malcom Randall Medical Center in Gainesville, FL attending the 2023 American Society of Electroneurodiagnostic Technologists (ASET) Conference in Orlando, FL. Mr. Shugan submitted a poster presentation entitled "Case Study on Lance-Adams Syndrome."

Angela Cook, REEGT, NA-CLTM and Rosario (Rosie) Carballo, REEGT., representing the ECoE and Tele-EEG at the 2023 American Society of Electroneurodiagnostic Technologists (ASET) Annual Conference in Orlando, FL

ECoE Education Committee

Chair:
Elizabeth Waterhouse

Co-Chair:
Omar Khan

Admin Support:
Tocarra Harris

1. Summary and major accomplishments for the year:

Needs assessment disseminated and results collated and discussed.

Webinars presented:

- Journal Club series of webinars focused on clinical management – well attended
- Patient and Caregiver "Hope in Epilepsy" webinar series
- Epilepsy Health and Wellness Workshop (Kristen Mordecai, PhD) in Baltimore, as part of the BRAINS program (a behavioral/cognitive rehabilitation and intervention for seizures)
- Acute Seizure Management (4-part webinar series for primary care providers, on TMS)

Epilepsy education materials developed/updated:

- Self Management in Epilepsy – A Guide for Healthcare Professionals – book comprehensively updated and to be printed 9/2023
- Seizure first aid magnet designed, produced, and distributed to ECoEs
- Extensive review of ECoE Education website with recommendations for redesign

Community events:

- Purple Day for Epilepsy Awareness events at ECoEs nationwide in March 2023
- Partnered with Anita Kaufmann Heads Up For Vets – Purple Heart Day August 2023

Planning:

- Developed proposal for multi-modality Acute Seizure Management course
- 2024 Journal Club
- 2024 Epilepsy for general neurologists – webinar series

2. Succession planning accomplishments for the year:

This year, the workgroup was transformed into a committee. Voting members were identified, and a committee charter was voted upon. Since the Education Committee has multiple projects and workgroups, there are opportunities for participation and future leadership.

3. Strategic planning accomplishments for the year:

- Polled members for priorities
- Needs assessment completed and reviewed
- Acute seizure management program feedback analyzed
- Established contacts with Epilepsy Foundation and community partners
- Initiated program planning for FY24 and submitted funding request for Acute Seizure Management Project

4. How we have applied Change Management principles:

We have assessed the impact of programs delivered earlier in FY23 and realigned based on feedback. We track the number of attendees at online seminars sponsored by the ECoE Education Committee. We have assessed stakeholder needs and discussed next steps for the development and dissemination of future programs. We are fortunate to have a dedicated cadre of actively participating members and encourage them to contribute ideas, talent, time, and effort to the endeavors of the Education Committee.

FY23 Committee Goals
Goal: Veterans choose VHA as their health care provider and coordinator, built on trusted, long-term relationships.
Objective: Understand and employ what matters most to the Veteran and their care team.
Outcome: Created opportunities for interactive open dialog between Veterans, caregivers, and providers through the Hope in Epilepsy webinar series.
Performed an educational needs assessment for clinicians covering topics of interest, and preferred modes of resource sharing and delivery of educational content.
Local piloting of opening direct channels of communication with Veterans at Baltimore site.
Goal: VHA delivers high-quality, accessible, and integrated health care.
Objective: Enhance Veterans' care by building an integrated delivery network with internal and external partners.
Outcome: Investigated strategic partnerships with partners outside the VA.
Provided epilepsy education through the Neurology Annual Update.
Initiated dialog with other national CoEs regarding combined educational efforts.
Developed and delivered the Hope in Epilepsy caregiver education series.
Goal: VHA maximizes performance through shared ownership and is at the forefront of innovations.
Objective: Integrate and leverage best practices and technological advances in health care into clinical practice and affiliation education.
Outcome: Best practices and up-to-date guidelines and standards of care presented and discussed at quarterly Journal Club sessions.
Developed proposal for Acute Seizure Management Project, which would disseminate best practices to VA health care systems at the regional and local levels.

FY24 Committee Goals
Goal: Establish criteria and form workgroup to perform scientific review of proposals using potential VA banked epileptic surgical tissue.
Goal: Develop funding timeline list for VA epilepsy researchers and hold annual white board meetings to brainstorm collaborative research projects timed around VA funding cycle.
Goal: Provide platform for VA Merit and Career Development Award participants in the field of epilepsy and its comorbidities to disseminate and present their findings. Have 2-3 seminars in FY24 from such candidates.
Goal: Enhance cross-talk between Basic Science Research and Clinical Research Committees. Establish a specific combined meeting and have a handful of Basic Science Committee members present briefly at the Clinical Committees.

ECoE Nursing Committee

Chair:
Natalya Kan Tyan

Chair:
Tracy Broomhead

Admin Support:
Tocarra Harris

1. Summary and major accomplishments for the year:

The ECoE Nursing Workgroup, now the ECoE Nursing Committee, met bimonthly.

- The Self-Management booklet for health care providers was updated and finalized by the workgroup authors, reviewed by the ECoE Nursing and Education committees and sent to QuickSeries for design and printing.
- Continued the Epilepsy Nursing Educational presentations: Nurses presented ~20-minute presentation and provided resources on topics: "Genetic Testing in Epilepsy" and "Seizure Dogs."
- EBP/Research Taskforce of volunteers collaborated and met virtually to discuss common patient issues and explore tools to analyze the data.
- Nursing Committee collaborated with the ECoE Education Committee and had seven speakers present on various topics: "TBI and Epilepsy," "Antiseizure Medication Side Effects," "How Can a Neuropsychologist Help a Patient with Epilepsy," "Self-Management in Epilepsy," "Mind Your Memory: Strategies to Improve Memory in People with Epilepsy," "Seizure Signs vs. Symptoms – What's the Difference," and "Brain Basics – Understanding Your Epilepsy."
- The chairs reviewed and renewed the TMS course "Safety in the EMU."
- Reviewed the ECoE website, Nursing Education tab, and identified items to update, correct, and add.

2. Succession planning accomplishments for the year:

Currently in the process of initiating a plan for succession for future chairs and co-chairs of the Nursing Committee, once the new governance structure is in effect starting October 2023.

3. Strategic planning accomplishments for the year:

The ECoE Nursing Committee was successful in accomplishing goals set for FY23. Please see FY23 goals/objectives/outcome table for reference. The FY23 goals were discussed, identified, and outlined at the workgroup meeting with the input of the members.

4. How we have applied Change Management principles:

Chairs Tracy and Natalya received final governance training in July 2023 and presented all learned governance changes to the Nursing Committee in the bimonthly August 2023 meeting. The meeting was recorded and all the governance files were uploaded in the Nursing Committee Teams channel. Emails were also sent out to notify members of the impending changes. The draft charter was also displayed, shared, and discussed. In follow-up, a Microsoft Form survey was sent out to the committee with a request for feedback on the charter draft, commitment for voting vs. non-voting members, and goals for the committee.

FY23 Committee Goals
Goal: Complete reviewing and finalizing the Self-Management Booklets for printing and distribution. **Objective:** To provide an educational booklet with updated medications, new surgical options and treatments, and resources for patients/caregivers and to empower the provider to counsel patients on epilepsy. **Outcome:** The Self-Management booklet for health care providers was updated and finalized by the workgroup authors, reviewed by the ECoE Nursing and Education committees and sent to QuickSeries for design and printing.
Goal: Continue Epilepsy Nursing Educational presentations and conduct a new needs assessment. **Objective:** To assess nurses' educational needs and provide the appropriate, engaging educational presentations and handouts on hot topics applicable to their practice. **Outcome:** Nurses presented ~20-minute presentation and provided resources on topics: "Genetic Testing in Epilepsy" and "Seizure Dogs."
Goal: Continue Evidence-Based Practice and Research Project Taskforce within the Nursing Workgroup. **Objective:** To utilize evidence-based data and research in order to address common issues for patients with epilepsy. **Outcome:** EBP/Research Taskforce of volunteers collaborated and met virtually to discuss common patient issues and explore tools to analyze the data.
Goal: Support ECoE Patient/Caregiver Webinar series and Clinician Webinar series for 2022-2023. **Objective:** To provide patient and caregiver education on topics of interest and provide hope and empowerment with the "Hope in Epilepsy" webinar series. **Outcome:** Collaborated with the ECoE Education Committee and had seven speakers present on various topics: "TBI and Epilepsy," "Antiseizure Medication Side Effects," "How Can a Neuropsychologist Help a Patient with Epilepsy," "Self-Management in Epilepsy," "Mind Your Memory: Strategies to Improve Memory in People with Epilepsy," "Seizure Signs vs. Symptoms – What's the Difference," and "Brain Basics – Understanding Your Epilepsy."

FY24 Committee Goals
Goal: Review and update the EMU Phase I Nursing Guidelines/Competencies and develop EMU Phase II Guidelines and surgical resources.
Goal: Identify nurses at consortium sites and invite them to participate in Nursing Committee and activities. Provide outreach.
Goal: Continue the Evidence-Based Practice (EBP) and Research Taskforce in order to address epilepsy patient issues with evidence-based care and research. The current Quality Improvement (QI) project is to assess 30 vs. 60/90 day Anti-Seizure Medication (ASM) access and medication adherence, with the goal to expand access for extended supply of ASMs to patients at more VA sites.
Goal: Support the ECoE Patient/Caregiver Webinar series for FY23-24.
Goal: Review and finalize the patient/caregiver version of Self-Management Booklet. (Health care provider version completed).
Goal: Resume "Safety in the EMU" Part 2 video update and script. (Project was on hold due to pandemic but confirmed have funding to proceed).

Business Processes Committee

Chair:
Jennifer Bonds King

Co-Chair:
Keninthe Davis

Admin Support:
Guiomar Scheid

1. Summary and major accomplishments for the year:

- Chartered a workgroup on EEG technologist recruitment and retention.
- Formed committee.
- Developed business rules for ECoE coding and financial business rules to be used as models for the site MOA template for all neurology CoEs.

2. Succession planning accomplishments for the year:

- Ms. Davis is serving as co-chair for succession planning.
- The tele-EEG senior admin is a member for succession planning.

3. Strategic planning accomplishments for the year:

- None. We will add to first meeting in FY24.

4. Have you applied Change Management principles in your committee's work?

No.

FY23 Committee Goals
Goal: N/A committee just started.

FY24 Committee Goals
Goal: Incorporate strategic planning for the committee.
Goal: Address ECoE's relationships with community partners and industry.
Goal: Research and address ECoE's travel policy.
Goal: Do environmental scan of business process needs for ECoE to incorporate in committee's work.

Technology Committee

Chair:
Kenichiro Ono

Co-Chair:
David C. McCarthy, Jr.

Admin Support:
Guiomar Scheid

1. Summary and major accomplishments for the year:

The Technology Committee has formally transitioned from the combined Technology/Telehealth Workgroup in FY23. This is an evolution from an initially small group of enthusiastic epileptologists to a large multidisciplinary, unified, and collaborative group of epilepsy caregivers. We have developed a revised charter with the goal of learning, acquisition, and dissemination of information and best practices for the successful implementation of technologies to advance epilepsy care. With this newly formed committee, we intend to formalize the collaboration amongst epilepsy caregivers with specific interests in technology. We also aim to help ECoE, its associate sites, as well as others within the VHA enterprise easily access subject matter experts in epilepsy-related technology.

Key accomplishments involve:

- Gradual consolidation of comprehensive epilepsy surgical evaluation within VAMC, now with full offering of stereo-EEG, Responsive Neurostimulation (NeuroPace), Deep Brain Stimulation (DBS), Laser Interstitial Theramal Therapy (LITT), and traditional resection capability (Ono).
- Ongoing implementation and collaborative efforts to deploy rapid-access EEG devices, such as Ceribell (Tobochnik, McCarthy), Zeto EEG (Ono), and Nihon Kohden Vital EEG (Narechania).
- Ongoing collaboration with Enterprise Cloud Service to develop FedRAMP authorization for full cloud functionality of Ceribell and Zeto EEG interpretation platforms (Ono).
- Ongoing Cadwell Video Ambulatory EEG pilots for advanced home video long-term monitoring (Riley, Van Aken).
- Recruitment of epileptologists to collaborate and cross-cover Community-Care referred home video long-term EEGs to sites with no coverage (Eisenschenck).
- Ongoing collaboration with newly formed Telehealth Committee for refined EEG templates, Cerner EMR development, and tele-EEG services (McCarthy, Haneef, Khan, Kellogg).

2. Succession planning accomplishments for the year:

The Technology Committee has just formally assigned Dr. Ken Ono (Central Virginia HCS) as chair with Dr. David McCarthy (Boston HCS) as co-chair.

3. Strategic planning accomplishments for the year:

Formal transition from combined Telehealth/Technology Workgroups to discrete committees with newly appointed chairs and formal charters completed.

Given this is a newly formed committee, ongoing efforts are underway to identify subcommittee leaders in various sections. These may include but are not limited to:

- EEG equipment, including new home video EEG systems, rapid-response EEG, intracranial EEG
- Trend analysis software (Persyst)
- Advanced epilepsy surgery planning techniques, such as multi-modal imaging, automated image processing
- Advanced epilepsy treatment devices (RNS, DBS)
- Collaboration with Telehealth Committee on discovery of third-party apps and/or further development of VHA Annie App
- Collaboration with tele-EEG partners to further expand Community-Care as well as enterprise-wide EEG coverage

4. How we have applied Change Management principles:

Currently, no formal Change Management principles have been implemented. We have begun preliminary discovery and formalization of key goals of the committee. Early basic survey findings indicate that many attendees of the committee meetings seek guidance on best practices to successfully deliver distant epilepsy care (telehealth, home video EEG) and surgery (neurostimulation) and do not have much experience with apps to monitor patients. Though some of these concepts blend with the Telehealth Committee, this is a good starting point to develop specific goals and identify stakeholders who may help achieve them.

FY23 Committee Goals	FY24 Committee Goals
Goal: Succession planning. **Objective:** Formalization of discrete Technology Committee with identification of chair. **Outcome:** Successful formation of committee, chair appointment.	**Goal:** Define attendee-driven discussion topics relevant to epilepsy technology and redesign meetings to conduct formal business as well as designated time for presentations to disseminate information.
Goal: Outside speaker, collaborator recruitment. **Objective:** Invite outside clinicians or industry stakeholders for potential development of epilepsy care techonologies. **Outcome:** Successful meeting and introduction of Bioserenity, Nelli.	**Goal:** Identify sites to target and collaborate for deployment of rapid-access EEG technologies or enrollment for Community-Care home video EEG to ensure internal VHA epileptologists maintain cross-coverage.
Goal: Restructuring, service recruitment. **Objective:** Garner interest and recruitment for Community-Care (Stratus) EEG reader pool. **Outcome:** Dr. Eisenshenck has been instrumental in recruitment and expansion.	**Goal:** Identify and engage interested collaborators to develop epilepsy-specific routines for VHA Annie App.
Goal: Subcommittee development (i.e. neurostimulation, non-cerebral diagnostic devices, machine learning systems). **Objective:** Garner interest and promote subject matter experts to share experience/ knowledge. **Outcome:** Unsuccessful. Time limitations, service obligations are major barriers to dedication to this development.	

Telehealth/ Informatics Committee

Chair:
Marissa Kellogg

Co-Chair:
David McCarthy

Admin Support:
Guiomar Scheid

1. Summary and major accomplishments for the year:

- Facilitated presentations to increase awareness of telehealth activities and opportunities within ECoE (e.g. Tele-EEG and Tele-Epilepsy Programs) and more ECoE members became involved over bimonthly meetings. Topics presented included: EEG coding for Amb and Home EEG studies, Tele-EEG Reader Pool surveys, VA 19-14 and 19-15 Directives for Telehealth, ECoE Epilepsy Dashboard, ECoE EEG database pilot, IFCs, Stratus Homebase MOA, Bioserenity, Annie, and NTNP updates.
- We introduced new technologies and informatics approaches such as EEG report templates, developed out of Boston and Houston over bimonthly meetings.
- Service on national neurology Cerner Council, bimonthly meetings to inform ECoE staff and other stakeholders of the progress, areas needing improvement, next steps, etc.

2. Succession planning accomplishments for the year:

Transitioned to new Chair Dr. Kellogg from former Chair Dr. McCarthy, who transitioned to co-chair in order to offer ongoing support and guidance.

3. Strategic planning accomplishments for the year:

In accordance with VA's FY22 strategic plan, we are working on better communicating with our Veterans and partners; delivering timely, accessible, and high-quality EEG and epilepsy care via telehealth; being transparent in our processes; and striving toward excellence. Change to structure of meetings and agenda templates were discussed and implemented. Includes real-time polls and increased rolls of invited speaker presentations.

4. How we have applied Change Management principles:

We followed the four steps of change management – 1) understanding change (i.e. new technological advances and challenges like Cerner transition & expansion of telehealth, need to be able to access more patients in non-ECoE regions, and review and communication of new telehealth tools through VA ECoE network, etc.), 2) planned change (i.e. cost-benefit analysis of implementing new technology, created pilots to test and developed ideas/technologies to face these challenges, etc.), 3) implemented change (e.g. started new EEG templates, TeleEEG reader surveys, represented ECoE on national committees, etc.), and 4) communicated change (i.e. held bimonthly open meetings for ECoE and other invited VA staff to keep them apprised as to what we were doing, new opportunities and technologies, participation in EHRM, etc.)

FY23 Committee Goals
Goal: Increasing awareness of telehealth activities and opportunities within ECoE network. **Objective:** To increase awareness of telehealth activities and opportunities within ECoE. **Outcome:** Facilitated presentations to increase awareness of telehealth activities and opportunities within ECoE (e.g. Tele-EEG and Tele-Epilepsy Programs) and expanded workgroup/committee audience to more ECoE and non-ECOE members at bimonthly meetings.
Goal: To introduce new technologies and informatics approaches to advance telehealth/informatics within ECoE. **Objective:** To increase awareness of telehealth activities and opportunities within ECoE. **Outcome:** We introduced new technologies and informatics approaches such as EEG report templates, developed out of Boston and Houston over bimonthly meetings.
Goal: Advocate for EEG/epilepsy support tools in the EHRM Transition to Oracle Cerner & inform ECoE of the status of EEG/epilepsy support tools, transition and to seek feedback for improving the technologies. **Objective:** To increase awareness of telehealth activities and opportunities within ECoE. **Outcome:** Service on national neurology Cerner Council, bimonthly meetings to inform ECoE staff and other stakeholders of the progress, areas needing improvement, next steps, etc.

FY24 Committee Goals
Goal: Same as prior year's goals—increase audience size and member participation at bimonthly meetings.
Goal: Support and implement new pilots testing new telehealth and informatics technology. Review existing pilots (Annie).
Performance improvement opportunity: Review and communicate new telehealth technology. Oracle Cerner platform improvements for EEG/epilepsy; create a universal template for ECoE use for EEG reports that is flexible enough and efficient to meet many sites' needs; increase access to ECoE for more Veterans via telehealth (tele-EEG and tele-Epilepsy), particularly Veterans in regions that are distant from ECoE or generally underserved.

Pharmacy Committee

Chair:
Nina Garga

Co-Chair:
Natasha Antonovich

Admin Support:
Kandace Burke-Thompson

1. Summary and major accomplishments for the year:

- Formed and identified chair, co-chair, recorder, and administrative officer (AO)
- Completed governance process to establish charter and identify voting members
- Core project: Develop anti-seizure medications (ASM) guide update
  - Identified format, cost
  - Developed section categories and distributed assignments to members
  - Reviewed submissions to date, ongoing project into FY24
- Served as subject matter experts in providing feedback to pharmacy benefits management (PBM) on brand to generic conversion restrictions for anti-seizure medications
- Gave input to WVE committee on EMR teratogenicity alert language and appropriateness

2. Succession planning accomplishments for the year:

Co-chair identified, core members identified. Engaging with sites that have robust neuro-pharmacist programs to ensure good representation on committee, with opportunity to invite to chair/co-chair if needed in the future.

3. Strategic planning accomplishments for the year:

Formed committee, set recurrent meetings, established core membership
Made significant progress on ASM guide update

4. How have you applied Change Management principles in your committee's work?

N/A

FY23 Committee Goals
Goal: Establish committee with administrative infrastructure and membership. **Objective:** Have a functioning committee of subject matter experts able to address needs of Veterans with epilepsy related to anti-seizure medications. **Outcome:** First meeting March 2023, monthly since, program specialist assigned to committee in July, charter approved September 2023. Final membership of committee to be completed by end of fiscal year (1-2 vacancies on committee).
Goal: Develop a 3rd edition of the anti-seizure medication guide. **Objective:** Support VA-based practitioners (primary care, specialty care, subspecialty care) and VA-based learners in optimizing care of Veterans with epilepsy. **Outcome:** Significant progress completed toward content of 3rd edition, continuing into FY24.

FY24 Committee Goals
Goal: Complete the ASM Guide 3rd edition, publish/print, and distribute to ECoE sites and associate sites within FY24.
Goal: Collaborate with pharmacogenomics team from Durham to develop clinical decision support tool and workflows for drug-gene interactions.
Goal: Collaborate with Nursing Committee to develop SOP for requesting controlled substance exemptions allowing 90-day fills for Veterans taking these medications for epilepsy.

Mental Health Committee

Chair:
Hamada Altalib

Co-Chair:
Kristen Mordecai

Admin Support:
Kandace Burke-Thompson

1. Summary and major accomplishments for the year:

- Updated Mental Health white paper summarizes distinct mental health needs and services of Veterans with epilepsy.
- Launched two QI projects on suicide screening in inpatient (Portland) and outpatient (West Haven) settings.
- Collaborated with Mind Brain Program in scaling up neurobehavioral therapy training and delivery of care.
- Continued to guide and support mental health-related research.

2. Succession planning accomplishments for the year:

- Added Kristen Mordecai, PhD as a co-chair.
- Strategizing succession planning as Mind Brain Program broadens its scope to movement, cognitive, and other areas beyond epilepsy.

3. Strategic planning accomplishments for the year:

- Began collaborating with National Mental Health as well as HCoE in developing models for mental health delivery.
- Scaling up Mind Brain Program.

4. Have you applied Change Management principles in your committee's work?

Yes.

FY23 Committee Goals	FY24 Committee Goals
Goal: Continue to establish standard of care for treatment of neuropsychiatric care beyond PNES. **Objective:** Describe models of mental health care and secure a commitment from each ECoE to adapt one. **Outcome:** Counted the number of ECoEs who have adopted one of the models of care outlined.	**Goal:** Measure adoption of models of care across ECoEs.
Goal: Continue mental health initiatives: NBT for PNES, tele-mental health, & suicide prevention. **Objective:** Increase number of clinicians trained to conduct NBT. **Outcome:** Increased number of trainees by 20%.	**Goal:** Roll out suicide screening program in at least one ECoE.

Women Veterans with Epilepsy Committee

Chair:
Anne C. Van Cott

Co-Chair:
Nina Garga

Admin Support:
Kandace Burke-Thompson

1. Summary and major accomplishments for the year:

Clinical Care

- ASM teratogenicity alerts for CPRS/Cerner
- PNES/behavioral health issues in women Veterans with epilepsy diagnosis
- WVE content for Cerner Epilepsy Template

Research/Publications

- Prescribing patterns of ASM in WVE
- Comorbidities: behavioral health issues
- PNES/dual diagnosis PNES

2. Succession planning accomplishments for the year:

To be determined before 2024.

3. Strategic planning accomplishments for the year:

- Established relationship with VA Library Network (VALNET) to develop WVE Bibliography.
- Established relationship with Behavioral Health to increase awareness of ASM issues.

4. How we have applied Change Management principles:

Not applicable. Anne Van Cott interested in taking course.

FY23 Committee Goals	FY24 Committee Goals
Goal: Start to establish WVE Bibliography accessible to VA providers. **Objective:** Establish relationship with VA Library Services. **Outcome:** Connected with VALNET.	**Goal:** Complete Revisions of Table 3: Seizure medication considerations in women with planned distribution to providers.
Goal: Increase awareness of special consideration in WWE. **Objective:** Research. **Outcome:** Published articles.	**Goal:** Complete research on prescribing patterns of ASM in WVE.
Goal: Increase awareness of special consideration in WWE. **Objective:** Research. **Outcome:** Published articles.	**Goal:** Continue with planning to establish WVE Bibliography.

Basic Science Research Committee

Chair:
Nikolai Dembrow

Co-Chair:
Christopher Ransom

Admin Support:
Linda L. Benson

1. Summary and major accomplishments for the year:

A. The monthly ECoE Basic Science Research committee meeting 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.

B. National Journal Club and Seminar Discussion group showcasing invited speakers within and outside VA research and discussing recent, exciting epilepsy-related basic science papers. Themes of 2023 were a) Mechanisms of action for novel and existing treatement strategies for epilepsy, b) cellular and network mechanisms contributing to epilepsy in human tissue, c) animal models of traumatic brain injury with a focus on posttraumatic epilepsy and its comorbidities.

- List of ECoE Basic Science Committee Video Seminars FY2023:
  - 10/11/2022: Journal Club – Neocortical slow oscillations implicated in the generation of epileptic spasms
  - 12/14/2022: Journal Club – Vagus nerve stimulation drives selective circuit modulation through cholinergic reinforcement
  - 01/12/2023: Journal Club – On-demand cell-autonomous gene therapy for brain circuit disorders
  - 02/08/2023: Seminar Presentation by Dr. Michelle Guignet: "Drug resistant epilepsy: What does medication adherence have to do with it?"
  - 03/08/2023: Seminar Presentation by Dr. Nic Poolos: "Dysregulation of tau expression in human and animal model epilepsy"
  - 04/12/2023: Journal Club – Pro-Ictal state in human temporal lobe epilepsy
  - 05/10/2023: Seminar Presentation by Dr. Martin Gallagher: "Mild TBI in genetic epilepsy"
  - 06/14/2023: Seminar Presentation by Dr. Roni Dhaher: "Modulating the relief from affective dysfunction in epilepsy patients"
  - 07/12/2023: Seminar Presentation by Dr. Jochem Meyer: "Observing epileptogenesis at multiple spatiotemporal scales using in vivo chronic imaging"

C. Core committee members are actively engaged in several epilepsy-related basic science research projects. Each individual member's research accomplishments are listed by region elsewhere in the annual report.

2. Succession planning accomplishments for the year:

We identify potential new core members of the Basic Epilepsy Research Committee by inviting them to give a seminar to our group and inviting them to participate at subsequent meetings. This has resulted in the active recruitment of a new member to our voting group.

3. Strategic planning accomplishments for the year:

The purpose of the Basic Science Research Committee is to provide a national forum and resource for scientists and clinicians studying any topic or laboratory technique utilized for the study of basic research relevant to epilepsy, seizures, epileptogenesis, epilepsy comorbidities, and status epilepticus that often precedes epileptogenesis and is a consequence of exposure to chemical warfare agents. We continue to devote a significant portion of our meeting time to the discussion of this critical scientific information.

In FY23, we had several specific planning accomplishments. First, we began to transition our structure to better match the larger ECoE structural reorganization. We have shifted from a workgroup to a committee structure while retaining our high standard of regularly disseminated content. We established a charter for the Basic Science Research Committee and determined which core members of the Basic Science workgroup will serve on the Basic Science Research Committee. We also have identified and connected with administrative support for the committee (Benson). Second, in an effort to enhance the committee's visibility, we have expanded our seminar presenter list to include several new experts in basic science epilepsy research (Drs. Guignet, Poolos, Gallagher, Dhaher, and Meyer). As an additional benefit, Dr. Gallagher (a VA Merit award recipient and clinician-scientist within the Southeast ECoE region) has also been recruited as a prospective core member of our committee. Our third and final goal has been to continue to enhance cross-talk among both Basic and Clinical committee members. To increase interest from the Clinical Science Committee, we expanded our topic list in FY23 to include mechanisms of action for novel and existing treatment strategies for epilepsy. In FY23, several Clinical Science Committee members have attended a subset of our seminars and journal clubs. When possible, the Chair of the Basic Research Committee has attended the Clinical Research Committee meetings. It is our committee's goal to have this groundwork lay the track toward future collaborations and funding opportunities.

4. How we have applied Change Management principles:

The rationale for the change in structure and governance and the potential advantages to committee members, the committee, and—most importantly—to the Epilepsy Centers of Excellence have been communicated to the committee. Our changes in structure and in alignment with larger changes in management principles are now detailed in our Committee Charter. Several specific advantages of the changes in governance have been identified by our committee. The first advantage is increased coordination with the Clinical Research Committee with potential funding/collaborations. A second advantage to this committee is the increased visibility within the ECoE, and a system of record-keeping that will better communicate the contributions Basic Science Committee members have made to research that is vital for the refinement and improvement in approaches to treatment of epilepsy and its comorbidities.

FY23 Committee Goals	FY24 Committee Goals
Goal: Provide high-quality scientific presentations from accomplished investigators that are of broad interest to both epilepsy clinicians and researchers. **Objective:** Have at least seven seminars/journal clubs in FY23 discussing the following three emphasized topics: mechanisms of action for novel and existing treatment strategies for epilepsy, cellular and network mechanisms contributing to epilepsy in human tissue, animal models of traumatic brain injury with a focus on posttraumatic epilepsy and its comorbidities. **Outcome:** Five outside speaker seminars and four journal club discussions in FY23 (see list above).	**Goal:** Establish criteria and form workgroup to perform scientific review of proposals using potential VA banked epileptic surgical tissue.
Goal: Enhance influence and participation of Basic Science Research ECoE series through recruitment of new expert seminar speakers. **Objective:** Recruit at least four new expert seminar speakers to present at our national seminar series. **Outcome:** Recruited five new seminar speakers discussing the following topics: epilepsy treatment and medication adherence, tau dysregulation in epilepsy, mild traumatic brain injury in genetic epilepsy, modulating the relief from affective dysfunction in epilepsy patients, and high-resolution optical imaging of epileptogenesis.	**Goal:** Develop funding timeline list for VA epilepsy researchers and hold annual white board meetings to brainstorm collaborative research projects timed around VA funding cycle.
Goal: Enhance cross-talk within Basic Science epilepsy researchers prior to large scientific meetings. **Objective:** Make and share meeting abstract list for members to post and refer to each others' research presentation at Society for Neuroscience and American Epilepsy Society. **Outcome:** Generated and disseminated shared abstract list and information at Society for Neuroscience.	**Goal:** Provide platform for VA Merit and Career Development Award participants in the field of epilepsy and its comorbidities to disseminate and present their findings. Have 2-3 seminars in FY24 from such candidates.
Goal: Increase cross-talk between Clinical and Basic Science committee members to pave pathway for future collaborative proposals. **Objective:** Expand seminar emphasis topics to encourage ECoE clinical research group participation. **Outcome:** Included mechanisms of action that underlie novel and existing treatment strategies for epilepsy as seminar speaker and journal topics covered. Attendance by a subset of clinical research group members was enhanced in FY23.	**Goal:** Enhance cross-talk between Basic Science Research and Clinical Research Committees. Establish a specific combined meeting and have a handful of Basic Science Committee members present briefly at the Clinical Committees.

Clinical Research and Operations Committee

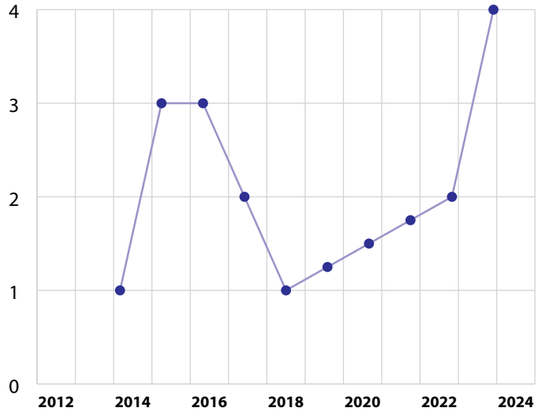
Chair:
Alan Towne

Co-Chair:
Zulfi Haneef

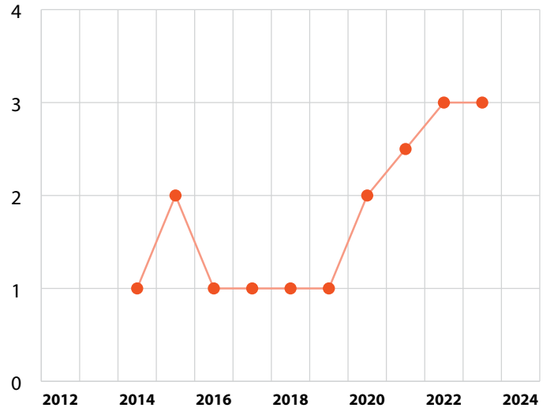
Admin Support:
Linda L. Benson

The number of studies mentioning ECoE and "VHA and Epilepsy" has increased since 2014.

Search query: "Epilepsy Centers of Excellence"



Search query: "(VHA) AND (Epilepsy)"



1. Summary and major accomplishments for the year:

The Clinical Research and Operations Committee (CROC) meets monthly and was developed:

- To facilitate and advise on protocol discussions of clinical research and clinical operations analysis within the ECoE.
- To support and promote diagnostic and treatment studies among sites and expand research sites.
- To collaborate and share best practices in clinical research studies and trials.
- To share and disseminate new clinical information to ECoE sites.

Additionally, the following ongoing projects are actively supported by the CROC:

- An auto detection system for hospital-based EMU monitoring - Talos is working with Cadwell to develop a combined system
- Overview study of epilepsy medication use in women (Rizwana Rehman)
- Assemble publication bibliography reviewing women with epilepsy. Connect this bibliography to a accessible VA library using ZoteroBib (Dr. Anne Van Cott)
- The Mind Brain Program trained providers and launched CBT for epilepsy/PNES within ECoE (Dr. Curt LaFrance)
- Military injuries: Understanding posttraumatic Epilepsy (Dr. Mary Jo Pugh)
- EEG utilization project (Dr. Marissa Kellogg)

- Collect EMU outcome data to reduce suicide/mortality rates in Portland (Dr. Marissa Kellogg)
- Introduce functional seizure research study via Providence (Van Patten)
- Development of a Drug Resistant Epilepsy (DRE) algorithm (Dr. Zulfi Haneef)
- Validation of EEG caps for routine and emergent use for quality and efficacy
  - A parallel sub-project will validate the minimum number of electrodes needed for seizure detection.
- Epilepsy template for health factor tracking

Projects funded by grants at the VHA include:

- Zeto device HSR&D trial begun with Miami, Richmond, and Charleston VA sites
- Begin Methylpenydate trial to evaluate the effect on cognition and quality of life (participants Boston, Portland, Miami, & Manhattan VA sites)
- Validation of a novel animal model of posttraumatic epilepsy

Projects by committee members:

ECoE Collaborative Projects Policy (11/2022-4/2023)

Prediction of posttraumatic epilepsy in TBI patients: a prospective study using an "enriched" patient population, DOD, 2020-2023

Military injuries: Understanding posttraumatic epilepsy (MINUTE): Bioinformatics with big data to examine multimodal PTE biomarkers, CDRMP. 09/30/21 – 09/29/25

Publications by committee members:

The role of deployment history on the association between epilepsy and traumatic brain injury in Post-9/11 Era U.S. Veterans, Neurology, 2023.

Utilization of epilepsy care among women Veterans: A population-based study. Epilepsy Research. 22, March 2023.

Mortality Among Veterans with epilepsy: The temporal significance of TBI exposure, Neurology accepted 2023.

Electroconvulsive therapy and transmagnetic stimulation in the treatment of psychiatric co-morbidity. Engel's Epilepsy Comprehensive Textbook, In Press.

Implementation Science. Engel's Epilepsy Comprehensive Textbook, In Press.

Therapeutic effects of epilepsy surgery on presurgical psychiatric comorbidities.
Engel's Epilepsy Comprehensive Textbook, In Press.

Epilepsy in Iraq Engel's Epilepsy Comprehensive Textbook, In Press.

Presentations to the committee:

These include presentations by outside commercial entities, invited guest speakers from VA, and non-VA individuals.

2. Succession planning accomplishments for the year:

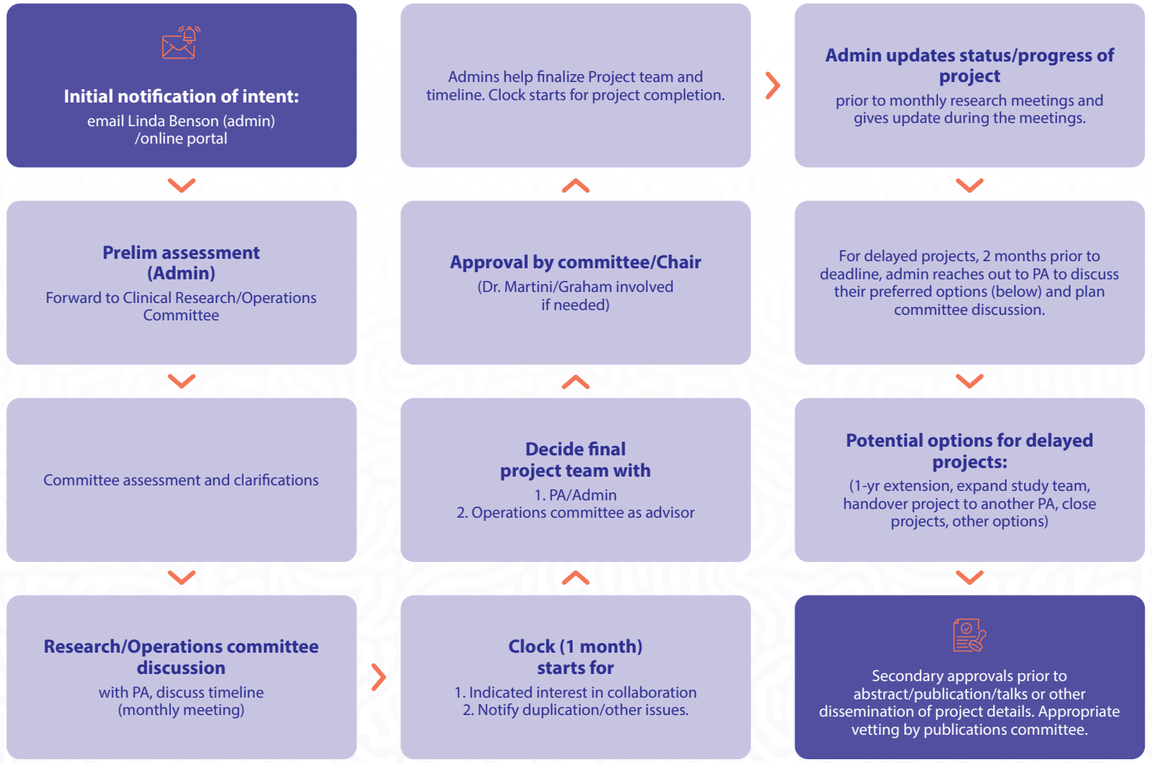
During FY23, Dr. Zulfi Haneef accepted the position as committee co-chair. The CROC is open to all members of the ECoE. Voting members actively participate in discussions and have expressed willingness to fill in as needed. This includes the formation of subcommittees that are involved in special projects of clinical interest.

3. Strategic planning accomplishments for the year:

CROC guidelines for new operations or research projects were developed and approved. Below, a summary of the proposed workflow for new projects is reproduced from the approved document.

4. How we have applied Change Management principles:

The CROC has developed governance documents as part of our change management planning. The CROC transitioned from a workgroup to a committee, working under the direction of the research council. This has permitted our committee to work more closely with the Basic Science Research Committee to share ideas and collaborate on projects.



FY23 Committee Goals
Goal: Continue with the Department of Veterans Affairs (VA) Advanced Medical Cost Management Solution (AMCMS) for the community care dashboard. **Objective:** Analyze community care data. **Outcome:** Unclear if the data have been useful.
Goal: Develop CROC operations policy. **Objective:** Transition to a governance structure allowing inclusion & participation of all members. **Outcome:** Generated criteria for the Operations Charter with agreement of all.
Goal: Design, train, and implement Mind Brain Program for ECoE. **Objective:** Expand Mind Brain Program to ECoE, associate sites, and other CoEs. **Outcome:** Expansion and recruitment in progress.
Goal: EMU database distribution for all ECoE use. **Objective:** Utilization of data for analysis in new projects. **Outcome:** Access database (DB) converted to Structured Query Language (SQL) and stored in the Houston SQL database.

FY24 Committee Goals
Goal: Collate list of ongoing ECoE projects to increase interest and collaboration across all sites and affiliates.
Goal: Ongoing development of the EMU database at Houston.
Goal: Develop and share collaborative ECoE datasets as described in the ECoE collaborative operations projects policy.
Goal: Expand Mind Brain Program to ECoE, associate sites, and other CoEs.
Goal: Develop data definitions of DRE to enhance treatment alternatives.
Goal: Finalize development of a Drug Resistant Epilepsy algorithm to improve delivery of non-drug therapies. (In alignment with the sprit of the Senate appropriations bill "Drug-Resistant Epilepsy"—the Committee encourages the Department to ensure that all Veterans with epilepsy have the opportunity to be comprehensively evaluated at a VHA Epilepsy Center of Excellence to identify drug-resistant epilepsy patients who may be candidates for FDA-approved non-drug therapies.)

Special Emphasis Programs

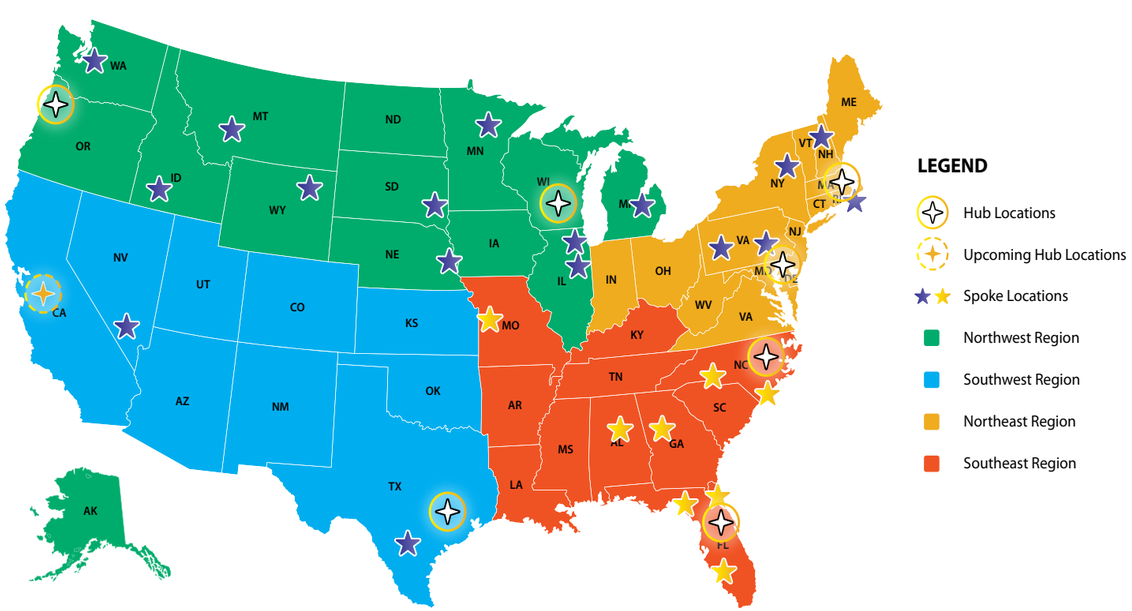
VA National Tele-EEG and Epilepsy Program

Mission: To provide nationwide coverage of EEG service and expert epilepsy consultation to Veterans through a telehealth platform utilizing hub-spoke methodology and leveraging a central data repository framework

VA's National Tele-EEG and Epilepsy Program (NTEEG-EP) works in concert with the ECoE to provide high-quality epilepsy care and remote Tele-electroencephalography (Tele-EEG) for Veterans with epilepsy and seizure disorders in rural and underserved locations. Tele-EEG uses state-of-the-art equipment to review EEG data—a recording of electrical activity in the brain using small electrodes placed on the scalp—remotely across VA facilities nationwide. Through Tele-EEG, Veterans can undergo brain activity monitoring from their local VA clinic, hospital, or home. This expedites EEG testing and reduces the need to travel long distances to a specialized hospital or clinic.

Tele-EEG launched in 2011 serving 10 locations. In 2022, the program received funding in the President's budget and has since expanded to serve 23 VA hospitals and clinics. The program currently has 10 more locations underway, including collaborations with military hospitals. By 2025, the program aims to expand Tele-EEG's footprint to more than 30 additional locations.

National TeleEEG MAP: Active and New Connections



For More Information
nationaltele-eegandepilepsyadmin@va.gov
https://dvagov.sharepoint.com/sites/NationalTele-EEGandEpilepsyProgram124/SitePages/Home.aspx

VA Mind Brain Program

Mission: To educate and train multidisciplinary clinicians in neurobehavioral therapy to deliver whole-person care for Veterans
Vision: To provide healing, hope, and wellness for Veterans with neuropsychiatric conditions

VA's ECoE launched the VA Mind Brain Program in 2021 to improve the knowledge and care of Veterans with neuropsychiatric conditions—including psychogenic nonepileptic seizure (PNES)—by educating and training clinicians across VA. PNES is a disorder resembling epileptic seizures and is associated with underlying psychological conflicts or life stressors. Many Veterans with PNES lack access to comprehensive care and treatment. With VA's Mind Brain Program, clinicians receive specialized training to effectively meet the needs of Veterans dealing with PNES and other neurological disorders.

VA Mind Brain Program Components

GOAL: The goal 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 neuro-psychriatric conditions.

COMMON DISORDERS MANAGED

- Functional Neurological (Conversion) Disorders (e.g., functional neurological/psychogenic movement/seizure/cognitive disorders)
- Neurologic disorders with neuropsychiatric comorbidities (e.g., migraines, movement disorders, epilepsy, TBI/polytrauma/with comorbid depression, anxiety, cognitive disorders, etc.)

TRAINING & EDUCATION

- MBP staff provide both group seminars as well as individualized clinical training to clinicians interested in learning more about these conditions and treatment options, such as evidence-based Neuro-Behavioral Therapy (NBT)
- Interested clinicians can also access online (VA TMS) continuing education courses reviewing the use of NBT in epilepsy and psychogenic nonepileptic seizures, including overviews or these conditions and the evidence base for NBT, clinical vignettes, and a session-by-session review of NBT

CLINICAL CARE

- MBP staff provide consultation, integrated care, and NBT in collaboration with the VA Epilepsy Centers of Excellence and VA National Tele-Mental Health Center's Tele-Seizures Clinic
- MBP staff will facilitate the use of Managing Epilepsy Well Network interventions in Veterans

RESEARCH

- MBP staff collaborate with other researchers, and facilitate new collaborations with VA clinicians who manage Veterans with complex neuropsychiatric conditions

For More Information

VHAMindBrainProgram@va.gov

https://marketplace.va.gov/innovations/va-mind-brain-program

14 **Clinicians trained or in training**

411 **Number of NBT encounters**

National Peer Review Committee

The National Peer Review Committee is an important part of the ECoE 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 health care 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

Ramon Diaz-Arrastia, MD, Professor of Neurology, 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)

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, Esq., Veteran

Special Thanks

The Fiscal Year 2023 Annual Report for the Epilepsy Centers of Excellence would not be possible without the invaluable work of the National ECoE Administrative Team, Site Directors, and Regional Directors. Special recognition is given to National Administrative Assistant Winona Finley and National Statistician Rizwana Rehman, PhD.

Appendix

Publications and *Presentations*

Northeast Region Publications and Presentations

Baltimore

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

Bensken WP, Alberti PM, Khan OI, Williams SM, Stange KC, Vaca GF, Jobst BC, Sajatovic M, Koroukian SM. A framework for health equity in people living with epilepsy. Epilepsy Res. 2022 Dec;188:107038. doi: 10.1016/j.eplepsyres.2022.107038. Epub 2022 Oct 20. PMID: 36332544; PMCID: PMC9797034.

Bensken WP, Vaca GF, Williams SM, Khan OI, Jobst BC, Stange KC, Sajatovic M, Koroukian SM. Disparities in adherence and emergency department utilization among people with epilepsy: A machine learning approach. Seizure. 2023 Aug;110:169-176. doi: 10.1016/j.seizure.2023.06.021. Epub 2023 Jun 28. PMID: 37393863.

Bensken WP, Fernandez Baca Vaca G, Alberti PM, Khan OI, Ciesielski TH, Jobst BC, Williams SM, Stange KC, Sajatovic M, Koroukian SM. Racial and Ethnic Differences in Antiseizure Medications Among People With Epilepsy on Medicaid: A Case of Potential Inequities. Neurol Clin Pract. 2023 Feb;13(1):e200101. doi: 10.1212/CPJ.0000000000200101. Epub 2023 Jan 11. PMID: 36865639; PMCID: PMC9973322.

Boston

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

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Richmond

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West Haven

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- Kanner AM, Saporta AS, Kim DH, Barry JJ, Altalib H, Omotola H, Jette N, O'Brien TJ, Nadkarni S, Winawer MR, Sperling M. Mood and Anxiety Disorders and Suicidality in Patients With Newly Diagnosed Focal Epilepsy: An Analysis of a Complex Comorbidity. Neurology. 2022 Dec 20.
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Boston

ABSTRACTS/POSTERS/PRESENTATIONS

- Marissa Kellogg, Rizwana Rehman, Carol Riley, Ronda Tschumper, Edward Savarese, Stephan Eisenschenk, David McCarthy Improving access to high-quality EEG for rural and urban patients in the U.S.'s largest governmental healthcare system: The Veterans Healthcare Administration (VA) National TeleEEG program and Epilepsy Centers of Excellence (ECoEs). International League Against Epilepsy, 9/2-6/2023. Dublin Ireland
- M. Kellogg, C. Smith, M. Pugh, Z. Haneef, R. Rehman, J. Jones, D. McCarthy, A. Towne, G. Graham, S. Martini, E. Boudreau. The VA EEG Utilization Project: A National VA Operations and Quality Improvement Initiative. 12/3/2022. American Epilepsy Society Meeting.
- M Ivanisevic, C. Brady, L. Grande, A. Knoff, D. Marra, D. McCarthy, S. Tobochnik. 12/3/2022 Intervention for Psychological Awareness and Skill Building (IPAS) in patients with Psychogenic Nonepileptic Seizures. American Epilepsy Society Meeting
- Rebecca Stafford, Stefanos Chatzidakis, Ivy So Yeon Kim, Benjamin Brush, Asim Zia Mian, David M. Greer, Stelios M. Smirnakis, Steven K. Feske, Charlene Jennifer Ong. Abstract S20.009, AAN Conference, Boston, MA, April 24, 2023 Association of Global Cortical Atrophy Score with Clinical Outcomes after Large Middle Cerebral Artery Stroke–

Northeast Region Publications and Presentations

- *M. YE, S. M. SMIRNAKIS Use two-photon imaging and single-cell optogenetics to dissect cortical circuit connectivity., Session 570.11, poster WW14, Society for Neuroscience Conference, San Diego, November 11-15, 2022
- *A. RINA, A. PAPANIKOLAOU, G. A. KELIRIS, S. M. SMIRNAKIS Direction of Motion Discrimination Training after V1+ Lesions: fMRI Analysis in 3 Subjects. Session 625.16, poster Q3, Society for Neuroscience Conference, San Diego, November 11-15, 2022
- Presentation: SMIRNAKIS Archimedes Research Center: Artificial Intelligence in Life Sciences, Summer School. Introduction to Network Neuroscience; Imaging tools. Athens, Greece, July 13, 2023.

Richmond

ABSTRACTS/POSTERS/PRESENTATIONS

- Rehman R, Towne AR, Epilepsy Prevalence in the Veterans Health Administration, AES Annual Meeting, 2022
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- Kaska, R. Mind Your Memory: Improving Memory in People with Epilepsy, ECoE Hope in Epilepsy Series, June 2023
- Kaska, R. Brain Basics: Understanding Your Epilepsy, ECoE Hope in Epilepsy Series, March 2023
- Ono, K. Sudden Unexpected Death in Epilepsy, National Medical Association 2023 Annual Meeting New Orleans, LA, 7/31/2023
- Towne, AR. Epilepsy Centers of Excellence: Interagency Collaborative to Accelerate Research on Epilepsy (ICARE), NINDS, Bethesda, MD, 5/25/2023
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- Waterhouse, E. Case-based Evaluation and Management for Primary Care Webinar, 11/3/2022
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West Haven

ABSTRACTS/POSTERS/PRESENTATIONS

- H Altalib, R Rehman, Z Haneef Access and Equity of Epilepsy Care in the Veterans Health Administration (P6-9.006) American Academy of Neurology Annual Meeting- 2023

- M Baig, M Gopaul, S Martini, H Altalib The Veterans Affairs Healthcare System (VA) National Neurology Community Care Dashboard: Development and Evaluation (P4-7.003) American Academy of Neurology Annual Conference- 2023

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Madison

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- Busch RM, Dalton JE, Jehi L, Ferguson L, Krieger NI, Struck AF, Hermann BP. Association of Neighborhood Deprivation With Cognitive and Mood Outcomes in Adults with Pharmacoresistant Temporal Lobe Epilepsy. Neurology. 2023
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- Struck AF, Metabolism and LPDs, ACNS Austin Tx
- Struck AF, Keynote Speaker Chicago Epilepsy Regional Conference Northwestern University 6/2023

Minneapolis

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ABSTRACTS/POSTERS/PRESENTATIONS

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- Reeder S. PGY2 Bootcamp: Electroencephalogram and Natus Application Basics. University of Minnesota Neurology Didactic. 6/12/2023.
- Exconde, R. Epilepsy in the developmentally disabled adult: When drugs don't control seizures. American Academy of Neuroscience Nurses Neuro-APP Conference. Long Beach, CA. January 2023.
- Exconde R. Critical care EEG primer. PGY2 Bootcamp. University of MN Neurology Didactic. June 2023

Portland

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

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- Kellogg M, Rehman R, Riley C, Tschumper R, Savarese E, Eisenschenk E, McCarthy D. Improving access to high-quality EEG for rural and urban patients in the U.S.'s largest governmental healthcare system: The Veterans Healthcare Administration (VHA) National TeleEEG program and Epilepsy Centers of Excellence (ECoEs). International League Against Epilepsy (ILAE) 35th International Epilepsy Congress, Dublin, Ireland. Sep 2023.
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- McCaskill M, Ernst L, Kellogg M. A Seizure Dog in the Epilepsy Monitoring Unit (EMU): Single Center Experience on Patient Safety and Tolerability. AES Annual Meeting, Nashville, TN. Dec 2022.
- Kazazian K, Gaspard N, Hirsch L, Kellogg M, Hocker S, Wong N, Farias-Moeller R, Eschbach K, Gofton T. The NORSE/FIRES Family Registry: A comparison of pediatric and adult presentations and outcomes. AES Annual Meeting, Nashville, TN. Dec 2022.
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Seattle

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- Dembrow NC, Hudson M, Contreras D, and Spain WJ. Input-rate driven dendritic computations in pyramidal neurons during temporally complex patterns of excitation. Submitted Abstract Society for Neuroscience, Washington DC. 11/2023
- Dembrow, NC and Spain WJ. Dendritic Computation of Naturalistic Patterns of Excitatory Input. Gordon Research Conference: Dendrites: Molecules, Structure and Function 2023. Barga, Italy
- Radaelli C., Alfiler L., Bertagnolli D., Dalley R., Hudson M., Omstead V., Opitz-Araya X., Rimorin C., Taskin N., Tieu M., Weed N. J., Wilson J., Bakken, Smith K., Sorensen S. A., Lein E., Perlmutter S. I., Spain WJ, Ting J. T., Kalmbach BE, NC Dembrow. Society for Neuroscience Annual Meeting 2022, San Diego CA, Abstract #031.11
- Radaelli C., Hudson M., Omstead V., Opitz-Araya X., Taskin N., Weed N. J., Smith K., Rimorin C., Tieu M., Bertagnolli D., Bakken T., Lein E., Perlmutter S. I., Spain WJ, Ting J. T., Kalmbach BE. and NC Dembrow. Intrinsic oscillatory properties of supragranular pyramidal neuron types in the motor and temporal cortex of the macaque. Society for Neuroscience Annual Meeting 2022, San Diego CA, Abstract #031.21
- NC Dembrow Invited Speaker at Max Planck Institute for Neurobiology of Behavior, Bonn Germany
- NC Dembrow Physiology and Biophysics Departmental Seminar
- NC Dembrow Gordon Research Conference: Dendrites: Molecules, Structure and Function (Barga, Italy)
- NC Dembrow Physiology and Biophysics Friday Faculty Forum
- Spain: On the origins of good and bad slow brain oscillations: Two hypothesis. Dept. Neurology Grand Rounds, University of Washington, October 2, 2022.
- Spain Random thoughts that emerge while grant writing. Friday Faculty Forum, Dept. Physiology & Biophysics, Univ. of Washington, March 10, 2023

- Feichtinbiner AB, O'Boyle R, Sytsma K, Ransom CB, Nolan AL. Satellite microglia: loss of neuronal regulation after traumatic brain injury and role of P2Y12 receptors. National Neurotrauma Society, Austin TX, 6/2023

Southeast Region Publications and Presentations

Durham

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

Gidal BE, Rehman R, Tran T, Karasov A. Patterns of psychotropic drug use in veterans with epilepsy: Do drug interactions matter? Epilepsy Behav. 2023 Aug;145:109335. doi: 10.1016/j.yebeh.2023.109335. Epub 2023 Jul 8. PMID: 37429123.

Gainesville

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

N/A

Miami

PUBLICATIONS/MANUSCRIPTS/CHAPTERS

- Swan Alicia A., Kennedy Eamonn, Cooper Douglas B., Amuan Megan E., Mayo Jamie, Tate David F., Song Kangwon, Eapen Blessen C., Van Cott Anne C., Lopez MR, Pugh Mary Jo. Comorbidity and polypharmacy impact neurobehavioral symptoms and symptom validity failure among post-9/11 veterans with mild traumatic brain injury. Frontiers in Neurology, Volume 14. 2023. DOI=10.3389/fneur.2023.1228377. ISSN=1664-2295
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Tampa

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N/A

Birmingham

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- Szaflarski J, Allendorfer J, Goodman A, Nenert R, Gaston T, Grayson LP, Philip N, Correia S, LaFrance W. Facial Emotion Processing Changes in Functional Seizures after Neurobehavioral Therapy (P12-8.008). Annual Meeting of the American Academy of Neurology. Boston, MA.
- Ryan Van Patten, PhD; Grayson Baird, PhD; Andrew Blum, MD, PhD; Stephen Correia, PhD; Noah S Philip, MD; Jane Allendorfer, PhD; Tyler E Gaston, MD, Adam Goodman, MD; Leslie P Grayson, MD; Krista Tocco, BA; Jerzy P Szaflarski, MD, PhD; W. Curt LaFrance, Jr, MD, MPH. Neuroimaging Biomarker for Seizures: Treatment Outcomes. Presented at the American Epilepsy Society Annual Meeting, Nashville, TN, December 2022
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Houston

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1. Karakas C, Ferreira LD, Haneef Z. Use of video alone for differentiation of epileptic seizures from non-epileptic spells: A systematic review and meta-analysis. Seizure 2023.
2. Karakas C, Houck K, Handoko M, Trandafir C, Coorg R, Haneef Z, Riviello J, Weiner H, Curry D, Ali I. Responsive neurostimulation for the treatment of children with drug-resistant epilepsy in tuberous sclerosis complex. Pediatric Neurology 2023. PMID 37302216
3. Ward R, Vallera AC, Ali I, Karakas C, Haneef Z. Seizure Control During Spontaneous Battery Failure with Responsive Neurostimulation. Epileptic Disorders, 2023. PMID 37002552
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5. Skrehot H, Englot D, Haneef Z. Neurostimulation in Focal Epilepsy: A Systematic Review and Meta-Analysis. Epilepsy and Behavior, 2023. PMID 36972642.
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9. Wang, E.T., Chiang, S., Haneef, Z., Rao, V.R., Moss, R., Vannucci, M. A Bayesian switching linear dynamical system to estimate latent seizure cycles in epilepsy. PNAS 2022. PMID 36343269
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CHAPTERS

1. Gadelmola, K (Senior Author): "Selection of candidates for VNS therapy" for upcoming "Neuromodulation in the treatment of epilepsy" Rohit Das, Ed.
2. Gadelmola, K (Author): "RNS: Pivotal trials and real-world evidence" for upcoming "Neuromodulation in the treatment of epilepsy". Rohit Das, Ed.
3. Stern, J. Haneef, Z, and Walshaw, P. "Functional MRI." In Engel: Epilepsy: A Comprehensive Textbook, 3rd Edition. Wolters Kluwer.
4. Nakhleh L, Haneef Z. Case 17: Psychogenic Nonepileptic Seizure. In: Toy EC, Simpson E, Mancias P, Furr-Stimming EE. Case Files: Neurology, 4th ed. McGraw-Hill 2022.
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2. Surgical Outcomes in Post-Traumatic epilepsy: A Meta-analysis. Ferreira L, Tabaeizadeh M, Haneef Z. Henry J.N. Taub & James K. Alexander Medical Student Research Symposium 2023. Baylor College of Medicine, Houston, TX on March 10, 2023. (First prize in "Reviews" to student presenter Dr. Ferreira).
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2. Haneef, Z. Status Epilepticus. A case-based Approach. ECoE Clinician Webinar FY21 to national Veteran's affair Hospitals. November 2022.

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None reported

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1. Naylor DE. In the Fast Lane: Receptor Trafficking During Status Epilepticus. Epilepsy Open, 2023; 8 (Suppl 1): S35-65 (Epub).
2. Choe, K.Y., Bethlehem, R., Safrin, M., Dong, H., Salman, E., Li, Y., Grinevich, V., Golshani, P., Denardo, L., Penagarikano, O.,Harris, N.G., and Geschwind, D.H. Oxytocin normalizes altered social circuit connectivity in the Cntnap2 knock-aout mouse. Published online in Neuron in 2022.
3. Chen Z, Blair GJ, Guo C, Izquirdo A, Golshani P, Cong J, Aharoni D, Blair HT A hardware system for real-time decoding of in-vivo calcium imaging data. Published online E-Life, 01/23/23.
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5. Guo C, Blair GJ, Sehgal M, Sangiuliano J, Bellafard A, Silva J, Golshani P, Basso M, Blair HT, Aharoni D. Miniscope-LFOV: A large field of view, single cell resolution miniature microscope for wired and wire-free imaging of neural dynamics in freely behaving animals. Published online in Science Advances April 22nd, 2023.
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8. Nguyen VH, Bainbridge JL, Dergalust S. Pharmacist Roles in Interprofessional Teams in the care of patients with Epilepsy. In press. Engel J, Moshe, SL (Eds.), 2022 Epilepsy, Third Edition.
9. Dergalust S, Bainbridge JL. Epilepsy in Adults. ACSAP 2022-2024 Series. November 2022.
10. Nguyen VH, Dergalust S. Phenytoin. Winter's Basic Clinical Pharmacokinetics. Beringer PM (Ed), In press. 2023, 7th Edition

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1. Naylor, David: Guest Editor Epilepsy Open 2022-23

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1. Naylor, David: Ionic Mechanisms of Seizures. UCLA Clinical Neurophysiology Conference, 11/8/22.
2. Naylor, David: Mechanisms of seizures and the development of epilepsy. WLA-VA Grand Rounds 3/18/2023.

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3. Naylor, David: GABAergic interneuron subtypes and their GABA-A receptor outputs are differentially tuned and targeted by select neurostimulation paradigms. Society for Neuroscience. Washington DC
4. Golshani, Peyman 2022: University of Minnesota, "Bridging the gap between synaptic physiology and behaviors using new tools to image network dynamics." Minneapolis, MN, Sep 13, 2022
5. Golshani, Peyman: 2022: UCLA NSIDP Keynote Speech, "Bridging the gap between synaptic physiology and behaviors using new tools to image network dynamics." Los Angeles, CA September 29th, 2022
6. Golshani, Peyman: 2022: UCLA Neuroendocrinology Talk Series, "Accumbens social representation instability in a model of autism."
7. Golshani, Peyman: 2022: UC Irvine Center for Neural Circuits, "Bridging the gap between synaptic physiology and behaviors using new tools to image network dynamics." Irvine, CA September 28, 2022
8. Golshani, Peyman: 2022: West Los Angeles VA Grand Rounds, "Bridging the gap between synaptic physiology and behaviors using new tools to image network dynamics." Los Angeles, CA September 30th, 2022
9. Golshani, Peyman: 2022: Cedars Sinai Department of Neurology Grand Rounds, "Unstable nucleus accumbens representations of social interaction in a model of autism." Los Angeles, CA October, 2022
10. Golshani, Peyman: 2023: UCLA, Department of Neurology, Science Day Keynote lecture, "Bridging the gap between synaptic physiology and behaviors using new tools to image network dynamics." Los Angeles, CA May 8th, 2023
11. Golshani, Peyman: 2023: Rice University, InterRice Neurotechnology Conference, "Bridging the gap between synaptic physiology and behaviors using new tools to image network dynamics." Houston, Texas. May 2023
12. Golshani, Peyman: 2023: Westlake University-Science Magazine Joint Online Symposium, "Open-source large field-of-view 2-photon miniaturized microscopes for imaging large scale neural dynamics". Zoom Seminar. May 2023.
13. Golshani, Peyman: 2023: Weizmann Institute, "Bridging the gap between synaptic physiology and behaviors using new tools to image network dynamics." Rehovot, Israel. May 2023
14. Golshani, Peyman: 2023: Hebrew University, "Bridging the gap between synaptic physiology and behaviors using new tools to image network dynamics." Jerusalem, Israel, May 2023
15. Golshani, Peyman: 2023: UCLA, Neural Repair Conference, "Stabilization of working memory representations." Los Angeles, CA June 9 2023.
16. Golshani, Peyman: 2023: Gordon Research Conference, Inhibition in the CNS, "Interneuron desynchronization drives places cell imprecision and instability in temporal lobe epilepsy." Les Diablerets, Switzerland, July 2023

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ABSTRACTS/POSTERS

1. Evaluating The Use and Efficacy Of Anti-Seizure Drugs In The Treatment Of Status Epilepticus In A Veteran Population, Neha Gautam, Stephanie Early, Brittany Romans, Alexander Crossley, Jennifer K Nguyen, Riley Johnson Hyojin Suh, Sunita Dergalust. Annual AES meeting, December 2022

San Francisco

PRESENTATIONS

1. Garga, Nina. Career Skills Panelist: Surviving your first year as an attending/faculty. American Epilepsy Society Annual Meeting, Nashville, TN. 12/2/2022.
2. Garga, Nina and Savarese, Edward. Workshop: From unmet need to a plan. Diagnostic Services Leadership Institute, Washington, DC. 3/29/2023.
3. Garga, Nina. Panelist: Navigating your resource management committee (RMC) and leadership. Diagnostic Services Leadership Institute, Washington, DC. 3/29/2023.

Public Law
S. 2162

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—

1. In designating locations for epilepsy centers of excellence under subsection (a), the Secretary shall solicit proposals from Department health care facilities seeking designation as a location for an epilepsy center of excellence.
2. The Secretary may not designate a facility as a location for an epilepsy center of excellence under subsection (a) unless the peer review panel established under subsection (c) has determined under that subsection that the proposal submitted such facility seeking designation as a location for an epilepsy center of excellence is among those proposals that meet the highest competitive standards of scientific and clinical merit.
3. In choosing from among the facilities meeting the requirements of paragraph (2), the Secretary shall also consider appropriate geographic distribution when designating the epilepsy centers of excellence under subsection (a).

(c) PEER REVIEW PANEL—

1. The Under Secretary for Health shall establish a peer review panel to assess the scientific and clinical merit of proposals that are submitted to the Secretary S. 2162—18 for the designation of epilepsy centers of excellence under this section.
    a. The membership of the peer review panel shall consist of experts on epilepsy, including posttraumatic 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.
2. 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.
3. 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.
4. The peer review panel shall not be subject to the Federal Advisory Committee Act.

(d) EPILEPSY CENTER OF EXCELLENCE DEFINED—

In this section, the term "epilepsy center of excellence" means a health care facility that has (or in the foreseeable future can develop) the necessary capacity to function as a center of excellence in research, education, and clinical care activities in the diagnosis and treatment of epilepsy and has (or may reasonably be anticipated to develop) each of the following:

1. An affiliation with an accredited medical school that provides education and training in neurology, including an arrangement with such school under which medical residents receive education and training in the diagnosis and treatment of epilepsy (including neurosurgery).
2. The ability to attract the participation of scientists who are capable of ingenuity and creativity in health care research efforts.
3. An advisory committee composed of Veterans an appropriate health care and research representatives of the facility and of the affiliated school or schools to advise the directors of such facility and such center on policy matters pertaining to the activities of the center during the period of the operation of such center.
4. The capability to conduct effectively evaluations of the activities of such center.
5. The capability to assist in the expansion of the Department's use of information systems and databases to improve the quality and delivery of care for Veterans enrolled within the Department's health care system.
6. The capability to assist in the expansion of the Department telehealth program to develop, transmit, monitor, and review neurological diagnostic tests.
7. The ability to perform epilepsy research, education, and clinical care activities in collaboration with Department medical facilities that have centers for research, education, and clinical care activities on complex multi-trauma associated S. 2162—19 with combat injuries established under section 7327 of this title.

(e) NATIONAL COORDINATOR FOR EPILEPSY PROGRAMS—

1. To assist the Secretary and the Under Secretary for Health in carrying out this section, the Secretary shall designate an individual in the Veterans Health Administration to act as a national coordinator for epilepsy programs of the Veterans Health Administration.
2. The duties of the national coordinator for epilepsy programs shall include the following:
    a. To supervise the operation of the centers established pursuant to this section.
    b. To coordinate and support the national consortium of providers with interest in treating epilepsy at Department health care facilities lacking such centers in order to ensure better access to state-of-the-art diagnosis, research, clinical care, and education for traumatic brain injury and epilepsy throughout the health care system of the Department.

    c. To conduct, in conjunction with the peer review panel established under subsection (c), regular evaluations of the epilepsy centers of excellence to ensure compliance with the requirements of this section.
    d. To coordinate (as part of an integrated national system) education, clinical care, and research activities within all facilities with an epilepsy center of excellence.
    e. To develop jointly a national consortium of providers with interest in treating epilepsy at Department health care facilities lacking an epilepsy center of excellence in order to ensure better access to state-of- the-art diagnosis, research, clinical care, and education for traumatic brain injury and epilepsy throughout the health care system of the Department. Such consortium should include a designated epilepsy referral clinic in each Veterans Integrated Service Network.
3. In carrying out duties under this subsection, the national coordinator for epilepsy programs shall report to the official of the Veterans Health Administration responsible for neurology.

(f) AUTHORIZATION OF APPROPRIATIONS—

1. There are authorized to be appropriated $6,000,000 for each of fiscal years 2009 through 2013 for the support of the clinical care, research, and education activities of the epilepsy centers of excellence established and operated pursuant to subsection (a) (2).
2. There are authorized to be appropriated for each fiscal year after fiscal year 2013 such sums as may be necessary for the support of the clinical care, research, and education activities of the epilepsy centers of excellence established and operated pursuant to subsection (a) (2).
3. The Secretary shall ensure that funds for such centers are designated for the first three years of operation as a special purpose program for which funds are not allocated through the Veterans Equitable Resource Allocation system.
4. In addition to amounts authorized to be appropriated under paragraphs (1) and (2) for a fiscal year, the Under Secretary for Health shall allocate to such centers from other funds appropriated generally for the Department medical services account and medical and prosthetics research account, as appropriate, such amounts as the Under Secretary for Health determines appropriate.
5. In addition to amounts authorized to be appropriated under paragraphs (1) and (2) for a fiscal year, there are authorized to S. 2162—20 be appropriated such sums as may be necessary to fund the national coordinator established by subsection (e).".

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

Acronyms

AAN – American Academy of Neurology

ABPN - American Board of Psychiatry and Neurology

ACGME - Accreditation Council for Graduate Medical Education

AES - American Epilepsy Society

AKF - Anita Kaufmann Foundation

AMCMS - Department of Veterans Affairs Advanced Medical Cost Management Solution

AO - Administrative Officer

ASD - Autism Spectrum Disorder

ASET - American Society of Electroneurodiagnostic Technologists

ASM - Anti-Seizure Medications

BCPS - Board Certified Pharmacotherapy Specialist

BPC - Business Processes Committee

CDA - Career Development Award

CDMRP - Congressionally Directed Medical Research Programs

cEEG - Continuous EEG

Cerner - Cerner Corporation (health care IT company)

CNP - Certified Nurse Practitioner

COEs - Centers of Excellence

CPRS - Computerized Patient Record System

CSRD - Clinical Science Research and Development

DB - Database

DBS - Deep Brain Stimulation

DoD - Department of Defense

DRE - Drug-Resistant Epilepsy

DTI - Diffusion Tensor Imaging

DUSHOM - Deputy Under Secretary for Health for Operations and Management

ECoE - Epilepsy Centers of Excellence

EEG - Electroencephalography

EFA - Epilepsy Foundation of America

EMG - Electromyography

EMR - Electronic Medical Record

EMU - Epilepsy Monitoring Unit

fMRI - Functional Magnetic Resonance Imaging

FND - Functional Neurological Disorder

FY - Fiscal Year

GME - Graduate Medical Education

HR - Human Resources

HSR&D - Health Services Research & Development

ICD-10 - 10th revision of the International Statistical Classification of Diseases and Related Health Problems, a medical classification list by the World Health Organization

ICU - Intensive Care Unit

IFC - interfacility consult

ILEADS - VHA Institute for Learning, Education and Development

LTM - long term monitoring

MBP - VA Mind Brain Program

MECP-2 - Methyl-CpG-binding protein 2

MEG - Magnetoencephalography

MEW - Managing Epilepsy Well

MIRECC - Mental Illness Research Education Clinical, Centers of Excellence

MIT - Medical Instrument Technician

MOA - Memorandum of Agreement

MRI - Magnetic Resonance Imaging

NBT - Neuro-Behavioral Therapy

NIDCD - National Institute on Deafness and Other Communication Disorders

NIH - National Institutes of Health

NINDS - National Institute of Neurological Disorders and Stroke

NTEEG/EP - National Tele-electroencephalogram (EEG)/Tele-Epilepsy Program

NTEP - National Tele-Epilepsy Program

NTNP - National Tele-Neurology Program

OAA - Office of Academic Affiliations

OEF - Operation Enduring Freedom

OIF - Operation Iraqi Freedom

OND - Operation New Dawn

PADRECC - Parkinson's Disease Research, Education, and Clinical Centers

PBM - Pharmacy Benefits Management

PCORI - Patient-Centered Outcomes Research Institute

PHR - Personal Health Record

PNES - Psychogenic Nonepileptic Seizures

POC - Point of Contact

PTSD - Posttraumatic Stress Disorder

QUERI - Quality Enhancement Research Initiative

RCT - Randomized Controlled Trial

Redcap - Research Electronic Data Capture

RN - Registered Nurse

RNS - Responsive Neurostimulation

ROI - Research Opportunity Index

SALIENT - StrAtegic PoLicy EvIdence-Based Evaluation CeNTer

SCAN-ECHO - Specialty Care Access Network - Extension for Community Healthcare Outcomes

SEEG - Stereoelectroencephalography

SOP - Standard Operating Procedure

SQL - Structured Query Language

TBI - Traumatic Brain Injury

UME - Undergraduate Medical Education

VA - Veterans Affairs

VA Ion - Veterans Affairs Innovation Network

VALNET - VA Library Network

VAMC - Veterans Affairs Medical Center

VHA - Veterans Health Administration

VISN - Veterans Integrated Service Network

VNS - Vagus Nerve Stimulation

VSSC - VHA Support Service Center

VVC - VA Video Connect

WVE - Women Veterans with Epilepsy

WWE - Women with Epilepsy

ZoteroBib - Citation Management Tool