BACKGROUND

The clinical assessment of medical students in the emergency department (ED) is a highly variable process in which clerkship directors (CD) create and use institution-specific tools, many with unproven reliability or validity, to assess students of differing experience and from different institutions.1,2

OBJECTIVES

Standardization of assessment practices and tools of assessment could enhance grading, improve the reliability and validity of information on the standardized letter of evaluation (SLOE) for program directors, and most importantly, provide consistent, valid and reliable formative feedback for students.

DESIGN

A consensus conference on end-of-shift assessment of medical students in the ED was held in the Clerkship Directors in Emergency Medicine (CDEM) track of the Council of Emergency Medicine Residency Directors (CORD) Academic Assembly in Nashville, TN, in March 2016. Themes surrounding the practice of end-of-shift assessment of medical students were derived from small-group discussions among the executive committee and refined at a large-group planning meeting at the 2015 CORD Academic Assembly (Table).

In May 2015, theme leaders were identified and tasked with recruiting relevant stakeholders to their respective small groups, synthesizing the background literature and articulating key issues surrounding their theme. Simultaneously, the executive committee derived “building blocks” of assessment from foundational source materials.3-9 Each contained the following: name, background and definition, benefits/drawbacks/alternatives to use in the clinical setting, areas of
overlap with other domains of assessment, examples of how
an assessment of this domain would appear on an assessment
form in three formats (narrative, dichotomous, and an
anchored ratings scale), and references.

On Day 1 of the conference, participants were divided into
small groups. Each theme leader met with each small group
providing background and guiding further discussion. Predeter-
determined questions with discrete responses were asked within
each small group. During the second morning of the conference,
the “building blocks” were discussed. Participants voted using an
electronic audience response system (www.polleverywhere.com).

**IMPACT/EFFECTIVENESS**

Sixty people participated on Day 1 and 70 participated on
Day 2 of the conference. Participants agreed on 63.4% of the
theme questions and 87.5% of the domains of assessment. The
group felt that both norm- and criterion-based assessment
should be incorporated, EM faculty and senior residents
should be allowed to complete the form, the unit of
observation should be a single shift, and that 6-10 shifts would
be adequate to accurately assess a student. Medical students
(MS3) and (MS4) should be assessed using the same tools, but
grading should differ. Learners with varying experience within
a year present a challenge; however, this is not prohibitive to
using a common form or grading rubric. Clinical assessment
data should be translated into a grade and onto the SLOE. Of
16 domains of assessment presented, nine were included, five
omitted, and two did not reach consensus. All domains should
be assessed via rating scale except professionalism, for which
a combined narrative/dichotomous approach was preferred.

Based on the variability of assessment forms currently in
use, we anticipated a large range of opinion on the topics
presented. Instead, we were surprised by the strength of
consensus on most topics.

Limitations to this process include that only approximately
half of the CDEM Academy membership was present, despite
extensive advertisement about the conference. Additionally,
voting may have been affected by the order in which the building
blocks of assessment were presented. Participants may have been
more apt to comment later once they had a better understanding
and more familiarity with how the materials were presented and
referenced. We attempted to mitigate this effect by providing the
materials to participants beforehand and providing preparatory
background material in discussion groups. Finally, participants
were able to change their vote while group discussion occurred.
Large-group discussion did sway votes; however, we feel this
culminated in a better representation of the group’s actual
opinions. Discussion helped guide the decision in real time, and
allowed minority opinions to be heard and considered.

This conference was a critical first step in the development
of national guidelines and a standardized clinical assessment
tool in EM. The education and discussion that the conference
provided elevated the level of conversation around assessment
in our specialty. The creation of a reliable and valid assessment
tool will provide a critical method for measuring outcomes in
educational innovations and research in the future.

Please see Appendix for CDEM Consensus Conference on End-
of-shift Assessment of Medical Students: Executive Summary.

**REFERENCES**

   Medicine Medical Student Clinical Evaluation Forms: A Taxonomy.
   Students in Emergency Medicine Clerkships: A Survey of Current
   milestones in emergency medicine. Acad Emerg Med. Aug
   2014;21(8):905-11.
4. AAMC. Core Entrustable Professional Activities for Entering
   Residency--Curriculum Developers Guide. Available at: https://
   members.aamc.org/webui/upload/core%20EPA%20Curriculum%20
5. Tews MC, Ditz Wyte CM, Colman M, et al. Implementing a Third-
   Year Emergency Medicine Medical Student Curriculum. J Emerg
   taxonomy of competency domains for the health professions and
8. CORD. Standardized Letter of Evaluation in Emergency
   DOCUMENTLIBRARY/SLOR/SLOE%20Standard%20Letter%20