

Asleep at the Wheel? Distractions in the Operating Room

Technology has advanced many aspects of the practice of anesthesiology including, but not limited to: immediate availability of patient medical records; more efficient communication and connectivity; contemporaneous documentation; improved legibility in the medical record; clinical decision support; and data acquisition, management and analyses. This same technology has also given rise to new patient safety and medicolegal concerns.¹ One emerging concern for many anesthesia practices is the proliferation and use of personal electronic devices (PEDs)^{*} in the operating room (OR).

Given the degree to which PEDs have become a fixture in our daily lives, it is not surprising that anesthesia practices are confronted with the challenge of how to effectively manage PEDs in the OR and other patient care areas. From Preferred Physicians Medical's (PPM) vantage point as a medical professional liability insurance company, any distractions in the OR can jeopardize patient safety and /or negatively impact PPM's ability to successfully defend malpractice lawsuits. The use of PEDs for personal or nonpatient-related activities increases the patient safety concern and compounds the challenge of defending anesthesia providers in the event of an adverse outcome. Distractions related to the use of PEDs have recently surfaced in anesthesia litigation, medical licensing board investigations, and as a basis for facilities to seek revocation of medical staff privileges.

The Data

The potential for distractions in the OR is, of course, not limited to PEDs. Reading in the OR, for instance, has been debated for years. Moreover, research on the impact of reading in the OR has been inconclusive. For example, a 2009 study examined the effects of reading in the OR on vigilance and workload during anesthesia care and concluded there were no scientific data that intraoperative reading and nonpatient-related conversation during low-workload portions of the maintenance phase of anesthesia adversely affect vigilance or multi-tasking.² In fact, Slagle *et al.* suggested that reading may actually improve vigilance under some circumstances by keeping the anesthesia provider intellectually occupied and clinically stimulated, thus averting boredom or mental inactivity.

Admittedly, little scientific data and research regarding the role of PEDs in the anesthesia environment is currently available. The ASA Closed Claims database reports a relatively small (13 of 5822) number of claims related to distractions in the OR.³ Given the delay associated with studying closed claims, it is not surprising that, to date, the database currently reflects distractions such as printed materials, phone calls and loud music. Distraction-related claims, however, were judged as substandard care in 91% of claims compared to 50% of other claims. Settlements were made in over 80% of the distraction-related claims for a median payment of \$725,937.

Given the data currently available, most of the commentators and cited authors agree that additional scientific research and data are needed to evaluate the impact of PEDs on anesthesia provider performance. Domino *et al.* suggested future research should include sophisticated electronic and human-factors methodology to consider the effects of PEDs and other distracting activities on vigilance and performance during simulated and actual anesthesia care.

The Litigation Problem

Notwithstanding a lack of scientific data of distractions from PED use during anesthesia care, the potential for distraction is a growing concern in the medicolegal arena. In the last year, PPM has defended several lawsuits involving allegations and/or evidence of distractions from the personal use of PEDs in the OR. In PPM's

^{*} Personal Electronic Devices include any device used for personal use and/or communication including, but not limited to: smart phones, cell phones, Blackberries, iPads, laptop and personal computers with or without Wi-Fi capabilities, tablets, iPods and other MP3 players, and any other Wi-Fi compatible devices and any communication devices that contain built-in cameras, audio or video recording devices.

experience, the mere suggestion that an anesthesia provider was distracted can negatively impact PPM's ability to defend the anesthesia provider. Texting, "surfing" the Internet, social media, personal cell phone conversations or playing video games may also create a negative perception in other OR team members that the anesthesia provider was not paying attention to the patient.

Additionally, plaintiff attorneys have no difficulty identifying anesthesiology experts who will testify that the use of PEDs for nonpatient-related activities in the OR is well below the standard of care and contrary to the very hallmark of a competent and professional anesthesia provider – vigilance.[†]

Plaintiff attorneys can be expected in such cases to subpoena cell phone records and retain IT experts to scour computer hard-drives to obtain metadata as evidence that the anesthesia provider was distracted in the OR. Metadata, the "data about data" created by computer operating systems and applications, allows plaintiff attorneys and their experts to determine, among other information, the exact date and time a web page was visited, a text or email was sent or received, a cell phone call was made or received, the parties' phone numbers and the duration of the communication. Unlike distractions in the OR allegedly caused by reading or loud music, where the evidence is typically limited to other witnesses' recollections of the events, the presence of PEDs in the OR provides plaintiff attorneys with a new evidentiary avenue. The increased use of electronic discovery (or "e-discovery") allows metadata to serve as an "expert witness" to establish a very detailed timeline of electronic activities in the OR.

In PPM's recent experience, courts have ruled that cell phone records and metadata are discoverable (i.e. parties to the litigation are entitled to obtain that evidence) and such evidence may be admissible (i.e. parties to the litigation are allowed to present that evidence to the jury to be considered in reaching a verdict). PPM's defense counsel have opined that allegations and evidence of distractions from personal PED use during surgery could potentially shock, anger and inflame jurors (most of whom have little to no knowledge of the day-to-day activities that occur in ORs). In PPM's own cases, defense counsel have suggested that evidence of distraction increases the potential for multi-million dollar verdicts, possibly including punitive damages, against an allegedly distracted anesthesia provider involved in a significant adverse outcome.

Other Consequences

PPM is aware of several high-profile lawsuits involving allegations and evidence of distractions in the OR that resulted in additional negative consequences including, but not limited to:

- Suspension and non-renewal of privileges at practice facilities
- State medical licensing board investigations and sanctions
- Significant negative media coverage
- Public relations challenges for the individual anesthesiologist and practice group
- Loss of employment
- National Practitioner Data Bank Reporting

What is the Solution?

In response to the patient safety concerns related to distractions in the OR from the use of PEDs for nonpatientrelated purposes, several professional societies and organizations have established position statements and guidelines to define appropriate PED use in the OR.^{4,5,6} Other health care institutions, residency programs and anesthesia practice groups have attempted to address this issue by establishing PED guidelines and policies. These PED policies range from zero-tolerance (e.g. no PED use in OR) to more balanced policies that allow PED use for purposes directly related to patient care, online research and communications between medical staff members, and verifying surgery schedule assignment.

Based on PPM's experience defending litigation involving allegations of distractions in the OR, PPM recommends that our policyholders work with their facilities to establish guidelines and expectations for the entire OR team that balance the benefits of having access to PEDs in the OR with the potential patient safety risks posed

[†] Vigilance has been defined as "a state of readiness to detect and respond to small changes occurring at random intervals in the environment."

by the inappropriate use of PEDs. PED guidelines and policies should have the goal of educating the medical staff about distractions from PED use and its potentially devastating effect on patient safety. Once implemented, PED guidelines or policies should also be monitored for compliance to ensure the facility and medical staff are promoting a culture of patient safety. PPM's Claims Attorneys are available to assist PPM policyholders with reviewing and implementing PED guidelines or policies that are tailored to meet our policyholders' practice needs and environments.

"In addition to PED guidelines and policies, from a risk management perspective, exercising good judgment and common sense is the best way to avoid and minimize distractions in the OR from PEDs," according to Brian Thomas, PPM's Director of Risk Management. Until additional scientific research and data are available to further evaluate this issue, PPM offers the following risk management strategies to reduce distractions in the OR.

Risk Management Strategies to Reduce Distractions in the OR

- Review and comply with practice facilities' PED guidelines and/or policies
- Implement a "sterile cockpit"[‡] or "no interruption zone"⁷ protocol during critical phases of procedures
- Eliminate all discretionary sources of noise during "sterile" periods
- Avoid loud or distracting music
- Limit personal telephone calls and text messages to urgent or emergent situations
- Forward cell phone calls and transmissions to voice mail or memory
- Silence ring tones
- Keep all telephone calls to a minimum and brief as possible
- Limit OR Internet access only to patient-care related websites
- Avoid discretionary Internet-based activities and browsing
- Minimize nonessential conversation, especially during critical phases
- Limit interruptions from outside staff and others
- Set an example vigilance and focused attention on the patient are paramount
- Speak up let others know when their PED use is distracting the OR team

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[‡] The sterile cockpit concept is derived from aviation law that prohibits crewmembers from engaging in any activity except those duties required for the safe operation of the aircraft during critical phases of flight, including taxi, takeoff, landing and all other flight operations conducted below 10,000 feet. "Sterile" periods in health care include, but are not limited to: induction and emergence of anesthesia, critical events during the anesthetic and/or surgery and unanticipated events requiring additional OR team communication.

Distractions in the Operating Room: A Case Study

The following case highlights some of the significant challenges in defending PPM policyholders in litigation involving allegations and evidence of distractions in the OR:

• The case involved a 53 year-old male with medical history significant for atrial fibrillation and smoking who presented for an elective cardiac atrial fibrillation ablation under general anesthesia. The PPM insured anesthesiologist performed the pre-anesthesia examination and assigned the patient an ASA III classification.

Shortly after the induction of anesthesia and placement of the endotracheal tube (ETT), the cardiologist performed a transesophageal echocardiogram (TEE) that revealed an ejection fraction of 40-45%. Four minutes into the procedure, the patient's systolic blood pressure dropped into the 80's. The anesthesiologist administered 10 mg ephedrine, but the blood pressure stayed in the 80's and the pulse rate went up to 180 bpm. The anesthesiologist informed the cardiologist about the changes in vitals, but the cardiologist indicated that he was not concerned about the heart rate because he was trying to locate the source of the atrial flutter, and there were no signs of ischemia on the EKG.

The anesthesiologist supported the blood pressure with Neo-Synephrine IV in 200 mcg boluses. He informed the cardiologist of his treatment, and the cardiologist was aware of the events due to the monitors in front of him. The anesthesiologist also lowered the anesthetic inhalational agent (sevoflurane) and gave fluid to maintain blood pressure. The blood pressure was volatile and required multiple adjustments throughout the case.

The patient's systolic blood pressure dropped into the 60's on two occasions. The anesthesiologist decided to begin a low dose of dopamine to help control the blood pressure, and he notified the cardiologist of his activities. Once he gave the dopamine, the systolic blood pressure stabilized in the 90's. About 45 minutes later, the blood pressure dropped again and the anesthesiologist increased the dopamine and the Neo-Synephrine, at which point the systolic pressure rose to 110. He continued to communicate his treatment choices to the cardiologist throughout the procedure. Although the cardiologist was aware of the volatile shifts in the blood pressure, the anesthesiologist believed that he was not concerned because he continued with the ablation procedure.

Approximately 15 minutes after the systolic pressure had risen to 110, it again dropped into the low 80's. Neo-Synephrine administration only assisted in bringing it up for a few minutes, and then it dropped into the 50's and would not increase in response to medications. The EKG showed that the patient's heart was generating electrical impulses, but it became clear that his heart was not beating and he was experiencing pulseless electrical activity (PEA).

A Code was called and the cardiologist suspected the patient was experiencing a cardiac tamponade. Multiple attempts to perform pericardiocentesis were unsuccessful. Another cardiologist arrived to assist and was able to drain 450 to 600 cc of effusion from the pericardial sac. The heart rate was restored and the patient was transferred to ICU. Unfortunately, the patient never recovered from the Code, and was eventually taken off the ventilator and passed away.

The patient's wife and son sued the PPM insured anesthesiologist, the cardiologist and the hospital. The patient's family alleged the anesthesiologist failed to: recommend that the cardiologist stop the procedure due to the hemodynamic instability caused by the hypotension, properly evaluate the cause of the hypotension that persisted for over two hours prior to the cardiac arrest, and maintain an acceptable blood pressure. The patient's family alleged further that the anesthesiologist's negligence contributed to the cardiac arrest resulting in hypoxic ischemic brain injury and death.

Defense experts retained on behalf of the PPM insured anesthesiologist were supportive of his care. The anesthesiology expert believed that the anesthesiologist's treatment of the hypotension met the standard of care, and he appropriately communicated the patient's changing vitals and hemodynamic status to

the cardiologist throughout the case. Further, he opined that the anesthesiologist does not have a duty, or even an ability, to stop the procedure as that decision is up to the cardiologist.

Despite the supportive expert witness, during discovery several nurses present in the OR testified the anesthesiologist was texting and reading articles on the Internet throughout the entire case and even during the Code. The anesthesiologist's mobile phone records, however, confirmed the anesthesiologist did not receive or send a text during the procedure. In deposition testimony, the anesthesiologist acknowledged he was looking at emails on his mobile phone during the procedure. The Internet log for the computer in the cardiac catheter lab confirmed that the anesthesiologist was accessing the Internet at various times during the procedure. He last accessed the Internet approximately eight minutes before the Code started. While there was no specific evidence the anesthesiologist was on the Internet during the Code, there was electronic evidence that the anesthesiologist was reading news stories on Yahoo and accessing his personal email account during the procedure.

Based on this evidence, defense counsel opined a jury would likely react very negatively to evidence that the anesthesiologist was accessing the Internet and his personal email in the cardiac catheter lab just moments before the Code. In the face of testimony from multiple nurses that the anesthesiologist was using a mobile phone throughout the procedure, and even during the Code, defense counsel was concerned PPM would be unable to persuasively defend the anesthesiologist given this potentially inflammatory testimony.

Based on defense counsel's evaluation, the PPM insured anesthesiologist consented to settlement. The parties participated in mediation and the case was settled within the insurance policy limits. *

Underwriter's Spotlight

Certificates of Insurance

At one time, it was common for an anesthesiologist to have his or her entire practice at a single location. A clerk in the hospital's medical staff office might have asked the anesthesiologist about malpractice insurance. Today, it is normal for an anesthesiologist to regularly do cases at several facilities and possibly have privileges at many more. Further, there are third party payers and others with whom you now do business who require confirmation of your insurance. Each may require evidence of your malpractice insurance.

Some policyholders continue to make copies of their insurance policies to provide to their practice facilities and others who ask for evidence of malpractice insurance coverage. It may be initially convenient to do this, but they may require the policyholder to provide a new copy with each quarterly renewal. Also, doing this often exposes personal information to third parties, since the policy paperwork contains such sensitive data as the policyholder's malpractice premium. Often, experienced credentialing professionals require that evidence of coverage come directly from the insurer so that they are certain that the policy is still in force and that they will be notified if the policy cancels.

PPM will send certificates of insurance that do not contain such personal data, and provide certification for the entire year to any organization authorized by the policyholder, including hospitals and other healthcare facilities, provider organizations, credentialing bureaus and medical boards. It is easy to take advantage of this service. Policyholders can simply provide PPM's underwriting or customer service representative with the names and mailing addresses of the organization authorized to receive the certificate of insurance. Thereafter, PPM will continue to routinely provide a certificate of insurance for as long as the policy is in force, or until the policyholder notifies PPM to discontinue the service. PPM provides this service to policyholders at no cost. *****

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NEWSLETTER EDITOR

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In This Issue

We examine the increasing incidents of distractions in the operating room that potentially threaten patient safety and increase anesthesia providers' exposure to litigation and other negative consequences. Specifically, distractions from the use of personal electronic devices in the operating room for purposes not related to patient care are reportedly widespread in the anesthesia community. Plaintiff attorneys are increasingly including allegations of negligent care caused by distractions in the operating room in medical negligence litigation. In this issue, we highlight a case summary involving allegations of "distracted doctoring," the impact the evidence of distractions had on the evaluation of the case and the significant challenges of overcoming that evidence in the courtroom. We also offer some risk management strategies to assist PPM policyholders in avoiding and minimizing distractions in the operating room.

Thanks for reading. Brian J. Thomas, Editor

Note: The purpose of this newsletter is to provide information to policyholders and defense counsel regarding professional liability issues. Risk management analysis is offered for general guidance and is not intended to establish a standard of care or to provide legal advice.

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