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Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

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Permalink

<https://escholarship.org/uc/item/6j2211kp>

Journal

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

ISSN

1936-900X

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Publication Date

2014

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81 Development of an Objective Structured Clinical Exam for Competency-Based

Assessment of Medical Students in an Emergency Medicine Clerkship

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Introduction: There is increasing emphasis on competency-based assessment in medical education, as evidenced by initiatives like the Milestones. Currently, assessment often relies on knowledge tests or on subjective measures like “shift cards.” These tools may not measure students’ ability to independently assess and manage acutely ill patients, core skills emphasized in EM. We developed an objective structured clinical exam (OSCE) to assess students’ competency in this area.

Objectives:

- Demonstrate a systematic approach to assessment and stabilization of acutely ill patients
- Perform essential diagnostic and management procedures
- Communicate effectively with patients and care team

Curricular Design: Our OSCE focuses on EM competencies defined by the Milestones, and consists of three stations: two manikin and one standardized patient (SP). In each station, students are examined individually, and must independently assess and manage the “patient.” Each station has a confederate “nurse” assisting the student and facilitating case progression. All stations are scripted to ensure consistency. Students are graded using standardized checklists including knowledge and skill items.

- Coma/overdose (manikin): young man found unconscious, ethanol/pill bottles in pockets. Requires dextrose, naloxone, intubation, overdose treatment.
- PE/cardiac arrest (manikin): woman with dyspnea after knee replacement, initially stable but arrests. Requires PE diagnosis, CPR, rhythm recognition, defibrillation.
- Trauma (SP): young woman with abdominal pain after assault. Requires trauma exam, domestic violence screen, C-spine clearance, abdominal ultrasound.

Impact: While psychometric data are not yet available for our OSCE, we expect that it will undergo revision over time to optimize reliability and validity. This exam will provide valuable insight into students’ ability to independently assess and manage acutely ill patients, as well as objective data on students’ attainment of key Milestones.