17 Do Resident Press Ganey Scores Improve during the Academic Year?

Fiesseler F, Riggs R, Bowerman K, Szucs P / Morristown Medical Center, Morristown, NJ

Background: It is speculated that the "worst time to get sick" is July when new residents begin training. Press Ganey evaluations have become an important instrument for accessing physician capabilities and patient satisfaction. Our residents are actively trained with regards to patient contentment and ways to improve this metric.

Objectives: We sought to determine if Press Ganey scores improve from first to final months of the academic year.

Methods: This was a retrospective study of residents rotating in the Emergency Department over a three year time period (2013-2015). Population: All residents including: emergency medicine, internal medicine, pediatrics, and family practice scores were utilized for analysis. Only those scores known to be associated with a specific resident were tabulated and the "doctors score" component of Press Ganey evaluation was employed. Scores were delineated by month of patient encounter. Monthly scores in July (1st month of training) were compared to June (final month of training). Further analysis utilizing the last two months (May/June) and the first two months (July/August) of training years were also calculated. Statistics: Mann-Whitney with a significant P-value of 0.05. This study was approved by our IRB.

Results: A total of 2634 resident Press Ganey scores were available for analysis. Two hundred and sixty-one different resident were included of which 42 were emergency medicine. Mean overall Press Ganey score was 87.8. The average Press Ganey score in July was 87.7 (95% CI 90.5 to 84.44) and mean score for June was 86.3 (95%CI 90.4 to 82.3) (p=0.77). Mean score for the first two months of training was 88.7 (95%CI 90.5 to 85.9) versus the final 2 months score of 87 (95% CI 89.62 to 84.38) (p=0.28).

Conclusions: Though overall Press Ganey scores were very good, no significant improvement occurred from the first to final months of training for residents in the emergency department.

18 Do Students Have Access to the Data They Desire When Selecting an Emergency Medicine Residency Program?

Jarou Z, Ochsenbein S, Franzen D, Fairbrother H, Kellogg A / Denver Health Medical Center, Denver, CO; East Tennessee State University, Johnson City, TN; University of Washington, Seattle, WA; New York University, New York, NY; Baystate Medical Center, Springfield, MA

Background: In 2015, 1613 allopathic (MD) 4th year medical students and 739 non-4th year MD, osteopathic [DO], and international medical graduates [IMG] applied for 1821 emergency medicine (EM) residency positions at 171 programs. Many programs report using filters to screen applicants. Matched US seniors submitted a median 39 applications to obtain 19 interview offers, up from 26 applications to obtain 17 interview offers in 2009.

Objectives: To determine which factors applicants consider most important when selecting an EM residency program.

Methods: A web-based survey was sent to two thousand 3rd and 4th year medical students who were asked to select 7 factors from a list of 16 options that they would consider most important in selecting an EM residency program. Questions regarding preference for geographic location, length of training, and program accreditation type were omitted as the importance of these have previously been validated.

Results: The survey was completed by 261 students (13% response rate) of which 210 (80.5%) were 4th years. Sixty-seven percent (67.3%) of respondents were MD students, 26.5% were DO, and 6.2% were IMGs. The top seven factors applicants indicated as most important in selecting a residency program included hospital type (university vs. community vs. county; 78.2%), hours worked per shift (66.7%), number of shifts per month (63.2%), USMLE scores required for consideration (59.8%), yearly ED patient volume (56.7%), program size by current number of residents (49.4%), and cultural description of the program (48.3%); further preferences are displayed in Table 1.

Conclusions: Several factors are considered by EM residency applicants, some of which (ie: USMLE scores required for consideration) are not published on program websites, possibly leading towards over application. By making certain data more transparent, students might be able to make more informed residency application decisions. Limitations of this study include absence of questions regarding elective time, longitudinal specialty tracks, and number of ICU /off-service rotations. Additionally, factors believed to be important by applicants may not be in agreement with what current/graduating residents or academic advisors would recommend.

Table 1. Applicant Ranking of Program Factyors in CHoosing an Emergency Medicine Residency.

Program Factor	Percentage of Applicants Ranking as Important (n = 261)
Hospital type - University vs. County vs. Community vs. Mix	78.2% (204)
Hours worked per shift (8 vs. 10 vs. 12)	66.7% (174)
Number of shifts per month	63.2% (165)
USMLE scores required for consideration	59.8% (156)
Hospital ED visits per year	56.7% (148)
Program size by total number of current residents	49.4% (129)
Culture description of the ED program provided by the program	48.3% (126)
Is moonlighting allowed	43.3% (113)
% DO & % IMG currently in program	42.1% (110)
Compensation & meals paid/ credit by the hospital	37.9% (99)
Number of weeks spent in the ED during intern year (R1)	37.5% (98)
(Non)-accredited fellowships	34.9% (91)
Percentage of graduates entering fellowship/academic jobs	31.8% (83)
Dedicated children's ED at the main training hospital	30.7% (80)
Research requirement vs. scholarly activity only	21.1% (55)
Total alumni from the program	6.9% (18)

19 Doctor, Interrupted: Preemptive Workflow and Accuracy of Rapid Electrocardiogram Screening for ST-Elevation Myocardial Infarction by Emergency Medicine Providers

Soares W, Price L, Mader T, Blanchard R / Baystate Medical Center, Springfield, MA; Clinical Research and Health Policy Studies at Tufts Medical Center, Boston, MA

Background: Interruptions are thought to contribute to medical errors. However, interruptions are also important to patient care in the emergency department. Prior research has failed to reliably demonstrate a relationship between interruptions and medical errors.

Objectives: Explore associations of interrupted, preemptive workflow on accuracy of interpreting interrupting clinical stimuli. We hypothesized accuracy would decrease during preemptive workflow compared to sequential workflow.

Methods: A 2x2 factorial crossover simulation trial was created. Resident and attending physicians from a single academic emergency department were invited to participate. Participants first completed a preemptive module, viewing patient presentations interrupted by clinical stimuli requiring interpretation every minute. Participants then completed a sequential module where presentations and clinical stimuli were completed sequentially without interruption. The primary outcome was accuracy of interpreting clinical stimuli, specifically electrocardiograms (ECG's) for ST elevation myocardial infarction (STEMI), during preemptive and sequential modules. Generalized estimating equation logistic regression evaluated factors, defined a priori, that influenced odds of correct ECG interpretation.

Results: 35 participants completed the study. Overall, there was no significant difference in accuracy of ECG interpretation for STEMI in the preemptive compared with the sequential module (Mean 0.89, 0.91, Paired T test p=0.21). Attending physician status (OR 2.56, CI 1.66-3.94, p<0.01) and inferior STEMI (OR 0.08, CI 0.04-0.14, p<0.01) were associated with increased and decreased odds of correct interpretation, respectively. Self reported confidence was associated with increased odds of correct interpretation in the preemptive module, but not in the sequential module. (Interaction p=0.02)

Conclusions: Preemptive interrupted workflow was not associated with accuracy of ECG interpretation for STEMI. However odds of correct interpretation during preemptive simulations were significantly decreased in ECG's participants reported low confidence in interpretation. Providers may be able to self identify "high risk" tasks prone to error in an interrupted environment.