



# 2020 Annual Meeting

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MIDWEST SURGICAL ASSOCIATION

## 24. IS THERE A GENDER BIAS IN MILESTONE EVALUATIONS IN GENERAL SURGERY RESIDENCY TRAINING?

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**Background:** Recently, there have been multiple studies with conflicting conclusions regarding gender differences in self-evaluation, perceptions of competence, and granted autonomy in the operating room during general residency training. Using the ACGME semiannual reporting of resident performance on milestones, the ACGME's competency-based developmental outcomes, we compared resident self-evaluation milestone ratings to those assigned by the Clinical Competency Committee (CCC).

**Methods:** Over a period of 5 years, between January 2016 and January 2020, CCC members completed semiannual resident milestone evaluations. Residents also completed self-evaluation milestones (SEM) on the same timeline. The CCC total milestone scores were compared to the SEM. The milestones for each ACGME core clinical competency (Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, and Systems-Based Practice) were also compared. Differences in mean score between male and female surgery residents were assessed using a t-test. We used ANOVA to evaluate the differences between PGY levels.

**Results:** A total of 300 evaluations for 41 residents at different PGY levels were analyzed. Of 150 SEM evaluations, 58 (38.7%) and 92 (62.3%),  $p=0.731$ , were completed by female and male residents, respectively, at different PGY levels (43 PGY1, 34 PGY2, 26 PGY3, 24 PGY4, and 23 PGY5). We compared the mean score differences between male and female residents by PGY level and raters (self and CCC). Means (SD) of SEM and CCC for both male and female residents were 40.8 (13.6), 38.8 (13.8),  $p=0.381$ , and 40.2 (12.7), 38.7 (13.3),  $p=0.490$ , respectively. There was a strong correlation between CCC and SEM total scores ( $r=0.90$ ,  $p<0.001$ ), and between CCC and SEM scores and PGY level (0.92, 0.92, with  $p<0.001$  in both). No significant score difference per PGY level between the raters (CCC vs. self) was noted. There was a significant increase in scores between most PGY levels ( $<0.001$ ).

**Conclusion:** There were no gender differences in surgical resident self-assessed milestones scores compared to those determined by the CCC. Both scores improved significantly as residents progressed to the next level.