

# The Clinical Skills Examination Training Program (CSET): An Interactive Training Exercise for Evaluators

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### **OBJECTIVE**

To develop a case-based training program to guide the evaluation of residents using the Neurologic Clinical Skills Evaluation (NEX) forms

#### BACKGROUND

- •The American Board of Psychiatry and Neurology (ABPN) requires that adult neurology residents demonstrate competency in medical interviews and the neurologic examination in five areas: Critical Care, Neuromuscular, Neurodegenerative, Ambulatory, Pediatric Neurology
- •ABPN certified neurologists are required to perform these assessments.
- •To date, there is no training program to guide evaluators and improve inter-rater reliability.
- •The AAN commissioned a group of program directors to develop a training program.

#### **METHODS**

- •The CSET committee developed 50 vignettes highlighting examples of resident error during an observed examination. Ten were selected for the training session. Six sessions were conducted (PD meeting Fall 2010, PD meeting Spring 2011, Michigan, Baylor, Beth Israel, Kaiser Permenante)
- •During the training session, evaluators were provided with pass/fail guidelines based on the ability of the resident to perform a history and examination that provides <u>sufficient information</u> to generate an appropriate differential diagnosis and treatment plan.
- •Participants voted using an audience-response system. After initial voting, the presenter showed the voting results to the audience and led a discussion amongst the participants on their rationale for their ratings. A re-vote was then performed.
- •Improvement was defined as a change in the passing rate in the desired direction for each item.
- •A paired t-test was used to compare the passing rate for all items combined and rater confidence before and after the intervention. The Wilcoxon rank-sum test was used to compare passing rates between subgroups of participants.

#### **DISCLOSURES**

Dr. Shanker has received consulting fees from Teva. There are no other disclosures.

## RESULTS

- •Data from five of six sessions were available. There were a total of 146 participants. 108 completed the entire session.
- •Practice information was available for 71 respondents: 41 (58%) were faculty, 30 (42%) were trainees. Of faculty participants, 32% served as ABPN examiners. The majority of faculty participants (78%) were in practice >10 years.
- •The aggregate improvement for all items was 10.3% (95% confidence interval, 5.8-14.9%; p <0.001). There was no difference in number of changes when comparing ABPN examiners v. faculty (p=.96), faculty <10 yrs practice v. faculty ≥ 10 yrs practice (p=.09), and trainees v. faculty (p=0.8)
- •Of 86 participants who reported confidence in assessing residents using the NEX pre and post session, there was a significant improvement in confidence after the session. (5.0  $\pm$  2.3 v. 6.7  $\pm$  2.4, p< 0.001)
- •Trainees were more likely than faculty to assign a pass grade either pre- or post-session (40% v 33%, p=.01). Additionally ABPN examiners were less likely to assign a pass than faculty who did not serve as examiners. (33% v. 40%, p=.009)

#### CONCLUSIONS

- Participants of the CSET program were able to improve their ability to rate in the desired direction. The outcome was similar regardless of the years of practice or experience as an ABPN examiner.
- •Participants of the CSET program were more confident in their abilities to use the NEX evaluation to assess residents after the training session.
- •The CSET program may be a helpful tool for training programs who must assess resident exams using the NEX. It is available on the AAN website in the program director's toolbox. <a href="https://www.aan.com/go/education/directors/consortium">https://www.aan.com/go/education/directors/consortium</a>

#### REFERENCES

- 1. American Board of Psychiatry and Neurology. NEX 1 form. Available at: American Board of Psychiatry and Neurology. NEX 1 form. <a href="http://www.abpn.com/downloads/forms/ABPN">http://www.abpn.com/downloads/forms/ABPN</a> NEX form v1.pdf.
- 2. American Board of Psychiatry and Neurology. NEX 2 form. Available at: American Board of Psychiatry and Neurology. NEX 2 form. http://www.abpn.com/downloads/forms/ABPN\_NEX\_form\_v2.pdf.
- 3. American Board of Psychiatry and Neurology NEX instructions. Available at: American Board of Psychiatry and Neurology. CSE requirements. <a href="http://www.abpn.com/downloads/forms/NEX%20Clinical%20Skills%20Evaluation%20Instructions.pdf">http://www.abpn.com/downloads/forms/NEX%20Clinical%20Skills%20Evaluation%20Instructions.pdf</a>.
- 4. Schuh L, London Z, Neel R, et al. Education research: Bias and poor inter-rater reliability in evaluating the clinical skill examination. Neurology 2009; 73:904-908.