The impact of technology on healthcare, from the standpoint of both doctors and patients, has clearly been a positive one. For many, advances in the understanding and treatment of operable diseases have meant a second chance at life. New and simplified procedures enter the medical field almost daily, often with the added benefit of increased hospital productivity and ease of surgical performance. Put together, these advances should lead to fewer patient deaths or hospital-related injuries and an overall decrease in physician and surgeon error. So why aren’t we seeing a corresponding decrease in medical professional liability premiums? A recent panel discussion at the annual Crittenden conference aimed to analyze the current state of healthcare technology and to assess its impact on medical malpractice premiums.

The Learning Curve

Few would debate that medical technological advancements are a good thing. However, as Kristin McMahon, Special Counsel, Kerns, Pitrof, Frost & Pearlman, points out, these advances are not implemented without risks. “Millions of people have been able to live longer, better-quality lives because of new treatments, surgical procedures, drugs and vastly improved diagnostic procedures. However, all technology introduces new errors, even when its sole purpose is to prevent errors. While technology prevents errors by replacing fallible humans with automated systems, learning to implement new healthcare technologies can be hazardous.”

In the 1990’s, a procedure called Laparoscopic cholecystectomy gained popularity as a treatment for gallstone disease. Before such a minimally invasive technique was developed, removing the gallbladder required painful and disfiguring abdominal surgery with a lengthy recovery period and was done only when absolutely necessary. Since the laparoscopic cholecystectomy reduces these effects, there was an increase in the frequency with which this procedure was performed. However, a lack of familiarity with the procedure, decreased visibility, and unfamiliar instruments led to new and different complications. With this new procedure, surgeons became more apt to injure the common bile duct, perforate the bowel, etc.—effects that were not a factor in the old surgical treatment for gallstone disease. Ironically, these newly created risks resulted in more malpractice claims and larger damage awards than in the era before laparoscopic cholecystectomies were available. Thus a technology that, done correctly, greatly improved the treatment of gallstone disease, instead contributed to increased premiums. Jack McCarthy, President, Risk Management Foundation of the Harvard Medical Institutions, is very familiar with this “learning curve” and the negative impact it can have on the implementation of new medical technology. According to Mr. McCarthy, Harvard is attempting to combat this at their own hospitals: "The Harvard facilities have begun to utilize simulator training for obstetrical and other clinical services with some decrease in claims noted. RMF also offers a premium discount to physicians who participate in a combined regimen of team training, simulator training and continuing education courses.”
The implementation of technology and the “learning curve” that accompanies them are not news to those experienced in underwriting medical malpractice. In fact, doctors and hospitals may find themselves penalized with higher premiums or even excluded altogether from coverage for performing procedures that are new or considered unsafe. Joshua Stein, Chief Underwriting Officer, OneBeacon Professional Partners, points out the fact that underwriters are slow to give credit in pricing based on new technologies and procedures. “While those procedures may ultimately improve the quality of care, there is also the likelihood that they will increase the number of claims until appropriate standards of care are established to govern their usage.” Procedures such as the increasingly popular and financially lucrative bariatric surgery may be excluded from coverage even in E&S markets. According to Dianne O’Donnell, Vice President, AVRECO, factors considered include whether the facility is properly equipped; the extent of staff training; a hospital’s motivation in developing the program; and the potential health complications often associated with bariatric patients, such as diabetes and high blood pressure. As a result, a carrier may choose from one of several options ranging from charging additional premium, imposing no change in premium, increasing the underlying retention, or excluding coverage altogether.

One can easily see why the implementation of a new technology might raise some concerns for those whose job it is to predict future outcomes that are essentially unknowable. New medical technologies therefore often raise a “gray area” in terms of the potential after-effects—can unpredictable effects be grounds for lack-of-informed-consent claims? Robert W. Goodson, Esq., Partner, Wilson, Elser, Moskowitz, Edelman & Dicker, LLP, has seen a definitive increase in claims for lack of informed consent due to new technologies. “Defending informed consent claims can be problematic due to the absence of a real standard as to what is a ‘material risk’ for some new technologies. In addition, the expectation of juries that patients should be fully informed as to the success rate and the risks involved on all new procedures presents another obstacle to the successful defense of these claims.” Some claims revolve around the lack of experience and training on new procedures, and many doctors are reluctant to disclose their level of experience. Since there are few studies, little data, and few requirements for training in the new technologies, both expert witnesses and defense counsel face more challenges in defending malpractice cases.

**Beyond the Learning Curve**

Once new procedures become established and properly performed and regulated, one would expect both claims and premiums to see some sort of decline. However, while the claims will hopefully decrease in number, many other factors influence premiums. Hospitals are often loath to implement new procedures because of the cost of training, oversight, risk management, and specialization in the new procedures. Although the new procedure may generate significant revenue, these increases are offset by the cost of readying the hospital and its staff for the new procedure, the likely initial increase in the number of claims, and a potential premium increase.

Medical technology does not only raise issues on the operating table. Further concerns are the issues of electronic communications of medical information. Most hospitals have implemented electronic patient records systems in addition to or in lieu of physical records retention. According to Ms. O’Donnell: “With the implementation of an electronic patient records system, there is an inherent expectation of better information, improved patient care and consequent reduced loss exposure. However, there is also the potential for system failure.” System failure, according to Mr. McCarthy has been determined at his own institutions to be the cause of many
claims. For example, although the procedure may be routine and the surgeon experienced, a last-minute change in the surgical operating room schedule may result in a room not being properly set up for the next scheduled surgery.

**Necessary Evils**

Advances in medical technology are risky. New medical procedures and systems necessarily involve a great deal of “unknowns,” which have the distinct possibility of adversely affecting any number of persons and institutions. Insurers are cautious; premiums will increase because claims will likely increase. However, advances in medical technology are also important, lifesaving, and necessary. As Ms. McMahon aptly states: “Technology is a positive development in healthcare in that it extends the length and improves the quality of life; however, it also has a negative impact on healthcare in the sense that it is causing a rapid increase in healthcare expenditures, and—for healthcare providers—considerably more exposure to liability.” Therefore, while healthcare providers must do everything in their power to ensure the safety of new procedures and the proper training of their staff, it is apparent to Mr. Stein that “the professional liability underwriting community does not do enough to encourage hospitals to implement new technologies that have a demonstrated track record of improving liability exposure. Underwriters should be doing more to encourage their use by giving premium credits and other incentives to the hospital that uses them.”