

The Journal of the American Osteopathic Association



The Journal of the American Osteopathic Association

(JAOA) encourages osteopathic physicians, faculty members and students at colleges of osteopathic medicine, and others within the health care professions to submit comments related to articles published in the JAOA and the mission of the osteopathic medical profession.

The JAOA's editors are particularly interested in letters that discuss recently published original research.

Letters must be submitted online at <http://www.osteopathic.org/JAOAsubmit>.

Letters to the editor are considered for publication in the JAOA with the understanding that they have not been published elsewhere and are not simultaneously under consideration by any other publication. All accepted letters to the editor are subject to editing and abridgment.

Although the JAOA welcomes letters to the editor, these contributions have a lower publication priority than other submissions. As a consequence, letters are published only when space allows.

Ten Tips for Maximizing the Effectiveness of Emergency Medicine Procedure Laboratories

To the Editor:

As medical director of Procedure Service at one of the nation's largest academic medical centers, I was keenly interested to read the medical education article by Hughes et al¹ in the June 2016 issue of *The Journal of the American Osteopathic Association*. The authors offered 10 tips to educators for designing an effective emergency medicine procedure laboratory, and they did a very good job in delineating some of the underpinnings of a successful simulation-based educational procedure experience. The program at the University of Miami-Jackson Memorial Hospital, previously described in this journal,² subscribes to many of their tips.

With respect to employing instructors with formal training in adult learning concepts (tip 1), the University of Miami-Jackson Memorial Hospital uses a

multifaceted approach that progresses gradually, from a show-and-tell demonstration of our program to faculty participation as a learner to mentoring (ie, faculty observe a teaching session led by a senior instructor) and proctoring (ie, faculty teach while being observed). Then they are prepared to directly supervise our team of residents as they perform clinically warranted procedures on patients. Even at this last stage, a senior instructor accompanies the team (ie, residents and a new instructor) into the clinical realm and is available as back-up.

Although I agree with most of the tips recommended by Hughes et al,¹ I have some comments on others. In developing learning objectives that are well defined, specific, and measurable (tip 2), I would add the importance of identifying the role of the exercise. For example, in our program, we recognized the lack of uniformity in previous apprenticeship-based foundational training. By laying the foundation from the outset, students, house staff, and faculty alike benefit from a standardized training method. I disagree that providing learners with training mate-

rials before they arrive at procedure laboratories (tip 3) evens the playing field. In doing so, we would not be able to adequately obtain preintervention baseline data, which are necessary to demonstrate the effectiveness of the intervention.

Hughes et al¹ recommend using mastery learning strategies (tip 6). Based on my experience, I disagree. In our paradigm, skills are perfected under direct attending supervision with pre-, peri-, and postprocedural feedback. This interaction occurs during learners' performance on a dedicated procedure service rotation, the experiential piece that translates skill in the simulation laboratory to the clinical bedside. Because learners progress at different rates, some will never achieve technical proficiency. True competency includes, but is not defined by, skills performed on a mannequin. Rather, competency is determined by patient-based outcomes, such as procedural completion, complications, and "forward needle passes."³

I applaud Hughes et al¹ for their work and believe that their tips will serve the medical community well. (doi:10.7556/jaoa.2016.150)

Joshua D. Lenchus, DO

Associate Professor of Clinical Medicine, Anesthesiology, and Radiology, University of Miami Miller School of Medicine, Florida

References

1. Hughes PG, Crespo M, Maier T, Whitman A, Ahmed R. Ten tips for maximizing the effectiveness of emergency medicine procedure laboratories. *J Am Osteopath Assoc*. 2016;116(6):384-390. doi:10.7556/jaoa.2016.079
2. Lenchus JD. End of the "see one, do one, teach one" era: the next generation of invasive bedside procedural instruction. *J Am Osteopath Assoc*. 2010;110(6):340-346.
3. Lenchus JD, Carvalho CM, Ferreri K, et al. Filling the void: defining invasive bedside procedural competency for internal medicine residents. *J Grad Med Educ*. 2013;5(4):605-612. doi:10.4300/JGME-D-13-00030.1

© 2016 American Osteopathic Association