Editor's Notes

Critically Caring for Anesthesiology's Future

By Stephen Jackson, M.D.

I long have believed that how our specialty addresses perioperative risk will be the bellwether of our profession's vitality and long-term viability. Admittedly, most of us aren't appreciably concerned about some distantly perceived or predicted devaluation of our importance to medicine and society, nor do we appear particularly threatened by any reversal of economic status that would accompany such an adverse future. However, a few of our most respected standard-bearers and "futurists" have devoted lengthy deliberation to this issue and deserve our attention and reflection.

A comprehensive assessment of the contributions of anesthesiology to perioperative risk might well incorporate the view that "anesthesia-related complications" should include *"anything adverse that manifests itself intraoperatively or postoperatively that is based on a decision and/or intervention that is deemed to be in the purview of an anesthesiologist."*[1] If this more expansive definition were adopted, then "others"—either from within or outside our specialty—may mandate responsibilities upon us that we, alone, could or should not accept and/or are not qualified to tackle. And, given our widely disparate levels of capacity, motivation, and enthusiasm, are we collectively going to welcome accountability for *"the growing number of associations between what we do, can do, or facilitate a surgeon or interventionalist doing, and adverse outcomes?"*[1] Perhaps it is not too late for our specialty to secure its future by grasping and embracing what the healthcare marketplace considers to be "value added" quality-of-care responsibilities.

Many of our practices are comfortably confined (*limited*) to preoperative assessment, intraoperative management, and postoperative unit care. Have we basked too long in the 1999 Institute of Medicine's proclamation that *"anesthesia is an area in which very impressive improvements in safety have been made?"* The IOM had estimated that anesthesia mortality rates had been cut from one in 5,000 (in the 1980s) to one in 200 thousand to 300 thousand.[2] However, just three years later, Robert Lagasse, M.D., (who will be speaking at our CSA Annual Meeting on May 30) challenged this assertion, claiming that "science does not support this [IOM] claim," and placed the anesthesia-related mortality rate at a stable figure for over a decade at 1 in 13,000![3]

Our "futurists" suggest that a *limited* mode of practice will make our specialty progressively less relevant, less essential, and, consequently, less valued. Ron Miller asks: *"Can the current economics be sustained in the long run, especially with the arrival of advanced technology and pharmacology requiring less skill for delivery of intraoperative medicine?"*[4] Will we become or be perceived simply as operating room technicians?

An alternative to this *limited* model is to define the perioperative period more expansively, extending from the onset of the surgical illness to a return to the preexisting state of health. If this *comprehensive* model were adopted and fulfilled, then anesthesiology would command the position (and economic value) for providing the expertise in managing a patient's altered physiology throughout the entire perioperative period. After all, the predominant weight of perioperative risk rests with a patient's medical and surgical risks, and ***not*** with the more lightly weighted risks of anesthesia. Yes, we would need to take a meaningful ownership for reducing our patients' medical and surgical risks, the vehicle being the interaction of our anesthesia functions with medical co-morbidities and surgical activities. I reiterate the conclusions of Roy et al.: *"If we want to play a significant role in reducing perioperative mortality and morbidity, then we must consider anesthesia complications to involve anything that manifests itself—or is less likely to occur—intra-operatively or postoperatively based on some decision or intervention in our purview."*[1]

In 1995 Saidman suggested that our institutional departments, indeed, our specialty, should be renamed perioperative medicine and pain management.[5] This recommendation notwithstanding, when the rubber hits the road, it is how we behave—what we actually do—that matters. Deed, not creed or title, is what will carry the day. Our challenge is to make our specialty resilient to the inevitable changes to be encountered as medicine evolves. The gauntlet is thrown down not only to our teaching and continuing education programs, but also to *all* of our practitioners, from neophytes to the mature and seasoned. In this regard Miller declared that *"our specialty needs to diversify its practice to ensure its future leadership in medicine,"* and optimistically continued, *"To have an increasingly dominant role in perioperative management,* ***including critical care****, seems well within our grasp."*

In the not-too-distant future, tertiary care hospitals will have at least half of their beds located in critical care and monitored bed units, occupied by older and sicker patients. The predominance of surgical operations and procedures may be of a less invasive nature. Moreover, safer and more pharmacogenetically facile anesthetic drugs will lessen the need for an anesthesiologist's skills and knowledge, deflating the economic value of the operating room anesthesiologist.[6]

An enhanced involvement in perioperative care demands expertise in critical care medicine, the birth and evolution of which were largely the product and purview of our specialty. With time, however, the attractiveness of an economically rewarding professional life largely confined to the operating room has successfully competed, almost to the point of oblivion, with our involvement in critical care medicine. Admittedly, given a lack of universal agreement with "our futurists," perhaps most of you, 15 years from now, still will be happily entrenched and ensconced in your current—or even somewhat evolved—mode of practice, manipulating and managing your patients' physiology within a *limited* and circumscribed perioperative role. Indeed, in all likelihood there always will be a need for *some* of us in the operating and procedural suites.

You may already have taken advantage of your *Bulletin's* series of continuing education programs. We have had modules on perioperative beta blockade, acute and chronic pain management, end-of-life issues, and obstetric anesthesia (all still available on our Web site at www.csahq.org). Heeding our futurists' sentiments, we now plan to offer an extended series of CME modules (with credit hours) on critical/intensive care medicine, the first of which, by Michael Gropper, M.D., Ph.D., FCCM, and John Taylor, M.D., is to be found on pages 69-82. In addition, Thomas Shaughnessy, M.D., presents the concept of the "eICU" for your reflection on pages 52-55.

1. Roy CR, Calicott RW. Anesthesia Practice Models, Perioperative Risk and the Future of Anesthesiology. *ASA Newsletter* 2007; 71:14-17.
2. Committee on Quality of Health Care in America, Institute of Medicine: To Err is Human; Building a Safer Health System. Edited by Kohn L, Corrigan J, Donaldson M. Washington, National Academy Press, 1999, p 241.
3. Lagasse RS. Anesthesia safety. Model or myth? A review of the published literature and analysis of current original data. *Anesthesiology* 2002; 97:609-1617.
4. Miller RD. Report from the Task Force on Future Paradigms of Anesthesia Practice. Presented to ASA Board of Directors, August 2005.
5. Saidman L. What I have learned from nine years and 9,000 papers. *Anesthesiology* 1995: 84;712-715.
6. Warner MA. Who better than anesthesiologists? *Anesthesiology* 2006;104:1094-1101.