

Knowledge about genetics and genomics and its application to oncology care is rapidly expanding and evolving. As a result, oncology nurses at all levels must develop and maintain their knowledge of genetics and genomics, as well as be aware of resources to guide practice. This article focuses on implementation of the standards described in the updated *Genetics/Genomics Nursing: Scope and Standards of Practice* by the basic practitioner.

#### AT A GLANCE

- Genetics and genomics should be considered an integral part of oncology nursing practice.
- Genetic nursing standards are applicable to specific nursing situations.
- Nurses should identify resources for guidance in referring patients for genetic evaluation and testing.

#### KEYWORDS

genetics; genomics;  
hereditary cancer syndromes;  
scope and standards of practice

#### DIGITAL OBJECT

#### IDENTIFIER

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# Standards of Practice

## Applying genetics and genomics resources to oncology

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Cancer is genetic at the cellular level resulting from changes in DNA structure or function. Oncology nurses have long been aware of the intersection of heredity, lifestyle, and environment in their assessments of patients and families. In 2003, completion of the Human Genome Project led to the expansion of genetics and genomics nursing practice and heightened awareness of the interactions between heredity and environment by the healthcare community in general. This was continued about a decade later, with enhanced guidelines by the National Comprehensive Cancer Network ([NCCN], 2017), inclusion of genetics referral and education in the American College of Surgeons (2015) Commission on Cancer guidelines, the U.S. Preventive Services Task Force ([USPSTF], 2013) recommendations concerning genetic testing, and a U.S. Supreme Court decision leading to increased availability of testing (O'Connor, 2016). Although these events have driven change for healthcare providers, one event significantly enhanced public awareness. When actress Angelina Jolie announced her mutation status and risk reduction surgery, the number of individuals seeking more information exploded (Juthe, Zaharchuk, & Wang, 2015). Because of Jolie's announcement, many patients and their families are asking nurses for genetics education and guidance.

Oncology nurses are in a unique position to address family and environmental issues through the development of trust-

ing long-term relationships. Although they do not need to handle every issue independently, nurses do need to be aware of resources and appropriate referrals for patients and their families. This article is the first of two describing the implementation of the updated *Genetics/Genomics Nursing: Scope and Standards of Practice* into daily practice for basic and advanced practitioners in oncology nursing (American Nurses Association [ANA] & International Society of Nurses in Genetics [ISONG], 2016). This article focuses on implementation of these standards for the basic practitioner.

#### Levels of Practice

Genetics and genomics nursing is a growing specialty within and outside of oncology. Patients in oncology practices have family histories that affect their personal risk, as well as that of their unaffected family members. A common question is who to test and when. This article will present three case studies: a 70-year-old woman with recurrent ovarian cancer with no other family history, a 60-year-old woman with recurrent breast cancer with negative genetic testing 10 years ago, and an unaffected woman of Ashkenazi Jewish heritage with a known founder mutation in the family. These are just a few of the situations encountered in oncology offices and primary care clinics.

The growing complexity of genetics in nursing has led to the delineation of roles and levels of practice in genetic care. *Genetics/Genomics Nursing: Scope and Standards of Practice* is a collaborative effort