2021 LEAD Capstone Poster Session

Elevation of Neurology trainee education by enhancing inpatient and outpatient subspecialty exposure

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Abstract

- There is difficulty striking a balance in Neurology resident training between inpatient experience and outpatient subspeciality exposure
- This proposal is to create a two-pronged approach to elevating the trainee experience at the North Texas Veteran's Affairs Health Care Center by:
  - Restructuring education
  - Improving logistics

Objectives

- Help provide subspecialty exposures earlier in residency training to help guide career decisions
- Empower residents to be a well-rounded neurologist
- Optimize and provide a consistent learning experience amongst groups of rotating residents
- Foster subspeciality research interests or quality improvement initiatives

Background Information

- Neurology resident training is skewed toward inpatient exposure
  - 2017 AAN survey showed 90% of graduating Neurology residents will pursue a fellowship[1]
  - However, nearly half of respondents reported inadequate (outpatient) sub-specialty exposure to make a fellowship decision[1,2]
  - A possible explanation for [pursuing fellowship] is a lack of confidence to practice general neurology on graduation[1]

Background Information

- UTSW Neurology residents rotate at multiple sites
  - Non-VA sites:
    - Trainees are part of large treatment teams
    - Learning is often service-based
    - Primary services may require trainees to assist in administrative tasks (traditionally, the role of a case manager or social worker)
  - VA inpatient consult service
    - Focus is on Neurology as a specialty consulting service
    - Trainees are not burdened by administrative duties
    - Unstructured time in resident schedule
      - Students and off-service resident rotators are on the VA consultation team, thus allowing for completion of consults in a timely fashion
      - Neurology residents often have time available after rounds for additional learning opportunities

Specific Aims

- Create structured inpatient experiences with formalized teaching
- Involve residents in neurophysiology procedures
- Incorporate outpatient subspecialty clinic exposures
- Improve logistics to minimize inefficiencies
- Provide appropriate equipment for efficient care and to enhance learning

Project Plan

Educational Restructuring

- Clarify rotation objectives
- Learn the role of a specialty consultant
- Exposure to neurologic issues unique to the veteran population
- Educate about the VA care model
- Monthly case conference with medicine residents to highlight important neurologic topics
- Weekly inpatient Neuroradiology and EEG rounds
- Resident involvement in neurophysiology studies (EEG, EMG/NCS)
- Six outpatient subspecialty clinics: Neuromuscular, Epilepsy, Headache, Movement Disorders, Neuro-oncology, Multiple Sclerosis
- VA-unique clinical opportunities: Spinal Cord Injury & Traumatic Brain Injury

Track metrics:

1. Resident evaluation

2. Objective scores

Improve Logistics

- Streamline credentialing process
- Remote access capabilities
- Neurology “on call” pager
- Update computer software and equipment
- Install radiology viewing station: screens & software
- Creation of a VA Handbook to outline VA-unique protocols, orders, and resources

Application of What You Learned at LEAD

- Development of a forward-looking curriculum
- Implementing practical tools for organization and time management
- Effective communication skills
- Identify and engage key stake holders

Proposed Budget

- Protected time to develop curriculum
- Equipment costs: computers, monitors, software
- VA Handbook printing, software application

Innovation and Significance

- Once proven successful, this model could be extrapolated to other specialties and training sites
- Ensure more standardized learning experiences despite variation in attendings and patient cases
- A large portion of the proposal is free and already available only needing better utilization and structure
- Incorporation of subspecialty exposures earlier in training to help guide career decisions

References

1. Neurology residency training in 2017 A survey of preparation, perspectives, and plans. Abhimanyu Mahajan, Carolyn Cahill, Eugene Scharf, Sahil Gupta, Stephanie Ahrens, Elizabeth Joe, Logan Schneider. Neurology Jan 2019, 92 (2) 76-83; DOI: 10.1212/WNL.0000000000006739
2. Enhancing Resident Exposure to Outpatient General Neurology through an Ambulatory Urgent Care Rotation (4207). Nicole Morgan, Helen Badu, Harold Weinberg, Arielle Kurzweil, Neurology Apr 2020, 94 (15 Supplement) 4207

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