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Self-Assessment of Preparedness: A Two Year Evaluation of Incoming Emergency Medicine Interns in the Era of Covid-19

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#### **Authors**

Piccoli, Lorie  
Briskie, Ryan  
Williams, Kathleen  
[et al.](#)

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factors affect clinical performance in airway emergencies and how thoughtful organization of airway carts can mitigate such factors (Chrimes et al. 2018, Bjurström et al. 2019). However, most of this research has focused on anesthesiologists intubating in ORs (Jones et al. 2018, Schnittker et al. 2018), a scenario that differs substantially from the emergent, unplanned intubations occurring in ERs (Stevenson et al. 2007).

**Objectives:** We aimed to develop a novel point-of-care airway organizational tool that integrates onto existing Video Laryngoscopy (VL) towers and improves resident readiness for first-pass intubation attempts.

**Methods:** This study was conducted at a Level 1 trauma center and university tertiary referral center. Prior to the study, VL towers were used as the principle intubating solution at our facility, but there was a large variety and disorganization of tools available on these towers (Figure 1A). Using principles of choice architecture (Redelmeier et al. 2021) we designed a compact, standardized solution that fits comfortably at the head of the bed and can be moved easily from room to room as intubation needs arise (Figure 1B). EM residents were surveyed throughout the process via convenience sampling. In response, the design then went through multiple revisions so that the solution would meet the needs of multiple situations and user preferences (Figure 1C, 1D).

**Results:** Residents reported an increased feeling of preparedness for first pass intubation attempts (pre = 2.94 (1.43), post = 4.33 (0.97),  $p = 0.0024$ ).

**Conclusions:** Our VL airway tower solution combines established best practices for airway equipment design with the needs and preferences of EM providers in a high-intubation volume ER. Further work is needed to determine if a similar solution is generalizable to other settings.

## 48 Self-Assessment of Preparedness: A Two Year Evaluation of Incoming Emergency Medicine Interns in the Era of Covid-19

*Lorie Piccoli, Ryan Briskie, Kathleen Williams, Amber Billet, Brent Becker, Barbie Stahlman, Katelyn Mann*

**Background:** COVID-19 resulted in modification, limitation or cancellation of rotations that affected the clinical experience of fourth-year medical students (MS4).

**Objective:** The purpose of this study was to compare the preparedness of incoming emergency medicine interns (EM-1) from the classes of 2021 and 2022 in light of changes to clinical rotations incurred by COVID-19.

**Methods:** We conducted a prospective, survey assessment of MS4 from 2021 and 2022 matriculating into 7 distinct EM residency programs. The anonymous survey collected data on demographics, rotations, procedures, and subjective comfort levels for specific clinical scenarios. Each respondent was

assigned a procedural index score (PS) and a clinical comfort index score (CCS), defined as the sums of procedure counts and quantitative Likert values for clinical scenarios, respectively. PS, CCS, number of rotations and COVID-19-related limitations were compared between 2021 and 2022 using the Mann-Whitney U test ( $p=0.05$ ).

**Results:** Completed surveys were returned by 63 and 56 respondents from 2021 and 2022, respectively. The class of 2022 reported significantly more EM rotations (median 3 [IQR 2-3] vs 2 [IQR 2-2],  $p<0.001$ ) and fewer virtual rotations (0 [IQR 0-2] vs 3 [IQR 1-4],  $p<0.001$ ). Based on Likert scale responses, the class of 2022 reported significantly less suspension of rotations (2 [IQR 1-2] vs 2 [IQR 2-3],  $p<0.001$ ) and less clinical limitations due to COVID-19 (2 [IQR 1-2.75] vs 2 [IQR 2-3],  $p<0.001$ ). Despite an improved, in-person clinical experience there was no significant change in 2022 PS (36.5 [IQR 32-41.75] vs 35 [IQR 30-39],  $p=0.283$ ) or CCS (31 [IQR 28-34] vs 30 [IQR 27-32]  $p=0.581$ ).

**Conclusion:** Based on self-reported data, the MS4 class of 2022 participated in more EM rotations, fewer virtual rotations and clinical rotations less impacted by COVID-19; however, this did not result in greater procedural exposure or clinical comfort levels entering their EM-1 residency year.

## 49 Shuffling the Deck - Factors at Play in Applicant Program Ranking

*Joshua Timpe, Kathleen Williams, Alisa Hayes, Sam Corbo, Tom Yang, Ephy Love, Jason Reminick*

**Background:** Geography significantly affects a medical student's choice when selecting a residency program. Other factors and sources of information are used. Nearly half of applicants alter their program applications as a result of Doximity rankings (DR). Alternatively, the AAAEM Benchmarking Survey & Acuity Index (AI), compare academic institutions objectively. Given EM trainees' desires to care for the sickest patients, we theorize that AI rankings should correlate with applicant competitiveness. Previous work has utilized subjective assessment of these factors, there are no studies utilizing objective data to determine how these influence applicants.

**Objectives:** We aimed to determine which factors correlate best with residency application preference: Geography, DR or AI. First, we hypothesize that geography continues to play a major role in application to residency. Second, we hypothesize the AI will correlate with applicant competitiveness.

**Methods:** We analyzed 2021 EM match outcome data from Thalamus ( $n=3158$  applicants, 63 programs) using GLM regression of applicant-program pairs to study the relative contribution of variables including standardized USMLE scores, AOA status, US News and World Report medical school ranking and geographic relation. Correlations of applicant competitiveness with DR and AI are compared.

**Results:** As hypothesized, geography plays a significant