### **UC** Irvine

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The New Morbidity and Mortality Conference - A Prospective Approach

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teamwork over time using the Trauma Non-Technical Skills (T-NOTECHs) tool, a validated tool in the assessment of teamwork skills of trauma teams.

Curricular Design: Based on a trauma roles educational slide show, institutional leaders in trauma education developed a script demonstrating the ideal blunt trauma resuscitation, which was translated into a simulated resuscitation video. The video emphasized non-technical skills believed to improve trauma team performance including leadership, situational awareness, and effective communication. A positioning map and a trauma checklist were created to ensure clear roles and Advanced Trauma Life Support task performance. The three tools were delivered to current residents via lectures and case-based discussions. Following implementation, trauma team performance was tracked by trained coders reviewing video of trauma resuscitations using the T-NOTECHs tool.

**Impact/Effectiveness:** Given the variety in trauma, agreement on an "ideal" resuscitation was challenging to create. Following implementation, initial surveys of both residents and attendings indicated perceived improvement in trauma team performance as compared to pre-implementation. Currently, trained coders are measuring team performance over time using T-NOTECHs tool. Results at six and 12 months are pending.

#### Advancing Diversity In Emergency Medicine: The NYU EM Summer Fellowship for Underrepresented Minority Medical Students

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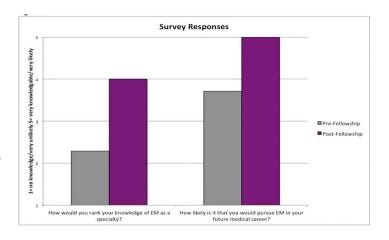
**Background:** Although under-represented minorities (URM) comprise 30% of the U.S. population, only 15% of medical students and 9% of emergency physicians self-identify as URM. We seek to provide early emergency medicine (EM) exposure for URM medical students in order to promote diversity and inclusion within EM. A physician workforce that more closely reflects our general population will facilitate learning and enhance cultural competency. Most medical schools do not offer exposure to EM until the clinical years, often as an optional rotation. As a result, many students are never formally exposed to EM, and thus lack the knowledge to make an informed career decision. A handful of EM programs in the country offer stipends for URM senior medical students who have already decided to specialize in EM. These programs, however, are not targeted at the early, undifferentiated, URM medical student.

**Educational Objectives:** Our fellowship was developed to engage pre-clinical URM medical students in EM and encourage them to pursue EM as a career.

**Curricular Design:** A total of 145 URM students from across the country applied to our five-week fellowship (July

2018), with full funding (housing, travel, and food) provided to the four who were accepted. Components aimed to explore the full breadth of EM and included faculty and resident mentorship, shadowing, social medicine initiatives, procedure workshops, didactics, simulation sessions, conferences, journal clubs, high school teaching, grand rounds, a wilderness medicine outing, meetings with the Office of Diversity Affairs, and a final scholarly project. A post-fellowship anonymous survey and focus group were conducted to assess their interest in pursuing an EM career. We aim to follow the fellows longitudinally to track career choice.

Impact/Effectiveness: We merged much of the curriculum with our inaugural NYU EM Summer Fellowship. Of the three NYU fellows, two were URM. Immediately post-fellowship, we conducted a focus group with all seven students and distributed an anonymous survey to assess our effectiveness in meeting our goals and the fellows' interest in pursuing EM. The fellows' average self-reported knowledge of EM and likelihood of pursuing a career in EM increased after the fellowship. From the focus group, students appreciated hearing from "someone [who] had [their] experience and made it to where they were." Due to the success of our 2018 fellowship, we have received funding for 2019.



# The New Morbidity and Mortality Conference – A Prospective Approach

Ostro B, Nandam K, Way D, Malone M, Emerson G, Li-Sauerwine S, Khandelwal S, King A / The Ohio State University, Columbus, Ohio

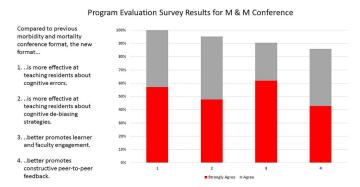
**Background:** In an effort to make morbidity and mortality (M&M) conference more engaging with an emphasis on cognitive biases, we launched a novel, prospective approach. Traditionally, the M&M format has been a case presentation with a retrospective analysis in a lecture-based format. Our previous conferences used a root-cause analysis to assess where errors occurred. Learners felt that the traditional format not only failed to promote engagement and faculty participation, but also lacked adequate attention to cognitive biases. Our new format, which incorporates small group learning, provides learners with a more

engaging environment to learn about cognitive errors and debiasing strategies.

**Educational Objectives:** Our goal was to implement and execute a novel prospective approach to M&M conference that increases attendee engagement with an emphasis on cognitive biases and de-biasing strategies.

Curricular Design: Cases are selected from referrals by resident and attending physicians or cases involving an adverse outcome. The case is presented by an education faculty member. The conference begins with a brief case presentation that includes only pertinent, critical data in one to two slides. The next slide defines the adverse outcome. We intentionally omit the details of the emergency department course in order to foster discussion regarding possible patient-related, systems-related, and cognitive factors that may have contributed to the outcome. Attendees are then divided into small groups comprised of both residents and attendings. Each group has a spokesperson and facilitator. Open-ended questions are posed to the group. Each group develops a fault-tree analysis of the potential errors; this is followed by a discussion of de-biasing strategies that could have been implemented to prevent cognitive errors that may have occurred. Small groups then reconvene and the actual fishbone analysis is discussed.

**Impact/Effectiveness:** A survey was disseminated to postgraduate year 2-3 residents. We received 21 out of 36 possible responses (58.3%). Survey items asked residents to rate features of the prospective conference format as compared to the traditional format using a Likert scale: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree. The residents nearly unanimously agreed that the new format is more effective at teaching cognitive errors and de-biasing strategies, while promoting attendee engagement.



## Burnout Scoring Using Electronic Medical Record

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**Background:** In emergency medicine and among physicians in general, burnout is a high risk and a growing

concern. Large bodies of evidence have shown that burnout detracts from educational opportunity and decreases the quality of patient care. Burnout can also limit the amount of time a physician is able to practice his or her trade. Much of physician wellness involves prevention, identification, and treatment of burnout. There are many prevention models and treatment regimens but very few objective ways to identify those at risk for burnout.

**Educational Objectives:** We sought to 1) identify those at risk for burnout, using the electronic medical record (EMR); 2) improve physician wellness by increasing interventions based on burnout identification; 3) eliminate the stigma surrounding burnout by increasing conversation about risk; 4) encourage communication about traumatic events; and 5) improve debriefing.

Curricular Design: We are creating risk values for different types of patient encounters to be identified by the EPIC EMR. While some patient encounters are at average risk, others including patient death, drug-seeking patients, and pediatric traumas may increase risk of burnout. Patient interactions are labelled in the EMR with scores based upon perceived risk to burnout based on resident surveys. We have assigned these patient encounters with specific risk values based upon the potential for causing physician distress or frustration. These risk values are to be entered into the EPIC EMR, flagging certain types of patient encounters and giving them a shift- associated burnout score. Through EPIC each resident will be given a burnout score based upon these identifiably higher-risk patient encounters. While clinical stressors are not the only or even primary cause of physician burnout, they do lead to decreased morale and increased burnout risk. We are collecting the data on these EPIC-monitored scores and comparing them to pre- and post- evaluation Mini Z burnout surveys. We can then narrow the patient encounters that potentially have higher risk for burnout based upon the changes in Mini Z survey results in light of the scores EPIC has generated. The benefit to this program is that it will allow the residency leadership to identify residents who may need more than average resources including debriefing, counseling, or further narrative communication. This will give leadership a chance to reach out to those residents who may be in need and identify their needs.

**Impact/Effectiveness:** This project allows for rapid identification of physicians at higher risk for burnout and the opportunity for quick intervention. This project can be applied to residency programs as well as physician groups.

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Essentials of the Emergency Medicine Match Process: The Couples Match Addendum, on Behalf of the CORD Advising Students Committee in Emergency Medicine