Development and Implementation of a Milestone Training and Evaluation System for the Simulated Clinical Encounter in Undergraduate Medical Education

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BACKGROUND
For clinical skills training in the preclinical education at Texas College of Osteopathic Medicine, we constructed a system of developmental milestones to coach and assess clinical skills during simulated patient encounters. Via monthly formative assessments of simulated patient encounters, we use the milestone system to track the progression of competency in EPA 1-4 throughout the second year.

Our primary goal was to formulate a training system that supported mentoring students along a developmental pathway and that could reliably be used by faculty to define and assess varying milestone levels of skills as students prepare for supervised patient encounters. Via monthly formative assessments of simulated patient encounters, we use the milestone system to track the progression of competency in EPA 1-4 throughout the second year.

OBJECTIVES

Objective 1: Employ a system of developmental milestones to assess performance of EPA 1-4 in a simulated patient encounter.

Objective 2: Document progression of competency in EPA 1-4 in year 2 of undergraduate medical education.

METHODS

- We approached the task with the conceptualization that clinical skills follow an identifiable developmental trajectory from the novice to the advanced beginner.
- We used the existing ACGME Milestones and AAMC/AACOM EPAs to guide our work.
- We submitted draft version to a panel of physicians and psychologists for comments, making revisions until consensus was achieved.
- Across each of the two semesters of our second year medical practice course, we observed students gradually improve their clinical skills according to our milestone system across various simulated clinical encounters.
- Data from the first year is currently under analysis. After the first implementation year, we refined the milestones based on the experiences and feedback of students and faculty.

CONCLUSIONS

- The TCOM milestone system is effective in assisting students to develop increasing proficiency in clinical skills.
- It is also useful for identifying the specific clinical training needs of individual students so that they can receive additional targeted coaching to bring them up to expected milestone levels.
- Future studies will examine data from our first implementation year to our current implementation year to verify that refinements were effective.
- Future studies are planned to validate the milestone levels of the assessment tool.

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