Residency (Core EPA) pilot and (2) changes in entrustment decision-making outcomes, between initial attempt at entrustment decision making for the graduating class of 2019 and the second entrustment decision-making cycle for the graduating class of 2020.

**Approach/Methods:** Four Core EPA pilot schools introduced EPAs frameworks and tested entrustment decision-making processes on a formative basis (for program evaluation purposes only) for some or all students in their 2019 and 2020 graduating classes. Schools considered the same EPAs (4–13 per school) in each year. For each EPA considered, a trained entrustment group (TEG) made an entrustment determination (“progression away from readiness,” “progression toward readiness,” “ready to be entrusted,” or “indeterminate” [no entrustment decision made]) for each student and recorded the number of workplace-based assessments (WBAs) available for review. With institutional review board approval or exempt determination by the Association of American Medical Colleges (AAMC) and each participating school, individual-level data were de-identified and merged into a multischool database. We used the chi-square tests to analyze between-group differences (2-sided P < .05 considered significant).

**Results:** The 4 schools made 4,525 (2019: 2,296; 2020: 2,229) EPA-specific entrustment determinations for 732 students (2019: 349; 2020: 383). The proportion of all 4,525 entrustment determinations that were entrustment decisions (including decisions of “progression away from readiness,” “progression toward readiness,” and “ready to be entrusted”) increased (P < .001) from 75% (1,731/2,296) in 2019 to 90% (2,010/2,229) in 2020. These proportions varied on an EPA-specific basis from 20% to 83% in 2019 and from 62% to 99% in 2020 (data not shown), increasing from 2019 to 2020 for all EPAs (each P < .05, data not shown) except EPA 8 (handovers: 93/125 [74%] vs 99/127 [78%]; P = .508) and EPA 12 (procedures: 104/229 [45%] vs 141/228 [62%]). Proportions remained unchanged (each P > .05) for EPA 4 (orders: 9/100 [9%] vs 6/82 [7%]), EPA 5 (documentation: 131/204 [64%] vs 152/224 [68%]), EPA 7 (evidence-based medicine: 164/220 [75%] vs 144/196 [73%]), EPA 8 (9/125 [7%] vs 12/127 [9%]), EPA 9 (collaboration: 120/220 [55%] vs 116/196 [59%]), EPA 10 (urgent care: 2/100 [2%] vs 3/82 [4%]), EPA 11 (informed consent: 1/100 [1%] vs 0/82 [0%]), and EPA 13 (safety: 0/125 [0%] vs 0/127 [0%]). The proportion of all 4,525 determinations for which there were ≥4 WBAs available to the TEG in making their determinations increased (P < .001) from 20% (452/2,295) in 2019 to 42% (938/2,229) in 2020. EPA-specific proportions varied from 0% to 76% in 2019 and 0%–91% in 2020 and increased from 2019 to 2020 for EPAs 1–3, 5–7, 9, and 12 (each P < .001, data not shown) but not for EPAs 4, 8, 10, 11, and 13 (each P > .05, data not shown).

**Discussion:** Proportions of determinations that were entrustment decisions, proportions of determinations that were “ready for entrustment” decisions, and proportions of learners with ≥4 WBAs all increased overall in 2020 vs 2019, and on an EPA-specific basis for EPAs 1–3 and 6. We also observed proportional increases in 2 of these 3 measures for EPAs 5, 7, 9, and 12. In contrast, determinations for EPAs 4, 8, 10, 11, and 13 remained challenging as WBAs availability did not increase and, although more entrustment decisions were made for EPAs 4, 10, 11, and 13 in 2020 vs 2019, >10% of learners were deemed ready for entrustment in each of these 4 EPAs in either year.

Correspondence should be addressed to David R. Brown, drbrown@fiu.edu, Florida International University Herbert Wertheim College of Medicine, 11200 SW 8 St., AHC2 593 Miami, FL 33199; email: drbrown@fiu.edu.

**Author affiliations:** D.R. Brown, V.T. Obeso, Florida International University Herbert Wertheim College of Medicine; J.J. Moeller, Yale University School of Medicine; D. Grbic, D.A. Andriole, Association of American Medical Colleges; W.B. Cutter, Vanderbilt University School of Medicine; M.D. Hormann, UTH Health McGovern Medical School; J.M. Amiel, Columbia University College of Physicians and Surgeons

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**References**


**Antimicrobial Stewardship: A Modified Team-Based Learning Curriculum With Timeouts for the Inpatient Medicine Clerkship**

Emily Cantor, MD, Satya Patel, MD, Pamela Tsing, MD, and Tyler Larsen, MD

**Purpose:** Medical students are typically introduced to the principle of antimicrobial stewardship in their preclinical years. However, they are often
inadequately prepared to participate in the clinical application of stewardship principles when they begin clinical clerkships. While stewardship is an evolving practice, students should be reintroduced and exposed to stewardship principles frequently and identify practical skills to optimize stewardship. In addition, students should be familiar with resources, such as practice guidelines and local antibiograms, as optimal therapies and resistance patterns often change. A timeout is a stepwise approach to evaluating the need for antibiotics and the optimal use of antibiotics. Timeouts are a common tool implemented by hospitals to monitor and manage the use of antibiotics. We propose that teaching clinical medical students to perform timeouts can lead to increased comfort with clinical decision making as it relates to antimicrobial stewardship.

**Approach:** We implemented a modified team-based learning (TBL) curriculum to teach medical students to perform timeouts focusing on common inpatient infections. This curriculum was integrated into the inpatient medicine clerkship orientation for third-year medical students. Students received the following presession materials: (1) a prereading assignment covering basic antimicrobial stewardship principles and a summary of guideline-directed management for common inpatient infections, and (2) a readiness test consisting of multiple-choice questions. The in-person session was 1.5 hours, led by 1 instructor and 1 facilitator, given to 25 to 30 third-year medical students during the required inpatient medicine clerkship orientation occurring 6 times per academic year. The instructor begins the session reviewing the readiness test with the group, then students divide into small groups of 4–5 to work through 2 clinical cases using the timeout framework throughout the case. The instructor and facilitator were available to assist the small groups with problem-solving and clarification. Each timeout case and learning points were discussed with the large group at the end of each case, highlighting different approaches to problem-solving and providing real-time feedback.

**Outcomes:** Surveys completed during the pilot academic year 2017–2018 revealed that over 90% of students agreed or strongly agreed that the learning activity would help their performance on the inpatient medicine clerkship (n = 121). Over 75% of students reported an improved understanding of the purpose of a timeout, and 85% reported an improved ability to participate in completing an antibiotic timeout. Qualitative survey data indicated that students valued both the presession reading materials and interactive nature of the learning activity, which provided a useful review of common inpatient infections and helpful tools for applying the principles of antimicrobial stewardship to clinical cases.

**Discussion:** The modified TBL session, focused on teaching antimicrobial stewardship through the structured framework of a timeout, was an effective teaching strategy in introducing and applying basic stewardship principles. Survey data from this study indicate that medical students find value in learning how to perform a timeout during this interactive session. This skill may translate to the early adoption of stewardship principles, self-guided learning, improved patient outcomes, and the lifelong practice of antimicrobial stewardship. However, further study is needed to determine the long-term effects of antimicrobial use and the most optimal modality to teach this skill set.

**Significance:** A modified TBL curriculum shows promise as an effective teaching modality for antimicrobial stewardship. Formal instruction in how to perform timeouts should be an essential component of the curriculum for clinical medical students as they begin their medicine clerkships to promote and reinforce the practice of these skills early in their careers.

Correspondence should be addressed to Emily Cantor, VA Greater Los Angeles Healthcare System, 11301 Wilshire Blvd., Mail Code 111, Bldg. 500, Room 3248, Los Angeles, CA 90073; email: emily.cantor@va.gov.

**Author affiliations:** E. Cantor, S. Patel, P. Tsing, T. Larsen, VA Greater Los Angeles Healthcare System

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**References**

**Incorporating Situational Judgment Tests Into Postgraduate Medical Education Admissions: Examining Educational and Organizational Outcomes**

Anurag Saxena, MD, MEd, MBA, Loni Desanghere, PhD, Kelly Dore, PhD, and Harold Reiter, MD, MEd

**Purpose:** CASPer is an online situational judgment test (SJT) that has been developed for use in medical school admissions, with a separate version developed for admission into specialty training. CASPer was developed to be a broad measure of personal and professional qualities for the entire applicant pool at the time of screening to help bring better quality applicants to interview. The purpose of this project was to examine if using CASPer in the residency selection process impacted the prevalence and type of professionalism issues, formal remediation incidents, and associated cost savings within the college.

**Methods:** Resident in difficulty documentation (type of intervention, CanMEDs areas of difficulty, professionalism issues, and costs) across 4 years before the implementation of CASPer (pre-CASPer cohort) and 4 years post-CASPer implementation (post-CASPer cohort) were reviewed. Descriptive statistics and between-group comparisons were used to explore type of interventions and associated problems. Professionalism issues, as documented in resident files, were categorized into different types of unprofessional behavior based on frameworks proposed by Mak-van der Vossen et al and Hilton and Stolnick.

**Results:** The number of residents identified to be in difficulty during the