



Time Motion Study Documents Nursing Activities in Support of Top-of-License Practice

In 2010, the Institute of Medicine (IOM) published the report “The Future of Nursing: Leading Change, Advancing Health.” This report provided recommendations for nursing’s contributions to improving health care and patient outcomes. One of these recommendations, the need for nurses “to practice to the full extent of their education,” leverages the unique knowledge and capacity of nurses to provide high-quality, efficient, cost-effective care. Practicing to the full extent of education has emerged as “top-of-license practice.”

Funded by the American Nurses Foundation (ANF) Nursing Research Grants Program, Jacalyn Buck, PhD, RN, NEA-BC, interim chief nursing and patient care services officer, and her team designed and implemented the first known study to use an electronic time motion tool to explore nurses’ workflow and activities related to communication, hands-on tasks and locations where activities occurred. The study was conducted on a medical-surgical unit at The Ohio State University Wexner Medical Center. A total of 316 hours of observations were completed across three blocks of time (7-11 a.m., 11 a.m.-3 p.m. and 3-7 p.m.) on the sample unit.

“Because the healthcare environment continues to rapidly evolve,” Buck says, “it is critical to develop new strategies to improve nurses’ time allocation to achieve the highest level of patient care possible.”



The results revealed that nurses spent 25% of their time charting and reviewing information in the electronic health records (EHR) system, averaging 31.63 minutes for charting and 21.51 minutes reviewing information (per four-hour observation). Nurses' work was not distributed equally across a 12-hour shift; greater frequency and duration in hands-on tasks occurred between 7 a.m. and 11 a.m. In addition, nurses spent approximately 10% of their time performing non-nursing activities or tasks deemed delegable.

Other findings from the study revealed that nurses spent nearly a quarter of their time multitasking. The most frequent types of multitasking included nurses communicating with patients during medication administration, assessment and charting, and communicating with other nurses while charting and reviewing the EHR. Results also revealed that nurses are often interrupted by phone calls; 16% of these occurred while the nurses were in patients' rooms, and 10% while in the medication room.

"Our study results have provided additional evidence to the growing body of literature on nurses' time allocation, multitasking and interruptions," Buck says. "Our goal was to assist nursing leaders to develop strategies for transforming nursing practice through re-examination of nursing work and activities, and to promote nurses working at top-of-license practice."

Study team members include Po-Yin Yen, PhD, RN; Jacqueline Loversidge, PhD, RNC-AWHC; Esther Chipps, PhD, RN, NEA-BC; Lynn Gallagher-Ford, PhD, RN, NE-BC; Lynne Genter, MS, RN, CCRN; and Jacalyn Buck, PhD, RN, NEA-BC.