Core Competencies in Cancer Genetics for Advanced Practice Oncology Nurses

Kathleen A. Calzone, RN, MSN, APNG(c), Jean Jenkins, RN, PhD, FAAN, and Agnes Masny, RN, MPH, MSN

Purpose/Objectives: To determine core competencies in cancer genetics for advanced practice nurses (APNs) in oncology.

Design: Survey.

Sample: Expert panel of 9 nursing educators or researchers, 9 general genetics experts, 9 genetics experts with specialties in oncology, and 10 oncology APN nurse consumers (N = 37).

Methods: Utilizing the Delphi Technique, two rounds of surveys were conducted. Round 1’s survey required open-ended responses to identify skills, attitudes, and competencies specific to cancer genetics. Round 2 requested ranking of the importance of identified competencies.

Main Research Variables: Skills, attitudes, and competencies specific to cancer genetics.

Findings: Recommended genetics competencies and knowledge for oncology APNs were identified for the categories of direct caregiver (6 items), coordinator (6 items), consultant (7 items), educator (6 items), researcher (8 items), and professional attitudes (16 items).

Conclusions: Identified competencies provide a foundation and direction for development of the education curriculum recommended for all practicing oncology APNs.

Implications for Nursing: Integrating genetic concepts into clinical practice is essential. Oncology APNs must have an expanded knowledge base in genetics to enable them to incorporate advances in genetics into practice to ensure quality outcomes. Development of genetics education is crucial to ensure future competency. Research that determines the impact of such education is warranted.

Genetics has moved into the forefront of health care, secondary to the discoveries generated by the Human Genome Project and other research efforts. This rapidly expanding wealth of genetic information has clinical implications that span the entire healthcare continuum, including cancer care. Cancer genetic information improves understanding about the biology of specific malignancies, helps to identify at-risk individuals, furthers the ability to characterize malignancies, establishes treatment tailored to the genetic features of the disease, and leads to the development of new therapeutic modalities. This genomic foundation of medical practice is anticipated to change the activities and functions of health care, including the care that nurses provide (Porter-O‘Grady, 2001).

In general, nurses are unprepared to integrate this genomic foundation into practice. Anderson (1996) conducted a search of the literature and identified nine studies from 1976–1994 that support the proposition that nurses lack an adequate background in human genetics. The nursing profession has not included genetics concepts in its curriculum, which has resulted in one of the greatest challenges that the nursing community will face: Most nurses have insufficient genetics knowledge to understand the implications for their practice. A national survey conducted by Scanlon and Fibison (1995) for the American Nurses Association (ANA) revealed that the majority of nurses studied had little, if any, instruction in genetics or the unique implications of genetic information. Curriculum surveys by Hetteberg, Prows, Deets, Monsen, and Kenner (1999) similarly indicated little change in the inclusion of genetics content in the preparation of entry-level nurses over the course of 15 years. Other available resources for nurse preparation, such as continuing-education programs and nursing literature, also are limited in genetics content (Monsen & Anderson, 1999). However, a resource developed by the International Society of Nurses in Genetics, Inc. (ISONG), and ANA (1998) titled Statement on the Scope and Standards of Genetics Clinical Nursing Practice provides descriptions of human genetics and the role and standards of

Key Points . . .

➤ Genetics concepts must be integrated into clinical oncology practice.
➤ Most nurses have insufficient genetics knowledge to understand the implications for cancer care.
➤ Advanced practice nurses (APNs) in oncology must be able to translate genetics information to ensure future quality care.
➤ Identified competencies provide a foundation and direction for APN education.

Kathleen A. Calzone, RN, MSN, APNG(c), is a nursing coordinator at the University of Pennsylvania Cancer Center in Philadelphia; Jean Jenkins, RN, PhD, FAAN, is a clinical nurse specialist consultant with the National Cancer Institute, National Institutes of Health, in Bethesda, MD; and Agnes Masny, RN, MPH, MSN, is a nurse practitioner at Fox Chase Cancer Center in Philadelphia. (Submitted April 2001. Accepted for publication November 28, 2001.)

Digital Object Identifier: 10.1188/02.ONF.1327-1333