assistant professor [OR: 1.32, (95% CI: 0.87–1.99)] or full professor [OR: 0.89, (95% CI: 0.56–1.43)] positions. Additionally, fellowship attainment did not correlate with the size of the employing academic program, population of the city of practice, being a residency director or chair.

CONCLUSION: Although the majority of APS hold a fellowship, the evidence suggests that a fellowship doesn’t always lead to greater entry or advancement towards an academic career.

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Differences in Operative Self-Assessment Between Male and Female Plastic Surgery Residents: A Survey of 8149 Cases

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BACKGROUND: Previous studies of resident physicians have shown that male and female residents rate their work performance differently, with women tending to underrate and men tending to overrate their own performance. We performed the current study to determine if plastic surgery resident trainee self-evaluations differed by trainee sex. METODS: Operative Entrustability Assessment (OEA) data were abstracted from MileMarkerTM, a web-based program capable of storing trainee self-assessments and their associated attending assessments of any CPT-coded procedure. Ratings are based on a 5-point scale where 1=“observed case” and 5=“can take junior resident through case.” All OEAs completed by plastic surgery programs at three institutions were extracted. Complete OEAs are defined as those containing a self-assessment by the trainee (plastic surgery resident) and an evaluation from an attending surgeon. We used linear regression to assess differences between trainee and attending scores by trainee sex and post-graduate year (PGY).

RESULTS: We included 8,149 OEAs from 3 training programs for the entire period of each program’s MileMarker use. OEAs were completed by 64 unique residents, of whom 25% were female, and 51 unique attending surgeons (29% female). Unadjusted analysis showed that male residents’ self-assessment scores were higher (mean=3.57, 95% CI: 3.55–3.60) than female residents’ self-assessment scores (mean=2.85, 95% CI: 2.80–2.91). When comparing residents’ self-evaluations to the attending’s evaluations, male residents’ self-evaluation scores were higher than the attendings’ scores (mean=3.48, 95% CI: 3.46–3.51) and female residents’ self-evaluation scores were lower than the attendings’ scores (mean=3.15, 95% CI: 3.08–3.20). After adjusting for PGY, both male and female residents’ self-assessment scores were below attendings’ scores (p<0.001); however, female residents’ self-assessment scores remained lower than their male counterparts.

CONCLUSION: Our dataset including 4.5 years of data from 3 plastic surgery training programs showed that female plastic surgery residents underestimated and male residents overestimated their performance as compared to attending assessments. This effect persisted after adjusting for PGY. Further studies are needed to determine reasons for these differences.

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Searching for an Alternative Method to Evaluate Surgical Knowledge: Does a Drawing Quiz Reflect Knowledge Gains and In-Service Exam Performance?

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BACKGROUND: The best methods to assess surgical knowledge are still debated. We used a non-multiple-choice test as a pre- and post-conference assessment to measure residents’ knowledge gains with comparison to a standard summative assessment tool.

METHODS: At one didactic conference, plastic surgery residents at a single institution were given a pre-test of drawing and labeling structures in the extensor mechanism of the finger and within the carpal tunnel. The quiz was followed by a lecture on the same material and a subsequent post-test. Scores were correlated with in-service exam performance.

RESULTS: Pre-test scores (n=13) were positively correlated with PGY until PGY-3. Performance on labeling
structures was higher than performance on the respective drawing prompt. Residents’ ability to label structures increased more strongly with PGY than their ability to draw structures. The post-test (n=8) demonstrated that teaching improves performance on labeling questions (pre-test score=62%; post-test score=87%). Improvement was observed across all PGYs. Pre-test results were positively correlated with in-service exam performance.

CONCLUSION: Our study suggests that a knowledge test focused on drawing and labeling structures given to surgical residents is a valid, nontraditional method for assessing resident knowledge. Such a quiz would offer programs an alternative method for regularly evaluating residents aside from in-service questions, in order to identify residents who may need targeted training for the in-service exam and to inform teaching plans. Additionally, residents could use quiz feedback to guide study efforts and prime conference-related learning.

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In-Service Examination Quizzes and Efficacy in Resident Education

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BACKGROUND: Standardized tests are an essential element of graduate education. The use of periodic examination of cognitive knowledge is universal in medicine and constitutes one step in the board certification process. In plastic surgery and other surgical specialties the In-Service Examination, ISE, is administered annually.

METHODS: One component of the UT plastic surgery program didactics is a weekly conference devoted to discussion of a set of readings centered on a specific module. Because of declining ISE scores, in 2012, the program initiated a policy of weekly examinations or quizzes. Since 2000, the questions from the ISE have been apportioned into the 103 modules of the UT curriculum. An examination of 15–18 questions based on the prior week’s conference module is administered at the beginning of conference, graded, and results returned accompanied by the syllabus for each question. To determine efficacy of the weekly examination, a comparison of ISE results for the years 2006–2012 and 2012–2018 was accomplished.

RESULTS: The trend toward a decline in ISE performance as independent residents progressed through the program was reversed and replaced by improvement from PGY-1 to PGY-3. That reversal is reflected in a p = 0.06 in comparison of the PGY-3 level.

CONCLUSIONS: Weekly ISE quizzes reinforce the learning of core content, provide a continuous assessment, and enable the early identification of residents at risk who would benefit from remedial intervention. Experience with implementation at a single institution has demonstrated efficacy at the PGY-3 level (p = 0.06). Mahmoud A, Andrus CH, Matolo NM, Ward CC. Directed postgraduate study result in quantitative improvement in American Board of Surgery In-Training Exam scores. Am J Surg. 2006 Jun;191(6):812–6.

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Ethics Education in Plastic Surgery Training Programs

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BACKGROUND: Ethics training has become standard in medical schools, but there are more limited resources for graduate medical education. Although pilot ethics programs for plastic surgery residents have been successful, further research is needed to evaluate the need for more formal ethics training nationally.

METHODS: A nineteen question cross-sectional needs assessment was created. The survey was pre-piloted and then piloted to establish construct validity and reliability of the instrument. The assessment was then distributed to United States plastic surgery PDs (N = 80).

RESULTS: Forty-six surveys were completed (response rate = 58%). Most programs (63%) have some form of ethics curriculum, with a mean of 3 hours spent on ethics education annually. Nevertheless, 80% of PDs expressed interest in incorporating more formal ethics training in their training. Nearly all PDs agreed that ethics training in residency is important (96%), yet only 70% agreed that their graduating chief residents were competent to manage ethical dilemmas. Many PDs (73%) would like more resources for teaching their residents about ethics, and 86% reported they would find a standardized ethics curriculum from a plastic surgery specialty society (e.g., ACAPS) to be helpful. Decision making, informed consent, conflicts of interest, and basic principles of biomedical ethics were identified as the most important topics for an ethics curriculum.