Because we finished the development of all assessment tools for the JeffMD students, we were able to provide a plethora of contextual information to students and faculty about sequential progress toward competence of knowledge and skills in the JeffMD curriculum. We also were able to provide the frequency of assessments that addressed a particular competence and the average competence score for the individual student and the cohort. Our assessment system used a variety of rating scales, as such, we were able to summarize student performance using an average score. For example, during the preclerkship years, a practice-based learning and improvement subcompetency was assessed 5 times, with an average score of 94.

Discussion: The development of competency-based assessment tools has significantly changed our conceptual approach to assessment. We discovered that many of the faculty were already providing bedside feedback to students, however, the feedback was informal and may or may not have been specifically focused on providing guidance toward all competencies. The documentation of the feedback via JeffDOT and the ability to collectively view all formative assessments in one place, JeffCAT, increased the student and faculty understanding of student level of competency. We also discovered that there is additional room for us to grow in faculty development.

Significance: The thorough design and evaluation of our use of competency-based assessment tools suggest we are on track for a hybrid system. Our system does not use the competency assessment tools to make decisions regarding graduation, but we use the tools to monitor progression toward successfully achieving competence. There are some competencies for which we struggled to find an appropriate method for formative assessment. We also identified competencies that may be written at a level slightly above where the undergraduate medical student is able to demonstrate competence. Our goal after identifying gaps is to provide a set of SKMC graduation milestones that can be indirectly linked to the Accreditation Council for Graduate Medical Education Transitional Year Milestones. As such, providing a seamless transition from UME to residency education.

We propose that drama, specifically Forum Theatre, is a modality well suited for resident engagement, discussion, and reflection of complex professionalism challenges such as mistreatment in the CLE. Forum Theatre “plays” are based on realistic conflict scenarios geared toward problem solving at a moment of crisis. Learners become participating spectators who watch, respond, and step into the play exploring potential solutions. Throughout, the facilitator debriefs with participants and solidifies key messages. The purpose of this pilot is to explore the use of Forum Theatre to address mistreatment concerns among residents.

Approach/Methods: This project was undertaken in obstetrics–gynecology (n = 10) and urology (n = 18). It consists of 2 phases: first, a focus group with residents to identify mistreatment that they experience and that could subsequently be used in the Forum Theatre, and second, the enactment during regularly scheduled 1-hour didactic sessions. Residents develop and enact the scenarios and through guided facilitation generate their own solutions. Residents completed an anonymous retrospective pre–post survey and a 6-month follow-up assessing knowledge, attitudes, and self-reported and observed behaviors. The instrument was modeled after Didwania et al. Data were analyzed using 2-sample paired t tests and 2-proportion z-tests for dichotomous variables. Institutional review board exemption was obtained.

Results/Outcomes: Each department created their own mistreatment scenario, one related to bullying and the other to gossiping. The survey response rate was 93%. Most respondents (92%) would recommend Forum Theatre to colleagues for teaching professionalism issues. Sixty-two percent of participants stated that their behavior changed as a result of participating in the program. After 6 months, self-reported mistreatment behaviors decreased including “making fun of others” (63% to 38%, P = .04), sending “disparaging texts” (54% to 27%, P = .02).

Observed mistreatment behaviors also decreased by 39% to 56%. Confidence in ability to recognize and intervene when mistreatment was directed at them or others increased immediately after the intervention from 3.6 ± 1 and 2.6 ± 0.9,
Innovation Abstracts

The AMA Graduate Profile: Tracking Medical School Graduates Into Practice

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Purpose: Medical schools aim to train competent physicians that meet the health care needs of society. Yet beyond the results of the residency match, medical schools often do not know what kind of workforce they are creating or how their graduates perform in practice.

Here, we describe the creation of a personalized Graduate Profile for 32 medical schools in the American Medical Association (AMA) Accelerating Change in Medical Education grant consortium. The Graduate Profile addressed 3 core questions: (1) Workforce: Where do graduates practice and to which communities do they contribute?, (2) Clinical Exposure: What prescriptions are graduates ordering for various patient types?, and (3) Quality of Care: What are graduates’ standardized quality measures?

Approach: The Graduate Profile links the AMA Physician Masterfile—a nationwide database of physicians in training and practice—to multiple public data sources spanning undergraduate medical education, graduate medical education (GME), and post-GME practice using individuals’ unique national provider identification numbers. Medical students graduating from 32 institutions between 1981 and 2012 were included (n = 120,426 graduates). Graduates’ demographics, self-designated practice specialty, practice location, and practice setting in the year 2019 were tabulated. Specialties were coded as primary care or not primary care. Practice locations were geocoded to identify practice in underserved or rural areas. Additionally, Centers for Medicare and Medicaid Services (CMS) utilization data and Merit-based Incentive Payment System (MIPS) standardized quality scores from the year 2017—representing over 140 million Medicare beneficiary interactions—were tabulated.

Outcomes: Graduate Profiles were delivered to 32 medical schools in November 2020. A webinar and 2 office hours were held to support rollout of the profiles. The profiles compared each institution’s graduates from 1981 to 2012 with an average across all medical schools in a series of tables and figures. Trends in graduate gender distribution, in-state retention, practice specialty, primary care practice, office-based practice, and underserved practice were visualized and benchmarked against all 32 medical schools. For example, practice in primary care specialties peaked in the late 1990s and has since declined. Practice in medically underserved communities remained largely constant across 3 decades of graduate cohorts, suggesting that programmatic and policy efforts have not dramatically increased underserved practice.

Average MIPS scores were delineated by specialty and over time. Overall, more recent graduates were associated with higher MIPS scores. Finally, graduates’ most prescribed medications to Medicare beneficiaries were tabulated. Across these 32 medical schools, the most prescribed medications were hydrocodone–acetaminophen, lisinopril, atorvastatin, omeprazole, and levothyroxine; as expected, substantial prescribing differences were observed by specialty. Each institution’s personalized profile differed, with substantial interinstitutional differences in most assessed areas.

Discussion: Harnessing the AMA Physician Masterfile and multiple open data sources, this project provided medical schools with detailed profiles of their graduates—some of whom had been in practice for nearly 40 years. The project relied on data science and informatics approaches, using a

References

Discipline: The use of Forum Theatre during regularly scheduled didactic times is not only feasible but also well received among residents. This evaluation demonstrates sustained self-reported behavior changes (Level 3a). In contrast to the study by Didwania et al., residents reported behavioral changes that were sustained over 6 months. Plans are underway to upscale this approach to other medical specialties in our institution.

Significance: The humanities engender self-reflection and discussion surrounding difficult topics. The unique power of the Forum Theatre is that it is tailored to the groups’ needs and provides opportunities for experimentation and peer influence. Such modalities offer opportunities for reflection and behavior change regarding other sensitive, professionalism, and communication topics such as social justice, power differentials, and conflict management.

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respectively, to 4.21 ± 0.8 (P = .005) and 3.7 ± 0.86 (P < .001). The change was sustained at 6 months: 4.25 ± 0.15 (P = .006) and 3.54 ± 0.16 (P = .004). In the comments, residents remarked on the benefits of communication in this forum, dealing with program hierarchy and it being an engaging way to strategize solutions to complex situations.

For example, “...the acting made it feel like something we could actually talk about without it being us.”

Discussion: The use of Forum Theatre during regularly scheduled didactic times is not only feasible but also well received among residents. This evaluation demonstrates sustained self-reported behavior changes (Level 3a). In contrast to the study by Didwania et al., residents reported behavioral changes that were sustained over 6 months. Plans are underway to upscale this approach to other medical specialties in our institution.

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