

Rapid Adaptation to Remote Didactics and Learning in GME

Weekly didactic conference in emergency medicine education has traditionally united residents and faculty for learning and fostered community within the residency program. The global pandemic coronavirus disease-19 (COVID-19) has fueled a rapid transition to remote learning that has disrupted the

Table 1
Rapid Adaptation Strategies and Considerations

Adaptation Strategy	Considerations
1. Engage the whole educational team	<ul style="list-style-type: none"> Establish a diverse team of faculty and trainees who can be in contact frequently to guide the transition from in-person to remote didactics Empowering the entire educational team to feel ownership will enhance sustainability and prevent isolation³ Team goals include identifying needs and employing creative mechanisms to foster active learning Communicate changes and expectations with faculty and trainees at regular intervals
2. Identify video conferencing champions	<ul style="list-style-type: none"> Champions need to be facile with the different features available on the video conference platform used and understand how to navigate them to optimize educational sessions Examples include managing who is sharing their camera (presenters vs. learners), muting all audience members on arrival to prevent distraction, organizing break out rooms, and using the appropriate settings to host panel discussions or webinars
3. Designate moderators	<ul style="list-style-type: none"> Having two moderators allows conference to continue smoothly if one needs to take a break or troubleshoot a technical error Make moderating fun—consider playing “walk up” music for speakers during transitions Moderators can also offload presenters from monitoring the chat and can summarize questions or comments to them.
4. Build in breaks	<ul style="list-style-type: none"> Breaks allow learners to briefly pause without fear of missing content Breaks reduce digital fatigue and optimize attention³ Breaks also facilitate time for social interaction among participants
5. Perform technology checks and education for speakers	<ul style="list-style-type: none"> “Tech checks” offer an opportunity for speakers to troubleshoot and familiarize themselves with basic features of the platform Consider job aids or short videos on basic function for virtual platforms Anticipate technical difficulties, remain flexible and have a backup plan
6. Perform continuous quality improvement	<ul style="list-style-type: none"> Debrief sessions to identify lessons learned for future conferences Continue to evolve and seek out literature and colleagues for improvement ideas
7. Leverage community of practice	<ul style="list-style-type: none"> Engage in a community of practice⁴ of other educators in order to crowdsource strategies and innovative ideas. Recruit alumni to present didactics or run educational sessions Utilize the remote format as a means to feature national leaders and experts on topics without the requirement for travel
8. Allow participants to comment and ask questions in real time	<ul style="list-style-type: none"> Utilize chat features that are built into the video conferencing platform Consider other platforms, that is, Slack, Twitter, etc., that offer enhanced functionality and can more easily archive conversation⁵ Promote engagement in real time such as integrating polls/questions and small-group breakout sessions Empower designated moderators to answer questions or pose questions in the chat to the speaker
9. Communicate video etiquette standards	<ul style="list-style-type: none"> Create a shared understanding of appropriate etiquette for remote didactics For example, communicate expectations to the audience according to the session type and audience size for whether they should share their video and/or mute themselves
10. Employ a mechanism for taking attendance	<ul style="list-style-type: none"> Consider third-party attendance options such as QR codes that can directly connect the attendee to their resident site for conference hour tracking (i.e., New Innovations) Attendees may send chat messages in the video software to a designated person tracking attendance (chat features are usually able to be saved by the host creating a record of attendance) Integrate a signed honor system acknowledging attendance

typical in-person format. To maintain ACGME¹ educational experiences and requirements for residents in a safe manner, many residencies have moved to video-conferencing platforms such as Zoom™, Teams™, and WebEX™ (Table 1).

Given the importance of didactic conference as a ritual, educational experience, and community-building activity, most residency programs have worked to maintain an active and robust didactic conference despite the many logistic challenges.² Engaging residency program members in the transition to remote learning and utilizing opportunities for innovation can help to maintain normalcy and combat isolation resulting from the loss of weekly in-person contact.

Herein, we propose practical tips for optimizing remote learning for weekly emergency medicine residency didactics.

Grace Hickam, MD¹ 

(Grace.hickam@vcuhealth.org)

Sally A. Santen, MD, PhD¹ 

Stephen John Cico, MD, MEd²

David Manthey, MD³

Margaret Wolff, MD⁴ 

Joel Moll, MD¹ 

Alexandra Lambert, MD¹

Jaime Jordan, MD⁵

Mary R. C. Haas MD⁶ 

¹Department of Emergency Medicine Virginia Commonwealth University, Richmond, VA

²Department of Emergency Medicine, Indiana University Indianapolis, IN

³Department of Emergency Medicine, Wake Forest University School of Medicine, Winston Salem, NC

⁴Medical Education Fellowship, University of Michigan Ann Arbor, MI

⁵Emergency Medicine Residency Program, Ronald Reagan UCLA Medical Center, Los Angeles, CA

⁶Emergency Medicine Residency Program, University of Michigan, Ann Arbor, MI

[Corrections added on October 30, 2020 after first publication: The author “Mary R. C. Haas, MD” have been changed from Supervising Editor to last author and Susan B. Promes have been set as Supervising Editor.]

Supervising Editor: Susan B. Promes, MD

References

1. Accreditation Council for Graduate Medical Education. ACGME Program Requirements for Graduate Medical Education in Emergency Medicine. Available at: https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/110_EmergencyMedicine_2019_TCC.pdf?ver=2019-06-11-153018-223. Accessed Jul 29, 2020.
2. Gottlieb M, Laundry A, Egan DJ, et al. Rethinking residency conferences in the era of COVID 19. *AEM Educ Train* 2020;4:313–7.
3. Barker A. Faculty development for teaching online: educational and technological issues. *J Contin Educ Nurs* 2003; 34:273–8.
4. Graven M, Lerman S, Wenger, E. (1998). Communities of practice: Learning, meaning and identity. *J Math Teach Educ* 2003;6:185–94.
5. Rose C, Mott S, Alvarez A, Lin M. Physically distant, educationally connected: interactive conferencing in the era of COVID-19. *Med Educ* 2020;54:758–9.