

procedural confidence averaged 8.65 (95% CI 7.97–9.33). The model was low-cost and highly usable. The 3D-printed mold costs approximately \$35 to make. Based on materials used, we expect it to allow indefinite reuse. The estimated cost of materials per model was \$7.11. Each model can be used at least 32 times before degradation of image quality.

**Conclusion:** This low-cost, reusable 3D-printed ultrasound-guided PIV phantom was effective, realistic, and feasible for resident training. The high success rate and short procedure times suggest that affordable 3D-printed models can provide a sustainable alternative to commercial simulators, expanding access to PIV training across diverse educational settings.

## 64 Empowering Residents: A Learner-Driven Workshop to Enhance Feedback Engagement in Emergency Medicine

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**Objectives:** Feedback is fundamental to Emergency Medicine (EM) education; however, residents frequently encounter obstacles when attempting to obtain and implement it. Learner-driven feedback strategies may improve feedback culture but approaches to promote feedback literacy are underexplored. We developed and evaluated a workshop to prepare EM residents to actively engage in the feedback process.

**Methods:** A prospective pre-post survey was conducted at a single academic EM residency. PGY1–PGY3 residents attended a workshop covering clarifying expectations, goal setting, and receiving feedback. Residents completed pre- and post-surveys using a 5-point Likert scale to assess comfort. Knowledge retention was assessed one week with a 15 question assessment. Pre and post-surveys were evaluated by paired t-test analysis.

**Results:** Thirty-one residents completed the pre-survey, and 30 completed both the post-survey and the knowledge assessment. Statistically significant improvements were observed in: clarifying expectations ( $\Delta = 0.67$ ;  $p < 0.001$ ), creating SMART goals ( $\Delta = 0.90$ ;  $p < 0.001$ ), comfort receiving feedback ( $\Delta = 0.33$ ;  $P = 0.01$ ), seeking feedback ( $\Delta = 0.40$ ;  $p = 0.02$ ), creating feedback action plans ( $\Delta = 1.70$ ;  $P < 0.001$ ), reflecting on and implementing feedback ( $\Delta = 0.40$ ;  $p < 0.001$ ), and recognizing feedback as the learner’s responsibility ( $\Delta = 0.53$ ;  $p = 0.002$ ) (Table 1). Perceptions of feedback’s importance and impact on patient care remained high and unchanged (Table 1). Knowledge retention averaged 91.1%, with highest scores in Expectations and SMART Goals (96.7%) and lowest in Feedback domains (81.1%) (Table 2).

**Conclusion:** A structured workshop significantly improved EM residents’ comfort, knowledge, and skills in engaging with feedback. Early introduction of learner-driven

strategies may strengthen feedback culture and support professional development. Further research is needed to assess long-term retention, clinical application, and the role of faculty development.

Table 1. Pre- and post-workshop survey scores by item (N = 30, 1- Strongly Disagree to 5- Strongly Agree).

Survey Item	Pre Mean (SD)	Post Mean (SD)	$\Delta$ (Post-Pre)	t	p-value
Clarify expectations from feedback	3.87 (0.68)	4.53 (0.51)	+0.67	-5.53	< 0.001 *
Define SMART goals	3.80 (0.71)	4.70 (0.47)	+0.90	-6.92	< 0.001 *
Open to receiving constructive feedback	3.03 (1.16)	3.27 (1.36)	+0.23	-1.19	0.243
Comfortable asking for feedback	4.00 (0.64)	4.33 (0.55)	+0.33	-2.76	0.010 *
Proactively seeks feedback	3.77 (0.94)	4.17 (0.59)	+0.40	-2.56	0.016 *
Uses a feedback plan	2.83 (0.87)	4.53 (0.57)	+1.70	-9.43	< 0.001 *
Reflects and applies feedback	4.13 (0.57)	4.53 (0.51)	+0.40	-3.89	< 0.001 *
Feedback supports professional growth	4.60 (0.56)	4.80 (0.41)	+0.20	-1.99	0.056
Feedback improves patient care	4.67 (0.48)	4.80 (0.41)	+0.13	-1.68	0.103
Learners are responsible for feedback	3.77 (0.82)	4.30 (0.65)	+0.53	-3.40	0.002 *

\* meets statistical significance with P-value < 0.05

Table 2. Mean percent quiz accuracy by feedback domain and postgraduate year (3 questions per domain, N=30).

PGY Level	Expectations	SMART Goals	Feedback Plan
PGY-1	100.0%	100.0%	83.3%
PGY-2	100.0%	97.2%	80.6%
PGY-3	87.5%	91.7%	79.2%
Overall	96.7%	96.7%	81.1%

## 65 Anticipating Change: Local Attitudes Towards a New Community Emergency Medicine Residency Program

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**Background:** Indiana University School of Medicine will launch a new emergency medicine residency program at Indiana University Health Bloomington (IUH-B) in 2026. No prior work has examined community perceptions of emergency medicine residency implementation in a community hospital.

**Objectives:** To assess community members’ awareness, attitudes, and concerns regarding the introduction of emergency medicine (EM) residents at IUH-B, and to evaluate prior experience with resident physicians, perceptions of forthcoming residents, and understanding of resident training.

**Methods:** This cross-sectional observational study used a concurrent convergent mixed-methods design. A convenience sample of structured surveys and semi-structured interviews was conducted with adult patients and caregivers receiving

emergency care at IUH-B, a level III trauma center with 60 ED beds, in June and July 2025. Quantitative data were analyzed with descriptive statistics and chi-square testing; qualitative data underwent transcription and thematic analysis.

**Results:** Thirty-nine participants completed surveys and 40 completed interviews. Many were aware of the upcoming residency programs (59%), but only 49% correctly identified an EM resident’s training level. Most (95%) felt residents would improve care quality, access, and modernization in Bloomington. Only 5% expressed concern about resident involvement, mainly supervision. Qualitative themes (Table 1) revealed optimism about benefits such as increased staffing, shorter wait times, and improved physician retention. Participants valued a resident who is competent, personable, and attentive, while wanting adequate supervision. Prior experience or awareness of the programs did not significantly influence comfort or support ( $\chi^2=0.004$ ,  $p=0.95$ ;  $\chi^2=0.034$ ,  $p=0.85$ ). The initial round of thematic coding resulted in high inter-rater reliability with a Cohen Kappa value of 0.724 ( $p< 0.001$ ).

**Conclusions:** Community members expressed strong support for the new residency programs and confidence in future residents providing safe, supervised care. Minimal concerns centered on experience and oversight. Findings highlight the need for community education regarding residents’ roles and training as IUH-B prepares for program implementation.

Table 1. Qualitative Thematic Analysis Codebook: Themes, Categories, and Codes

Theme	Category	Code
Benefits of Residency Program	System Level	Extra Staff, Increased Providers, Reduced Wait Times, Increased Retention, Up-to-date Training
	Community Level	Economic Benefit, Community Benefit, Increased Educational Opportunities
Concerns Regarding Residents	Inexperience	Lack of Knowledge, Rushing
	Overconfidence	Arrogance, Not Asking for Help
	Supervision	Lack of Oversight, Proper Supervision
Trust (or Distrust)	Patient-Provider Communication	Honesty, Professionalism, Bedside Manner
	Clinical Demeanor	Bedside Manner, Positive Attitude, Listening Skills
Advice to Residents from a Patient Perspective	Collaboration	Learn from Staff
	Preparedness	Stay Updated, Humility, Knowledge

## 66 Backup Policies and Practices in Emergency Medicine Residencies: A National Study

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**Background:** Emergency Medicine (EM) residency programs face the challenge of developing systems to manage unexpected absences. Currently, there is no published literature describing the state of backup policies in EM.

**Objectives:** This study aims to fill that gap by examining the backup policies of ACGME-accredited EM residencies in the United States, highlighting variations and commonalities.

**Methods:** We conducted a cross-sectional survey of EM residency directors across the US. Respondents completed an electronic survey with multiple-choice and open-ended questions. Descriptive statistics were used for analysis.

**Results:** Out of 282 directors surveyed, 107 responded (37.9%). Approximately 80% of programs have a formal backup policy. Academic programs are more likely to have such policies than community-based programs (92.7% vs 54.2%). Four-year programs have a higher prevalence of formal back up policies compared to three-year programs (91.7% vs 76.3%). Smaller programs with 8 or fewer residents per post-graduate year were less likely to implement formal policies (50%).

About 54% of program directors believe their backup policy effectively meets their program needs, 34% are ambivalent, and 10% feel their policies are inadequate. For those dissatisfied or ambivalent (n=45), the key challenges include managing multiple call-outs (58%), over-use of backup (56%), and unclear distinction between excused vs unexcused absences (44%).

The predominant backup structure involves a resident on a 24-hour backup shift (55%). Conversely, 34% of programs may leave the shifts unstaffed when someone calls out.

Table 1: Program Demographics of EM Residencies (n = 104)

Variable	Category	n (104)	%
Program type	Academic	41	39.40%
	Community	24	23.10%
	County	13	12.50%
	Combination / Other	26	25.00%
U.S. division (9)	South Atlantic	23	22.10%
	Mid-Atlantic	22	21.20%
	East North Central	16	15.40%
	Pacific	13	12.50%
	West South Central	9	8.70%
	New England	9	8.70%
	West North Central	5	4.80%
	East South Central	4	3.80%
	Mountain	3	2.90%
U.S. region (4)	South	36	34.60%
	Northeast	31	29.80%
	Midwest	21	20.20%
	West	16	15.40%
Training length	3 years	80	76.90%
	4 years	24	23.10%
Residents per PGY year	8 or fewer	26	25.00%
	9--12	34	32.70%
	13--16	31	29.80%
	17--20	9	8.70%
	21 or more	4	3.80%
Total residents	Median	36	
	IQR (Q3-Q1)	17	