Methods: We performed a causality-comparative study, gathering data from fourth-year medical students (MS-IV) in the clerkship and faculty over a six-month period: 3 months with the didactic series and 3 months with the blended format. Data included final examination scores, simulation performance and satisfaction surveys of students and faculty. The student t-test was used to compare means between groups.

Results: Seventy-four MS-IVs were in the pre group and 63 MS-IVs were in the post group; 10 faculty were enrolled. Examination scores were statistically higher ($p<0.01$) for the post-group (84.8%, 95% CI 83.1-86.5) compared to the pre-group (80.8%, 95% CI 79.1- 82.5). Simulation scores were significantly higher ($p<0.0001$) for the blended curriculum in weeks 1 and 2, but not in week 3. Students rated the blended curriculum higher ($p<0.001$). Overall difference in means for faculty satisfaction was not statistically significant.

Conclusion: The blended curriculum model is an effective educational intervention to teach EM medical students. Longitudinal follow-up with students may provide insight into the enduring impact of the blended curriculum on learning outcomes.

30 Focusing Feedback: A Resident Based Intervention

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Background: Feedback and evaluation are crucial in residency training. Constructive feedback allows residents to develop while honing in on weaknesses to improve their clinical practice. Due to time constraints, protection of relationships, privacy, and lack of feedback training, giving and receiving quality feedback is difficult.

Objectives: The purpose of this study is to determine if there is qualitative improvement in feedback or evaluations when residents are encouraged to set a goal for each shift. To assess for quality improvement in resident evaluations following an intervention.

Methods: This is a retrospective before-after study of a resident self-initiated feedback intervention at a single EM program. The resident feedback intervention included the introduction of a paper evaluation form called "Self-Initiated Resident Feedback is Utterly Phenomenal" (SIRF's UP) where residents would select pre-shift goals to focus on based off of ACGME requirements for evaluation. Evaluations were assessed for improvement with focus on clarity, subjectivity, actionability, and specificity. Three blinded reviewers scored evaluations on a Likert scale for each domain. Post-intervention evaluations were rated on whether the faculty evaluation met the resident's stated goal. Descriptive statistics and repeated measures regression were used to test for differences in pre- and post-intervention evaluation data.

Results: There were 183 pre- and 183 post-evaluations. Resident evaluations after the intervention were more specific (mean difference[MD] 0.56, $p<0.001$), more actionable (MD: 0.56, $p<0.001$), more clear (MD: 0.43, $p<0.001$), and less subjective (MD: -0.69, $p<0.001$) than evaluations before the intervention. In the post-evaluations, 90.4% of the faculty evaluations were rated to meet (Strongly Agree/Agree) the resident's pre-stated goal for the shift.

Conclusions: This intervention was feasible and resulted in feedback that was less subjective and more specific, actionable,and clear while also aligning with individual resident feedback goals.

31 Foundations of Emergency Medicine: Trends in Use, Perceived Benefits, and Barriers to Implementation

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Background: Foundations of Emergency Medicine (FoEM) was introduced in 2016 as a novel, nation wide open-access emergency medicine (EM) curriculum that provides interactive instruction specific to learner level. Limited data exist on stakeholders' attitudes toward its implementation.

Objective: To evaluate use, perceived benefits, and barriers to implementation of FoEM.

Methods: This was a survey study of FoEM site leaders and learners. Surveys were administered online and consisted of Likert scale and multiple choice items. Survey items were piloted prior to implementation. Sites were excluded if they registered after December 2018 or reported nonuse or limited use of content. Descriptive statistics were reported.

Results: 130 of 247 US EM residency programs (53%) registered for FoEM for 2018-2019. 102 programs were eligible to participate in the study. 98 site leaders (96%) and 1618 learners (54%) completed the surveys. Enrollment data (Table 1) shows highest use of Foundations I (F1) and II (F2) , EKG I, and In-Training Exam (ITE) Review materials. 37 sites (38%) allowed structured resident-as-teacher opportunities. Site leaders reported 100% satisfaction and limited required preparation (mean 1.16 hr/wk) (Table 2). 60% felt learners came prepared for meetings and 61% reported that F1 small group cases helped identify learners who required extra support. Barriers to implementation include limited conference time (67%) and faculty oversight (48%). Learners reported high satisfaction (93%) and indicated adherence to asynchronous assignments (mean 1.6 hr/wk). 87% reported a perceived reduction in the chance of making a medical error as a result of exposure to FoEM content.

Conclusions: FoEM has been widely implemented across

US EM residency programs and is viewed positively by both leaders and learners. Potential benefits include identification of struggling learners. Program logistics may limit implementation.

Table 1. Foundations of Emergency Medicine Enrollment (USA, 2018-2019).

Course	Programs	PGY1	PGY2	PGY3	PGY4	Total
Foundations I (F1)*	**95**	1069	235	162	57	**1523**
Foundations II (F2)*	**74**	239	719	417	90	**1465**
Foundations III (F3)*	**34**	97	146	286	70	**599**
EKG I**	**48**	570	204	185	48	**1007**
EKG II**	**37**	305	329	266	50	**950**
Imaging I	**23**	269	111	98	17	**495**
ITE Review	**59**	719	450	377	106	**1652**
Frameworks	**22**	248	81	66	12	**407**
Resident Instructors	**37**	51	40	164	79	**334**

*Foundations I-III cover EM Model core content; F1 targets PGY1s, F2 targets PGY2s, F3 targets PGY3/4s.
**EKG I covers fundamental EKG topics targeting PGY1s; EKG II covers advanced topics for PGY2/3s.

Table 2. Foundations of Emergency Medicine Survey Results (2018-2019).

Leaders		
Survey Item		
Please rate your satisfaction with Foundations of Emergency Medicine. (1-Very Satisfied, 3-Neutral, 5-Very Dissatisfied)	**Satisfied/Very Satisfied** 100%	**N** 98
My learners come prepared for Foundations (F1, F2) meetings. (1-Strongly Agree, 3-Neutral, 5-Strongly Disagree)	**Agree/Strongly Agree** 60.2%	**N** 93
F1 small group cases have helped our residency leadership identify learners who might benefit from additional support. (Yes/No)	**Yes** 60.5%	**N** 81
How many hours did you spend each week coordinating meetings for Foundations core courses (F1, F2, F3)? (n=88)	**Mean** 1.17	**SD** 0.79
What are the barriers to using additional Foundations courses at your site? (n=94)	Limited time in conference schedule = **67%** Available faculty oversight = **48%** Faculty resistance = **5.3%** Resident resistance = **4.3%** Quality of content = **5.3%** Awareness of available content = **8.5%** Other = **23%**	
Learners		
Survey Item		
Please rate your satisfaction with Foundations of Emergency Medicine. (1-Very Satisfied, 3-Neutral, 5-Very Dissatisfied)	**Satisfied/Very Satisfied** 93%	**N** 1612
On average, how many hours do you spend on Learning Pathway (independent study) assignments prior to Foundations I or II meetings? (n=XXX)	**Mean** 1.57	**SD** 0.96
Do you feel that your exposure to Foundations has reduced the chance of you making a medical error? (Yes/No)	**Yes** 87%	**N** 1603

F1, Foundations I course; F2, Foundations II course; F3, Foundations III course; Learning Pathway, asynchronous assignments coordinated to F1 and F2 meetings.

32 Gender Evaluation and Numeric Distribution in Emergency Medicine Residencies. Understanding Contributing Factors to Gender Differences Within US Emergency Medicine Programs

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Background: Emergency medicine has experienced increased growth, with addition of over 500 residency positions over the past 10 years. It could be assumed that increased ethnic, gender, and cultural diversity would also be seen, however, this is not the case.

Objectives: The study was designed to determine the male-to-female ratio of EM residencies, serving as a proxy for the specialty. Our hypothesis is that the gender diversity of the leadership influences the gender makeup of the programs they represent. To determine what factors influence gender representation within the specialty of emergency medicine, with the goal of better understanding of diversity and development of best practices for recruitment.

Methods: An IRB approved, retrospective, observational study of US Emergency Medicine programs for all residents of entering class years 2014-2017 was conducted using publicly available data for resident cohorts and program leadership to identify the study population, and data was confirmed by program leadership. Data was analyzed, examining program director's gender compared to the resident gender ratio to determine if there was a statistically significant relationship that existed. Secondary analysis of the distribution of gender by location was also performed.

Results: A population of 7236 residents in 170 programs was identified: 4635 male and 2601 female, giving an overall ratio of 1.78:1, with an individual program range of 0.50-6.67; 13 programs had a ratio ≤1. This distribution was consistent among program directors with a male-to-female ratio of 2.39:1. There was no statistically significant correlation between the program leadership gender compared to the individual program ratio(p=0.212). There was also no correlation noted between location and gender ratio found (p=0.675)

Conclusion: There are many factors that contribute to the makeup of the gender diversity within EM residencies, and although no direct correlation between program leadership gender and overall gender was elucidated, it still may play a role in the selection of the program by the individual, and further studies are currently being conducted to evaluate that role.

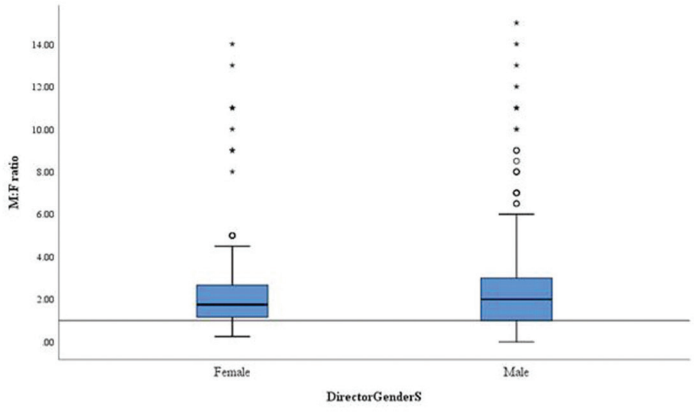

Image 1.