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What Predicts Resident Performance?: A Multi- Center Study Examining the Association Between Resident Performance, Rank List Position, and USMLE Scores

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would lead to increased usage of the study program.

Methods: Emergency medicine residents at Barnes Jewish Hospital/Washington University School of Medicine are split into 6 “families” for educational exercises. Each “family” has 8 members, with 2 representatives from each class (PGY 1-4). Data were collected from September-December, 2014.

In this prospective observational trial, each resident was granted free access to the Rosh Review, an online study tool that consists of emergency medicine-specific questions. The program is accessible via computer or mobile device application. Calendar months were divided into alternating “Family Challenge” months and control months. During “Family Challenge” months, the number of correctly answered questions was tallied and weekly scoreboards were disseminated via email. The winning family was that which correctly answered the most questions at the end of the month. Only correctly answered questions were counted in order to control for honest effort when completing questions. There were no prizes.

Results: During the “Family Challenge” months of September and November a total of 6,692 correctly answered questions were completed compared to a total of 3,508 (p=0.009) during the control months of October and December. Table 1 compares the number of correctly answered questions organized by residency family and month.

Conclusions: Our study showed that gamification can be used to increase the use of an online study tool by emergency medicine residents. Showing competitors a scoreboard each week motivated them to complete more questions.

Table. Number of Correctly Answered Questions by Family.

	September*	October**	November*	December**
Sopranos	372	166	404	700
Huxtables	325	101	415	536
Fockers	844	218	756	150
Corleones	424	184	396	193
Bluths	1125	481	820	363
Joneses	478	170	333	246
Total	3568	1320	3124	2188

*Family Challenge” month

**Control month

(EM) residency programs devote an immense amount of faculty time predicting which applicants will be most successful in residency and rank them accordingly on their program’s Rank Order List (ROL). However, few studies have investigated if ROL position, presence of a medical student rotation at their respective program prior to matching, or USMLE rank within a class are predictive of residency performance.

Objectives: To examine the correlation of initial rank position, USMLE scores and presence of a medical school rotation to a resident’s final rank at the end of residency in order to guide future ranking processes.

Methods: All full-time EM faculty at Los Angeles County + University of Southern California, Harbor - UCLA (Harbor), Alameda County - Highland (Highland), and the University of California - Irvine (UCI) ranked the classes of 2013 and 2014 at time of graduation. From these anonymous surveys, a graduation rank list was created. This graduation rank list was then compared to each class’s USMLE Step 1 rank within a class, rank order list, and presence of a medical student rotation using Spearman’s rho.

Results: A total of 93 residents, spanning 2 graduating classes, at 4 EM residency programs in California were evaluated. Residents’ initial ROL was not correlated with final graduation rank order (Rho=0.14, p=0.19). This was true for the pooled sample as well as individual programs. Interestingly, among the subgroup of individuals who had rotated as a medical student at their respective programs, ROL did significantly correlate with final ranking (Rho=0.31, p=0.03). We did not observe a significant correlation between USMLE step one scores and graduation rank (Rho= 0.15, p=0.14).

Conclusions: This multi-center study showed that USMLE Step 1 score rank within a class and position on initial rank order list did not predict resident performance at time of graduation. However, ROL was predictive of future residency success in the subgroup of residents who had completed a sub-internship at their respective programs. These findings should guide the future selection and ranking processes of emergency medicine residencies.

61 When do Sub-Interns Prefer to Interview?

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Background: Traditionally, all 4th year sub-interns rotating in Emergency Medicine at LAC+USC were invited back for their residency interview during interview season (Nov-Jan). This required students to travel back to Los Angeles at a later date to interview and filled a large number

60 What Predicts Resident Performance?: A Multi-Center Study Examining the Association Between Resident Performance, Rank List Position, and USMLE Scores

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Background: Each application cycle, emergency medicine