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Climate-Informed Medicine: A Three-Phase Model for Integrating Climate and Health into Undergraduate Medical Education

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assisted workflow using structured prompts to produce weekly conference communications containing rotating language greetings, inspirational quotations, reading assignments, schedules, and accreditation information. The workflow was refined iteratively to improve clarity, reduce variation, and create a predictable sequence for information generation. Faculty used a standardized prompt and performed a brief accuracy review prior to distribution. Early challenges included the need for precise prompting, occasional formatting variability, and intermittent drift in output structure. Iterative adjustments focused on clearer prompt design and a consistently applied review step.

Impact/Effectiveness: Time required to prepare weekly conference communications decreased from approximately 30 minutes per email to 17 to 21 minutes per month after implementation. Faculty noted reduced cognitive load and greater reliability during email preparation, while residents and faculty receiving the communications reported improved clarity and consistency. The workflow has demonstrated stable performance over 12 months with minimal drift. Next steps include expanding the workflow to additional recurring educational communications and developing a transferable prompting framework for other programs.

15 Adapting to Change: Developing a High-Fidelity Mock ABEM Certifying Exam for Residency Training

Robert Tennill, Marit Tweet, Jonathan dela Cruz

Introduction: In 2026, ABEM will begin delivering the new Certifying Exam (CE), in place of the previous Oral Board Exam, designed to ensure graduating residents can apply the skills learned in training to simulated, real-world clinical scenarios. Residency programs are attempting to rapidly adapt to this significant change and ensure their graduates are well prepared. We developed and implemented a half-day, high-fidelity Mock ABEM CE for our PGY-3 residents to assess feasibility and educational impact.

Educational Objectives: To evaluate whether a mock exam improved residents' confidence and perceived preparedness for the new ABEM CE including clinical care, communication, and procedural cases.

Curricular Design: We developed ten cases designed to replicate the ABEM clinical care, communication, and procedural assessments (Example Image 1, Supplement 2). Standardized patients, task-trainers, ultrasound, and faculty examiners were used to represent all proposed case types in a half-day session. An introductory orientation session and structured debrief was also included. We then conducted a paired pre-post evaluation of the course. Surveys assessed confidence in passing the ABEM CE and perceived preparedness across eight competency domains (clinical decision making, prioritization, reassessment/troubleshooting, difficult conversations, managing conflict,

patient centered communication, ultrasound, and procedures). All items used 5-point Likert scales. Paired analyses compared pre- to post-course responses (Table 1).

Impact And Effectiveness: Eight participants completed both the pre-course and post-course surveys. Two participants increased their overall confidence level and six reported no change. No decreases were observed. Most domains demonstrated stable or modest improvements in confidence and perceived preparedness, with the largest gains observed in reassessment/troubleshooting (mean paired change =+0.6), difficult conversations (+0.4), managing conflict (+0.5), and patient centered communication (+0.3). This course appears to help build confidence and several key skills, though a larger sample is needed to more clearly measure its impact.

Question	Survey	n	Mean	Std Dev	Min	Max
1. How confident do you feel about passing the American Board of Emergency Medicine (ABEM) Certifying Exam (CE)?	Pre	8	3.1	1.2	2	5
	Post	8	3.4	1.1	2	5
	Paired Change	8	0.3	0.3	1	-
Clinical Decision Making	Pre	8	3.1	0.3	1	5
	Post	8	4.1	0.4	3	5
	Paired Change	8	1.1	0.3	-1	3
Prioritization	Pre	8	4.1	0.3	3	5
	Post	8	3.8	0.3	3	5
	Paired Change	8	-0.4	0.4	-2	0
Reassessment/Troubleshooting	Pre	8	3.5	1.5	2	5
	Post	8	4.1	0.4	3	5
	Paired Change	8	0.6	1.1	3	-1
Difficult Conversations	Pre	8	3.5	0.3	1	5
	Post	8	4.1	0.2	3	5
	Paired Change	8	0.6	0.4	3	2
Managing Conflict	Pre	8	4.1	0.2	3	5
	Post	8	4.5	0.2	3	5
	Paired Change	8	0.4	0.2	3	2
Patient-Centered Communication	Pre	8	4.1	0.3	3	5
	Post	8	4.5	0.2	3	5
	Paired Change	8	0.4	0.2	3	2
Ultrasound	Pre	8	3.4	1.3	2	5
	Post	8	3.5	1.3	2	5
	Paired Change	8	0.1	0.2	3	-1
Procedural	Pre	8	3.1	0.2	2	5
	Post	8	3.4	0.2	2	5
	Paired Change	8	0.3	0.2	3	-1

16 Climate-Informed Medicine: A Three-Phase Model for Integrating Climate and Health into Undergraduate Medical Education

Lorraine Thibodeau

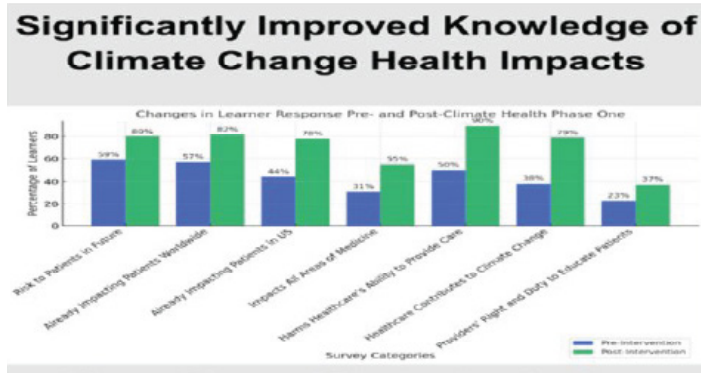
Introduction: Climate change is altering disease patterns, amplifying health inequities, and placing increasing strain on healthcare delivery, yet most medical schools offer limited training on its clinical relevance leaving future physicians underprepared. National calls for integration in medical education highlight a growing readiness gap. A needs assessment at our institution confirmed this gap and guided the development of a three-phase climate health curriculum.

Objectives: The curriculum sought to strengthen student understanding of climate-related health impacts, improve recognition of climate-sensitive exposures across specialties, increase awareness of healthcare's role in greenhouse gas emissions, and cultivate a sense of professional responsibility to engage in climate-informed care and anticipatory guidance.

Design: We implemented a three-phase curriculum: an orientation module for all incoming students using foundational didactics and authentic local cases underscoring immediate relevance, integration of climate content throughout preclinical courses, and a senior planetary health elective incorporating community engagement and advocacy. This abstract evaluates the orientation component. Pre- and post-surveys assessed

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 1 st and 2 nd 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,