Agenda

• Welcome and NAEC Update
• NAEC Center Data Presentation
• Update on Medicare Policy Changes
• EMU Safety Presentation
# NAEC Board for 2017

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Nathan Fountain, MD, University of Virginia, Charlottesville</td>
<td></td>
</tr>
<tr>
<td>Vice President</td>
<td>Susan Herman, MD, Beth Israel Deaconess Medical Center, Boston</td>
<td></td>
</tr>
<tr>
<td>Secretary/Treasurer</td>
<td>Jerry Shih, MD, University of California, San Diego</td>
<td></td>
</tr>
<tr>
<td>At-large</td>
<td>Susan Arnold, MD, Children’s Medical Center Dallas</td>
<td></td>
</tr>
<tr>
<td>At-large</td>
<td>Anto Bagic, MD, PhD, University of Pittsburgh</td>
<td></td>
</tr>
<tr>
<td>At-large</td>
<td>Fred Lado, MD, PhD, Montefiore Medical Center, Bronx</td>
<td></td>
</tr>
<tr>
<td>At-large</td>
<td>Mary Zupanc, MD, CHOC Children’s, Orange</td>
<td></td>
</tr>
<tr>
<td>Past President</td>
<td>David Labiner, MD, Banner – University Medical Center Tucson</td>
<td></td>
</tr>
</tbody>
</table>
## NAEC 2016 Finances

Total Estimated 2016 Income: $467,997  
Total Estimated 2016 Expenses: $439,959

<table>
<thead>
<tr>
<th>Area of Expense</th>
<th>Estimated Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association Operations and Accreditation</td>
<td>$322,482</td>
</tr>
<tr>
<td>Annual and Board Meetings</td>
<td>$56,885</td>
</tr>
<tr>
<td>Website Renovation and Special Projects</td>
<td>$56,592</td>
</tr>
<tr>
<td>Sponsorships/Charitable Contributions</td>
<td>$4,000</td>
</tr>
</tbody>
</table>
Activities and Accomplishments - 2016

Developed first strategic plan with three main goals:

<table>
<thead>
<tr>
<th>Standard Setting</th>
<th>Advocacy</th>
<th>Member Center Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Completed First Accreditation Cycle</td>
<td>• Analysis of Medicare Regulations</td>
<td>• New Website</td>
</tr>
<tr>
<td>• Capacity Building: New Hire</td>
<td>• Coding Efforts in collaboration with AAN and ACNS</td>
<td>• Webinars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Infographic on Specialized Epilepsy Care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Coding Information for Centers</td>
</tr>
</tbody>
</table>


NAEC Website

National Association of Epilepsy Centers

Assuring quality epilepsy care by accrediting and supporting specialized epilepsy centers.

FIND A CENTER

WHAT IS AN EPILEPSY CENTER?
Epilepsy centers provide a comprehensive team approach to the diagnosis and treatment of epilepsy.

LEARN MORE

FOR PATIENTS
There's hope for people whose seizures are not well-controlled or who have side effects from medications.

ABOUT EPILEPSY CARE

FOR MEMBERS
NAEC provides members resources, expertise, and tools to support the administration of epilepsy centers.

FIND MEMBER RESOURCES
Find an Epilepsy Center

Enter a Zip Code or State

Please enter a ZIP Code or choose a state to find epilepsy center locations.
Center Annual Report

Annual Report Form

Step 1 of 7

Your Contact Information
Please enter the contact information for the person who is completing this report.

Your Name *
Johanna Gray

Title *
Developer

Phone Number *
202-524-6767

Email Address *
info@naec-epilepsy.org
Accreditation Update – 2016

<table>
<thead>
<tr>
<th></th>
<th>Level 4</th>
<th>Level 3</th>
<th>Total # of Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>66</td>
<td>24</td>
<td>90</td>
</tr>
<tr>
<td>Pediatric</td>
<td>37</td>
<td>3</td>
<td>40</td>
</tr>
<tr>
<td>Adult/Pediatric</td>
<td>81</td>
<td>14</td>
<td>95</td>
</tr>
<tr>
<td>Total # of Centers</td>
<td>184</td>
<td>41</td>
<td>225</td>
</tr>
</tbody>
</table>
2016 Accreditation Results

<table>
<thead>
<tr>
<th></th>
<th>Level 4</th>
<th>Level 3</th>
<th>Total # of Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Year</td>
<td>144</td>
<td>26</td>
<td>170</td>
</tr>
<tr>
<td>1-Year</td>
<td>40</td>
<td>15</td>
<td>55</td>
</tr>
<tr>
<td>Total # of Centers</td>
<td>184</td>
<td>41</td>
<td>225</td>
</tr>
</tbody>
</table>

6 centers began the accreditation process and either did not complete it or withdrew their application.
Commonly Missed Criteria

- Missing some protocols
- Missing at least one patient report
- Missing CVs
- Most common deficiency in 2015 for level 4 centers: Center did not perform intracranial monitoring and/or cortical mapping in 2015.
Accreditation Update

• 2016: Centers received either one- or two- years of accreditation.

• 2017: Two pathways to complete accreditation process. All centers must pay dues.
  – Centers with two-year accreditation complete annual report only.
  – Centers with one-year accreditation, applicants, or level 3 centers applying for level 4 accreditation complete report and upload documents.
2017 Accreditation Timeline

November 2016
• Instructions distributed

January 31, 2017
• Deadline to pay dues, complete Center Annual Report, and upload required documents

February 1-15, 2017
• Review and revise period

March 1, 2017
• Final deadline for revisions/additions
• No materials will be accepted after this date
Accreditation Webinars

• NAEC will hold two identical webinars on the 2017 accreditation process, criteria and timeline:
  – Thursday, December 15, 2016 12–1 PM EST
  – Wednesday, January 11, 2017 4-5 PM EST

• Please share with your administrators/staff who help with process!
What’s In Store for 2017 – Coding Issues

• CMS identified CPT Code 95951 as a high volume service, which requires that it be reviewed by the AMA RUC.

• You are critical to that RUC Review

• NAEC working closely with AAN and ACNS on this process. Our members will be asked to complete the survey on physician work (likely this summer).
What’s In Store for 2017 – Member Resources

• NAEC Member Survey – How can we be more helpful to you?
  – Strategies to address common issues with insurers
  – Operational resources and tools
  – Sample protocols and order sets
What’s in Store for 2017 – Standard Setting

• Next iteration of Epilepsy Center Guidelines to be developed by NAEC Board.

• Qualitative review of and enhanced standards for protocols.
Questions?
NAEC Data Update

Susan Herman, MD
NAEC Vice President
EMU Admissions – 2011-2015

Number of Centers

Number Reported

- 2011
- 2012
- 2013
- 2014
- 2015

Number of Beds - 2015

Number of Centers

Number of Beds

0 to 5 | 6 to 10 | 10 to 15 | 16 to 20 | 21 to 25 | 26 to 30 | 31 to 35 | 36 to 40 | 41 to 45 | 46 to 50 | 51 to 60
---|---|---|---|---|---|---|---|---|---|---
82 | 103 | 27 | 9 | 2 | 0 | 0 | 1 | 0 | 0 | 1

National Association of Epilepsy Centers
Average Length of Stay - 2015

Number of Days

0 to 0.9 1 to 1.9 2 to 2.9 3 to 3.9 4 to 4.9 5 to 5.9 6 to 6.9 7 to 7.9 8+

Number of Centers

1 17 42 77 56 26 4 2 0
Average LOS – 2011-2015

Number of Centers

- 0 to 0.9
- 1 to 1.9
- 2 to 2.9
- 3 to 3.9
- 4 to 4.9
- 5 to 5.9
- 6 to 6.9
- 7 to 7.9
- 8+

Number of Days

- 2011
- 2012
- 2013
- 2014
- 2015
Total Resections -2015

Number of Resections

Number of Centers

0 1-2 3-5 6-10 11-20 21-30 31-40 41-50 51-60 61-70 70+
Total Resections – 2011-2015
Total Temporal Lobectomies - 2015

Number of Temporal Lobectomies

Number of Centers

- 0: 44
- 1-2: 37
- 3-5: 54
- 6-10: 38
- 11-20: 38
- 21-30: 8
- 31-40: 4
- 41-50: 1
- 51-60: 1

Number of Centers: 0, 1-2, 3-5, 6-10, 11-20, 21-30, 31-40, 41-50, 51-60

Number of Temporal Lobectomies: 44, 37, 54, 38, 38, 8, 4, 1, 1
Temporal Lobectomies – 2011-2015

Number of Centers

Number Reported

- 2011
- 2012
- 2013
- 2014
- 2015
Total Extratemporal Resections - 2015

Number of Extratemporal Resections

- 0: 77 centers
- 1-2: 50 centers
- 3-5: 39 centers
- 6-10: 33 centers
- 11-20: 16 centers
- 21-30: 5 centers
- 31-40: 4 centers
- 41-50: 0 centers
- 51-60: 0 centers
- 61-70: 0 centers
- 70+: 1 center
Extra-Temporal Resections 2011-2015

Number Reported

Number of Centers

0 1-2 3-5 6-10 11-20 21-30 31-40 41-50 51-60 61+

2011 2012 2013 2014 2015
Corpus Callosotomies - 2015

Number of Centers

Number Reported

- 161
- 40
- 20
- 3
- 1

NAEC
National Association of Epilepsy Centers
VNS Implantations - 2015

Number of Centers

Number Reported

- 0: 33
- 1-10: 119
- 11-20: 45
- 21-30: 20
- 31-40: 7
- 41-50: 0
- 51-60: 1

National Association of Epilepsy Centers (NAEC)
VNS Redos or Battery Change - 2015

Number Reported

Number of Centers

0 1-10 11-20 21-30 41-50

32 110 48 12 5
Total Number of Surgeries - 2015

<table>
<thead>
<tr>
<th>Surgery</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resections</td>
<td>2573</td>
</tr>
<tr>
<td>ICM without Resection</td>
<td>506</td>
</tr>
<tr>
<td>Total</td>
<td>3079</td>
</tr>
</tbody>
</table>

- **Total ATL with ICM**: 29%
- **Total ATL without ICM**: 31%
- **Total EXT with ICM**: 22%
- **Total EXT without ICM**: 18%

- **Extratemporal**: 40%
- **Temporal**: 60%
ATL with ICM 2011-2015

% of ATL with ICM of all ATL

- 2011: 37%
- 2012: 51%
- 2013: 29%
- 2014: 52%
- 2015: 48%
Questions?
NAEC Annual Meeting
Medicare Policy Update

Ellen Riker
NAEC Executive Director
Topics

• 2017 Medicare Physician Fee Schedule
• MACRA – Medicare’s Quality Programs
• CPT Code 95951 to be Reviewed
Medicare Physician Fee Schedule

- Most services provided at epilepsy centers maintain current values or shift by 1 – 2 percent in either direction.
- Conversion Factor slightly increased - $35.89.
- Series of new cognitive service codes that centers may want to incorporate into practice
  - Chronic Care Management
  - Non face-to-face prolonged E&M
  - Care planning for patients with cognitive impairment
MACRA

• Combined quality reporting programs – single bonus/single penalty
• MIPS – Merit-based Incentive Payment Sys.
  – PQRS (60%)
  – EHR (meaningful use) (25%)
  – Improvement Activities (25%)
  – Value-Based Modifier – resource cost (0%)
• Advanced Payment Models – 5% bonus
MACRA

• 2017 considered a transition year.
• Avoid penalty by submitting one measure/one time.
• Partial or full participation to achieve bonus.
• Exclusions for low volume practitioners
• 4% payment reduction for those that do nothing.
• See Summary of Rule on NAEC Website for more information.
CPT Code 95951

- 95951 – vEEG, 24 hour, attended by a technologist – code for inpatient vEEG
  - Used in EMU and ICU
  - Reported for shorter testing with a modifier
- 95951-26 – total relative values (rvus) are 9, with physician work at 6 rvus.
- Code and its values been in place since mid-90’s
CPT Code 95951 Review in 2017

• CMS identifies 95951 as a “high volume” service and seeks specialty society input on whether to review.
  – Claims increased from 2009 – 2014 by more than 100% and the code hasn’t been reviewed since mid-90’s.
  – 2009: 53,000 Medicare claims
  – 2014: 115,000 Medicare claims
  – 2015: 127,000 Medicare claims
What is NAEC Doing

• Working with AAN and ACNS to determine if any coding changes should be requested.
  – 95951 reviewed with the family of long term EEG monitoring codes (95950, 95953, 95956)
  – Recommendations could include code deletions, additions and/or code changes

• Once coding proposal is accepted by AMA CPT Editorial Panel codes are surveyed and reviewed by AMA RUC.
What NAEC Needs from You!

• AAN will distribute a survey on physician work likely this summer. Physicians that perform 95951 should complete the survey.

• Survey evaluates physician time, judgement, skill, and intensity of service.

• Please participate in this survey - NAEC will alert you that the survey is coming, but the distribution is from AAN.

• Coding and rvu changes to take effect in 2019 at the earliest.
Questions?
Sudden Death in Epilepsy (SUDEP) in your EMU

Mark C. Spitz, MD
Professor of Neurology
Chief of Epilepsy Division
University of Colorado
Disclosure Information

Nothing to disclose
SUDEP in the ICU

1. The “Colorado Case” from a personal perspective
2. The risk of SUDEP in the EMU
3. How to convince hospitals to support appropriate surveillance
The “Colorado Case”

- October 2007
- 57 yo right handed man
- Cryptogenic onset age 7
- Daily aura of stereotypical strange feeling
- 2/week with impairment of consciousness
- Drug resistant
- Referred by community neurologist for surgical evaluation
In EMU (Continuous Scalp EEG)

- **1st 4 days**
  - 9 typical subjective auras non-localizable
  - 2 with evolution to dyscognitive seizures with left temporal ictal signature

- **10th Seizure**
  - Again looked Left Temporal
  - Secondary generalized and led to SUDEP
University of Colorado

- >80% Surveillance with EEG tech
- The single tech was in ICU fixing electrodes at the sentinel moment
Went to Literature

- 2 case reports in abstract form
  - Purves 1992
  - Lee 1998
Telephoned 4 colleagues

• “We have all had our case”
• We don’t talk about it
  • Embarrassed
  • Large legal settlement with gag order
• We then became very strict with EMU surveillance
How our case was unique

- Family requested video
- Became a local news story and more details leaked to the internet
- Allowed me to share our experience
I spoke of our case
  I defined it as a SUDEP
  I said EMU SUDEP was much more common than the literature suggests
  In the USA we can’t study it because of Lawyers
  It might be investigated in other countries
Incidence and mechanisms of cardiorespiratory arrests in epilepsy monitoring units (MORTEMUS): a retrospective study

Philippe Ryvlin et al

- Retrospectively collected 25 cases from units in Europe, Israel, Australia, and New Zealand
Risk of SUDEP or near SUDEP in the EMU

- Pre-surgical 9.7 (5.2-16.7)/patient-years VEEG
- 1/20 years if you have 5 patients continuously monitored

Ryvlin 2013
It doesn’t take long to happen

All near SUDEP’s had CPR in <3 minutes

Ryvlin 2013
How to convince hospitals to support appropriate surveillance

- SUDEP in the ICU is not rare
- They don’t hear about them because of our legal system
- Large legal settlements
- Potential bad publicity
EMU Safety
Role of Staffing

Katherine Noe, MD, PhD
Associate Professor of Neurology
Director, EMU + EEG Laboratory
Mayo Clinic Arizona
Need to Record Seizures in a Timely Fashion

Risk of Seizure Related Morbidity and Mortality

AED withdrawal, activating procedures

Monitoring, safety precautions, rescue medications
Adverse Events in the EMU

- Self report survey, AES members, 70 epilepsy centers
- In the last year...

![Bar chart showing percent positive of various adverse events.]

- Falls
- Status
- Postictal Psychosis
- Dislodged Intracranial electrodes
- Laceration
- Pneumonia
- Cardiac arrest
- Fracture
- Concussion
- Death
How do we maintain safety?

• **Staff:**
  – Physician availability, training
  – Nursing training, staff:patient ratios
  – Monitoring of EEG, video/clinical status

• **Equipment:**
  – Seizure alarms, bed alarms
  – Monitors for EKG, pulse oximetry
  – Bed rails, safety belts, etc.

• **Medication:**
  – Plans for AED tapering
  – Protocols for rescue medication
What determines EMU safety practices?

- Accepted standards of care
- Government/certifying organization rules
- Quality
- Cost
- Value
- Reimbursement
- Efficiency
- Comparative safety outcomes data
- Patient tolerability
A consensus-based approach to patient safety in epilepsy monitoring units: Recommendations for preferred practices

Patricia O. Shafer a,*, Janice M. Buelow b, Katherine Noe c, Ruth Shinnar d, Sandra Dewar e, Paul M. Levisohn f, Patricia Dean g, David Ficker h, Mary Jo Pugh i, Gregory L. Barkley j

- AES workgroup
- Delphi process used due to lack of evidence to support guidelines (2009)
- Multidisciplinary, small and large EMUs
- 30 recommendations for preferred practices based on consensus

Consensus Recommendations

• Strong agreement on need for seizure observation by dedicated providers
• No agreement on need for continuous observation in all patients
• Agreement for continuous observation for:
  • invasive electrodes
  • patients at high risk for injury
  • patients undergoing AED withdrawal.
• No agreement on who is watching
• Agreement that family, friends can assist with observation “in some circumstances”

Shafer et al, 2012 Epilepsy Behav
Consensus Recommendations

• Staff should provide seizure first aid for all seizure types
  – Vital sign monitoring
  – Suctioning, oxygen
  – Monitoring of changes in mental status

• IV access established at admission for all patients

• Staff must have immediate access to emergency medication

• Physician available in-house 24h/day to manage seizure emergency

Shafer et al, 2012 Epilepsy Behav
Required Staffing + Protocols

NAEC Level 4 Epilepsy Center

• Continuous patient + EEG observation
• Epilepsy staff nurses on site 24/7
• 24 hour availability of epileptologist
• Examination of speech, memory, motor function, level of consciousness during + after seizure
• Protocol for intervention after excessive number, duration, severity of seizure

What is the evidence that EMU staffing impacts...

...missed seizures?
...falls?
...death?
Use of alarms + automated detectors

- 4:1 RN ratio, video monitor “in view of RN”
- Patient activated alarm missed 70% of CPS/GTC, 30% of PNES
- Automated alarm missed 70% of CPS/GTC, 90% of PNES
- No RN response in 30% CPS, 10% GTC/NES
- 60% missed epileptic seizures had an automated alarm activated
Unit Staffing Models

- Prospective survey of 27 EMUs in the UK
- 272 spells, 177 epileptic, 12% adverse events
- 44% of events unattended by staff
- 27% of events attended within 30 seconds
- Dedicated RN staff was the primary determinate of early attendance
Use of Trained Observers


Seizure response before and after change in staffing
- Pre: weekday EEG tech, nights/weekends nurse assistant
- Post: 24/7 EEG tech

Outcome
- Missed seizures ↓ 77% (p=0.009); 26/492 pts to 6/479 pts
Staffing + Respiratory Events

• Nursing interventions during seizures:
  – Supplemental oxygen
  – Oropharyngeal suctioning
  – Lateral decubitus positioning

• Early intervention in GTC associated with shorter duration of hypoxia and of generalized EEG suppression

• EMU SUDEP/near SUDEP correlated with nocturnal GTC, delay in CPR

• Recommendations: nighttime staffing, ECG + oximetry alarms

Falls

- Publically reported quality metric
- A leading cause of hospital morbidity
- Falls occur in 2-12% of all hospitalized patients/3.44 falls per 1000 patient days
- 1:4 falls associated with injury
- Causes of falls in the EMU:
  - Seizure
  - Post-seizure confusion
  - Baseline neurologic deficits
  - AED associated instability

## Falls in the EMU

<table>
<thead>
<tr>
<th>Study</th>
<th># subjects</th>
<th># falls (%)</th>
<th>Falls/1000 pt days</th>
<th>Adverse Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanders 1996</td>
<td></td>
<td></td>
<td>8</td>
<td>60% abrasion or contusion</td>
</tr>
<tr>
<td>Dobesberger 2011</td>
<td>507</td>
<td>17 (3.4%)</td>
<td>6</td>
<td>2 fracture, 1 epidural hem</td>
</tr>
<tr>
<td>DiGennaro 2012</td>
<td>54</td>
<td>3 (5.5%)</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Atkinson 2012</td>
<td>20</td>
<td>6 (3.5%)</td>
<td></td>
<td>1 contusion</td>
</tr>
<tr>
<td>Liu 2012</td>
<td>230</td>
<td>3 (1.3%)</td>
<td></td>
<td>3 contusion or abrasion</td>
</tr>
<tr>
<td>Arrington 2013</td>
<td>454 (peds)</td>
<td>1 (0.2%)</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>Pati 2013</td>
<td>1116</td>
<td>26 (2.3%)</td>
<td></td>
<td>2 laceration</td>
</tr>
<tr>
<td>Spanaki 2012</td>
<td>479</td>
<td>7 (1.5%)</td>
<td>2.3</td>
<td>1 fracture</td>
</tr>
<tr>
<td>Spritzer 2015</td>
<td>3092</td>
<td>39 (1.2%)</td>
<td>2.81</td>
<td>None</td>
</tr>
</tbody>
</table>
Preventing Falls in the EMU

Table 1
EMU safety and fall prevention initiatives at Mayo Clinic Hospital from 2001 to 2014.

<table>
<thead>
<tr>
<th>Year</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>24/7 continuous observation of video and EEG monitor by trained technicians</td>
</tr>
<tr>
<td></td>
<td>Individualized tapering of antiepileptic medications based on physician judgment</td>
</tr>
<tr>
<td></td>
<td>24/7 continuous staffing by EMU trained nurses, maximum of 4:1 patient:nurse ratio</td>
</tr>
<tr>
<td></td>
<td>Padded bed rails, rails kept in up position</td>
</tr>
<tr>
<td></td>
<td>Use of voluntary safety lap belts when in bed</td>
</tr>
<tr>
<td></td>
<td>Out of bed to stand or walk with 1:1 nursing supervision only</td>
</tr>
<tr>
<td></td>
<td>Out of bed to chair only with nursing or family supervision and use of voluntary safety lap belts</td>
</tr>
<tr>
<td></td>
<td>Exercise with supervision only; seated exercise bike</td>
</tr>
<tr>
<td>2005</td>
<td>Falling Star Program; star magnet placed on room door to alert staff that patient is at risk of falls</td>
</tr>
<tr>
<td>2007</td>
<td>Hourly rounding by nursing staff</td>
</tr>
<tr>
<td></td>
<td>Chair alarm in every patient room</td>
</tr>
<tr>
<td></td>
<td>Updated fall risk signage posted on patient room door</td>
</tr>
<tr>
<td></td>
<td>Days Without Fall signage in staff area</td>
</tr>
<tr>
<td>2010</td>
<td>Patient education video discussing fall risks and prevention shown to every patient on admission</td>
</tr>
<tr>
<td></td>
<td>Stop, Call Before You Fall! signs added in each patient room</td>
</tr>
<tr>
<td></td>
<td>2 persons assisted by nursing staff when out of bed for any patient with a history of drop attacks or seizures with fall</td>
</tr>
<tr>
<td></td>
<td>Monthly review of falls at unit-based team meetings</td>
</tr>
<tr>
<td>2011</td>
<td>Nocturnal bed alarm on all patients</td>
</tr>
<tr>
<td></td>
<td>Nursing team huddles immediately after every fall</td>
</tr>
<tr>
<td></td>
<td>Regularly scheduled multidisciplinary safety rounds (epileptologists, EMU nursing staff, unit supervisor, EEG technologists, epilepsy neurosurgeon, neuropsychologists) with open discussion of any safety events or concerns in the EMU including review of all falls</td>
</tr>
<tr>
<td>2013</td>
<td>MasterVest™ ceiling lift system for all patients when out of bed, including in chair or in bathroom</td>
</tr>
</tbody>
</table>


Fig. 3. Number of falls at Mayo Clinic Hospital per 1000 EMU days and per 100 patients admitted.
Current Staffing Models
ASET/NAEC Survey

• 69 centers, 89% level 4
• Continuous observation of vEEG 75%
• 84% using EEG techs to observe
  – 97% rated as the ideal model
• Monitor watching average 4.6 EMU screens (range 1-10+)
  – 3.96 rated as ideal
• 1/3 watching for 12 hour shifts
  – 70% rated 8 hour shift as ideal
Keys to Implementing a Safety Plan

• Commitment from the team
• Education of the patient before and during admission
• Informed consent/assumption of risk
• Written safety policies
Thank you!