Focus on Patient Safety

Over the last few years, much has been written about medical errors and strategies for improving patient safety. This commentary on patient safety in nursing practice comes from the Agency for Healthcare Research and Quality.

Patient Safety in Nursing Practice

Carolyn M. Clancy, MD; Mary Beth Farquhar, MSN, RN; Beth A. Collins Sharp, PhD, RN

HEALTHCARE experts have long known about patient safety problems in the American healthcare system, but the issue has only recently moved to the center of the national healthcare agenda. Florence Nightingale warned in the late 1800s to “do the sick no harm,” but it took the Institute of Medicine’s (IOM’s) landmark report *To Err Is Human: Building a Safer Health System* to create momentum for the patient safety movement of today.

The IOM report caused headlines worldwide when it was released, and now 5 years later, patient safety has become an increasingly important public concern. For example, in a recent survey by the Kaiser Family Foundation (KFF), the Agency for Healthcare Research and Quality (AHRQ), and the Harvard School of Public Health, 1 in 3 respondents reported that they or a family member had experienced a medical error at some point in their life; one fifth of all respondents said it had caused serious health consequences such as death, long-term disability, or pain. Moreover, 5 years after the publication of the IOM report, Americans say that they do not believe the nation’s quality of care has improved. Forty percent of the people surveyed said the quality of healthcare has gotten worse in the past 5 years, while 17% said the quality of care has gotten better, and nearly 38% said it has stayed the same.

There is progress still to be made, but the survey did offer some good news. It is a positive sign that consumers are more sensitive overall to issues of quality and safety of care. Seven in 10 people surveyed said that they checked a medication against their written prescription when picking it up at the pharmacy; another 7 in 10 said they called to check on test results; and 2 in 3 reported talking with their surgeon about the details of an upcoming procedure, including what will take place during the procedure, how long will it take, and the recovery process.

We need to use such positive news to continue the momentum of improvement. We also must recognize that improvement and transformation of the healthcare system is a team effort, and that each team member in the system has a significant role to play.

Nurses are the largest group of healthcare providers in the nation offering direct patient care. We commend the *Journal of Nursing*...
Care Quality for making a significant contribution to the national dialogue by calling attention to both the problems and the cutting-edge solutions that have been seen to help improve safety and quality. The journal clearly recognizes the significant role that nurses have in making care as safe as possible. Because of nurses’ broad, yet intimate, perspective on the causes of errors and their prevention, they are an indispensable part of the multidisciplinary teams that are finding innovative solutions to improve safety and ultimately benefit patients.

The statement defining the mission of the AHRQ, “to improve the quality, safety, efficiency, and effectiveness of health care for all Americans,” reflects the need to do more than only fund research. We need to make sure that the findings, knowledge, and tools that result from research are put immediately to work to improve health and healthcare.

The AHRQ has long been a leader in funding research on patient safety and making its findings applicable to the everyday care of patients. The US Congress has supported this effort by appropriating more than $165 million for AHRQ’s patient safety research initiative. Most recently, Congress appropriated $139 million for AHRQ’s new multiyear health information technology initiative, which will help harness the power of technology to improve safety. The more than 100 grants and contracts funded under this initiative will help providers improve patient safety by reducing medication errors through eliminating handwritten prescriptions, helping to ensure that important information follows patients as they move among healthcare settings, and reducing duplicative and unnecessary testing.

The AHRQ is committed to improving patient safety, not only through funding research on patient safety, but also by commissioning such groundbreaking reports as the IOM report Keeping Patients Safe: Transforming the Work Environment of Nurses. This report provides guidance on how to design a work environment, in which nurses can provide safer patient care. According to The Effect of Health Care Working Conditions on Patient Safety, a systematic review, strong evidence exists that workforce staffing and workflow design affect medical errors and patients’ safety outcomes.

The AHRQ funded a special program of research on working conditions, with the majority of the projects focusing on nursing. Results from these studies will be released in the coming year. In the meantime, the existing body of AHRQ research on the nursing workforce has been summarized in Research in Action: Hospital Nurse Staffing and Quality of Care. The current research supports the existing reports that nurse staffing is integral to patient safety.

We must continue working to apply the knowledge gained from our research to clinical practice. For the momentum of change to continue, all stakeholders must be on board from researchers and caregivers to educators and policymakers. To transform our healthcare system, it is also essential to have the support of leaders and managers at all levels in a variety of organizations.

Chief among the factors that will help transform the healthcare system is our knowledge that patient safety problems are more the result of system design flaws than they are of “bad” providers. By blaming and punishing providers, we have only created a “culture of shame” and driven problems underground rather than solving the problems that would enhance patient safety.

A systems approach takes a broader perspective by seeking solutions in the physical and cultural environment. For example, the way nursing units are arranged, healthcare procedures, organizational knowledge transfer, technical failures, inadequate policies and procedures, communication among healthcare teams, and staffing issues are all significant factors that may dramatically affect the individual caregiver’s ability to deliver safe, high-quality care. These issues, left unaddressed, may result in additional errors.

How is patient safety defined, and what is the extent of medical errors? The IOM defines patient safety as “freedom from accidental
injury; ensuring patient safety involves the establishment of operational systems and processes that minimize the likelihood of errors and maximize the likelihood of intercepting them when they occur. 

Estimates are that preventable medical errors are responsible for between 44,000 and 98,000 patient deaths in hospitals per year. The cost of errors ranges from $17 million up to $29 million annually, and the related emotional costs for patients and their families, as well as caregivers, are incalculable.

One of the serious issues we face in the healthcare industry is the long hours demanded of nurses and other healthcare providers. Healthcare lags behind other sectors of the economy such as aviation, nuclear power, and manufacturing that prevent unsafe service systems from proliferating. Long hours pose a threat to patient safety because caregivers display slower reaction time, decreased energy, and reduced attention to detail.

Our research is confirming the fact that we must seek solutions in the larger healthcare system if we are going to reduce unnecessary deaths and injuries. In one AHRQ-funded research study, nurses who work shifts longer than 12 hours or who work unplanned overtime were found to be 3 times more likely than other nurses to make errors such as giving patients incorrect medications or dosages or administering medications late. Another study showed that the odds of a nurse making an error were twice as high among nurses who rotated shifts as that among nurses working straight days or evenings.

Another concern is nurse staffing levels. Research has shown that higher rates of poor patient outcomes, including pneumonia, shock, upper gastrointestinal bleeding, cardiac arrest, urinary tract infections, and longer hospital stays, are more likely in hospitals that have lower nurse staffing levels. This is particularly pertinent when there are fewer registered nurses on duty, as compared with licensed practical nurses or nurses’ aides, and when nurses spend less than optimal time with patients. As the IOM has noted, direct-care nursing staff must be involved in determining and evaluating the approaches used to decide staffing levels for each shift to improve quality and enhance patient safety.

These and other studies are providing the momentum to shift away from blaming individuals when errors are made to a more balanced approach that focuses on the healthcare systems and work environments. Yet all of our research and work on improving patient safety will not have an impact unless the healthcare system creates a “culture of safety.” In this culture, nurses and other caregivers are encouraged to report medical errors, “near misses,” or adverse events, where they can be discussed in an atmosphere of trust and mutual respect without fear of blame or retribution. Mistakes or near mistakes are used as opportunities for learning. A culture of safety focuses on analyzing why and how problems occur rather than the person who might have been responsible. In this type of environment, innovation and positive changes are possible that would ultimately benefit both patients and caregivers.

An important part of this culture is talking to patients. In the KFF/AHRQ/Harvard survey, only 30% of respondents who reported medical errors said that the doctor or healthcare professional told them or their family member that an error had been made. In addition, just over 50% thought it was likely that the doctor would tell them if they experienced a preventable medical error. Since these are baseline data, we do not know if these percentages have increased over the last 5 years. However, the central issue is that caregivers should be expected to inform patients when they make a medical error. Telling a patient about a medical error and what can be done to prevent future errors should be the rule, not the exception.

An increasing number of tools are available to support nurses in their efforts to help create a culture of safety. For example, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) uses a voluntary reporting system to capture serious adverse events. JCAHO also began requiring
organizations seeking accreditation to comply with its National Patient Safety Goals, which ensure a greater focus on patient safety. Its 2005 goals include improving the accuracy of patient identification, improving caregiver communication, reducing the risk for healthcare-associated infections, and improving the safety of medication use.\textsuperscript{12}

The AHRQ has also funded the Hospital Survey on Patient Safety Culture. This survey can help diagnose the safety culture of an organization, raise safety awareness, and identify opportunities for improvement.\textsuperscript{13} It measures both hospital- and unit-level aspects of the culture such as supervisor/manager expectations and actions, nonpunitive response to error, and continuous learning.\textsuperscript{14} Readers can go to http://www.ahrq.gov/qual/hospculture for details of the survey and instructions.

The AHRQ’s health information technology initiative mentioned earlier is an important component of this culture change, but is a means to an end, not an end in itself. As the IOM said in 2003, “Americans should be able to count on receiving healthcare that is safe. . .this requires, first, a commitment by all stakeholders to a culture of safety, and, second, improved information systems.”\textsuperscript{15}

Our agency has a number of studies underway that encompass a wide variety of issues such as

- nurse workload and working conditions, including the effects of fatigue and stress,
- sleep deprivation and shift work,
- organizational climate and culture, including written and oral communication, and information flow,
- human problems such as failure to follow policy and procedures,
- lack of appropriate patient education,
- staff development, and
- technical failures.

We will continue to share the findings from these studies and help others to translate these into changes at the service delivery level.

### Helpful AHRQ Resources

- AHRQ Nursing Web site: http://www.ahrq.gov/about/nursing
- AHRQ WebM&M: http://www.webmm.ahrq.gov (This is an online forum that focuses on patient safety cases. Nurses are encouraged to share the nurse perspective by authoring case studies. It offers nursing CEUs.)
- AHRQ PS Net (Patient Safety Network): http://www.psnet.ahrq.gov (This is an online one-stop shop for patient safety resources.)
- AHRQ Nursing Listserv: http://www.ahrq.gov/about/nursing/nurslist.htm
- First Do No Harm: AHRQ’s column in the American Journal of Nursing

As we hope you have gathered from this commentary, AHRQ (www.ahrq.gov) is an excellent resource for nurses. Together, we have a tremendous opportunity and responsibility to make a difference in helping to safeguard the patients we care for every day.

### REFERENCES


