Oncology Nurse Practitioners in Genetics: Examining Scope of Practice and Competence

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Genomic science is rapidly evolving, and ordering germline testing requires appropriate and comprehensive assessment of a patient’s personal and family history, as well as the knowledge base to facilitate selection of the best test or panel of tests, provision of pretest counseling for informed consent, interpretation of test results, post-test recommendations, and coordination of care for other at-risk family members. Prior to ordering germline genetic testing, an advanced practice RN’s scope of practice accountability includes consideration of competence in the provision of genomic care. This article provides a case study to illustrate the complexities of issues related to competence when ordering germline genetic testing.

**AT A GLANCE**
- The continual expansion of genomic science has created a need for competent genetic professionals to provide comprehensive care to patients and families.
- Information about scope of practice accountability is fundamental for advanced practice oncology nurses considering provision of genomic care.
- Competence is an essential component of personal accountability in scope of practice determinations.

**KEYWORDS**
genetics; genomics; advanced practice nurse; genetics professional; scope of practice

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The expansion of genomics knowledge continues to generate important clinical applications in oncology. Incorporation of genomic information in precision medicine prognosis and treatment decisions is one example. Another is the identification of pathogenic germline variants conferring increased cancer risk and providing insights into prognosis and treatment options for those patients and their family members. The demand for genomic information is also expanding among consumers. All contribute to a great and growing need for competent genetic professionals. However, the current workforce of genetic professionals is estimated to be only 44% of what is needed to provide counseling at the suggested ratio of one counselor per 75,000 individuals (Stoll et al., 2018). Oncology nurse practitioners (ONPs) may be interested in genomics or may be asked to add genetic testing services to their practice. As with any nursing practice expansion, a reasonably prudent advanced practice nurse starts with consideration of scope of practice (SOP) and competence.

The Nurse Practice Act, rules, and regulations define SOP in each state. Decision trees or algorithms (see Figure 1) may be helpful resources when considering SOP, particularly as practice evolves because of new knowledge and rapid growth in health care, as is the case with genomic science. The key underlying principle of SOP determination is personal accountability “for decisions made and actions taken in the course of nursing practice” (Ballard et al., 2016, p. 19). Competence is an essential component of SOP determination. Competence is a broad term that encompasses an “observable, measurable, performance-based outcome that indicates the achievement of a particular knowledge component, application, or demonstration of a psychomotor behavior or skill” (Greco et al., 2012, p. 4).

This article provides a case study to examine essential competencies for ONPs who provide genomic care. Included in the discussion are genomic assessment, provision of information for informed consent, selection of the genetic test or test panel, test interpretation, and management of the patient and family. Some ONPs may determine that they cannot ensure competence to provide genomic care. In those cases, referral to a genetics professional is the prudent choice for the provision of best and comprehensive care for patients and families.

**Case Study: Genomic Assessment and Genetic Testing**
After an ONP in a medical oncology practice ordered an 11-gene panel test (ATM, BARD1, BRCA1, BRCA2, CDH1, CHEK2, NF1, PALB2, PTEN, STK11,