Title

Exploratory Factor Analysis of Patient Ability to Differentiate Individual Core Competencies During Evaluation of Resident Clinical Performance

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was not seen with the paper form. Storage of complete data allows students and preceptors to reflect on the contents of the MSF sessions at a later date.

23 Enhancing Resident Engagement and Knowledge Retention through Curricular Modifications

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Background: Emergency medicine is a specialty filled with individuals ill suited to sit in a lecture hall for long periods. Despite this, 5 subsequent hours of 50 minute blocks are commonly used to meet Residency Review Committee conference requirements. These prolonged sessions test the patience of the audience and impact knowledge retention.

Educational Objectives: At Washington University School of Medicine, we've implemented changes to combat boredom while enhancing retention.

Curricular Design: We addressed the issue of fatigue and boredom when sitting through 5 hours of lecture by dividing lectures into 25 minute slots rather than the traditional 50 minutes. This rapid-fire lecture style minimizes lapses in attention, which studies have shown occur roughly every 10-15 minutes. One challenge has been preventing lecturers from delivering 50 minutes of content in only 25. Additionally, the audience must get adequate breaks, as most people cannot maintain continuous attention for more than about 45 minutes. We addressed this obstacle by using a timer that runs continuously during conference, giving the speaker a 5 minute warning followed by an alert that their lecture time is over. This dramatically improves the ease in which a long-winded lecturer can be curtailed. Finally, we implemented spaced-repetition. This is a well-proven method of enhancing knowledge retention. The key points are repeated to the residents 3 times. First during the lecture itself, second as a rapid-fire summary of the entire day of content at the end of conference, and a third time as a faculty run review the following week.

Impact: As this is a cutting-edge curricular change, we have little evidence to its effectiveness. While we don't have internal evidence, there is a large body of educational literature to support these initiatives. Conference feedback and evaluations improved dramatically over the past six months. Our hope is that inservice scores will reflect the benefit of our new curricular design.

24 Exploratory Factor Analysis of Patient Ability to Differentiate Individual Core Competencies During Evaluation of Resident Clinical Performance

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Background: Patient evaluation of resident performance has been included as part of 360 degree evaluations by the Residency Review Committee of Emergency Medicine. Despite their use in most residency programs, little research has been done to evaluate the metrics of patient evaluations.

Objectives: We sought to determine the ability of emergency department (ED) patients to differentiate individual core competencies when asked to evaluate resident clinical performance.

Methods: This prospective observational study was conducted at an urban ED with a postgraduate year 1-3 emergency medicine residency program comprised of 30 residents. Each resident was evaluated by approximately 10 patients over a 2 month period on a competency-based evaluation questionnaire. The questionnaire was administered to patients by a trained research assistant and resident performance on 8 competency based items was rated on a fixed 9 point scale. Surveyed patients were selected randomly by the research assistant during clinical shifts from the patient log without resident knowledge. Pearson correlation coefficients across each resident's score for the competency based questions were analyzed in a correlation matrix.

Results: During the 2 month period of the study 286 patients evaluated 29 residents yielding an average of 9.8 evaluations per resident. To determine whether patients were able to separate and rank residents on the individual competencies we compared Pearson correlation coefficients across each resident's score for the competency based questions. The resulting correlation matrix yielded 28 combinations. The patient rankings for all of these scores were highly correlated. The correlations ranged from 0.78 to 0.97 and all were significant at $p<0.001$.

Conclusion: When patients evaluate resident performance using a competency based form, the results obtained across multiple competency based questions are highly correlated. Patients do not discriminate well between individual competency based constructs when performing clinical evaluations of residents.

25 Faculty Prediction of In-training Examination Scores of Emergency Medicine Residents: A Multi-center Study

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Background: The Emergency Medicine In-Training Examination (EMITE) is one of the few valid tools for medical knowledge assessment in use by emergency