An Essential Tool for Patient Safety

by John L. Mc Carthy

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Part of CRICO/RMF's mission is to protect the assets and reputations of the insured institutions and physicians, and to enable them to practice with the security of a proactive insurance program behind them. Another part is to assist the providers in delivering the safest health care in the world. Indeed, that is what energizes our staff: the idea that the efforts that we make result in increased care quality and safety, and, as a byproduct, lower malpractice claims rates. Toward that end, one of the efforts we have fully embraced is combining simulation-based training and team training—backed by insurance premium discount incentives—to improve skills and reduce preventable errors.

CRICO has been involved in simulation for 15 years, starting when the Center for Medical Simulation (CMS) asked us to help develop some of our malpractice cases into scenarios that CMS would use for team training exercises. Malpractice claims are extremely well documented, providing detailed insight into what clinical and human factor issues emerged, i.e., what really went wrong. As we watched these adverse events played out as team training scenarios (first at CMS and now elsewhere), we recognized the extraordinary value of having clinicians work through crises (sometimes chaos) without any risk to their patients or their careers.

Anesthesia

Our initial foray into simulation targeted anesthesia, not because anesthesiologists had a bad malpractice record, but because they had, in fact, reduced their liability. Aided by some equipment and technique advances, anesthesia was a pioneer specialty in patient safety improvement. But when CRICO/RMF approached the anesthesia chiefs with a sizable premium discount (because of the good trends in malpractice claims) they asked us to redirect our good will (and funds) in the form of an incentive for attending physicians to go through the type of simulator-based training that was already required for residents. We agreed and offered a 10 percent premium discount, about $500 at that time. Despite some concern that $500 might not be overly enticing, it was enough to secure full participation. The anesthesiologists' good malpractice profile got even better. With that in mind, we began to consider how to use simulation-based training in the business plans we develop for other high-risk specialties.

Obstetrics

As is true for most malpractice insurers, obstetrical patient safety is a major concern for CRICO/RMF and the OB/Gyns and certified nurse midwives it covers. Despite relatively low frequency (about one claim per 1,500 births) obstetrics-related claims often represent high severity in terms of both injury and payouts (our average payment is >$1.2 million; several cases have resulted in jury awards above $10 million). In 2003, when CRICO/RMF and the Harvard-affiliated obstetrics chiefs decided to create a premium reduction incentive program, simulation-based team training was the key component. Even with our relatively competitive premium rate for obstetrical providers (OB/Gyns pay about $65,000 per year compared to more than $200,000 in some states), the 10 percent premium discount represented a significant fiscal commitment to the belief that simulation-based team training would have a positive impact on obstetrical patient safety.

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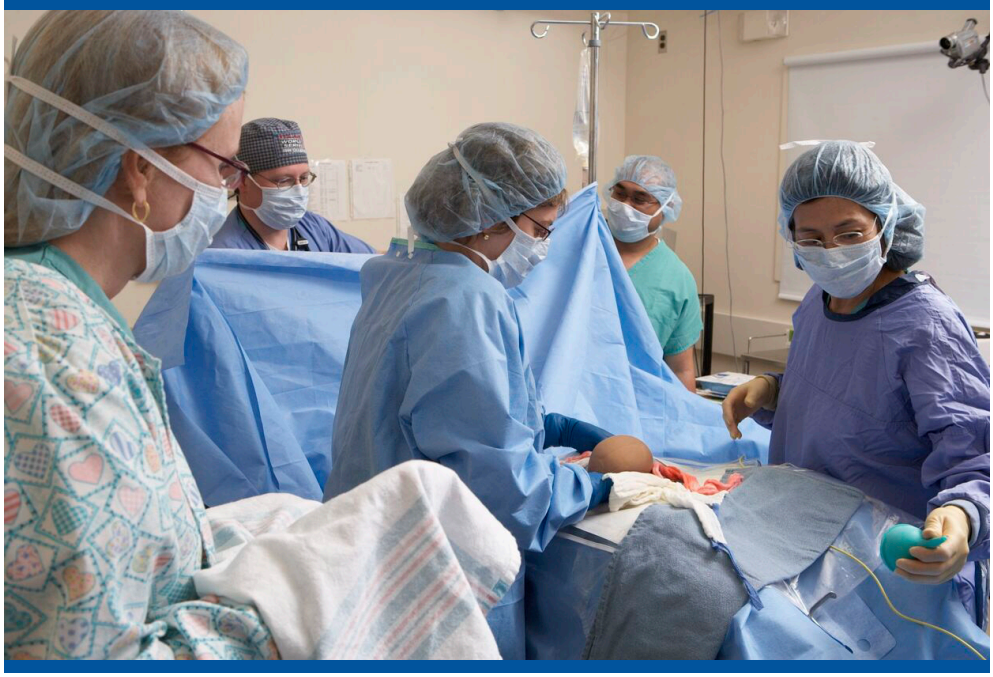

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Today, as we pass the five-year mark of our OB incentive program, our actuaries say CRICO/RMF could justify an even larger reduction in the OB/Gyn premium, based on the current experience. Certainly we need to wait for more complete data (there is still some claim lag there), but if those indications hold true we may soon be able to further reduce premiums for a specialty experiencing dramatic increases just about everywhere else in the country.

Obviously, we are very encouraged by the data behind our simulation-based training incentive and, for CRICO/RMF and our insureds, almost nothing moves forward without data and measurement. Our commitment to our board of directors (comprising leadership from the hospitals we insure) is to continuously report back on each of our initiatives with pre- and post-implementation results. In 2003, we asked the Board to commit almost $4 million for the first five years of our OB incentive program with a mutual understanding that its effectiveness might not be clear until those five years had passed. With an average payment of $1.2 million per obstetrics-related case, and extensive legal fees, a reduction of just one case per year would justify the expenditure for the incentive. In a marketplace with higher obstetrics-related claims frequency and equal or greater severity, a similar incentive program would present an even more convincing cost benefit analysis. This is one of the most compelling selling points for anyone attempting to stir up interest in funding simulation-based team training efforts.

Residents and Beyond

A third area of concern to CRICO/RMF, and other malpractice insurers that cover teaching programs, is the liability exposure for residents (house officers). Clearly, teaching hospitals, patients—and juries—expect residents to meet the standard of care—while they are in training. But, although a safety net is provided by teaching/supervising attendings (and peers and nurses) residents are, nevertheless, "in training," and thus at risk for finding themselves in unfamiliar situations with dire ramifications.[1] Simulation-based technical and team training offers an opportunity for us to develop a more effective structure for their training needs so that they have a better, safer way of experiencing rare or chaotic events.

The current requirements—baseline training standards—for residents are unclear, inconsistent, and probably inadequate for the realities of modern medicine and teaching environments. To better prepare our physicians of tomorrow, we need to go beyond "see one, do one, teach one." We need to guarantee that every medical school graduate has been introduced to simulation-based training and teamwork training, and to ensure that those training methods are continued and expanded during their post-graduate—and post-residency education. Right now, we do not see that happening, at least not broadly and systematically, and it is unlikely to occur without an infusion of innovative ideas and perspectives like those outlined in this issue by our *Forum* contributors.

Where is this all headed? In the CRICO community, the hospitals and other organizations that sponsor the clinicians we insure have moved simulation-based training from pilot project, to incentive program, toward it becoming a requirement for privileging and credentialing. Anesthesia is likely to be first, but not alone. Last year, CRICO/RMF offered an incentive for surgeons who participated in a simulation-based training for laparoscopy and there is a good chance that that, too, will soon be required for privileging. Obstetrics is likely to follow a similar track in which this training mode becomes part of the work life of a physician, just like it is for a pilot or a nuclear plant operator.

Think about simulation as an investment with a really long term sustainable return. Ten or 15 years from now, as we all look back at this period in simulation from the perspective of a virtual-reality based program, today's methods will look technically primitive, but they will be seen as critically important early steps in the development of health care providers who are thoroughly prepared to deliver the safest health care in the world. ■

Note

1 http://www.boston.com/business/articles/2005/05/11/238m_award_in_childbirth_lawsuit/