Using Simulation to Assess Clinical Skills in the Emergence Medicine Clerkship

Title

Permalink

https://escholarship.org/uc/item/55c294vc

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 15(5.1)

ISSN

1936-900X

Authors

C, Heitz
Prusakowski, M

Publication Date

2014

License

CC BY-NC 4.0

Peer reviewed
Using Simulation to Assess Clinical Skills in the Emergence Medicine Clerkship

Heitz C, Prusakowski M/Virginia Tech Carilion, Roanoke, VA

Introduction: Shift evaluations and multiple choice question (MCQ) exams are frequently used to assess students. Evidence of their reliability and validity as evaluations of clinical skill is weak. Forms of clinical skill assessment include oral boards-style cases and OSCEs. Simulation assessments using global scales and checklists can reliably evaluate learner behavior and skills.

Educational Objectives: To develop an assessment tool to more accurately evaluate medical students’ clinical skills during the required EM clerkship.

Curricular Design: We developed a dual-format assessment tool including a yes/no checklist and a global rating scale (GRS) of the student’s approach to a simulated patient. The checklist was developed from Level 1 EM Milestones behaviors that the authors deemed most appropriate for assessment by simulation. In addition, some L2 behaviors were included to allow for identification of high performers. The GRS was developed using a Likert scale to assess performance in the areas of information gathering, physical exam, diagnostic testing, patient assessment, patient management and pharmacology. Students each performed the same 3 standardized simulation cases: altered mental status, chest pain, and shortness of breath.

The tool underwent modification after initial use on 10 students. Checklist items were changed from unacceptable/good/excellent to yes/no/NA scoring, items not easily evaluated during simulation were removed, and the GRS Pharmacology section was added. Some GRS anchors were modified to better define expectations based on EM Milestones (Figure 1).

Impact/Effectiveness: MCQ exams and shift evaluations do not completely evaluate students' clinical skills. We have developed an assessment tool for clinical performance on standardized simulation cases in the EM clerkship. Future efforts will determine inter-rater reliability of the assessment tool and compare performance to shift evaluations and standardized written examination scores.