

NAEC Annual Meeting

December 5, 2022



Agenda

1. Welcome and 2022 Update – Sue Herman, MD
 - NAEC Operations Update
 - 2022 Activities and Accomplishments
2. Outlook and Activities for 2023 – Fred Lado, MD, PhD
 - NAEC Leadership
 - Accreditation Changes for 2023/2024
 - Epilepsy Center Guidelines Update
3. NAEC Pilot Program – Kate Davis, MD and Adam Ostendorf, MD



2022 NAEC Update

Susan Herman, MD

NAEC Outgoing President



NAEC Epilepsy Center Accreditation

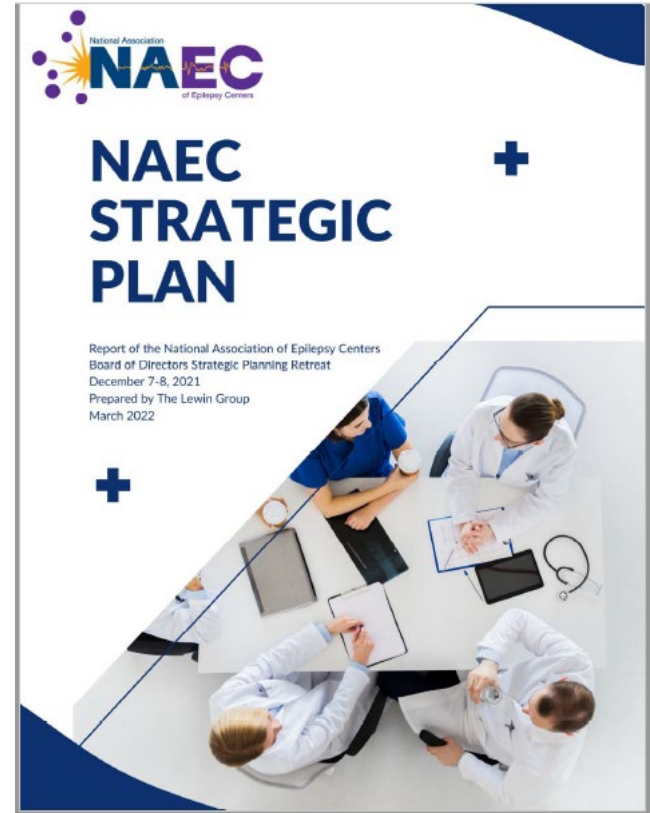
| Center Demographic | | | | |
|--------------------|-------|-----------------|-----------|-------|
| | Adult | Adult/Pediatric | Pediatric | Total |
| Level 4 | 74 | 77 | 47 | 198 |
| Level 3 | 44 | 13 | 4 | 61 |
| Total | 118 | 90 | 51 | 259 |

| NAEC Centers Accredited by Year | | | | | | | |
|---------------------------------|------|------|------|------|------|------|------|
| | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 |
| Level 4 | 198 | 197 | 199 | 192 | 188 | 181 | 184 |
| Level 3 | 61 | 62 | 57 | 54 | 52 | 52 | 41 |
| Total | 259 | 259 | 256 | 246 | 240 | 233 | 225 |



Strategic Planning

- NAEC Board met in December 2021 to begin strategic planning process for 2022-2027
 - Reviewing/revising pillars and activities
 - Addressing health disparities
 - Responding to broader health care system changes
 - What's NAEC's role in and responsibility to broader epilepsy community – patients, sister organizations, research enterprise, etc?



Strategic Planning Results

Table 1. Vision, Mission, and Core Pillars

Vision: Assuring quality epilepsy care by supporting strong specialized epilepsy centers.

Mission: NAEC supports epilepsy centers in delivering quality comprehensive care to people with epilepsy, by setting standards of care, advocating for access to high quality epilepsy center services, providing knowledge and resources to its member centers, and collaborating with and otherwise serving the epilepsy community.

| Standard Setting | Advocacy | Member Center Support | Community |
|--|---|--|---|
| NAEC will define continuously improving standards for epilepsy centers to ensure the highest quality care. | NAEC will ensure the current and future role, value, and viability of epilepsy centers. | NAEC will be the comprehensive resource for the organization and administration of epilepsy centers. | NAEC will collaborate with the epilepsy community to improve access to centers and resources. |



2022 Activities and Accomplishments

**Standard
Setting**

Advocacy

**Member
Center
Support**

Community

**Assuring quality epilepsy care by
supporting strong specialized epilepsy centers**



2022 Activities: Standard Setting

- Completed the 2022 Accreditation Process
- Updated Criteria and Process for 2023 and 2024
- Epilepsy Center Guidelines under development



2022 Activities: Standard Setting

- ASET/NAEC training module for Neurodiagnostic Assistants (monitor watchers)/no cost for NAEC members launched March 2021.
 - 668 enrolled/469 completed
- AANN/NAEC on Epilepsy Center inpatient and outpatient modules for epilepsy certification – launched Nov 2021.
 - 233 completed/111 in process
 - 15 facilities with institutional programs



2022 Activities: Advocacy

- Worked with ACNS and AAN to remove CMS national coverage decision on ambulatory EEG
- Analysis and comments on Medicare regulations
- Signed letters to Congress on prior authorization relief.



2022 Activities: Member Center Support

- Establishment of Work Groups
 - Epilepsy Center Tools and Resources
 - Marketing and Improving Access to Underserved
 - Outcome Measures/Data Collection
- Webinars
 - CDC's Managing Epilepsy Well Programs
 - NAEAC 2022 Accreditation and Trends Data
- Responded to questions from members on accreditation, coding, reimbursement, insurance coverage policies



Publications of NAEC Data

- United States Epilepsy Center Characteristics: An Analysis of Data From the National Association of Epilepsy Centers
- Impact of the COVID-19 Epidemic on Epilepsy Center Practice in the United States
- Epilepsy Center Characteristics and Geographic Region Influence Presurgical Testing in the United States
- Association Between Characteristics of National Association of Epilepsy Centers and Reported Utilization of Specific Surgical Techniques
- NAEC Center Director Study Group



2022 Activities: Community

- Work with AES, ACNS, AAN, CNF, CNS on advocacy, guidelines, and other issues
- Leadership roles in Epilepsy Leadership Council review of IOM report, actions to date, priorities moving forward



Thank You to 2022 NAEC Volunteers!

Accreditation Committee

Meriem Bensalem-Owen, MD – Chair
Christi Heck, MD
Ammar Kheder, MD
Megan Selvitelli, MD
John Stern, MD

Finance Committee

Ahmed Abdelmoity, MD – Chair
Fred Lado, MD, PhD
Emily Klatte, MD

Nominations Committee

Stephan Schuele, MD, PhD – Chair
Kate Davis, MD
Ammar Kheder, MD

Guidelines Panel

Susan Arnold, MD – Co-Chair
Fred Lado, MD, PhD – Co-Chair

Guidelines Oversight Committee

Christi Heck, MD – Co-Chair
David Labiner, MD – Co-Chair
Stephan Schuele, MD, PhD
Kevin Chapman, MD
Lara Jehi, MD

Survey Work Group

Stephanie Ahrens, DO
Anto Bagic, MD, PhD
Kevin Chapman, MD
Nathan Fountain, MD
Jay Gavvala, MD
Adam Ostendorf, MD
Kyle Rossi, MD



Thank you to 2022 NAEC Volunteers!

Tools and Resources Work Group

Ahmed Abdelmoity, MD, Chair
Meriem Bensalem-Owen, MD
Liu Thio, MD
Sima Patel, MD
Stephan Schuele, MD, PhD
Dan Weber, DO

Data Collection Work Group

Kate Davis, MD, Chair
Sue Herman, MD
Lawrence Hirsch, MD
Adam Ostendorf, MD
John Pollard, MD
John Rolston, MD
Stephan Schuele, MD, PhD

Center Marketing Work Group

Dave Clarke, MD, – Chair
Gabrielle Conecker
Fred Lado, MD
Suchetta Joshi, MD
Emily Klatter, MD
Sandi Lam, MD

NAEC Coding Session and Webinar Speakers

Stephanie Ahrens, DO
Greg Barkley, MD
Jonathan Edwards, MD
Sue Herman, MD
Marc Nuwer, MD
Adam Ostendorf, MD
Stephan Schuele, MD, PhD



Thank You to NAEAC Staff!

- Ellen Riker, Executive Director
- Johanna Gray, Deputy Director
- Barbara Small, Programs Manager



Outlook and Activities for 2023

Fred Lado, MD, PhD

NAEC President



NAEC Board for 2023

| | |
|-------------------------|--|
| President | Fred Lado, MD, PhD Hofstra Northwell Comprehensive Epilepsy Center |
| Vice President | Stephan Schuele, MD, MPH Northwestern Medicine Comprehensive Epilepsy Center |
| Secretary/ Treasurer | David Clarke, MD Dell Children's Medical Center |
| At-large | Ahmed Abdelmoity, MD Children's Mercy Epilepsy Center |
| At-large | Kathryn Davis, MD University of Pennsylvania |
| At-large | Jennifer Hopp, MD University of Maryland |
| At-large | Mohamad Koubeissi, MD George Washington University |
| Past President | Susan Herman, MD Barrow Neurological Institute |



Outgoing Board Member



Nathan Fountain, MD

F.E. Dreifuss Comprehensive Epilepsy Program

NAEC Past President



Thank you!



Susan Herman, MD
Barrow Neurological Institute
NAEC Past President



2023 Activities

Standard Setting

- 2023 accreditation cycle and 2024 updates
- Complete NAEC's Guidelines
- NAEC Data Pilot Project

Advocacy

- Explore coding options
- Advocacy with private insurers
- Analysis and advocacy re: Medicare Rules

Member Center Support

- Enhance Center Resources – business plan webinars and toolkit
- Update NAEC website to make more user friendly

Community

- Collaborations with AAN, AES, ELC, EF, ACNS, etc
- Develop strategies to address disparities in access to epilepsy centers

Assuring quality epilepsy care by supporting strong specialized epilepsy centers

National Association

of Epilepsy Centers

NAEC Accreditation Updates



2023 Accreditation Updates

- **Core Criteria:** After being postponed for several years due to COVID-19, starting in 2023 all centers must meet core criteria.
- Core criteria are required annually with no exception or flexibility; **centers with deficiencies in core criteria will not be accredited (rather than receiving conditional accreditation).**



Core Criteria - 2023

- **Medical Director:** The Medical Director must have at least one of the following board certifications: ABPN epilepsy, ABPN clinical neurophysiology, ABCN clinical neurophysiology, or ABCN epilepsy monitoring.
- **One Pediatric Epilepsy Specialist for Pediatric and Adult/Pediatric Centers:** Requirement for a board-certified pediatric epileptologist, who has ABPN Child Neurology board certification in addition to at least one of the following board certifications: ABPN epilepsy, ABPN clinical neurophysiology, ABCN clinical neurophysiology, or ABCN epilepsy monitoring.
- **Active Presence of Epilepsy Specialist Neurosurgeon for Level 4 Centers:** Requirement for at least one neurosurgeon who has ABNS board-certification or equivalent or is “board-eligible and tracking toward ABNS certification” with special expertise in epilepsy.



Core Criteria 2023, cont'd

- **Presence of an EMU meeting specific criteria:** The EMU criteria implemented in 2022 are now core criteria, so all centers must have an EMU with:
 - Designated hospital beds where video and EEG data is captured and sent to a central location
 - Remote-control video cameras with 24/7 recording available (not a fixed camera)
 - Trained personnel (in seizure recognition and recording integrity) dedicated 24/7 to only monitoring video and EEG. (Not necessarily required to be traditional EEG technologist)
 - EMU safety-trained inpatient nurses
 - Epilepsy-specific staff training and protocols for seizure safety
 - Clinical decision-making by an epileptologist



2023 Accreditation Updates

- **Referral Relationships Between Level 3 and 4 Centers:** Level 3 Centers going through the full accreditation process must upload proof of adult and pediatric patient referrals depending on the demographic served by the center. Adult/pediatric centers must provide proof of referrals for both adult and pediatric patients.
- **Outpatient Services:** All centers must provide specialized outpatient epilepsy care. This will be implemented via questions in the Center Annual Report.



2023 Accreditation Updates

- **EMU Policy Standards:** NAEC will assess whether the EMU policy document includes certain elements (checklist included in materials)
- **AANN/NAEC Nursing Requirement:** As announced last year, each center must have at least one nurse who has completed the AANN/NAEC training module



2023 Accreditation Timeline

- **November 16, 2022:** NAEC 2023 accreditation process began; Instructions distributed.
- **January 31, 2023:** Deadline to pay dues, complete the Center Annual Report, upload required documents to Box.com, and complete the supplemental survey.
- **February 1-15, 2023:** Review and Revise Period: NAEC staff will review your center's submission for completion and let you know if anything is missing.
- **March 1, 2023:** Final deadline for any revisions or additions. **We cannot accept dues or materials after this date.**



2023 Accreditation Webinar

- NAEC will hold a webinar on the 2023 accreditation process, criteria and timeline in January.
- Please share with your administrators/staff who help with process!



2024/2025 Accreditation Changes

- New criteria to take effect in your center's next full accreditation year:
 - Separate Accreditation for Adult and Pediatric Centers
 - New Core Criterion: Pediatric centers must submit a VEEG report for a patient under age 2



Separating Adult/Ped Centers

- All adult/pediatric centers must separate or choose to be either an adult or pediatric center.
 - If the center separates into adult and pediatric centers:
 - Each center will need to meet all criteria for its desired level independently,
 - each will complete the full accreditation process and would be listed separately in NAEC's member directory.
 - Centers can apply for different levels for its ped and adult centers.



Update on NAEC Guidelines Process

- In 2020, NAEC Board explored options for updating its published epilepsy center guidelines.
- In 2021, NAEC Board approved and initiated guidelines following “evidence-informed, consensus-based process” using a Delphi approach.
 - Hired Consultant
 - Created Oversight Committee to govern process
 - Sought applications from community to serve on panel.



Guideline Panel

| | |
|--|-----------|
| Epileptologists*, ** | 17 |
| People with Epilepsy (PWE) and Caregivers* | 6 |
| Neurosurgeon | 4 |
| EEG Technologists | 4 |
| Neuropsychologist | 2 |
| Neuroradiologist | 2 |
| Epilepsy Nurse Specialist | 2 |
| Pediatric Neurologist | 1 |
| Neuropsychiatrist | 1 |
| Epilepsy APP | 1 |
| Patient Educator | 1 |
| Center Administrator | 1 |
| PANEL TOTAL | 43 |

* 1 level 4 ped epileptologist is also a person with epilepsy

** 9 Epileptologists are APBN Board Certified in Child Neurology, 2 are from level 3 centers

Panel Co-Chairs:

Susan Arnold, MD

Fred Lado, MD, PhD

Panelist names kept confidential until Guideline is complete



Update on NAEC Guidelines Process - 2022

- Training of panel participants
- Developed list of potential recommendation topics (services, personnel, infrastructure, protocols), including call for input from NAEC members and sister organizations
- Literature review and evidence extraction related to potential topics
- Establishment of work groups to draft recommendations



Update on NAEAC Guideline Process - 2023 and Beyond

- Multiple virtual meetings in 2022/2023 to draft recommendations
- Modified Delphi process to finalize recommendations
- Draft manuscript with anticipated submission date for publication in 3rd quarter 2023
- Impact on accreditation likely no sooner than 2024/2025.



Questions?



NAEC Data Collection Pilot



NAEC Data Collection Work Group

- Kate Davis (Chair)
- Adam Ostendorf
- Larry Hirsch
- Sue Herman
- Stephan Schuele
- John Rolston
- John Pollard (Level III Center)



Current State

- Annual NAEAC Center report
 - Group level data collected (e.g. number of intracranial studies)
 - Centers are not required to collect outcome or complication data



Future State

- Expectation that Level III/IV Centers are collecting data regarding patient-specific outcomes, complications
- Engage in center-specific quality improvement
- Obtain more rigorous national data regarding patients (e.g. age, syndrome), surgery types and outcomes
- Enable individual centers to compare themselves to national data/standards



3-Year Data Collection Pilot

- Recruit at least ~10 Level IV and ~5 Level III NAEC accredited centers to participate
 - Regional representation
 - Variation of center sizes
 - Pediatric and Adult representation
- Voluntary participation



Benefits

- Participating centers will be acknowledged on the NAEC website
- Data collection instrument with patient-level data submitted in lieu of completing the associated portions of the prior data collection instrument (group level surgical data)
- Provides a method to internally track surgical patients at each center

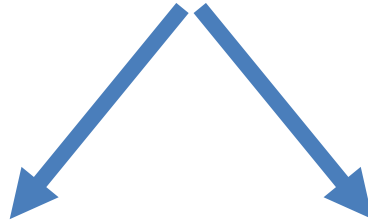


Participating Centers

- Provide feedback on the data collected and data collection instrument
- Provide input on governance (e.g. publication rules, data access)
- Center-specific data will not be published or shared



Launch – 2 options



Start w/ 2023 Accreditation

- Centers can choose to use the new patient-specific data collection instrument for 1/31/2023
- Includes patient surgical/device data but no outcomes
- 1-year outcome data for 2023 surgeries submitted 1/31/2024

Start w/ 2024 Accreditation

- Centers can choose to prospectively start using the new patient-specific data collection instrument 1/1/2023 for the January 2024 NAEC accreditation submission



Data Collection Instrument

- During Pilot year 1 will use Excel
 - Drop down choices and multi-select enabled
 - Allows for centers and NAEAC to automatically calculate the group level data currently collected annually
- Years 2/3 will transition to a web-based data collection instrument
 - Currently exploring best options



Data Platform Examples

| Center ID # | Patient ID | Race | Ethnicity | Sex | Primary Payer |
|-------------|------------|---------------------------|------------------------|------|---------------|
| 1 | 1 | Black or African American | Not Hispanic or Latino | Male | Public |



Data Platform Examples

| Epilepsy Type | Etiology (multiselect) | Seizure types (multiselect) | Syndrome | Previous treatment surgery (including neuromodulation) | Age at Surgery | Year of Surgery |
|---------------|------------------------|-----------------------------|---|--|-------------------|-----------------|
| Focal | Structural | Focal to BTC | Other familial temporal lobe epilepsies | Yes | 19 years or older | 2021 |



Data Platform Examples

| Intracranial EEG | Intraoperative ECOG at resection | Location of resection or device target | Type of resection / disconnection / ablation | Type of device | Complications (multiselect) |
|------------------|----------------------------------|--|--|----------------|--|
| Stereo EEG | No | temporal neocortical | | RNS placement | Readmission, reoperation or prolonged length of stay |



Data Platform Examples

| 12-month Engel Outcome | 12-month ILAE Score | 24-month Engel Outcome | 24-month ILAE Score |
|---------------------------------------|--------------------------------|---------------------------------------|--------------------------------|
| III | 4 | | |

Next Steps

- Express interest via online form
- Two virtual meetings (December and January) with interested and participating centers to launch pilot

