Creative group performances to assess core competencies in a first-year patient-centered medicine course

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Introduction: A novel assessment of systems-based practice and practice-based learning and improvement learning objectives, implemented in a first-year patient-centered medicine course, is qualitatively described.

Methods: Student learning communities were asked to creatively demonstrate a problem and solution for health care delivery. Skits, filmed performances, plays, and documentaries were chosen by the students. Video recordings were reviewed for themes and the presence of course competencies.

Results: All performances demonstrated not only the index competencies of team work and facilitation of the learning of others, but many other core objectives of the course. The assignment was rated positively both by the faculty and the students and has been added to the assessment modalities of the course.

Keywords: patient-centered medicine; core competencies; creative performances

Patient-centered medicine is a multidisciplinary, interdepartmental course in the preclerkship curriculum. Themes of patient-centered care are introduced in the first-year curriculum and then woven throughout the medical school experience. Large and small group teaching in stable learning communities of 10–11 students are complemented by outpatient office and community site visits. Twenty-seven specific objectives based on the six Accreditation Council for Graduate Medical Education (ACGME) core competencies have been identified (Fig. 1). Assessment strategies include facilitator observation and feedback in small group discussions, reflective portfolios, performance on objective structured clinical evaluations (OSCE), professionalism forms and peer evaluation. The measurement of the established objectives, demonstration of effective performance on a health care team (systems-based practice) and facilitation of the learning of other students and health care professionals (practice-based learning and improvement), challenged the authors to develop a modality unique to the culture of the institution and the course.

The ACGME Toolbox of Assessment Methods® recommends the following modalities for systems-based practice and practice-based learning and improvement: checklists, global ratings, portfolio, OSCE, and 360° evaluations. The teaching and measuring of these competencies continue to be the most challenging for residency program directors (1). There are limitations to using some of these tools in the preclerkship undergraduate curriculum. An OSCE for these competencies requires a significant knowledge base (2), and performance rating systems are limited by the number of observers (3). Given the limited knowledge base of first-year medical students, the abbreviated time for clinical experiences, as well as the challenges of teaching team work and measuring its effect (4, 5), a unique way of assessing team performance was needed. Traditional assessments did not address the developmental, individualized, and team building aspects of the course (5), and current measurements have not been found to be consistently reliable or valid (6). Individual creative projects have been used in the basic science and clinical curricula to explore professional, personal, and ethical development (7–9) and to instill flexibility and creativity among trainees (10). However, group creative performances have not been described.

Methods
Each learning community was asked to identify a problem related to health care delivery, craft a solution,
and demonstrate it in a 10-minute creative performance to occur within a month. The following guidelines were presented to the class (Fig. 2). Each of the 16 groups performed in front of all students and all small group facilitators. Patient-centered medicine is a pass/fail course. The creative group performance and rating was included in the overall course grade. Students needed to achieve a score of 1 on the performance to pass the course. The facilitators rated the students on a scale of 0–2 (0 = group performance reflected limited thought and preparation; 1 = the group adequately fulfilled the assignment of addressing a topic and making a presentation; 2 = group presentation reflected good knowledge of the topic, a collaborative effort among group members and a creative presentation). Video recordings of the performances were viewed by the course directors (authors) for content and assessment of the index competencies for the exercise: demonstrating effective involvement on a health care team and facilitating the learning of other students and health care professionals. Additionally, the videos were reviewed for demonstration of all of the course competencies. The mean number of competencies for each performance was also calculated as well as the student evaluation of the experience.

Results
The genre included one taped documentary, two formal plays, and 13 skits, with clear references to pop culture in one-third of the performances (Fig. 3). The mean performance score was 1.8 with a range of 1–2. All of the performances demonstrated the index competencies: demonstrating effective involvement on a team and facilitating the learning of others. The mean number of competencies demonstrated in each performance was 10. All groups demonstrated three competencies: respectful and effective communication, use of the explanatory model, and non-verbal communication. Other frequently demonstrated competencies included demonstration of
accountability to patients and profession (13), commitment to ethical principles (12), recognition of personal limitations (10), and gathering essential and accurate information (9).

Ninety-three percent of students reported that all or most students played a role in performance creation. The workload was reasonable with most spending 5–10 hours on the project.

Conclusion
The reactions of many of the students to this assignment included surprise at something so different from a multiple choice exam, dread of performance, and reluctance to participate in something seemingly sophomoric. The students truly amazed us with their creativity, humor, humanity, and performing arts skills, all of which we believe to be surrogates for their internalization of the important themes of patient-centered care and their ability to work effectively in teams. Both students and faculty called the day the best of the year, and it has become part of the medical school curriculum. ‘An excellent experience and worthy wrap-up of a course integral to my education’ sums up the student feedback. Creative performance can be used to foster collegiality and team work and to assess multiple core competencies in the first-year curriculum.

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