The Science of Patient Safety: Implications for Oncology Nursing Practice

Carol A. Sheridan, RN, MSN

Patient safety is one of the most frequent terms used in health care today. Patients and their families are, first and foremost, focused on receiving effective and safe care, and oncology nurses strive to incorporate clinical evidence into day-to-day practice. This article provides a road map on how to incorporate emerging patient safety science into daily clinical practice to best serve patients and their families.

Oncology nursing’s historical approach to patient safety has its roots in the safe administration of chemotherapy (Oncology Nursing Society [ONS], 1992). The first ONS standards for chemotherapy administration were written to address safe nursing practice, describing the knowledge and skill necessary to safely deliver chemotherapy to patients. The healthcare reality today has shifted to delivering results regarding patient-specific outcomes. The Centers for Medicare and Medicaid Services (CMS) now link reimbursement to the reduction and elimination of hospital-acquired infections (HAIs) and hospital-acquired conditions (HACs) (Lee et al., 2012; Richter, Jarrett, Hold, & LaBresh, 2013) (see Figure 1). The goal of patient safety is to reduce and eliminate preventable injury or harm resulting from the process of health care. Practicing oncology nurses must expand their knowledge and expertise beyond cancer care and embrace the principles and practice that serve as the foundation for the science of patient safety to reduce these patient harms.

Patient Safety

The topic of patient safety began appearing in the healthcare literature at an accelerated pace with the publication of To Err Is Human: Building a Safer Health System (Institute of Medicine [IOM], 1999). A key finding was that, despite an expensive healthcare system in the United States, patients continue to be injured or die at an alarming rate as a result of human error.

The science of safety actually is an eclectic collection of principles borrowed from other disciplines that have been leading the field of safety (manufacturing, aviation, defense, and systems thinking). Oncology nurses who use structure, process, and people as a framework to guide safety initiatives will be able to address patient safety risks or gaps, regardless of the setting or role along the cancer continuum.

Structure

The way in which organizations are structured (see Figure 2) is very informative regarding priorities as well as the goals of the board of directors. Frequently, resources are dedicated to priority programs. At the cancer center or unit level, interdisciplinary quality improvement or process improvement projects often are initiated. The level of commitment can generally be gauged based on the leadership engagement in these improvement or safety initiatives. The unit-level initiatives provide oncology nurses with both clinical and leadership venues to address patient safety concerns for discussion, problem solving, and final resolution.

In addition, through participation in national meetings, oncology nurses can identify safety initiatives that colleagues from other cancer centers are implementing to improve care, and can bring those forward in their own institutions (i.e., new electronic health records [EHRs] and bar coding technologies) for possible adoption.

In the current healthcare setting, prior to bringing new equipment into a practice, a pilot study is conducted to determine the effectiveness of a product. Another opportunity to identify safety gaps, however, is when a new process, procedure, or new piece of equipment is introduced into an oncology site. Staff should monitor its reliability and gauge whether or not it delivers the desired results. Variability (i.e., is the same outcome achieved regardless of when the procedure is conducted or regardless of a particular staff member) has the potential to create safety gaps in clinical care.

Process

The second pillar is the process in which care is delivered. Understanding