Symposium
Introduction

JoAnne Phillips, DNP, RN, CNS, CPPS

Complex Patient Care Technology

JoAnne Phillips, DNP, RN, CNS, CPPS

Health care and nursing practice are changing rapidly. Nurses are at the center of that change, challenged to keep up with the pace. Nurses can use advances in complex patient care technology to facilitate the care of an increasingly complex patient population. Historically, complex patient care technology was seen predominantly in operating rooms and critical care units. That is no longer the case. Over the past 3 decades, complex patient care technology has been assimilated across the continuum of care. Nurses have the greatest interaction with patient care technology, using it to monitor and manage patients not only in high acuity and critical care environments, but in long-term and home care as well.

Successful implementation of complex patient care technology is a multifaceted process. Nurses play a role in every facet. In fact, the Institute of Medicine report titled *The Future of Nursing: Leading Change, Advancing Health* recommends that nurses be involved in the design and implementation of technology.[1] The following symposium contains a number of in-depth articles that address several key facets of technology selection and implementation.

When caregivers are asked to consider adoption and implementation of any patient care technology, among their initial considerations must be the risk associated with that technology. After a patient safety event, Memorial Hermann Hospital System addressed the risk associated with lack of familiarity with those devices among staff by introducing a process for identifying the risk associated with technologies when caregivers are insufficiently educated about their operation and use. The tools used by the Memorial Hermann staff in the "Fail Safe" program are included herein to enable readers to evaluate and adopt such a program in their own institutions.

Nurses play a key role in the introduction and adoption of innovative technology. Szatala and Young present a process to introduce an innovative technology in neurocritical care monitoring that enables the aggregation of multiple clinical data points to one platform. Data are analyzed and provide guidance for clinicians to optimize patient management and prevent secondary brain injury.

The final article on strategies for technology selection, education and competency assessment, and adoption puts all the pieces together. Each step in the

JoAnne Phillips is Director, Clinical Practice, Virtua Health System, 303 Lippincott Dr, Marlton, NJ 08053 (jphillips3@virtua.org).

complex process is reviewed. The article offers an in-depth review of the role human factors play in technology selection and adoption. It includes a worksheet developed to guide critical care nurse leaders on the steps in the process.

This series addresses several hallmarks of successful technology adoption. It is designed to provide leaders and clinical nurses guidance on the selection, education and competency assessment, and implementation of complex patient care technology.

REFERENCE

1. Institute of Medicine (US). Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing. *The Future of Nursing: Leading Change, Advancing Health.* Washington, DC: National Academy Press; 2011.