Oncology Nurse Informaticists

An evolving role to support nursing practice

Brianna D. King, BSN, RN, OCN®, Laurie A. Riemann, BSN, RN, and Jeannine M. Brant, PhD, APRN-CNS, AOCN®, FAAN

Nursing informatics is an evolving field in the burgeoning context of technologic and digital advances in health care. Nurse informaticists are integral in translating these advances into evidence-based clinical practice to improve the quality and safety of patient care and professional practice. This article describes the role and operationalization of nurse informaticists in the oncology setting. A case study is presented to exemplify how nurse informaticists can lead interprofessional teams in evaluating opportunities for process or quality improvement and implementing and evaluating digital solutions to improve oncology care.

AT A GLANCE

- Nurse informaticist is an evolving role that leverages technologic advances to support clinical practice.
- Nurse informaticists have many opportunities to enhance the care of individuals with cancer across practice settings.
- Building efficient, effective patient- and nurse-centered workflows can improve patient care delivery and the comprehensive nature of information in the patient's health record.

First recognized as a specialty role in 1992 (Sewell, 2018), nursing informatics is defined as "the specialty that integrates nursing science with multiple information and analytical sciences to identify, define, manage, and communicate data, information, knowledge, and wisdom in nursing practice" (American Nurses Association, 2015, p. 1). As a profession, nursing informatics has emerged to help drive evidence-based clinical practice through integrated electronic methods (Mills, 2019). An integrative review of 40 articles reported that nursing informatics affects nursing outcomes and healthcare quality and recommended further expansion of nursing informatics education and application of the role (Darvish et al., 2014). In an era of increasing digitalization of health care, including the nationwide implementation of electronic health records (EHRs), the nurse informaticist role is expanding in diverse clinical settings. This overview of the nurse informaticist role in the oncology setting includes a case study, which illustrates how the role influences clinical care delivery for individuals with cancer.

Role of the Oncology Nurse Informaticist

The complexity of oncology care, including care management, potentially by multiple specialty areas and across multiple care settings, creates the need for innovative technologic solutions in the oncology space (Dicker & Lim, 2018). Such solutions include interactive decision aids, mobile applications, web-based technologies (Dicker & Lim, 2018), and optimized EHRs. In oncology nursing, electronic solutions, such as the Oncology Interactive Navigator™, aid enhanced patient support and nurses' professional engagement (Lau & Loiselle, 2018). As digital solutions, including and extending beyond the EHR, provide new opportunities to connect patients and providers to clinical resources, an oncology nurse informaticist has a critical role in supporting technologic advances that enhance practice in the oncology setting to improve safety, quality, and standardization of care. Oncology nurse informaticists may contribute to such advances through many roles, including educating staff about new technologic opportunities to enhance clinical practice and leading quality and process improvement initiatives to evaluate the impact of such solutions on clinical practice and care outcomes (American Nurses Association, 2015).

By virtue of their education (American Nursing Informatics Association, 2020b; U.S. News and World Report, 2019), certification (American Nurses Credentialing Center, 2020), training (American Nursing Informatics Association, 2020a; Nurse.com, 2020), or practice experience, oncology nurse informaticists are prepared to design and implement new electronic tools, conduct workflow analysis and enhancement, and train