Objectives: This qualitative study aims to explore the perspectives of residents who self-identified as facing difficulty completing the scholarly project.

Methods: We performed a qualitative study using a constructivist paradigm and conducted semistructured interviews at 4 American ACGME-accredited emergency medicine residency programs. We invited residents who self-identified as struggling with scholarship. Two researchers independently performed a thematic analysis of interview transcripts. Discrepancies were resolved through in-depth discussion and negotiated consensus.

Results: 13 residents consented to be interviewed. Many had participated in scholarship before residency. Major themes identified were: barriers to scholarly project development, advice to programs, and advice to residents. Barriers to scholarly productivity included lack of: time, perceived value of scholarship, clarity around the requirement, infrastructure, skills, and mentorship. Suggestions for residency programs included setting clear expectations, providing infrastructure, and facilitating mentorship. Participants' advice to residents included starting early and seeking a quality mentor.

Conclusions: Our analysis reveals that even residents with prior experience in scholarship can struggle to complete the scholarly project required in residency. Our participants highlight challenges to completing the scholarly project requirement and recommend strategies at multiple levels to help residents succeed. [This was completed as our group project for the MERC at CORD Program]

78 Artificial Intelligence May Benefit Experienced Users More than Novices in Point-Of-Care Ultrasound Acquisition

Jacob Lenning, Corey Garrison, Paul Thanel, Aaron Mahoney

Background: There is limited evidence defining the role of artificial intelligence (AI) guidance in point-of-care ultrasound (POCUS) education. It unknown for which learners and for which POCUS studies AI guidance is most immediately helpful due to an absence of prior repeated-measure studies.

Objective: Determine the immediate effect of AI guidance on POCUS acquisition time and image quality in novice and experienced users.

Methods: A repeated-measure experimental study was conducted in a simulated setting. A convenience sample of 14 novice users with limited POCUS training during medical school and 10 experienced emergency medicine residents recorded right upper quadrant (RUQ) abdominal and apical-4 chamber (A4C) cardiac windows with and without AI guidance on three standardized patients in randomized order. Acquisition times were compared with the Mann-Whitney U test. Three blinded reviewers assigned Boolean values for the quality criteria: essential structures visible, correct imaging plane, and proper probe orientation. Quality criteria proportions were compared with Pearson's chi-square for independent samples and McNemar's test for repeated measures.

Results: 286 ultrasounds were recorded. Median [interquartile range] acquisition time (seconds) was longer with AI than without for A4C (117 [125]; 69 [62]; p<0.01) and RUQ (61 [64]; 38 [38]; p<0.01) windows in all users (Table 1). All A4C and RUQ quality criteria were more likely in experienced

Table 1. Median (Interquartile Range; IQR) time in seconds to acquire ultrasound windows with and without Artificial Intelligence (AI) by study group. P-values from the Mann-Whitney U test. *Four RUQ timing videos without AI missing for analysis.

Study Group	Right Upper Quadrant Window			Apical-4-Chamber Window		
	Number of Recordings	Median (IQR) Seconds	p	Number of Recordings	Median (IQR) Seconds	p
All Participants	140*	52 (58)	-	144	91 (88)	-
Novice Users	80*	69 (72)	**<0.01**	84	104 (89)	**0.04**
Experienced Users	60	34 (30)		60	74 (74)	
All Participants With AI	72	61 (64)	**<0.01**	72	117 (125)	**<0.01**
All Participants Without AI	68	38 (38)		72	69 (62)	
Novice Users With AI	42	85 (91)	**<0.01**	42	136 (109)	**<0.01**
Novice Users Without AI	38*	53 (59)		42	75 (66)	
Experienced Users With AI	30	44 (29)	**<0.01**	30	98 (132)	0.18
Experienced Users Without AI	30	28 (21)		30	66 (47)	

Table 2. (A) Proportion of recordings meeting quality criteria by ultrasound (US) window and experience level. **(B)** Likelihood the total number of criteria was greater with or without artificial intelligence (AI) and proportions for each criterion by US window and study group. P-values from McNemar's test for repeated measures unless noted. #Pearson's chi square test. $Fisher's exact test. *One A4C and RUQ recording without AI missing for analysis.

(A)		Right Upper Quadrant Window				Apical-4-Chamber Window			
		Proportion [95% CI]		X^2 (df=1)		Proportion [95% CI]		X^2 (df=1)	
Group	Quality Criteria	Novice	Experienced	n	p	Novice	Experienced	n	p
All Recordings	Essential Structures	0.65 [0.54,0.74]	0.92 [0.81,0.97]	143	**<0.01#**	0.58 [0.47,0.68]	0.77 [0.64,0.86]	143	**0.02#**
	Imaging Plane	0.58 [0.47,0.68]	0.78 [0.66,0.87]		**0.01#**	0.22 [0.14,0.32]	0.48 [0.36,0.61]		**<0.01#**
	Probe Orientation	0.78 [0.68,0.86]	0.97 [0.88,1.00]		**0.02#**	0.41 [0.31,0.52]	0.73 [0.61,0.83]		**<0.01#**
(B)		**AI**	**WO**	**-**		**AI**	**WO**	**-**	
All Users	Greater # of Criteria	0.23 [0.15,0.35]	0.20 [0.12,0.31]	142	0.37#	**0.35** [0.25,0.47]	**0.20** [0.12,0.32]	142	**0.04#**
	Essential Structures	0.75 [0.63,0.83]	0.78 [0.67,0.86]	71	0.62	0.69 [0.58,0.79]	0.62 [0.50,0.72]	71	0.32
	Imaging Plane	0.65 [0.53,0.75]	0.68 [0.57,0.78]		0.64	**0.40** [0.30,0.52]	**0.25** [0.16,0.36]		**0.02**
	Probe Orientation	0.89 [0.79,0.94]	0.83 [0.73,0.90]		0.29	0.56 [0.44,0.66]	0.54 [0.41,0.64]		0.85
Novice Users	Greater # of Criteria	0.29 [0.18,0.45]	0.24 [0.14,0.40]	83	0.62#	0.32 [0.20,0.47]	0.20 [0.10,0.34]	83	0.21#
	Essential Structures	0.63 [0.48,0.76]	0.67 [0.51,0.79]	41*	0.78	0.57 [0.42,0.71]	0.59 [0.43,0.72]	41*	0.80
	Imaging Plane	0.54 [0.39,0.68]	0.62 [0.47,0.75]		0.37	0.26 [0.15,0.41]	0.17 [0.08,0.32]		0.21
	Probe Orientation	0.83 [0.68,0.92]	0.74 [0.59,0.85]		0.25	0.43 [0.29,0.58]	0.39 [0.26,0.54]		0.80
Experienced Users	Greater # of Criteria	0.17 [0.07,0.34]	0.13 [0.05,0.30]	60	1$	0.40 [0.24,0.58]	0.20 [0.09,0.38]	60	0.09#
	Essential Structures	0.90 [0.73,0.97]	0.93 [0.77,0.99]	30	0.56	0.87 [0.70,0.95]	0.67 [0.49,0.81]	30	0.06
	Imaging Plane	0.80 [0.62,0.59]	0.77 [0.59,0.88]		0.71	**0.60** [0.42,0.75]	**0.37** [0.22,0.55]		**0.03**
	Probe Orientation	0.97 [0.82,1.00]	0.97 [0.82,1.00]		1.00	0.73 [0.55,0.86]	0.73 [0.55,0.86]		1.00

than novice users (Table 2A). The total number of A4C quality criteria was more often greater with AI (0.35 [95%CI 0.25, 0.47]) than without (0.20 [0.12, 0.32]; X2, df=1, n=142, p=0.04) for all users regardless of training level (Table 2B). The correct A4C imaging plane was more likely with AI for all users (0.40 [0.29, 0.52]; 0.25 [0.16, 0.36]; X2, df=1, n=71, p=0.02) and experienced users (0.60 [0.42, 0.75]; 0.37 [0.22, 0.55]; X2, df=1, n=30, p=0.03; Table 2B). No significant differences in quality criteria were observed for novices regardless of window or RUQ windows regardless of user.

Conclusion: AI guidance was associated with longer POCUS acquisition time for all users. The immediate effect on image quality trended more favorably for experienced users obtaining the A4C window. POCUS AI guidance is likely more beneficial for users with prior experience.

79 Measuring Our Worth: Results from the Emergency Medicine Coordinator Salary Survey

JanAlicia Ricker, Marie Hoyle, Tania Strout

Background: GME program coordinators are vital to training program success, but recent studies reveal high levels of professional burnout and job dissatisfaction. One area that may contribute to this is coordinators' perceptions of compensation; however, little is known regarding EM coordinator compensation.

Objectives: To explore: 1) EM program coordinators' compensation models, compensation satisfaction, and factors contributing to higher compensation, and 2) factors coordinators believe would improve job satisfaction. Methods: We conducted an anonymous, cross-sectional survey of US-based EM program coordinators using an electronic survey platform. Responses were summarized using descriptive statistics; hierarchical logistic regression models were used to examine predictors of higher salary and perceived compensation inadequacy. Free-text responses were summarized using a qualitative descriptive approach.

Results: 120/375 (32%) coordinators completed the survey; their characteristics are provided in Table 1. The mean number of residents managed was 37.8 ± 24.2, 95% CI: 33.4-35.6 and 36.7% endorsed also managing EM fellowships (44/120). Salaries ranged from ≤$45,000 ($45K) to ≥$85K, with most in the $55K-$64K (39/120, 32.5%) or $65K-$74K (31/120, 25.8%) ranges. Many participants endorsed their compensation as 'somewhat' or 'very inadequate,' 93/120, 77.5%. The number of residents managed was the only significant predictor of higher (≥$75K) salary (OR 1.07, 95%CI 1.01-1.13, p=0.02), while only years of GME experience predicted endorsing inadequate compensation (11+years' experience: OR 0.06, 95%CI 0.01-0.68, p=0.02; 4-6 years' experience: OR 0.06, 95%CI 0.004-0.73, p=0.03).

Table 1. Participant characteristics (*N*=120).

	n	%
Educational attainment		
High school diploma	24	20.0
Some college	2	1.7
Associates degree	1	0.8
Bachelor's degree	23	19.2
Master's degree	42	35.0
TAGME certification		
No	99	82.5
Yes	21	17.5
Years in GME		
Less than 1 year	4	3.3
1-3 years	37	30.8
4-6 years	21	17.5
7-10 years	13	10.8
11+ years	45	37.5
Years in EM GME		
Less than 1 year	9	7.5
1-3 years	42	35.0
4-6 years	22	18.3
7-10 years	16	13.3
11+ years	31	25.8
Geographic region		
Midwest	36	30.0
Northeast	37	30.8
Pacific	8	6.7
South	26	21.7
West	12	10.0
Northeast and South	1	0.8
Hospital or institution type		
Academic medical center	50	41.7
Community hospital	28	23.3
University-affiliated hospital	29	24.2
County hospital	2	1.7
Private, non-profit hospital	1	0.8
Academic medical center, community hospital	1	0.8
Academic medical center, university-affiliated hospital	4	3.3
University-affiliated hospital, community hospital	2	1.7
Academic medical center, community hospital, university-affiliated hospital	3	2.5
Number of resident physicians in programs coordinated		
1-10	3	2.6
11-20	14	12.1
21-30	32	27.6
31-40	30	25.9
41-50	19	16.4
51-60	11	9.5
61-70	1	0.9
71-80	3	2.6
81-90	1	0.9
91-100	1	0.9
>100	1	0.9
Also manage EM fellowship programs		
No	76	63.3
Yes	44	36.7
Current base salary, before taxes		
Under $45,000	1	0.8
$45,000 – $54,999	18	15.0
$55,000 - $64,999	39	32.5
$65,000 - $74,999	31	25.8
$75,000 - $84,000	18	15.0
$85,000 or more	13	10.8

Notes: TAGME=Training Administrators in Graduate Medical Education; GME=graduate medical education.

Eight major themes for improving job satisfaction were identified: compensation, respect, appreciation, recognition, workload, leadership team, professional development, and