In Reply:

I would like to thank Dr. Wlody for his letter expressing concern about the image we created for the November 2015 issue of Anesthesiology. We took the photograph to illustrate the great diversity among individuals who are now entering the field of anesthesiology. My colleagues in the Department of Anesthesiology, Perioperative and Pain Medicine at Brigham and Women's Hospital in Boston, Massachusetts, were kind enough to help me create this image. My instructions to the group were to congregate in the main hospital lobby, *inside the facility*, where the image was taken.

Dr. Wlody is hinting at an important topic that has caught the attention of regulatory bodies in recent years, including The Joint Commission and the Massachusetts Department of Health. There is currently much focus on surgical attire that can be linked to the recommendations published by the Association of periOperative Registered Nurses (AORN).[1] This group has summarized the available scientific evidence regarding the use of various components of surgical attire and put forth a set of recommendations that are widely being held as the current standard by regulatory organizations. Much of the science is weak, yet many of the AORN recommendations appear logical. The newest AORN guidelines are strict: all facial hair must be covered; face masks should be tied tightly in place or completely removed, never worn dangling loosely around the neck; arms should be completely covered with long-sleeved surgical attire; and all attire worn in the operating room must be newly laundered in a healthcare–accredited laundry facility.

For the cover photograph, our group assembled in the lobby, and no one ventured outside of the facility in their operating-room attire. There does not appear to be an increased bacterial contamination when surgical attire is worn inside and outside the perioperative suite within the facility,[2] and the AORN guidelines call for a change to newly laundered attire only when entering the perioperative environment from outside of the facility. Nonetheless, Dr. Wlody's point is well taken. We all should pay close attention to our own personal conduct to minimize avoidable risk to our patients. Strict hand washing and wearing newly laundered surgical attire that has never been worn outside of the facility are two simple ways that are likely to help make the environment we work in safer.

Competing Interests

The author declares no competing interests.

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Cardiovascular Implantable Electronic Device Service as an Anesthesia Service

To the Editor:

I read with great interest "Initial Experience of an Anesthesiology-based Service for Perioperative Management of Pacemakers and Implantable Cardioverter Defibrilators" by Rooke *et al.*[1] At our medium-sized hospital, the anesthesia group has been providing cardiovascular implantable electronic device service since 2010. All members of the group are expected to perform this service on their patients. We received training and equipment from the manufacturers, but nothing as rigorous as what you describe. With around an hour of training on each device, we were competent to (1) interrogate to evaluate settings, (2) decide upon and initiate an appropriate deactivation of function, (3) initiate appropriate reactivation of function, and (4) confirm whether the settings on discharge were the same as those on initial interrogation. Our preoperative testing department reviews device information with patients before their arrival, and all patients must have an interrogation completed within the last 6 months. On the rare occasion that we find problems with any settings, we contact the company representative and treating cardiologist. All training sessions were videotaped and can be reviewed by the providers as a refresher. While I appreciate the extra work your providers did to obtain a deeper understanding of these devices and their management, I don't know if that is a realistic or necessary goal for most groups. Waiting for the cardiology team or a company representative, who usually just places a magnet and says, "Good to go," isn't a good solution either. This service has been a huge improvement to our previous process and is looked upon favorably by the hospital administration. I would recommend that all practices seek a pathway to offering these abilities by whatever means the administration feel comfortable with.

Competing Interests

The author declares no competing interests.

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of pacemakers and implantable cardioverter defibrillators. Anesthesiology 2015; 123:1024–32

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In Reply:

We thank you for your interest in our program for the perioperative management of pacemakers and internal cardioverter defibrillators (ICDs).[1] You and your colleagues are to be commended for taking on this often overlooked task.

Learning how to use the programming boxes was not a trivial process, at least for us. The screen appearance and the method of performing tasks not only differ among the device manufacturing companies, but also may vary from model to model. Videotaping the session for future use, including as a refresher, is a great idea that should be considered by programs taking on this task. Learning how to make basic programming changes is certainly possible with modest training, especially if all that is to be performed is the disabling of tachycardia sensing. The decision to convert to asynchronous pacing is sometimes more complicated, as it may require programming changes to determine the underlying rhythm, in addition to the consideration of the location and the extent of electrocautery. Additional device features, such as noise reversion and the mode switch response, may require further decision-making if demand pacing is used during the procedure. The individual providing the programming may have to reevaluate intraoperatively, as well. For example, our assessment of pacing dependency has occasionally proved wrong despite careful preoperative assessment, making intraoperative programming changes necessary.

An overarching goal of our program was to avoid making programming errors, especially with regard to restoration of the original device settings after surgery. Our caution was justified when we discovered that altered settings sometimes occur with restoration of demand pacing. It became quickly apparent that acquisition of complete device settings (baseline printout of all device settings) before making any programming changes is absolutely mandatory. We sincerely hope that any program performing this service, whether by anesthesiologists or cardiologists, takes such precautions. Our program faces the additional challenge of caring for surgical procedures that are not common to all practices, notably ventricular assist device implantation, during which pacing capture may fail due to lead dislodgement or tissue trauma. In such situations, intraoperative lead impedance, sensitivity, and threshold testing must be performed expeditiously to determine a solution. We wanted to be able to handle these more advanced tasks, something that may not be necessary in all practices.

Your process, whereby devices are evaluated well in advance of surgery, is an important aspect of appropriate management. Our preoperative clinic sees only a fraction of the patients with devices. Although all patients with these devices should have regular follow-up, that is not always the case. In consequence, when we interrogate the device in the preoperative holding area, we occasionally discover some level of device malfunction or low battery.

Finally, we completely agree with you that all practices should devise a system for managing devices that involves more than just "placing a magnet." What works best for a given institution will depend on the institution's patient population, case mix, system of preoperative assessment, and level of institutional support. No system, including ours, is likely to be perfect. But it will be better than no plan at all.

Competing Interests

Drs. Rooke and Poole were supported by Medtronic, Inc., Minneapolis, Minnesota, for a study of electromagnetic and cardiovascular implantable electronic devices. Dr. Poole has received honoraria for educational speaking from Biotronik, Lake Oswego, Oregon; Boston Scientific, Marlborough, Massachusetts; Medtronic, Inc.; and St. Jude Medical, St. Paul, Minnesota. Dr. Poole is also on the Medical Advisory Board for Boston Scientific. The other authors declare no competing interests.

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Predilection for Poor Prediction with the Surgical Apgar Score

To the Editor:

I enjoyed the recent article by Terekhov *et al.*,[1] "Preoperative Surgical Risk Predictions Are Not Meaningfully Improved by Including the Surgical Apgar Score" (SAS). I value the contributions of these authors to this field of investigation, including their pioneering work with the SAS.[2] The authors made two methodological choices that may have contributed to the study concluding no improvement in prediction, so I humbly offer two suggestions to permit a more definitive test of their hypothesis.

First, would the authors consider performing their analyses using an alternative sampling interval for vital signs? The authors constructed the vital signs components of the SAS,