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Emergency Medicine Resident Productivity Over the Course of Residency Training: A Descriptive Analysis of Progression and Variability

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#### Does the Medium Matter? Evaluating the Depth of Reflective Writing by Medical Students on Social Media Compared to the Traditional Private Essay Using the REFLECT Rubric

A Brown, Jauregui J, Ilgen J, Riddell J, Schaad D, Strote J, Shandro J, /University of Washington, Seattle, Washington; Keck School of Medicine of the University of Southern California, Los Angeles, California

**Background:** Social media is a novel medium to host reflective writing (RW), yet its impact on depth of students' reflection is unknown. Shifting reflection on to social platforms offers opportunities for students to engage with their community and explore the nuances of peers' reflections. However, its public nature may leave students feeling vulnerable and negatively impact students willingness to reflect deeply.

**Objectives:** Using sociomateriality as a conceptual framework, we aimed to compare the depth of reflection in RW samples submitted by medical students in a traditional private essay format to those posted on a secure institutional social media platform.

**Methods:** Medical students were required to submit a RW essay as part of their emergency medicine clerkship, either on a private essay format (AY 2015) or on a closed, password protected social media website (AY 2016). Five raters used the REFLECT rubric to score 167 deidentified RW samples (78 private essays, 89 social media). Average scores for RW submitted on the two platforms were compared using t-tests. We also surveyed students regarding their comfort with the social media experience.

**Results:** There were no significant differences in average composite REFLECT rubric scores under the private essay (14.1 SD 3.07) versus social media (13.70 SD 3.06) conditions. There was also no difference in essay length or scores based on gender for either type of submission. Seventy-three percent of students responded to the survey; most (72%) reported feeling comfortable sharing their personal reflections in the social media format and 84% felt comfortable commenting on their peer's writing. Sixty two percent of students reported that reading their peers' reflections on social media prompted them to think more about bioethical challenges they had faced.

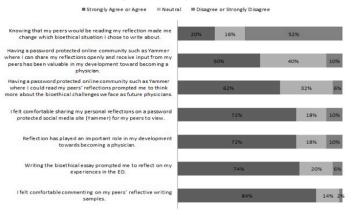
**Conclusions:** Shifting to a social media format did not affect students' average depth of reflection, and students generally felt comfortable sharing RW essays in this way. These findings suggest that social media is a viable medium for submission of reflective essays. Future work should evaluate the benefits and challenges of this curricular approach to stimulating reflection in students.

 Table 1. REFLECT rubric scores for private essay vs social

 media posts

	Private Essay (SD)	Social Media (SD)
Writing spectrum	2.97 (0.77)	2.95 (0.80)
Presence	3.12 (0.86)	2.85 (0.82)
Description of disorienting dilemma	2.98 (0.70)	3.02 (0.70)
ttention to emotion	2.28 (0.99)	2.21 (1.00)
nalysis and meaning making	2.73 (0.69)	2.67 (0.75)
Composite Score	14.05 (3.08)	13.74 (3.08)

#### Table 2. Social media group survey results



## Lightning Oral Presentations

# Emergency Medicine Resident Productivity Over the Course of Residency Training: A Descriptive Analysis of Progression and Variability

McHugh D, Gissendaner J, Kolm P, Fredette J, / Christiana Care Health System, Wilmington, Delaware

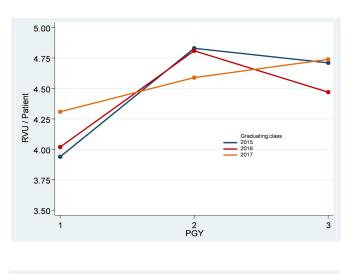
**Background:** Residency programs are constantly seeking ways to improve the overall educational experience and understand resident productivity. Previous studies have attempted to define "efficiency" but they are dated and not in a modern practice setting. Having an improved understanding of resident productivity will allow us to better understand the overall productivity value of EM residency programs, allow for improved advisement of trainees, and attempt to improve residency staffing models.

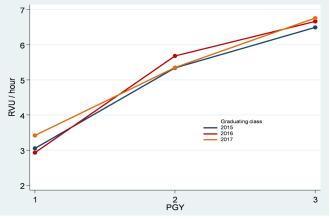
**Objectives:** To evaluate the progression of productivity of emergency medicine residents in terms of patients/hour, RVUs/ hour, and RVUs/patient. We hypothesized that residents would experience an increase in patients' acuity and productivity over the course of a 3-year residency.

**Methods:** This was a retrospective review of EM resident productivity from 2012-2017 over the course of a 3-year training program. It was performed at a level-1 community academic tertiary care referral center. Data collected included patients/hour, RVUs/patient and RVUs/hour. Mixed effects models were used to assess change in outcome over PGY levels for graduating classes during the study period. The models included the interaction between graduating class and PGY to detect patterns between classes. Statistical significance was set at p<0.05.

**Results:** There was a statistically significant increase in RVU/patient for each graduating class (p = 0.032) but the pattern of change over PGY was not the same for graduating classes (Figure 1). There was a statistically significant increase in RVU/hour (p < 0.001) and mean increased from 3.0 to 5.5 to 6.6 over PGY levels (Figure 2). Lastly, there was a statistically significant increase in patients/hour that was essentially the same for all graduating classes (p < 0.001). Mean patients/hour increased from 0.75 to 1.2 to 1.4 over PGY levels.

**Conclusions:** There is a statistically significant increase in patients/hour, RVU/patient, and RVU/hour during the course of a residency. This descriptive study will allow the emergency medicine programs to have an enhanced understanding of the overall productivity expectations from their residents.





#### 2 Improving the Quality and Standardization of Resident Handoffs through Interspecialty Handoff Training

Naples R, Zavodnick J, Altshuler M, Cowan S, Jaffe R, Margiotta M, McCall J, Wickersham A, Wolf A, Diermer G/Thomas Jefferson University, Pennsylvania

**Background:** Transitions of care present a major risk for to patients. Formal handoff training during medical school varies. While many residency programs have implemented handoff training, it is variable, resource-intensive, and doesn't promote interspecialty standardization.

**Educational Objectives:** We developed a handoff training program for incoming interns that would improve and standardize handoffs.

**Curricular Design:** We provided handoff training during intern orientation; 120 interns participated, representing 12 of 15 programs. Pre-course online modules were used to introduce the IPASS and TeamSTEPPS concepts. The workshop began with a didactic review followed by 3 simulated hand-off scenarios: ED to floor, shift change, and transfer of service. Interns were assigned to groups of 3 and given a checklist to ensure each team member completed all activities: giving handoff, receiving handoff, observing handoff. Additionally, each team was observed by a trained facilitator (1 facilitator for every 3 groups). The observer completed a tool on handoff quality. The workshop concluded with a debriefing and evaluation (5 point Likert scale with 1 - "strongly disagree" and 5 - "strongly agree").

#### Intern IPASS Workshop 6/19/2017

consisting and used

This session had o	0			
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
This session was	organized.			
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
feel more confid	<u>v</u>	f a patient after a		
	Agree	Neutral	Disagree	Strongly Disagree
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Strongly Agree will use IPASS du Strongly Agree		ndoffs. Neutral	Disagree	Strongly Disagree