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Barriers to Education Scholarship for Core Educators: a Needs Assessment and Proposed Solutions

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by MHS; these included 5 composite scores (i.e., self-perception, self-expression, interpersonal, decision making, stress management) with 15 sub-scores on EI competencies. Differences were examined across gender, age, and training year. Scores are reported as means with 95% CIs. No incentives were offered. The study was IRB approved.

Results: 36 residents completed the EQ-i (response rate 100%). Results were normed to the general US population (mean 100, SD 15). Total mean EI was 104 (95%CI, 99.8-108); this was higher in female (107) vs. male residents (101). No differences were noted across age. Highest composite scores were in interpersonal skills (107; 95%CI, 100-108) and stress management (105; 95%CI, 101-109). Cohort competency strengths were in self-actualization (107); empathy (107); interpersonal relationships (106); impulse control (106); and stress tolerance (106). The lowest subcategory score across all years was in assertiveness (98). PGY-2s demonstrated the lowest mean EI score (95) versus PGY-1s (104) and PGY-3s (110). Self-regard, assertiveness, independence, problem solving, and optimism were lowest in PGY-2s. PGY-3s scored highest in nearly all categories.

Conclusions: EI in EM residents approximated the mean for the general population. Assertiveness was identified as a weakness across all trainees. Findings will be used to inform programmatic changes to optimize self-preservation skills in trainees, specifically in PGY-2s.

5 Assessment of Post-graduate Year Level And Unplanned Floor To ICU Transfer Within 24 Hours from the Emergency Department

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Background: Academic EDs utilize residents of different post-graduate year (PGY) levels to provide clinical care for patients under the supervision of attendings. Admitted patients that have an unplanned transfer from the floor to the ICU within 24 hours have been shown to have higher mortality and are a potential focus for quality improvement. It is unclear if the level of training of the EM resident correlates with unplanned transfers.

Objectives: To determine if PGY level of EM resident is associated with unplanned floor to ICU transfer within 24 hours from the ED.

Methods: This is a retrospective chart review with a primary outcome measure of unplanned floor to ICU transfer within 24 hours after ED admission. The variable of primary interest is PGY level. The study was done at an urban, academic tertiary care referral center with an affiliated 3 year EM residency. All patients presenting to the ED between 07/01/2012 to 06/30/2015 were eligible. Logistic regression was used to test for significance and to control for confounders such as emergency severity index (ESI), age, gender, unstable vital

signs at triage, patients originally in ED observation, ED length of stay (LOS), and time to doctor. Odds ratios (OR) with 95% confidence interval (CI) was used as the primary effect estimate.

Results: We reviewed the records of a total of 60,609 admitted patients. Of these 1,769 (2.9%) were unplanned transfers from floor to ICU within 24 hours. The odds ratios of primary provider roles as predictor of floor to ICU transfers is included in Table 1. Of note none were significant predictors with p-values all > 0.05. While with each EM PGY level there is a decrease in the ORs of unplanned floor to ICU, this is not significant. Unstable vital signs at triage, age, ESI, ED LOS, original ED observation status that required admission, time of arrival to time seen by physician, and gender were significant predictors of unplanned floor to ICU in 24 hours with a p-value of < 0.05.

Conclusions: This data shows that there was no significant difference between the PGY level of the EM resident and unplanned floor to ICU transfer within the first 24 hours. Identification of variables significantly related with unplanned floor to ICU transfer within 24 hours maybe valuable to prevent this adverse event.

Table 1. Odds Ratio of Primary Provider Role as Predictors of Unplanned Floor to ICU Transfers in 24 hours of Admission.

| | Odds Ratio | 95% Confidence Interval | p-value |
|------------------|------------|-------------------------|---------|
| EM3 | 0.42 | (0.37-0.47) | 0.45 |
| EM2 | 0.43 | (0.38-0.48) | 0.42 |
| EM1 | 0.47 | (0.42-0.52) | 0.37 |
| Non-EM Residents | 0.44 | (0.39-0.49) | 0.40 |
| Student | 0.27 | (0.22-0.32) | 0.59 |
| Attending Only | 0.21 | (0.20-0.22) | 0.14 |

Barriers to Education Scholarship for Core Educators: a Needs Assessment and Proposed Solutions

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Background: CORD seeks to support educators in their scholarly pursuits. Educators may be limited by time, funding, access to expertise, and lack of mentorship.

Objectives: To evaluate barriers educators face in performing scholarship and identify potential strategies for success.

Methods: Emergency Medicine educators completed an online survey consisting of multiple choice, rating scale,

and short answer items. Descriptive statistics were reported. Qualitative analysis of short answers used a thematic approach.

Results: 205 educators participated. The most common publication was peer-reviewed research manuscript. 31% (61/197) had training in research methodology. Time constraint was the greatest barrier to scholarship (8.61/10). There was a mismatch between actual and ideal hours spent on job related tasks. 69.8% (111/159) of researchers perform research in education. Barriers to research were lack of time, support, expertise, mentorship, funding, reward, challenges of adhering to scientifically rigorous methods, and achieving publication. The most motivating factors to performing research were personal intellectual stimulation and to be a better teacher. 7.57/10 and 6.91/10 respectively. Research study design and scientific writing were the most desired skills to acquire, 61.2%(112/183) and 49.7%(91/183) respectively. Preferred formats for developing research skills were online and a home institution faculty development course; 65/181 and 61/181 favor these respectively. 49.7%(91/183) have a mentor.

Conclusions: Multiple barriers to performing scholarship were identified and impact educators to varying degrees. Potential strategies for improvement were suggested. This information may inform interventions to help support educators in their scholarly pursuits.

7 Barriers to the Remediation of Struggling Learners: A Qualitative Study

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Background: Physician trainees are expected to progress through educational milestones to achieve competence appropriate to their level of training. Meeting this expectation requires identification of the struggling resident through outcomes-based and learner-centered assessments with subsequent action taken to remediate the observed deficiencies.

Objectives: This study was designed to better understand faculty perspectives on remediation, including the barriers to the implementation of a remediation plan for struggling residents.

Methods: The authors conducted structured focus groups of regional stakeholders in medical education to explore barriers to the process of remediating struggling residents. Due to limited existing research and theory around remediation, the authors utilized a constructivist qualitative design with conventional content analysis to evaluate the data. Concepts related to barriers to remediation were identified and overarching themes were developed.

Results: Major themes identified as barriers to remediation were: (1) faculty concern about the premature labeling of

residents as "struggling" and the stigma that comes with remediation; (2) limited availability of resources to devote to remediation; (3) inadequate faculty development and training around the development and implementation of remediation plans; (4) a lack of, or an unwillingness, of resident participation; and (5) a lack of consistent and honest documentation.

Conclusions: The process of remediation is hindered by the emotional response of faculty, a dearth of resources and expertise, learner factors, and a lack of honest and consistent documentation. When implementing a remediation program for a struggling resident, educators should address these elements prior to initiation of the plan.

8 Can Active Learning via the Socratic Method Improve Knowledge Retention Amongst Emergency Medicine Residents?

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Background: Socratic instruction utilizes targeted questions to expand learners' understanding of a subject. In medical education, a form of the Socratic method known as "pimping" is used, which at its best may help learners attain greater knowledge in a slightly stressful environment. Although "pimping" is a common teaching strategy for medical students, it has not been studied as an educational tool for Emergency Medicine residents.

Objectives: The focus of this pilot study was to assess Emergency Medicine residents' perceptions of "pimping" and to evaluate whether teaching via Socratic instruction can enhance knowledge retention amongst residents compared with a standard lecture format.

Methods: This was a prospective, randomized-controlled study performed during emergency department shifts at an urban, academic hospital. Groups of 3-4 residents received a bedside teaching session on head trauma either in a Socratic method i.e. "pimping" style or a lecture style. Groups were taught by one of two emergency physicians trained via an online module and a live session. Residents were asked the same pre-defined set of questions during the session. Afterwards, both groups completed a questionnaire assessing their perceptions of "pimping". Four weeks after the teaching session, residents completed a follow up quiz.

Results: 72 residents participated in our study. Results of our questionnaire showed that 54% of residents found "pimping" to be an effective teaching method most or all of the time. 82% would use Socratic instruction as a teaching method at least some of the time.

57 out of 72 residents (79%) completed the follow up quiz. Average scores were identical for residents in the "pimping" group (66.2%) compared with the non-pimping group (65.9%). Interns in the "pimping" group had higher