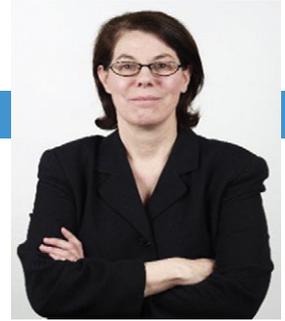


## HOT TOPICS COLUMN

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### The Distracted Nurse

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IN AN EFFORT to curb medical errors, hospitals have spent a great deal of money on computers, cell phones, and other electronic devices so health care providers have instant access to patient data, drug information, or medical reference material. Unfortunately, like many innovations, this solution has come with an unintended downside—health care providers focusing on electronic devices and away from the patient. It also allows health care providers to do non-work-related tasks, such as texting friends, answering personal e-mails, or surfing the Web, even during moments of critical care. A new study has been published showing that half of health care workers running bypass machines admitted texting while performing cardiopulmonary bypass (CPB; Smith, Darling, & Searles, 2011). This phenomenon has set off discussions in many medical settings of a problem, which has been described as “distracted doctoring.” In response, some hospitals have begun limiting the use of electronic devices in critical settings, and some nursing schools have started reminding students to focus on patients instead of devices, even as they are being handed more electronic tools. Among the respondents, 36.1% reported having a hospital policy regarding cell phone use, whereas 16.4% had a department policy.

In the peer-reviewed survey of 439 health care workers published this year, 55.6% admitted to using a cell phone during the performance of CPB (Smith et al., 2011). Sending text messages while performing CPB was acknowledged by 49.2%, with clear generational differences detected when cross-referenced with age groups. Younger respondents were more likely to use a cell phone while on CPB than were older respondents. For smart phone features, health care workers report having accessed e-mail (21%), having used the Internet (15.1%), or having checked/posted

on social networking sites (3.1%) while performing CPB. Safety concerns were expressed by 78.3% of respondents who believed that cell phones can introduce a potentially significant safety risk to patients. Speaking on a cell phone and text messaging during CPB were regarded as “always an unsafe practice” by 42.3% and 51.7% of respondents, respectively. Personal distraction by cell phone use that negatively affected performance was admitted by 7.3% of the respondents. In addition, 95.4% of respondents reported no known serious accidents that were the direct result of cell phone use.

Although an overwhelming majority (92.7%) of respondents to the survey of health care providers answered that they have never been distracted or been negatively affected by the use of cell phones while on CPB and 98% claimed never to have made a medical error that was a result of cell phone distraction, when asked if they ever witnessed another health care provider distracted on CPB because of the use of a cell phone, 34.5% had witnessed a distracted provider. According to the researchers, this discrepancy may be because cell phone users are often unaware of their own miscues or may not believe that they are distracted. Lesch and Hanock (2004) studied if drivers were aware of their reduced driving abilities while simultaneously operating a motor vehicle and a cell phone. They came to the conclusion that drivers are oblivious to their reduced driving abilities while simultaneously using cell phones. Strayer, Drews, and Johnson (2003) also reported that drivers described other drivers with cell phones as driving inconsistently but that their own performance while using a cell phone was normal, even

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when results showed otherwise. The researchers concluded that cell phone use makes drivers unaware of their own attention deficits.

Cell phone use is on the rise in many environments, increasing the potential distraction. One study reported that cell phone use while driving causes a participant's peripheral vision to be substantially reduced when on a cell phone compared with a control group, even without the physical aspect of dialing or holding a phone (Maple, DeRosier, Hoenes, Bendure, & Moore, 2008). Strayer et al. (2003) described how cell phone use while driving causes distraction because of the change in focus of attention from driving to the cell phone conversation, a term they called *inattention blindness*. Inattention blindness is the withdrawal of attention from the external scene around the subject toward an internal cell phone conversation. As a result of increased cell phone use while driving and the increase in accidents associated with them, many states have created legislation to deter drivers from driving while talking on a handheld cell phone. In the medical field, a reduced visual field or a diverted attention away from the patient may result in a health care provider not recognizing potential complications, such as a low reservoir level or a disconnected tube. If an accident occurred, telephone records are obtainable by attorneys, and an attorney would attempt to prove to jury that a health care provider who used his or her cell phone frequently while working was negligent, irrespective of whether the accident occurred while the provider was using a cell phone. The researchers also noted that although there are clinical uses for cell phones, increasingly, there is a social stigma associated with using a cell phone at work

because it is automatically assumed that the provider is on Facebook or checking the Internet.

Medical professionals have always faced interruptions from beepers and phones. Communication in a hospital setting is essential. Multitasking is inherent in the medical environment. What has changed is the increasing pressure to interact with devices. Young people can be particularly susceptible to distraction because they have grown up being constantly connected. Modern medicine demands that patient care be data driven and that the information be instantly available. Investment in technology by hospitals has increased substantially in the interest of preventing medical error. Electronic devices have a great capacity to reduce risk, but they also have the potential for distraction while operating the device. Such distractions have the potential to be catastrophic for the patient. As technology advances, how to keep the computer from coming between the patient and the nurse will become a topic that will become increasingly relevant.

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