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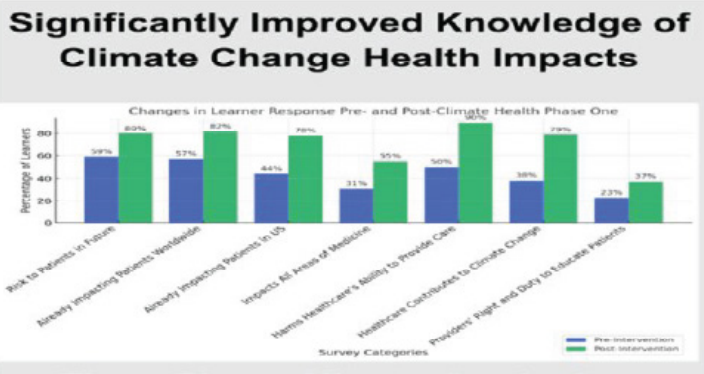
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changes in knowledge, attitudes, and perceived professional roles and responsibility.

Impact: A total of 145 students participated, with response rates of 92 percent for the pre-survey and 62 percent for the post-survey. Students demonstrated substantially improved understanding that climate change is already affecting patients in the United States and globally, influences all specialties, and contributes to strain on healthcare systems. Awareness of healthcare's contribution to greenhouse gas emissions more than doubled. Notably, the proportion of students who believed physicians have both a right and a duty to discuss climate-related health risks with patients and to provide anticipatory guidance rose from 23 percent to 37 percent. These findings suggest that an integrated, phased approach can deliver meaningful climate and health education without significant disruption to existing curricula. Future evaluation will focus on preclinical integration and the senior elective, with potential expansion into graduate medical education.



	Orientation	Integration	Planetary Health Senior Elective
Audience	Entire Entering Medical School Class	All 1st and 2nd Year Medical Students	Interested Senior Medical Students
Description	Intro Didactic Small Groups • Authentic Local Clinical Cases • Health Care's Impact • Advocacy Reflection	Integrate relevant material into all pre-clinical blocks eg – Reproductive block: heat and PM cause preterm labor	• PH Didactics • National Modules • EH Clinic • Advocacy at Capital • Small Group TBL • Final Project
Advantages	Foundational Base for Future Learning for All Incoming Students	Connects climate change as a threat multiplier Doesn't require additional curricular time	Students gain a deeper understanding of Planetary Health and Individualized project
Goals	Foundation	Application	Leadership

17 MatchMakerMD: A Novel Mentorship Pairing Software to Boost Scholarship

Shad Yasin, Kelly Reese, Andrew Mittelman, Kelly Mayo, Avery Clark

Background: Mentorship and scholarly productivity are core expectations in graduate medical education, yet many EM departments lack systems to connect learners with potential mentors. Prior studies show that 94.1% of EM residents stated that mentorship was the key to success in residency. To address this gap, we developed a centralized portal to catalog active scholarly projects and research interests among EM residents, fellows, and faculty.

Educational Objectives: To increase accessibility of departmental scholarly activity and expertise, facilitate faculty-trainee mentorship, and enhance research collaboration and scholarly output.

Curricular Design: The intervention followed Kern's Six-Step Model. Our needs assessment drew from Program Evaluation Committee (PEC) meeting minutes and ACGME Survey weaknesses. In response, identification of mutual scholarly interests was prioritized. We surveyed residents, fellows, and attendings to collect research interests, ongoing projects, scholarly ideas, and mentoring capacity. After exploring options for dissemination, we deployed an interactive portal, iteratively improved the user experience via pilot rounds, and launched it during a department-wide scholarship day. Users can identify and sort collaborators through interest clustering, content expertise, and availability. A periodic newsletter highlights recent activity and encourages continued use.

Impact: Focus group feedback shows trainees have increased access to a more diverse pool of mentors, and faculty have convenient lists of mentees for collaboration. Ongoing evaluation is studying the quantitative impact on abstract submissions, poster presentations, and resident scholarly output. The implementation of a mentor/mentee pairing portal has transformed the process of identifying collaborators in an academic EM department. This model is easily scalable for other residencies or fellowships and offers promise for increasing faculty/trainee collaboration via deliberate team formation.

18 Innovating Emergency Medicine Simulation Training through Generative AI: A Pilot in Resident Education

Robert Tennill, Richard Selinfreund, James Waymack, Sharon Kim

Introduction: Early EM residency training requires rapid development of efficient diagnostic reasoning, information gathering, and communication skills. Traditional simulation is resource-intensive and limited in scalability. Advances in generative artificial intelligence (AI) now enable realistic, interactive patient avatars that integrate history, physical exam, diagnostics, management, and interpersonal communication. We piloted an AI-simulated patient program for PGY-1 residents to assess feasibility and educational impact.

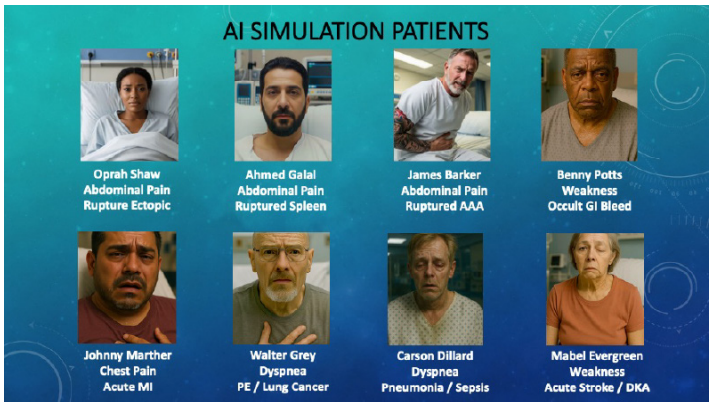
Educational Objectives: To evaluate whether AI-simulated patient encounters improve early residents' confidence, diagnostic sequencing, clinical reasoning,

and communication skills. We also assessed comfort and perception of this novel simulation modality.

Curricular Design: Eight AI-simulated cases representing common emergency presentations (chest pain, dyspnea, abdominal pain, and weakness) were developed using avatars with diverse patient backgrounds, communication styles, and personalities (Image 1). Residents completed a pre-survey, simulation encounter, post-survey, and final assessment. The system automatically captured metrics for diagnostic sequencing, time to critical actions, and management decisions, followed by structured debriefing. This is an IRB-approved project.

Impact And Effectiveness: Eight PGY-1 residents completed all simulations. Across the first four cases mean Likert ratings ranged from 3.6–4.1/5, reflecting overall positive perceptions (Table 1). The largest pre–post gain was in comfort participating in simulation (+0.42), while other domains (perceived educational value, engagement, and clinical reasoning) remained stable. No statistically significant differences were observed, consistent with high baseline confidence and limited sample size.

This pilot demonstrates that AI-simulated patient encounters are a feasible, safe, and responsible modality for EM resident training.



Question	Mean Pre	Mean Post	Mean Δ (Post-Pre)	SD Δ	t-test p	Wilcoxon p
Q11	3.638	4.055	0.417	0.432	0.149	0.25
Q12	3.783	3.75	-0.033	0.461	0.896	1.0
Q13	3.824	3.71	-0.115	0.283	0.478	0.593
Q14	3.824	3.866	0.042	0.315	0.809	1.0
Q15	3.668	3.81	0.141	0.279	0.386	0.285

Question 11: Comfort participating in simulation-based training
Question 12: Perception of simulation as valuable for learning EM skills
Question 13: Confidence engaging in and contributing to simulation
Question 14: Comfort making mistakes in simulation
Question 15: Expectation that simulation improves clinical reasoning

19 Residency Training for Language-Concordant Care: How Effectively Can a Bilingual Emergency Medicine Residency Improve Outcomes for Patients and Hospitals?

Lincoln Sheets, Victor Cisneros

Background: Nearly 20% of the U.S. population experiences limited English proficiency, placing them at heightened risk. In emergency medicine, timely and accurate communication is essential for patient safety. LEP patients experience longer ED stays, higher repeat visits, and increased adverse events. Elderly LEP patients are particularly vulnerable, compounding clinical risks. Despite federal mandates, existing interpretation services often fall short of patient needs. High costs and inconsistent quality plague current language access solutions.

Curricular Design: Residency Training for Language-Concordant Care proposes a proactive shift by training residents to provide language-concordant care. A structured, evidence-based bilingual curriculum is integrated into residency training. This curriculum spans three years, progressively building medical Spanish proficiency. It begins with foundational language skills and advances to complex clinical conversations. Digital tools, including an online learning platform and smart phrasebook, support the training. A professional development module ensures regulatory compliance in language access. A virtual compliance advisor provides real-time guidance on legal and ethical standards. Residents are prepared to achieve Qualified Bilingual Staff (QBS) status, with certification based on scenario-based assessments and rigorous testing. The curriculum supports both language acquisition and cultural competence. An interdisciplinary team with extensive clinical and educational expertise leads the project.

Impact: Our preliminary data show significant improvements in medical Spanish proficiency and pilot studies indicate high user acceptance of the smart phrasebook and digital modules. The project will evaluate language proficiency gains and assess regulatory compliance and resident self-efficacy. Key metrics include completion rates, time-to-certification, and patient satisfaction. Data collection spans multiple residency programs and clinical settings. The program's scalability will allow broader adoption across healthcare institutions. Success will advance health equity and improve outcomes for LEP populations. This innovative approach aims to transform language access in emergency medicine nationwide.

20 Development of a Prehospital and Austere Medicine Elective

Bryanne Macdonald, Matthew Shapiro, Leah Manchester, Adrianne Wurzl, Matthew Senno, Julianne Earle, Brendan McFall, Meghann Zapcic-Desrochers, Seth Kelly, Liza Smith

Introduction: Subspecialty EM rotations provide students with exposure beyond a standard clerkship experience and broaden access for away rotations. They also allow programs to highlight unique strengths and engage with applicants. Existing resource-limited environment electives typically address wilderness medicine or EMS in isolation. To fill this gap, we created a fourth-year elective integrating wilderness