back to the Future: Redesign of the Anesthesiology Residency Curriculum

To the Editor:

I wish to thank Dr. Kuhn1 for her recent editorial highlighting the need for a more dynamic anesthesiology residency curriculum.1 Dr. Kuhn suggests that our curriculum be changed such that our trainees have either a pain or critical care focus. In other words, part of the CA3 postgraduate (PG) training year would be structured to permit residents to acquire additional perioperative skills. Although I strongly support her desire to give program directors greater flexibility in designing more individualized training pathways and her call to employ competency-based milestones in determining resident advancement, I am concerned that her proposals may not be sufficiently radical to truly transform our residency programs. Dr. Kuhn bases her suggestions upon retention of our 4-yr residency training continuum and our 1-yr subspecialty fellowships. But is our current training continuum the most effective way to develop perioperative physicians?

I would suggest that perhaps we look to our internal medicine colleagues and to our own past to restructure our training continuum to produce anesthesiologists equally adroit at intraoperative anesthetic delivery, anesthesia care team supervision, and perioperative medicine. Before the mid 1980s, the anesthesia training continuum was of 3 yr duration—equal in training length to general internal medicine. When I completed the then new CA3 (PG 4) year in 1988–89, that year was largely spent much as Dr. Kuhn suggests as a clinical fellow in one or two specialty areas. Over time, requirements increased gradually, making the CA3 year less and less an opportunity for advanced training and more and more like what it was, another year of residency often centered upon clinical service obligations. Consequently, the ability to provide subspecialty training during the CA3 year was lost, leading to a proliferation of 1-yr, PG 5 fellowships. Unfortunately, these 1-yr fellowships are primarily clinical in nature and often do not permit trainees the time to develop a scholarly focus.

Perhaps it is time to return basic anesthesiology training to a program of 3-yr duration. Upon completion of this 3-yr curriculum, and assuming competency objectives are met, anesthesiology residents would be prepared to provide the spectrum of individual physician-delivered intraoperative anesthetic care independently. After the PG 3 year, anesthesiology trainees would next complete an additional, mandatory 2 yr of training in critical care medicine, pain medicine, anesthesiology research, or an anesthesiology subspecialty. New programs in hospital medicine and emergency medicine in combination with anesthesiology might be developed similar to those already available with pediatrics. Other residents might use part of the PG 4 and PG 5 years to undertake graduate education in management, health policy, clinical effectiveness, or adult education theory. During the final year of training, residents would receive formal instruction and practical experience in midlevel supervision. After completion of the 5-yr continuum, the resident would only then be eligible for American Board of Anesthesiology certification in anesthesiology and would likewise be able to obtain a subspecialty qualification in an anesthesiology-related discipline, certification by another American Board of Medical Specialties board (if enrolled in a combined program), or awarded an additional academic degree for advanced study. Because the core basic anesthesiology training would be completed during the PG 1–3 years, residents’ time during the PG 4–5 years would be protected from service demands and devoted exclusively to specific, individualized advanced training. Under such a structure, the 1-yr clinical anesthesia fellowships now offered would no longer be necessary and could be eliminated because those activities would now be incorporated into a 5-yr training continuum. Because different programs have different areas of subspecialty expertise, it is likely that residents would be able to complete their PG

References


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4–5 years in institutions separate from those that provided their core PG 1–3 training.

Although Dr. Kuhn’s suggestions have merit, our past history suggests that attempting to employ the CA3 year to develop perioperative specialization is likely not to be successful. Conversely, our internal medicine colleagues routinely direct individuals into 2- and 3-yr fellowships after completion of a 3-yr internal medicine residency. By restructuring the training continuum into clearly defined basic and advanced components, we may well enjoy greater success in producing the physicians that I suspect both Dr. Kuhn and I hope our trainees will become.

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Reference

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Leadership in Postgraduate Medical Education

To the Editor:

We applaud Dr. Kuhn for her seasoned perspective on postgraduate medical education, particularly the development of innovative anesthesiology programs.1 The paucity of physician-scientists in our specialty has been the topic of several editorials in ANESTHESIOLOGY over the past several years.2,3 As mentioned by Dr. Kuhn, many anesthesiology programs will now be exploring ways to better train and nurture the careers of expert subspecialists and clinician-scientists through the use of innovative programs or “Scholars Programs.” Clearly, one impediment our trainees face is the traditional length of the training continuum required for a subspecialty or academic career, with the associated financial sacrifice. Hopefully, programs that provide stimulating, efficient continuums of training with financial stipends will make the pursuit of an academic career more attractive. We also believe the pairing of research with clinical expertise in at least one of our subspecialties may be the ideal. A more efficient training pathway should allow our trainees to pursue subspecialty training as well as research training.

Our specialty is ideally positioned to become a leader in competency-based postgraduate medical education via our expertise in innovative teaching and assessment modalities such as high-fidelity simulation.4 There is now an opportunity to compare and contrast the intensive use of high-fidelity simulation and some of the more innovative learning modalities such as self-reflective learning, problem-based learning, and the use of academic portfolios with more traditional teaching tools such as conventional lectures and faculty teaching in the clinical setting. The exploration and dissemination of “best practices” within our specialty will be needed to accelerate the learning and competency of our innovative program participants.

Faculty mentorship of young physicians has been a longstanding tradition in medicine. Ongoing professional and research mentorship by successful clinician-scientists in our specialty is likely to be an essential component of successful innovative anesthesiology training programs. One benchmark of success should be how many of these innovative program participants remain in academic anesthesiology departments and are able to successfully obtain extramural funding for their original research. We have the best clinical laboratories in medicine to conduct studies as well as promote self-reflective and practice-based learning for our trainees. These laboratories are our preoperative clinics, operating rooms, postanesthesia care units, critical care units, and pain clinics. Therefore, we have a great opportunity to attract and retain the top talent.

As implied by Dr. Kuhn, we believe that the terms “resident” and “fellow” may soon become anachronisms in the age of competency-based education. Our specialty should be one of the leaders in establishing “best practices” in postgraduate medical education and nurturing the careers of academicians. Innovative programs as described by Dr. Kuhn as well as a continued focus on educational initiatives and innovation within our specialty will be essential to our success.

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References
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In Reply:

I appreciate the interest generated by my editorial1 and the time that Dr. Wasnick and Dr. Cox et al. took to reply. The intent of the editorial was to stimulate discussion about our current residency and fellowship programs with the hope of creating a vision to better meet the needs of our specialty in the future.