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# Contents

**Preface** ........................................................................................................................................... vii

**Acknowledgments** ....................................................................................................................... ix

**American Nurses Association Approval and Acknowledgment** ........................................... xi

**Introduction** ................................................................................................................................. 1

**Scope of Oncology Nursing Practice** ...................................................................................... 3
  - Definition of Oncology Nursing ................................................................................................. 3
  - Historical Perspective of the Oncology Nursing Specialty .................................................... 3

**Scope of the Oncology Nursing Role** ....................................................................................... 9
  - Populations Served by Oncology Nurses ............................................................................... 11
  - Oncology Nursing Practice Environments ............................................................................ 14
  - Requirements to Be an Oncology Nurse .............................................................................. 18

**Ethics** ........................................................................................................................................... 23
  - Provisions .............................................................................................................................. 23

**Trends in Oncology** ................................................................................................................... 31
  - Access to and Affordability of Care ....................................................................................... 31
  - Changes to the Insurance Environment ............................................................................... 32
  - Aging Population and Comorbidities .................................................................................. 32
  - The Opioid Epidemic and Oncology Care Needs ................................................................. 32
  - Precision Medicine and Immunotherapy ............................................................................. 33
  - Value-Based Care .................................................................................................................. 34
  - New Sources of Data: Access and Knowledge ..................................................................... 34

**Trends in Oncology Nursing** .................................................................................................... 35
  - Essential Oncology Competencies ....................................................................................... 35
  - Expanding Use of Technologies ............................................................................................ 35
  - Evidence-Based Translational Practice ................................................................................ 36

**Usefulness in Practice** ............................................................................................................. 39

**Standards of Oncology Nursing Practice and Professional Performance** .......................... 41
  - Standards of Practice ............................................................................................................. 42
  - Standards of Professional Performance ............................................................................... 52

**References** .................................................................................................................................. 65

**Glossary** ...................................................................................................................................... 69
As we move further into the 21st century, evolving science continues to deepen our understanding of the biologic mechanisms underlying the development and behavior of cancer. This has led to unprecedented innovations in cancer prevention and control, improved patient outcomes and symptom management, and an increased number of cancer survivors needing specialized care. These advances require the ongoing evolution of oncology nursing practice to most effectively address the diverse needs of people at risk for or diagnosed with cancer.

_Oncology Nursing: Scope and Standards of Practice_ was developed using a variety of resources. To fully reflect current nursing standards in the United States, the structure of this document was designed to meet the requirements laid out in _Recognition of a Nursing Specialty, Approval of a Specialty Nursing Scope of Practice Statement, Acknowledgment of Specialty Nursing Standards of Practice, and Affirmation of Focused Practice Competencies_ by the American Nurses Association (ANA, 2017). In addition to a review of the current literature, several foundational publications provided the basis for the content of the scope and standards, including the following: the Oncology Nursing Society’s (ONS’s) _Statement on the Scope and Standards of Oncology Nursing Practice: Generalist and Advanced Practice_ (Brant & Wickham, 2013), _Standards of Oncology Nursing Education: Generalist and Advanced Practice Levels_ (Jacobs & Mayer, 2016), and _Standards of Oncology Education: Patient/Significant Other and Public_ (Blecher, Ireland, & Watson, 2016) as well as ANA’s (2015) _Nursing: Scope and Standards of Practice_. _Oncology Nursing: Scope and Standards of Practice_ builds upon ANA’s (2015) _Nursing: Scope and Standards of Practice_ and does not replace it. As oncology nursing requires additional knowledge, skills, and expertise beyond those learned in generalist nursing practice and educational programs, oncology nurses are expected to practice in accordance with the competencies identified in both documents. Other foundational documents include content outlines for the Oncology Nursing Certification Corporation (2018a, 2018b) certification tests.
at the RN and advanced practice levels and competencies developed by ONS (2007, 2008, 2012, 2016) for generalists, clinical nurse specialists, nurse practitioners, and leadership.

To ensure that the updated scope and standards are relevant to current and anticipated future oncology nursing practice, input was requested from practicing oncology nurses at several points. Comments and ideas were sought and assimilated during the development of the initial draft, as well as during the public comment and expert review phases. This input was essential to completion of *Oncology Nursing: Scope and Standards of Practice*.

The intent of this publication is to provide clear direction and support to oncology nurses in all settings across the cancer care continuum. The scope and standards are designed to lay the groundwork upon which oncology nurses can develop professionally and defend their essential contribution to quality cancer care.

References


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The American Nurses Association has approved the Oncology Nursing Scope of Practice as defined herein. Approval is valid for five (5) years from the first date of publication of this document or until a new scope of practice has been approved, whichever occurs first.

The American Nurses Association has acknowledged the Oncology Nursing Standards of Practice, as set forth herein. Acknowledgment is valid for five (5) years from the first date of publication of this document or until new standards of practice have been acknowledged, whichever occurs first.
The Oncology Nursing Society (ONS) has been defining the scope and standards for oncology nursing practice since 1979. Over the years, these standards have evolved to reflect changes in cancer care in general and in oncology nursing practice more specifically. The purpose of this current document is to provide oncology nurses, administrators, legislators, other professionals, and the public with a clear description of the appropriate and expected scope of oncology nursing practice. Oncology nursing practice will be addressed at three levels: the registered nurse (RN), the graduate-level–prepared RN, and the advanced practice registered nurse (APRN), with detailed practice requirements and expected competencies for each of these practice levels.

Cancer is the second leading cause of death worldwide (Heron, 2018). Although the incidence of cancer in the United States has been slowly declining, it is estimated that cancer incidence throughout the world will rise by 70% by 2030 (American Cancer Society [ACS], 2015). In the United States, approximately 1.7 million new cancer diagnoses were estimated for 2019, or more than 4,700 new cases each day. In addition, cancer survival has steadily increased since 1991, resulting in growth of the cancer survivor population (ACS, 2019; American Society of Clinical Oncology [ASCO], 2017).

As of early 2016, more than 15.5 million cancer survivors were alive in the United States (ACS, 2019). The majority of survivors were diagnosed years ago and remain cancer free, but other survivors live with cancer as a chronic disease. The number of cancer survivors in the United States is expected to increase to 26.1 million by 2040, with older adults constituting a significant majority of this group (Bluethmann, Mariotto, & Rowland, 2016). Survivors have needs that require qualified healthcare providers to detect and manage these challenges (Smith, Yates, & Ewing, 2017). In addition, the growing population of older adult survivors presents a challenge, as they often have concurrent chronic diseases and complex needs (Bluethmann et al., 2016).
Oncology nursing encompasses nurses who work in a wide variety of roles and settings, but all have a common purpose: to help people at risk for or with a cancer diagnosis achieve the best quality of life and outcomes (ONS, 2016a). This includes not only nurses who identify as an oncology nurse but also those who care for people at risk for or with a cancer diagnosis in nontraditional, generalist, and other specialty areas.
Oncology nursing is a nursing specialty that seeks to reduce the risks, incidence, and burden of cancer by encouraging healthy lifestyles, promoting early detection, and improving the management of cancer symptoms and side effects throughout the disease trajectory.

Oncology nurses advocate for people at risk for or with a diagnosis of cancer, coordinate care delivery, ensure safe delivery of cancer treatments, help manage symptoms, optimize quality of life, support people with cancer and their caregivers, advocate for the unique needs of people with cancer, and collaborate with the interprofessional team to improve outcomes and reduce the impact of cancer on people, families, communities, and populations.

Advocacy for the needs of people with cancer in the United States began with the building of the first specialized cancer hospital in New York City in 1887. Unfortunately, the stigma of cancer as an incurable, and likely contagious, disease earned the hospital a poor reputation despite its full occupancy within the first month of opening its doors. Concurrently, the first research laboratory devoted to cancer began its work at the University of Buffalo and, in 1913, eventually led to the development of a hospital associated with the research facility. In 1912, another hospital devoted to cancer research and the care of patients with cancer opened in Boston and was associated with the Harvard Medical School.
Oncology Nursing: Scope and Standards of Practice (Lusk, 2011). These early hospitals were crucial to the advancement of understanding about the disease but were still considered places where people with cancer went to die.

By the 1920s and with advancements in technology and medical-surgical specialization, hospitals had become centers for the development of new surgical and radiologic techniques to treat cancer. However, they remained unwilling to accept patients with advanced cancers because of the care burden they represented. During this time, most people with advanced cancers died at home without the benefit of caregivers trained to provide palliative and end-of-life care. Subsequently, the need for and number of homecare nurses caring for people with cancer grew (Lusk, 2011).

Over the first 30 years of the 20th century, death rates for infectious diseases declined, and the focus on cancer as a public health concern increased. The American Society for the Control of Cancer, a precursor organization to ACS, devoted effort to educating the public on early recognition of cancer, when cure may be possible (ACS, 2017). Nurses were heavily recruited to join the “war on cancer” and become educated about cancer, inform the public about early recognition, and care for those with advanced disease. Nursing care of patients with cancer occurred in two situations: postoperative care for those with operable cancers and palliative care for those with inoperable cancers (McDonnell, 2011). As technologies advanced and radiation therapy was developed, cancer treatment began moving from end-of-life care at home to the hospital setting, and specialized nurses were in even greater demand (Lusk, 2011).

Evidence supports that early oncology nurses were charged with critical responsibilities in the care of patients with cancer, including early recognition of oncologic emergencies, intense symptom management (occurring in the absence of antibiotics or antiemetics), and limiting exposure to radioactive materials during their duties (Lusk, 2011). Care of patients with cancer was recognized by cancer care physicians of the time as intense and demanding work, requiring a unique set of specialized skills (Lusk, 2011).

By the early 1940s, the “curative era” of cancer care began, as clinical trials using nitrogen mustard to treat Hodgkin lymphoma commenced. Although venous access was, at this time, strictly the domain of physicians, oncology nurses began including admixture of chemotherapy agents in preparation for physician administration as part of their duties (Haylock, 2011). By the 1950s, nurses
in research hospitals were routinely administering cytotoxic agents intravenously.

The emergence of antibiotics and antiemetics also changed the focus of oncology nursing care. The use of these supportive care drugs increased patient tolerance of treatment, allowing for more aggressive and immunosuppressive treatment with more patients completing treatment. The role of the oncology nurse shifted from traditional bedside care to more complex integration of technological advances and psychosocial care. However, throughout the 1940s, cancer nursing as a specialty was supported through initiatives such as the Russell Sage Foundation to identify current and future nursing needs for people with cancer, and an increasing recognition of the oncology nurse’s role in psychosocial support emerged (Haylock, 2011).

From 1950 to 1980, cancer treatment consisted of extensive surgery, such as modified radical mastectomy; radiation therapy; intensive cytotoxic drug therapy; or a combination. The toxicities associated with these regimens required skilled nursing care management by highly specialized nurses. Further, oncology nurses routinely administered IV chemotherapy, operated radiation therapy equipment, and provided intensive patient and caregiver education and psychosocial support. Although nursing care was recognized by the 1940s as integral to patient and caregiver needs at the end of life, it was not until 1950 that a commission was established to study the effect of nursing care at that point in the care continuum (Haylock, 2011). The commission concluded that more nursing time and enhanced quality of nursing care were needed in hospitals and homes to meet the needs of this patient population.

In 1937, the National Cancer Institute (2016) was established with a charge to conduct and encourage research on cancer and to provide training and instruction. As an outgrowth of this charge, the Cancer Chemotherapy National Service Center was created in 1955, with a subsequent rapid growth in clinical trials in the 1960s. Throughout the 1960s, as it became clear that many nurses would at some point be caring for individuals receiving chemotherapy agents, the need for education of nurses about cancer and cancer care became more pronounced. Although no formalized definition of oncology nursing was yet established, nurses began to fulfill roles in clinical trial teams, reporting outside of the nursing administrative structure and directly to the principal investigator. These relationships provided foundational specialty training for oncol-
ogy nurses. The Nurse Training Act of 1964 encouraged development of master’s degree training programs and increased enrollment. This legislation was crucial to the founding of many specialty nursing organizations at the time, including the Association of Pediatric Oncology Nurses in 1974 and ONS in 1975 (Lynaugh, 2008).

Nurse practitioner and other advanced practice roles in oncology nursing began to develop in response to a shortage of acute care physicians, which began in the 1960s and became critical in the 1970s. Coupled with this physician shortage was an increasing public awareness of expanded roles for women in the workplace, promoted by the women’s movement of that era. As a response to public need, advanced practice education for oncology nurses began (Wilson, 2005).

ONS’s priorities have focused on promoting excellence in cancer care through the advancement of the oncology nursing specialty by defining the scope of practice of the oncology nurse and providing education and practice resources to oncology nurses at all levels. In 1979, ONS published the first set of oncology nursing standards, *Outcome Standards for Cancer Nursing Practice*, in collaboration with the American Nurses Association (ANA). This was followed by several revisions, with the most recent titled *Statement on the Scope and Standards of Oncology Nursing Practice: Generalist and Advanced Practice* (Brant & Wickham, 2013). In addition, to ensure the consistency and standardization of educational preparation for oncology nurses, in 1982 ONS developed *Standards of Oncology Nursing Education: Generalist and Advanced Practice Levels*, now in its fourth edition (Jacobs & Mayer, 2016). ONS also has developed *Standards of Oncology Education: Patient/Significant Other and Public* to provide guidance to nurses as they develop, implement, and evaluate cancer-related education for patients, caregivers, and the public (Blecher, Ireland, & Watson, 2016).

In 1981, ONS established a certification task force to explore the development of an oncology nursing credential that recognizes nursing expertise in oncology nursing. The Oncology Nursing Certification Corporation (ONCC) finalized its corporate status in 1984 and awarded the first oncology certified nurse (OCN®) credential in 1986 (Nielsen et al., 1996). Additional certifications for advanced practice and subspecialty roles have since been developed.

ONS has developed competencies for many oncology nursing roles. The first competencies, for the oncology nurse practitioner (ONS, 2007) and the oncology clinical nurse specialist (ONS, 2008),
were developed to delineate the knowledge and skills needed by nurses starting in these practice roles. Since then, ONS has developed competencies for oncology clinical trial nurses (ONS, 2016c), oncology nurse navigators (ONS, 2017b), and oncology nurse generalists (ONS, 2016a). In addition, ONS has created leadership competencies to address the leadership knowledge and skills needed at all levels of oncology nursing practice (ONS, 2012).
Cancer is a complex group of diseases that can occur at any age and exhibit a diverse set of characteristics. Cancers can arise from many body tissues and have variable abilities for growth, invasiveness, and metastatic spread (Tedder & Eggert, 2017). For some cancers, the disease process is rapid and requires quick evaluation and aggressive treatment. Other cancers begin more slowly and may allow a period of observation before requiring intervention. Some people diagnosed with cancer will have no evidence of disease on completion of treatment, whereas others will live with cancer as a chronic condition requiring periodic intervention. Because of these and other variabilities, methods for screening and early detection, determination of the best treatment approach, management of side effects, and planning for survivorship require oncology healthcare professionals to have specialized knowledge and skills that must be updated frequently as new research on cancer and treatment options becomes available.

Understanding of the scope of oncology nursing practice must begin with a definition of nursing. According to ANA’s (2015b) *Nursing: Scope and Standards of Practice*, “Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, facilitation of healing, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities, and populations” (p. 7). This holistic view of nursing is the essential basis for all nursing practice, including oncology nursing. However, because of the unique characteristics of cancer across the continuum, nurses who care for people at risk for or with a diagnosis of cancer must have additional specialized knowledge and skills to provide safe, competent care. Therefore, oncology nurses are expected to practice in accordance with both *Nursing: Scope and Standards of Practice* (ANA, 2015b) and *Oncology Nursing: Scope and Standards of Practice*.

People at risk for or diagnosed with cancer are evaluated and require care in many settings across the disease continuum. There-
Therefore, oncology nursing roles most commonly include direct care provision in inpatient, ambulatory, home, and hospice settings; patient navigation and care coordination; patient education; nursing education in academic and healthcare settings; clinical research coordination; prevention and early detection; quality improvement; informatics; management and leadership; and pharmaceutical industry support, among others. Despite the diversity of roles and practice settings, many commonalities exist in the scope of the oncology nursing role across cancer types.

Areas of focus for oncology nursing have been described through several role delineation studies performed by ONCC since the mid-1990s. Although most often performed to support the certification process, role delineation studies help to identify the tasks, knowledge, and skills needed to perform a specific role safely and effectively (Duke & Meyer, n.d.). For oncology nursing, the OCN® and advanced oncology certified nurse practitioner (AOCNP®) test content outlines provide the best guidance in determining universal areas of focus for oncology nurses (ONCC, 2018a, 2018b). The 15 areas of focus are the following:

- Health promotion, screening, early detection, and genetic risk
- Patient and caregiver education
- Factors in treatment planning
- Safe administration of cancer treatments
- Symptom management
- Psychosocial support
- Oncologic emergencies
- Survivorship
- Supportive and palliative care
- End-of-life care
- Coordination of care
- Interprofessional collaboration
- Evidence-based practice
- Legal and ethical issues
- Patient and caregiver advocacy

Oncology nurses may specialize in a specific cancer diagnosis (e.g., leukemia), treatment modality (e.g., radiation), or aspect of the cancer care continuum (e.g., screening, hospice). The cancer care needs of the individual or community and the role of the oncology nurse are interrelated. Influencing factors are the population being served, including but not limited to sex, age, social, cultural, and economic demographics; available resources; location or environment of care; risks and rates
of specific cancers inherent to the region; nurses’ level of education or training; and the evolution of science and technology related to detection, treatment, and symptom management.

### Populations Served by Oncology Nurses

#### People at Risk for Cancer

Prevention and early detection are key to decreasing cancer occurrence, morbidity, and mortality. Institutions may employ nurses specializing in oncology to oversee and provide information, education, and services to engage with groups and individuals at risk. Oncology nurses in these settings use evidence-based information about lifestyle and other cancer risks to develop and implement preventive services. These services may include, among others, tobacco cessation programs, vaccinations to prevent infection with hepatitis and human papillomaviruses, and dietary and exercise interventions to help patients achieve a healthy weight.

Oncology nurses also promote early detection of cancers, especially those with evidence-based screening procedures. For diseases such as breast, cervical, colorectal, lung, and skin cancers, oncology nurses advocate for and provide or refer for screening activities. Other risk factors that influence the need for and timing of screening procedures may include exposure to occupational or environmental hazards, first-degree female relatives with breast cancer, heavy alcohol consumption, and personal or family history of genetic syndromes (e.g., Lynch syndrome). In addition, 80% of cancers in the United States are diagnosed in individuals aged 55 years or older, so advancing age is a risk factor for adult cancers (ACS, 2019).

Because screening and early detection often occur in primary care settings, the oncology nursing role includes educating the public and primary care providers. Primary care and other generalists need information and referral resources for appropriate screening measures based on relative risks as well as general risks.

#### People Diagnosed With Cancer

Oncology nurses care for individuals diagnosed with cancer during the diagnostic, staging, and treatment planning phases. Diag-
nosis may be made following routine screening, a problem-focused medical visit, or in some cases, as an incidental finding during an unrelated medical test or examination. Patients and caregivers almost universally describe the diagnosis of cancer as a life-changing event. Oncology nurses have the responsibility to coordinate tests and appointments, provide education and information, and offer emotional support to patients and significant others.

**People Receiving Treatment for Cancer**

After diagnosis, staging, and treatment planning have been established, oncology nurses have a role in providing care during, between, and following treatments. Cancer treatment modalities include surgery, radiation therapy, chemotherapy, biologic agents, targeted therapy, and immunotherapy. Therapy may be local or systemic, based on diagnosis, stage, patient-related factors, and available resources. Patients undergoing treatment do not have universal access to all known or recommended therapies. Country of origin (e.g., low- and middle-income countries vs. high-income countries) and geographic location within a nation (e.g., rural vs. urban) can dictate available options and which individuals receive treatment (Torre, Siegel, Ward, & Jemal, 2016). Financial toxicity has been identified as a barrier to treatment and can include uninsured or underinsured groups and individuals. Disparity of resources across the globe also affects access to recommended treatments and care.

**People Eligible for Clinical Trials**

Individuals can be eligible for clinical trials at any point along the cancer care continuum. These trials evaluate new approaches to cancer prevention, early detection, treatment, and symptom management. Clinical oncology research nurses may specialize in cancer and engage in research sponsored by institutions, agencies, pharmaceutical companies or industry, or collaborative research groups. Oncology nurses provide a wide variety of services to people interested in or participating in clinical trials, such as recruitment; provision of education to patients, caregivers, and colleagues; assessment and documentation of eligibility; assessment and documentation of adverse events and disease response; coor-
Coordination of study requirements; management of complications of study interventions; collection of study-related data; and other activities as appropriate to the specific study, patient population, and institution.

People Eligible for Palliative or Hospice Care

Although often thought of as similar in focus, palliative care and hospice care may have different goals. Palliative care is “an approach to patient/family/caregiver-centered health care that focuses on optimal management of distressing symptoms, while incorporating psychosocial and spiritual care according to patient/family/caregiver needs, values, beliefs, and cultures” (National Comprehensive Cancer Network® [NCCN®], 2019, p. PAL-1). It is ONS’s position that all patients with cancer may benefit from palliative care and that it “should begin at the time of diagnosis and continue throughout bereavement” (ONS, 2016b, para. 6). In addition, when cancer is advanced, the person is not responding to or tolerating treatment, or comorbidities limit treatment options, a sole focus on palliative care might be an appropriate choice.

Patients who are at the end of life may benefit from a hospice referral. Hospice is an interprofessional care model for symptom management when the physician estimates a patient’s life expectancy to be less than six months (NCCN, 2019). Referrals to hospice result in reduced hospitalization and high-intensity care at the end of life (NCCN, 2019). Palliative care and hospice care are not defined by the setting but by patient need. Because oncology nurses possess competencies essential for palliative and hospice care, they are skilled at identifying the need and making referrals or providing the necessary care.

Cancer Survivors

Based on the cancer survivorship model of Fitzhugh Mullan, cancer survivorship begins at the moment of diagnosis and extends for the remainder of the person’s life (O’Brien et al., 2014). Mullan identified three phases—acute, extended, and permanent—that distinguish an individual’s position on the continuum of cancer care related to disease and treatment. Survivors are in the acute phase
beginning with diagnosis until the completion of active treatment. During this phase, they may be dealing with actual and potential losses, fear of dying, acute side effects of therapy, and role changes in home, work, or social settings. The extended phase begins at the end of active treatment and includes the months and years the person is under active surveillance for disease progression, relapse, or recurrence. Survivors in the extended phase may be in remission, be receiving maintenance therapy, or have advanced or terminal disease. Major issues to be addressed at this time are adjustment to separation from treatment-based support systems, feelings of celebrating life versus fear of recurrence or death, adjustment to a physical and psychosocial “new normal,” and identification of community-based rather than medical-based support. Survivors enter the permanent phase when the likelihood of active disease or recurrence is deemed to be low. Survivors may be dealing with insurance, workplace, or employment discrimination and continue adapting to physical and psychosocial changes when in this phase (Mullan, 1985).

### Oncology Nursing Practice Environments

Oncology nurses practice in a variety of settings and at times follow individuals across multiple care settings. They have roles in the community for education and screening. Oncology nurses practice in university, community, freestanding, and government healthcare centers. Agencies and organizations for population health or research, as well as medical and pharmaceutical companies, also employ oncology nurses for cancer-specific leadership and expertise. At times, oncology nurses are engaged in virtual care (e.g., telenursing, helplines, follow-up for clinical trials or other data gathering).

### Community Settings

Oncology nurses may work with private or community agencies and organizations to develop, implement, and track prevention and early detection activities. For example, nurses may be employed by community programs designed to decrease disparities and maximize quality care for people enrolled in state Medicaid programs. In Texas, the Medicaid for Breast and Cervical Cancer program employs nurses as service coordinators. These nurses assess for and
address healthcare needs, provide education related to Medicaid benefits, and facilitate access to medical and community resources for needs that might otherwise go unmet (Texas Health and Human Services, n.d.).

Oncology nurses also may be dedicated to homecare or home hospice visits. Many people with cancer receive part or all of their treatment in the home. In these situations, home health nurses must be prepared not only to manage the antineoplastic drugs but also to assess for and manage the side effects of therapy. Data show that when home health nurses have the appropriate competencies, patients can experience a higher quality of life and better outcomes (Chavis-Parker, 2015).

Oncology nurses also may be part of a team with other health-care providers and staff with business, sales, marketing, or health-care science backgrounds.

Clinical Care Settings

Diagnosis, treatment, and symptom and side effect management occur primarily in inpatient and ambulatory oncology settings. The choice of setting will depend on the patient’s physical status, type of cancer, and treatment modality and intensity, as well as anticipated and actual side effects and symptoms. Oncology nurses working in these settings may serve dedicated populations, such as site-specific cancers (e.g., gynecologic, breast, or hematologic malignancies), or may focus on treatment-specific interventions, such as surgery or radiation therapy. In addition, oncology nurses may work on dedicated units such as critical care areas or units dedicated to hematopoietic stem cell transplantation or clinical trials. Oncology nurses also are active in interprofessional palliative and hospice care in these settings.

Many oncology nurses work in ambulatory care settings, such as physician offices, ambulatory clinics, and infusion centers. These settings may be affiliated with acute care facilities, privately owned, or freestanding. Oncology nurses in these settings provide patient assessment before, during, and after treatment; develop and implement plans to manage symptoms and side effects of treatment; identify needs for additional services or support and facilitate referrals; educate patients and their caregivers; monitor patient outcomes; and change their approach as new issues arise.
A challenge facing many oncology ambulatory care settings is the shift of care from inpatient to ambulatory settings, leading to increased wait times and decreased patient satisfaction. For example, staff at the University of Texas MD Anderson Cancer Center recognized that their regional cancer centers had experienced 215,000 billable encounters in 2015–2016, a 9% increase over the previous fiscal year (Edwards, Hermis, LeGette, Lujan, & Scarlett, 2017). To address these issues, a team of oncology nurses, administrators, and pharmacists undertook a quality improvement project focused on an acuity-based scheduling system for the infusion center. Ideal and actual staffing levels as well as patient safety and satisfaction were monitored and evaluated. The outcome of the project was a six-level acuity system that optimized clinic space and time by using the acuity of patients rather than simply numbers to drive assignments. In addition, nurses completed competencies to demonstrate their ability to care for patients with cancer in this busy and still expanding ambulatory setting. This led to increased efficiency without compromising safety and decreased the wait time for patients, resulting in less anxiety and an improved patient experience (Edwards et al., 2017).

Oncology nurses in both acute and ambulatory settings administer systemic chemotherapy, targeted therapy, and immunotherapy, as well as injections, transfusions, antibiotics, and other parenteral pharmaceuticals. In clinical areas where chemotherapy is administered, preventing errors is a safety concern, as the system can break down at many points in the process. ONS and ASCO support standards for medication administration aimed at reducing medication errors. These standards include having two certified providers perform double checks for drug name, dose, volume, ordered rate (for IV infusions), expiration date, and patient name and date of birth prior to the administration of any antineoplastic agent by any route. A second check by two certified providers is to be completed at the bedside or chairside. Only nurses with extensive training on chemotherapy administration, safe handling and disposal, side effects, and management of reactions and emergencies have the appropriate knowledge to safely administer and double-check chemotherapy (Neuss et al., 2017).

Schleisman and Mahon (2015) cited an example in which a patient’s ambulatory medication record was used to verify medications during an inpatient admission. A nurse not familiar with antineoplastic dosing, mechanism of action, and potential adverse
side effects administered a daily dose at bedtime, not realizing that the patient had taken a dose that morning prior to admission. Fortunately, this was deemed to cause minimal harm to the patient, but it reinforces the need for nurses with specialized education and training to administer all doses of antineoplastic agents and adhere to established safety standards. Healthcare systems must recognize that technology and standards only add to safety when used appropriately by nurses who have completed specialized education and training and have documented competence.

Diagnostic and procedural departments also rely on oncology nurses. Medical imaging settings where mammography, breast ultrasound, breast magnetic resonance imaging, and biopsies are performed often employ oncology nurses as navigators to support women during the process of timely testing to confirm or rule out breast cancer. Research is beginning to demonstrate the positive impact that oncology nurse navigators in these settings can have on patient outcomes. A study by Harding (2015) indicated that, in the study population, women undergoing core needle biopsy for suspicious breast lesions who were provided with nurse navigation services experienced significantly less anxiety than those who were not navigated.

**Nonclinical Settings**

Because of their expertise in the disease process and the treatment and management of people at risk for or diagnosed with cancer, oncology nurses have opportunities in many nontraditional roles. Oncology nurses work for commercial and nonprofit organizations as research coordinators and specialists, educators, clinical support personnel, editors, and content developers, among others.

One example of oncology nursing practice in a nonclinical setting is that of clinical nurse educators who work for pharmaceutical and medical device companies. Clinical nurse educators provide expert education to healthcare providers, patients, and caregivers to increase their knowledge of cancer and management of the disease. In addition, clinical nurse educators can provide training related to symptom management and patient–provider communication. This education helps healthcare providers adapt more quickly to ongoing innovations in cancer diagnosis and treatment and more effectively manage patients on new therapies (Bonsall, 2011).
Professional nurses who practice in oncology are prepared and licensed at all levels, from the diploma, associate, and bachelor levels through master’s and doctoral preparation. Prelicensure-level programs are designed to prepare nurses for generalist nursing practice, and most do not focus on a specific clinical area or patient population. Therefore, entry into oncology nursing practice requires cancer-specific knowledge and clinical competence related to the unique needs of people with cancer and the specific roles of oncology nurses.

**Registered Nurses**

Oncology nursing provides a wide variety of opportunities for specialization and subspecialization. Each area of specialization requires additional learning and skill development focused on the individual patient population, practice setting, and role requirements.

RNs who choose to practice in oncology have many opportunities for using their general nursing skills to care for people at risk for or living with cancer. To practice in oncology, RNs must have completed an accredited diploma, associate degree, or baccalaureate degree nursing program and have an active RN license. Although most prelicensure programs include minimal content on cancer care, RNs can gain the required knowledge to function as a competent oncology nurse in many ways.

Most education provided to RNs new to oncology is done as part of orientation to a new position. They may participate in a structured program, such as a residency or fellowship, or learn more informally through engagement in educational and skill attainment programs offered by healthcare, professional, or other organizations. No matter the source of oncology content, it is important for the employing organization to provide nurses with opportunities to practice and demonstrate competence in the skills required for safe and high-quality oncology patient care.

**Graduate-Level-Prepared Registered Nurses**

Many opportunities exist in cancer care for nurses who wish to advance their career through pursuit of additional academic educa-
tion. These roles fall into two categories: APRN and non-APRN roles. APRNs in oncology function as nurse practitioners or clinical nurse specialists. Non-APRN roles vary greatly but most commonly focus on administration, clinical or academic education, or nursing research. In addition, many oncology nurses who earn graduate degrees will transition to a leadership role in their subspecialty area, providing mentoring and guidance. All graduate-level–prepared nurses have a responsibility to function at the full scope of their license, using their expertise and education to advance the science of nursing.

Educational preparation for non-APRN roles: All graduate-level–prepared RNs in oncology must have a master’s or doctorate degree in nursing and an active RN license. The need for oncology-specific content and skills will vary based on the RN’s experience prior to entering graduate school, as well as whether the program completed included an oncology focus or opportunities to attain oncology knowledge and skills. For graduate-level–prepared RNs who do not have oncology experience or an opportunity to acquire oncology-specific knowledge and skills, it is essential that they pursue opportunities to gain these through education or training programs designed for RNs in their specific role. In addition, the employing organization must evaluate these graduate-level–prepared RNs for competence in the skills required for safe and high-quality oncology patient care and support their efforts to attain and maintain these competencies.

Educational preparation for oncology APRN roles: Oncology APRNs must have completed an accredited APRN program (master’s or doctorate level). They must have an active APRN license and/or hold specialty certification as required by the state in which they practice. The need for oncology-specific content and skills will vary based on the APRN’s experience prior to entering graduate school, as well as whether the program completed included an oncology focus or opportunities to attain oncology knowledge and skills. APRNs who do not have prior oncology experience or whose academic program did not provide the opportunity to acquire essential oncology knowledge and skills must pursue educational or training programs designed for oncology APRNs. In particular, APRNs in oncology are frequently responsible for performing procedures that are beyond the scope of other oncology nursing roles. Examples of oncology-specific skills that may be required by APRNs include bone marrow procedures, lumbar puncture, and accessing an Ommaya reservoir.
The employing organization must evaluate these APRNs for competence in the skills required for safe and high-quality oncology patient care and support their efforts to attain these competencies. Employers may consider using oncology nursing certification, such as OCN®, advanced oncology certified nurse (AOCN®), advanced oncology certified clinical nurse specialist (AOCNS®), or AOCNP® certification, as an indicator of competence in the specialty.

**Continuing Professional Development**

Health care is ever evolving, with new science and innovations in patient management discovered on a nearly daily basis. As reflected in the historical perspective on oncology nursing and current trends, cancer care is rapidly changing as researchers and clinicians learn more about the genetic basis of cancer and develop new therapies that provide exciting improvements in disease outcomes and symptom management. However, the frequency with which new approaches are approved, the complexity of new treatment regimens, the unique side effects caused by novel therapies, and the volume of information and skills that oncology nurses must master can be overwhelming and challenging to keep pace with. Oncology RNs must continually learn and enhance their practice to ensure the safety and quality of life of their patients.

Each oncology nurse has the responsibility to maintain professional competence to ensure that the highest-quality care based on the best current evidence is provided to people with cancer. It is essential that each nurse assess his or her needs and identify methods by which to decrease gaps in knowledge, skill, or practice (ANA, 2014). Oncology Nursing: Scope and Standards of Practice sets minimal standards for the practice of oncology nursing and provides competencies that individual oncology nurses should use to evaluate their practice and identify gaps and areas for growth. It is the professional responsibility of oncology nurses to seek the education and experience needed to fill the identified gaps.

The mission of ONS (n.d.) is “to advance excellence in oncology nursing and quality cancer care.” This mission is supported by core values and strategic initiatives that seek to disseminate current evidence to guide practice, expand oncology nursing educational opportunities, facilitate integration of oncology content into more diverse venues, and help nurses to integrate new knowledge.
into practice. Providing education and evidence-based resources to nurses who care for people with cancer is one of ONS’s priorities. In addition, oncology RNs and APRNs who are certified by ONCC are required to complete an assessment that identifies their learning needs. To recertify, they must complete learning activities that close their identified knowledge gaps. Through these avenues, ONS carries out its mission by supporting the process of lifelong learning.

**Oncology Specialty Practice Certification**

Nurses who specialize in cancer care engage in lifelong learning and can demonstrate ongoing competence through achievement of oncology nursing certification. ONCC, an affiliate of ONS, has been offering oncology nursing specialty certifications since 1986. Accredited by the National Commission for Certifying Agencies, ONCC currently offers five oncology nursing certifications: OCN®, AOCNP®, certified pediatric hematology oncology nurse (CPHON®), certified breast care nurse (CBCN®), and blood and marrow transplant certified nurse (BMTCN®). In addition, three previously offered certifications are renewable through professional development activities: AOCNS®, AOCN®, and certified pediatric oncology nurse (CPON®). The mission of ONCC is to “promote health and safety by validating competence and ensuring lifelong learning in oncology nursing and related specialties” (ONCC, n.d.). Each certification is based on a rigorous process to ensure it reflects current oncology nursing practice and adheres to the National Commission for Certifying Agencies standards for accreditation of certification programs (Institute for Credentialing Excellence, 2014).

Certification is recognized in the oncology community as an indicator that an RN has the knowledge needed to competently provide quality cancer care to the people being cared for in the specialty or subspecialty area. Certification in oncology nursing also may be used by employers to meet accreditation or other recognition standards by organizations such as the Joint Commission, the American Nurses Credentialing Center’s Magnet Recognition Program®, the American College of Surgeons Commission on Cancer, the National Accreditation Program for Breast Centers, the Association of Community Cancer Centers, and the American College of Radiation Oncology.
In addition to certifications, ONS and ONCC offer certificates of additional qualification for experienced nurses who administer anti-neoplastic drug therapy and for nurses who specialize in radiation oncology. These programs provide in-depth educational content followed by a comprehensive examination designed to document the knowledge needed to care for people receiving these complex therapies.

Initial achievement and renewal of certifications and certificates of additional qualification provide oncology RNs the opportunity to evaluate their current knowledge and identify areas for continuing professional development. In addition, many employers recognize attainment of oncology certifications or certificates as evidence of competence in the practice of oncology nursing.
Ethics

A cancer diagnosis directly affects an individual’s quality of life, leading to distress and feelings of vulnerability and powerlessness. This can compromise one’s ability to fully participate in difficult conversations and make complex decisions. Oncology nurses are in a unique position to help prevent and identify ethical issues and work with people with cancer and their caregivers to determine their goals, needs, and values. Oncology nurses must advocate to ensure that decisions made about patients’ health care support their right to self-determination (Iseminger, Buratto, & Storey, 2016).

ANA’s (2015a) Code of Ethics for Nurses With Interpretive Statements elucidated nine provisions that provide a framework for ethical nursing practice. Oncology nurses need to consider how they will apply each provision to their practice, patient population, and work setting.

Provisions

Provision 1. The nurse practices with compassion and respect for the inherent dignity, worth, and unique attributes of every person. Oncology nurses take the time and effort to assess patients’ values, including but not limited to cultural, spiritual, and generational values, as they relate to the diagnosis and options for treatment and care. Fostering nonjudgmental dialogue and advocating for patients’ rights are essential for oncology nurses to demonstrate appropriate ethical conduct. Oncology nurses promote and uphold patients’ right to self-determination. For example, the right to self-determination and informed consent may be in question when an individual is unwilling or chooses not to follow medical advice for cancer treatment and it is unclear whether this patient understands the consequences of that decision. If the tumor type is aggressive, the window for effective treatment may be narrow. In this situation, the nurse has the responsibility to ensure that
the patient makes an informed decision without delay and that the patient’s rights of autonomy and self-determination are fully protected.

**Provision 2. The nurse’s primary commitment is to the patient, whether an individual, family, group, community, or population.** Oncology nurses are mindful of actual and potential ethical dilemmas and advocate for discussions and decisions that support ethical care reflecting the goals, needs, and values of individual patients and their caregivers. By fostering a nonjudgmental environment, all parties are represented, and the goal for primary commitment to the patient is recognized and supported. For example, the issue of hastening death has legal, moral, and ethical implications. Patients with advanced terminal diseases, including cancer, are known to express their intent to hasten death. They may opt to not accept life-prolonging therapy, stop eating and drinking, or use escalating doses of pharmacologic agents to treat symptoms or hasten death. A nurse may be in the position to explore a patient’s request to hasten death and honor the patient’s wishes as stated in an advance directive or other document. State laws govern assisted death, so nurses may be asked to provide information about where and how to access assisted death resources without imposing personal beliefs and opinions (Hospice and Palliative Nurses Association, 2017).

**Provision 3. The nurse promotes, advocates for, and protects the rights, health, and safety of the patient.** At all points on the continuum of care, oncology nurses respond to ethical issues by mobilizing organizational resources that address ethical dilemmas. Key areas of concern include end-of-life care, informed consent for tests and treatment, patient confidentiality, and decision making related to the risks and benefits of cancer treatment. Oncology nurses know how to address veracity, beneficence, nonmaleficence, autonomy, justice, and fidelity during discussions with patients, colleagues, and agencies participating in care and decisions related to an actual or potential cancer diagnosis.

As technology and mandates for electronic health records evolve, so do the possibilities for misuse of personal information. Oncology nurses must take active roles in educating patients, the public, and colleagues about safeguarding personal medical information. Nurses often can be the first line of defense in protecting information by adhering to policies for need-to-know access and employing barriers that limit or closely track access for sensitive information (e.g., mental health and genetic testing), in addition to monitoring
patient care areas for potential and actual breaches in information security.

Genetic testing has many implications associated with confidentiality, for instance, if a patient with breast cancer is referred to or seeks genetic counseling and decides to undergo testing. Genetic counseling, which includes a pedigree for the patient’s family that identifies other family members affected by cancer, and her positive \textit{BRCA1} test results could create the inference that her mother, who also has breast cancer, would test positive. If the mother in this example was not interested in counseling or testing, the sharing of her daughter’s specific test results would be an ethical issue involving confidentiality and the right to know for both of these women.

\textbf{Provision 4. The nurse has authority, accountability, and responsibility for nursing practice; makes decisions; and takes action consistent with the obligation to promote health and to provide optimal care.} Oncology nurses take responsibility for the quality and effectiveness of care by ensuring that their care is based on current standards and best available evidence that support the optimal health and well-being of their patients. The opioid epidemic is of specific concern to oncology nurses. Several decades ago, undertreatment of cancer-related pain was recognized. It was then that pain was added as the “fifth vital sign” to provide a clear pathway for ongoing assessment and treatment of pain. As advances have been made in effectively treating acute and chronic cancer pain, opioids in various forms and durations of action have become a mainstay of therapy. Pain assessment and advocacy for effective treatment have become an integral part of oncology nursing practice in all patient care settings. This more consistent assessment and treatment of cancer-related pain led to improvement in quality of life for many people with cancer. However, the emerging recognition of opioid misuse has created challenges for oncology nurses.

APRNs often have responsibility for recommending and facilitating prescriptions of opioids and other controlled substances for cancer pain management. As prescribers, APRNs must be cognizant of the risk for abuse and misuse, whether intentional or accidental. They must be responsible for prescribing only what is appropriate for well-documented diagnoses and symptoms. They are also held responsible for adhering to required safeguards when securing and tracking prescriptions.

\textbf{Provision 5. The nurse owes the same duties to self as to others, including the responsibility to promote health and safety,
preserve wholeness of character and integrity, maintain competence, and continue personal and professional growth. Oncology nurses develop and maintain self-worth and dignity through collegial exchange of information, certification, and credentialing. Ongoing competency development and maintenance is essential in the field of cancer care, in which technology and treatments are advancing rapidly. Many scenarios involving patients with cancer may evoke moral distress. Oncology nurses caring for young patients with terminal diagnoses often experience moral distress by identifying with the patient or caregiver rather than maintaining their professional role. By using evidence-based interventions for caregiver strain, maintaining professional boundaries, accepting professional help to manage distress, and engaging in self-care practices, nurses can decrease distress and lessen the risk of compassion fatigue.

Provision 6. The nurse, through individual and collective effort, establishes, maintains, and improves the ethical environment of the work setting and conditions of employment that are conducive to safe, quality health care. Through education and professional growth activities, oncology nurses establish, maintain, and improve the ethical environment for themselves and colleagues. Attention is given to cancer-specific practices of safe handling of hazardous drugs, exposure to radioactive sources, potential conflict of interest with commercial and pharmaceutical companies, and prudent prescription of pharmaceutical analgesic agents.

Nurses who either carelessly or intentionally fail to adhere to safe handling practices for hazardous drugs or radiation safety standards put coworkers, patients, their organization, and themselves at risk for deleterious outcomes, including but not limited to reproductive toxicity, carcinogenicity, and genotoxicity (Olsen, LeFebvre, & Brassil, 2019). Supporting and adhering to safety standards can be demonstrated through clinical competency skill checks using evidence-based practice resources and current regulatory mandates.

Provision 7. The nurse, in all roles and settings, advances the profession through research and scholarly inquiry, professional standards development, and generation of both nursing and health policy. Oncology nurses are active participants in research projects and application of findings to cancer prevention, diagnosis, treatment, and symptom management. They must adhere to the highest standards of scientific, legal, moral, and ethical conduct. Opportunities for participation in developing evidence-based standards and quality measures and supporting oncology nurses in
all roles are available at organizational, local, regional, national, and international levels. As members of the interprofessional team, oncology nurses are expected to be aware of internal and external resources to assist them in responding to actual and potential ethical situations. If resources such as a chaplain, ethics committee, or program leaders are not readily available or are not effective, nurses must create awareness of this deficit and direct efforts to explore standards for the development and implementation of programs and resources that meet the standards. The individuals enlisted to respond to ethical concerns need to be familiar with legal mandates and resources within their community. Examples include provision for accessible and affordable health care and legal requirements for independent living and decision making.

Provision 8. The nurse collaborates with other health professionals and the public to protect human rights, promote health diplomacy, and reduce health disparities. Establishing open communication and ensuring representation when policies related to cancer care are being developed will allow oncology nurses to help ensure that decisions are made that protect human rights, promote health diplomacy, and reduce health disparities. Cancer care can be expensive, and those with inadequate or no health insurance may have limited access to comprehensive healthcare services. “Uninsured individuals are less likely to receive preventive care or obtain screening, more likely to receive inadequate or delayed treatment, and more likely to die prematurely than those with adequate health insurance coverage” (ONS, 2017a, para. 1).

One method people with cancer can use to access current, evidence-based treatment is participation in clinical trials. However, clinical trial participation carries a specific ethical risk. Oncology nurses who care for patients interested in or enrolled in clinical trials have the obligation to safeguard patients’ rights of autonomy, non-maleficence, beneficence, veracity, justice, and fidelity when consenting to and participating in clinical trials. This can be achieved by ensuring the following: patients fully comprehend what they are consenting to, the decision to participate is not coerced by their caregivers or members of the healthcare team, and they understand that they can decide not to continue on the clinical trial at any time.

In addition, oncology nurses often hold leadership positions or work closely with program leaders. In this role, they can foster informal discussions and support formal committee structure to facilitate timely identification of ethical issues with appropriate atten-
tion to addressing each concern. Barriers to adequately addressing ethical issues can include limited administrative support, an ineffective reporting or committee structure, and hierarchy misuse. Nurses must be vigilant in creating and maintaining an inclusive and collegial atmosphere to identify and help address these barriers. Using journal clubs, case studies, and recent news reports can create awareness of and foster teamwork in addressing oncology-specific ethical issues.

Provision 9. The profession of nursing, collectively through its professional organizations, must articulate nursing values, maintain the integrity of the profession, and integrate principles of social justice into nursing and health policy. Adhering to legal, organizational, and professional standards of care allows oncology nurses to collaborate with internal and external sources for optimal outcomes when ethical issues arise or when discussions, actions, or decisions are in question. Oncology nurses are integral in bridging the clinical aspects of patient needs and care with proposed policy to ensure that decisions accurately and fairly represent and meet the needs of those with cancer. Oncology nurses use standards of care and the strongest available evidence to provide the highest-quality care and maintain the integrity of clinical practice. Membership in professional organizations (e.g., International Society of Nurses in Cancer Care, ONS) provides a source for standards and a forum for collegial exchange of ideas, information, and resources based on sound scientific evidence.

Oncology nurses bring their diverse backgrounds and beliefs to this specialty. Recognizing the differences in beliefs and social mores and respecting legal decrees are integral. Prevention of personal bias requires deliberate ongoing examination of one’s own beliefs. Personal beliefs and values that may influence care include the “right to try” or the choice to select and receive treatment with an unapproved therapy. Other examples are the right to withdraw from active treatment or the use of cannabis for cancer symptom management.

Patients, their caregivers, and oncology professionals confront a number of physical, social, and mental changes that require decisions for management as patients travel the continuum of cancer care. People with cancer frequently experience end-of-life symptoms, such as refractory delirium, anxiety, agitation, and terminal restlessness. The use of terminal sedation is a controversial treatment option. The expected benefit is the maintenance of a desired
level of sedation and comfort with the option for reliable reversal. The potential harms include the real or perceived hastening of death and the lack of data supporting the effect on quality of life (Whitehead, 2015).

Oncology nurses at all levels and in all settings must be mindful of ethical issues related to cancer care. Nurses have a professional obligation to actively participate in existing ethics committees and institutional review boards to serve patients with cancer and bring the nursing perspective to each issue. Nurses must also participate in ongoing education and training to stay informed about known and emerging ethical concerns affecting oncology care.
Trends in Oncology

The beginning of the 21st century has been marked by rapid improvements in the care of patients with cancer, which are reflected in declining incidence and mortality rates for many cancers and in unprecedented advances in treatment and technology. Prevention activities by oncology nurses, such as education about early screening, tobacco cessation support, and lifestyle educational efforts, have contributed to improved mortality rates. Despite these trends, challenges remain in health care and in particular within oncology settings.

Access to and Affordability of Care

As Americans are living longer and cancer mortality declines, more people are living as survivors in need of ongoing access to oncology care. This increased need translates to more stress on current providers and a greater demand for specialized nurses functioning as both generalists and advanced practice providers.

Disparities in care remain a significant challenge. Causes include health insurance availability and affordability, increased drug pricing, and ongoing socioeconomic disparities in racial, ethnic, and geographical access associated with delayed time to treatment, increased side effect profiles, and increased costs (ASCO, 2017). About one in every three working-age cancer survivors has debt associated with cancer care, and 55% of these have incurred debt of $10,000 or more (ASCO, 2017). Although changes in recent years have afforded some protections regarding lifetime spending limits or preexisting condition clauses, those without insurance continue to demonstrate poorer health outcomes than those who are insured (ASCO, 2017). Although there increasingly are options for treatment for people with cancer, escalating drug prices for novel oncology therapies contribute to debilitating financial toxicity for those whose insurance requires
significant co-payment, those without insurance, or individuals on Medicare.

**Changes to the Insurance Environment**

Recent evidence shows that patients with cancer who now have greater access to health insurance have an associated improvement in health outcomes. For example, early colorectal cancer diagnoses increased 8% between 2011 and 2013 after screening for the disease became available without a co-payment charge through Medicare (ASCO, 2017). The instability of the healthcare market, however, and potential changes to the Patient Protection and Affordable Care Act can create uncertainty for patients who would be unable to afford care without insurance coverage or who could not pay deductible, co-payment, or out-of-pocket fees to receive life-sustaining care. This, coupled with the escalating costs of drug development, puts patients with cancer at risk for financial burden and, in some cases, bankruptcy.

**Aging Population and Comorbidities**

The demand for oncology nurses will rise exponentially as the American population continues to grow and age. Although some commonly diagnosed cancers have declined in incidence, others have increased, requiring a need for a broad knowledge base in cancer care. As the number of survivors increases annually, so do the long-term care needs, concurrent comorbidity management needs, and complexity of this population, requiring a highly skilled workforce for effective monitoring and care. Care coordination is increasingly critical to ensure that patients receive comprehensive care from multiple specialty providers. Oncology nurses fulfill this critical role in multiple care settings to ensure that holistic patient needs are addressed throughout the care continuum (ASCO, 2017).

**The Opioid Epidemic and Oncology Care Needs**

Although primary care generates about half of the opioid prescriptions in the United States, oncology care relies heavily on opi-
oid pain management (Centers for Disease Control and Prevention, 2017). Despite undeniable misuse and its associated consequences in the United States, the need for access to opioids for unique pain syndromes associated with cancer persists. Oncology nurses must be skilled at identification of true substance use disorders versus physical dependency, as well as complex pain control, to ensure effective care of the oncology patient population.

People with cancer and those at the end of life are at risk for unrecognized pain and inadequate pain management (Dowell, Haegerich, & Chou, 2016). Oncology nurses’ knowledge of pain physiology, pharmacologic and nonpharmacologic interventions, substance use disorder screening, and complex symptom control is crucial to effective pain management and deterrence of opioid misuse. Oncology nurses must also be knowledgeable and educate patients and caregivers about regulatory and legal requirements for prescribing, storage, and safe disposal of opioids and other controlled substances. Oncology nurse leadership, through a deep understanding of pain physiology and symptom control and through effective patient education and support, is crucial to ensuring that patients with cancer receive adequate pain control while avoiding substance use disorders (Adams et al., 2017).

Precision Medicine and Immunotherapy

Perhaps the most rapidly changing area in oncology practice is the substantial advances in biologic anticancer agents. Called precision medicine because of the identification of molecular targets that can be matched to specific tumor characteristics, these therapies are enabling many patients to receive individualized treatment planning that is more likely to benefit them based on precise molecular diagnostics. Testing has advanced from discrete genetic mutation testing of tumor tissue to next-generation sequencing diagnostics that can test for dozens of genetic mutations, amplifications, or rearrangements from a single sample. Testing can now be accomplished for some mutations using urine or blood samples when tissue is unavailable. These advancements translate to meaningful overall survival outcomes for many patients, can predict prognosis, and can identify drug resistance.
Value-Based Care

The shift from fee-for-service to pay-for-performance in healthcare systems is driven by quality metric monitoring. Healthcare providers, both individuals and organizations, will be rewarded based on patient care outcomes and improved patient engagement (Centers for Medicare and Medicaid Services, 2018). Oncology nurses are key contributors to effective value management systems through performance and analysis of nursing-sensitive quality measures. APRNs must demonstrate their contribution to quality measures for reimbursement; however, organizational payment is also dependent on nursing-sensitive measures that will ultimately drive both costs and reimbursement. Oncology nurses must be prepared to address and act on quality measures focused on assessment and treatment aims that demonstrate improved outcomes.

New Sources of Data: Access and Knowledge

Process changes and new coalitions have elevated access to data and, ultimately, access for patients to emerging therapeutics. The U.S. Food and Drug Administration’s Oncology Center of Excellence integrates and accelerates the regulation of new oncology products. The National Institutes of Health and its foundation partnered with biopharmaceutical and research companies to create the Partnership for Accelerating Cancer Therapies to fund precompetitive research, thereby making way for data to be much more broadly available among competitive parties for future research. The National Cancer Institute has prioritized patient education and access to clinical trial information and involvement. The 21st Century Cures Act of 2016 appropriated millions in supplemental funding to support the National Cancer Moonshot Initiative, a commitment to supporting critical cancer research, improving electronic health record function and the advancement of big data availability, enhancing information on clinical trial availability, and supporting centralized institutional review boards and data standardization. These efforts enhance and support research and result in an ever-escalating volume of data sources and new knowledge (ASCO, 2017).
Effective oncology nurses must prepare for a lifelong learning environment, as the expectations for advanced care delivery will only increase as oncology care becomes more complex (National Council of State Boards of Nursing [NCSBN], 2017). Because of the integration of patients with cancer in nearly every care setting and the vastly increasing number of oncology survivors, essential oncology competencies are critical to safe and effective nursing care delivery by RNs in any care setting. However, oncology content and competencies are not consistently integrated into prelicensure nursing programs because of lack of time and resources (Lockhart et al., 2013). As successful validation of essential oncology competencies at the prelicensure level is key to ensuring that all cancer survivors, in any setting, receive consistent and safe care, further steps need to be taken to prepare nursing students to meet this population’s needs.

The explosion of technology-assisted healthcare use by the public for information searches, access to healthcare portals, and adjuncts during healthcare encounters has elevated expectations for immediate access to health information. Nurse knowledge and acumen in use of these technologies have expanded to include integration of electronic health records, treatment algorithms, reference texts, and other resources via electronic formats.

The rapid advancement of electronic delivery and storage of healthcare information improves decision making and care planning at the bedside and allows for inclusion of the patient and caregiver as part of the care team. Computerized clinical pathways and
guidelines, computer-generated order sets, and dose-checking algorithms have contributed to more standardized cancer care and have minimized errors (Schulmeister, 2016). Technology allows remote access to patients where once they would have had to travel to obtain health care; likewise, remote availability of providers encourages more collaborative decision making and provides access to trained professionals in rural areas.

Advances such as real-time communication technology, bar coding and scanning of medication, and use of smart pumps with integrated drug libraries and safety parameters are commonly available in oncology settings, requiring advanced knowledge and training for effective use. Education kiosks and self-paced education modules have changed the modalities that nurses use for educating patients and validating their understanding (Schulmeister, 2016). With increased shifts toward technology-assisted traditional nursing tasks, the demand for highly technically skilled nurses will persist for complex patient populations, such as patients with cancer (NCSBN, 2017).

Challenges for oncology nurses include limitations in non-oncology-specific electronic health records that may compromise essential documentation. Nurses must proactively educate patients regarding how to find and interpret reliable data on the Internet and are increasingly called on by patients to interpret these data (Schulmeister, 2016). Finally, competent use of complex technologies in cancer care requires advanced skill in communication, technical expertise, data analysis, and data security (NCSBN, 2017).

Evidence-Based Translational Practice

Oncology nurses lead the field in evidence-based, patient-centered, and highly skilled care delivery. They heavily rely on evidence to inform treatment and management decision making, especially as new therapies and evidence of their effectiveness emerge. Oncology nurses must incorporate interpretation of scientific evidence into translational behaviors to affect clinical practice and quality measurement. The complexity of old and new therapeutic protocols, the emergence of new oncologic emergencies, and the physiologic differences inherent in the management of patients receiving emerging therapies require rapid incorporation of new clinical knowledge to ensure safe and quality-directed
care. Advances in oncology include all areas of patient care, such as prevention, detection, pharmacology, symptom management, and skilled care delivery. Oncology nurses must possess essential competencies in multiple specialty realms, including palliative care, genetics and genomics, critical care, and end-of-life care. A commitment to ongoing education and evaluation of emerging evidence is inherent in oncology nursing practice.
Usefulness in Practice

*Oncology Nursing: Scope and Standards of Practice* provides a clear description of the appropriate and expected scope of oncology nursing practice across settings, levels of practice, and roles. This document is purposely general to accommodate the diversity of oncology nursing practice. However, the scope, standards, and related competency statements provide the framework by which the quality of oncology nursing practice can be measured, gaps identified, and improvements implemented. These standards can be used as the foundation for the following (ANA, 2015b; Brant & Wickham, 2013):

- Position descriptions and performance appraisals
- Self-assessment and continuing education activities
- Institutional policies, procedures, and protocols
- Healthcare delivery models and organizational structures
- Healthcare policy and reimbursement structures
- Quality improvement processes
- Consumer input on quality of nursing care
- Research to validate outcomes of oncology nursing practice
- Regulatory agency review
Professional practice standards are “authoritative statements of the duties that all registered nurses, regardless of role, population, or specialty, are expected to perform competently” (ANA, 2015b, p. 51). These standards outline expectations of nursing practice across settings and provide practice guidelines for institutions and individual nurses practicing in specialties such as oncology. Current, evidence-based, nationally recognized standards for the practice of oncology nursing are critical to the future of oncology nursing practice.

Oncology Nursing: Scope and Standards of Practice delineates the professional responsibilities of nurses engaged in cancer practice regardless of care setting or specific position. It includes standards of practice, which reflect the nursing process, and standards of professional performance, which describe professional responsibilities of oncology nurses. For each standard, a listing of competencies is provided that can be used to demonstrate compliance with the standard.

<table>
<thead>
<tr>
<th>Standards of Practice</th>
<th>Standards of Professional Performance</th>
</tr>
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<tbody>
<tr>
<td>• Assessment</td>
<td>• Ethics</td>
</tr>
<tr>
<td>• Diagnosis</td>
<td>• Culturally congruent care</td>
</tr>
<tr>
<td>• Outcomes identification</td>
<td>• Communication</td>
</tr>
<tr>
<td>• Planning</td>
<td>• Collaboration</td>
</tr>
<tr>
<td>• Implementation</td>
<td>• Leadership</td>
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<tr>
<td>– Coordination of care</td>
<td>• Education</td>
</tr>
<tr>
<td>– Health teaching and health promotion</td>
<td>• Evidence-based practice and research</td>
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<td>• Evaluation</td>
<td>• Quality of practice</td>
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<tr>
<td></td>
<td>• Professional practice evaluation</td>
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<td>• Resource utilization</td>
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<td>• Environmental health</td>
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For each standard, two to three levels of competencies are listed. The RN competencies apply to all oncology RNs. The graduate-level–prepared RN competencies assume competency in the RN-level competencies while adding additional requirements for nurses with an advanced degree (APRN and non-APRN). In addition, the APRN competencies highlight responsibilities specific to the APRN in addition to the RN and graduate-level–prepared RN competencies.

### Standards of Practice

*Oncology Nursing: Scope and Standards of Practice* builds upon ANA’s (2015b) *Nursing: Scope and Standards of Practice*. Oncology nurses are expected to practice in accordance with the competencies identified in both documents.

### Standard 1. Assessment

The oncology nurse systematically collects data specific to the disease and treatment experience of the patient with cancer.

#### Competencies

The oncology RN:

1.1. Collects pertinent data, including but not limited to demographics; social determinants of health and health disparities; family, genetic, disease, and treatment history; current medications and allergies; and physical, functional, psychosocial, emotional, cognitive, sexual, fertility and reproductive, cultural, age-related, environmental, spiritual and transpersonal, and economic assessments. These are conducted in a systematic, ongoing process with compassion and respect for the inherent dignity, worth, and unique attributes of every person.

1.2. Uses data collected from multiple sources, including the patient, the patient’s health record, caregivers, other healthcare providers, and the community, to identify potential or actual problems and barriers to care.

1.3. Collects assessment data at each care transition across the cancer care continuum and modifies the plan of care to address changes.
1.4. Uses theoretical and evidence-based concepts in nursing to assess individual patient populations.

1.5. Uses appropriate evidence-based assessment techniques, instruments, and technologies in collecting data, including valid and reliable instruments designed for the oncology population.

1.6. Elicits the patient’s values, preferences, needs, and knowledge of the healthcare situation as it relates to a potential or actual cancer diagnosis.

1.7. Identifies barriers to effective communication based on physical limitations and psychosocial, literacy, financial, and cultural considerations.

1.8. Documents initial and ongoing assessment data clearly and concisely in a retrievable form available to the interprofessional team to facilitate communication and continuity of care.

**Additional Competencies for the Graduate-Level–Prepared RN**

In addition to the RN competencies, the graduate-level–prepared RN:

1.9. Assesses the supportive and deleterious effects of interactions among individuals, caregivers, the community, and social systems on people at risk for or diagnosed with cancer throughout the cancer care continuum.

1.10. Assists the RN in the development and maintenance of evidence-based assessment skills with a focus on common cancer-related problem areas.

**Additional Competencies for the APRN**

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:

1.11. Performs a health history review of systems and a comprehensive physical examination.

1.12. Orders, as allowed by the scope of practice in the state of licensure, or recommends relevant diagnostic tests, procedures, genetic counseling or testing, and other assessment methods, including tests that are specific to the diagnosis, assessment, and/or monitoring of patients undergoing active cancer treatment.

1.13. Synthesizes and integrates findings to develop a comprehensive patient and caregiver record and problem list.

1.14. Communicates and collaborates with the interprofessional team regarding clinical findings and contributes to the plan of care.
**Standard 2. Diagnosis**

The oncology nurse analyzes assessment data to determine actual or potential diagnoses, problems, and issues related to cancer and other health concerns of patients.

**Competencies**

The oncology RN:

2.1. Determines cancer-related nursing diagnoses and potential problem statements derived from assessment data and knowledge about cancer, the cancer care continuum, and anticipated and actual patient care needs.

2.2. Develops individualized nursing diagnoses that are physically, psychologically, socially, spiritually, and culturally appropriate to the patient with cancer.

2.3. Reviews nursing diagnoses with the patient, caregivers, and interprofessional team.

2.4. Prioritizes nursing diagnoses according to actual or potential threats to the patient’s well-being and goals established with the patient and caregivers.

2.5. Documents nursing diagnoses in a retrievable form available to the interprofessional team to facilitate identification of desired patient outcomes and continuity of care.

**Additional Competencies for the Graduate-Level–Prepared RN**

In addition to the RN competencies, the graduate-level–prepared RN:

2.6. Assists nursing staff in development and maintenance of competency in the development of nursing diagnoses.

**Additional Competencies for the APRN**

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:

2.7. Systematically formulates nursing and medical diagnoses and identifies problems by comparing and contrasting clinical and research data.

2.8. Prioritizes diagnoses, problems, and risk estimation regarding physical, psychological, social, spiritual, and cultural concerns.

2.9. Collaborates with the interprofessional team to ensure comprehensive differential diagnoses and problem identification.
2.10. Documents diagnoses, problems, and risk estimation clearly to facilitate identification and initiation of the treatment plan and outcome evaluation.

**Standard 3. Outcomes Identification**

The oncology nurse identifies expected outcomes to guide individualized plans for the patient and caregivers with a focus on health promotion and maintenance, symptom management, rehabilitation, or a comfortable death.

**Competencies**

The oncology RN:

3.1. Identifies expected outcomes for plans designed to maximize the individual patient’s functional abilities with careful consideration of risks, benefits, costs, current evidence-based practice, and clinical knowledge.

3.2. Develops expected outcomes collaboratively with the patient, caregivers, and interprofessional team.

3.3. Assists the patient and caregivers in identifying their own desired outcomes and goals of treatment.

3.4. Ensures that expected outcomes for the individualized plan of care are physically, psychologically, socially, spiritually, and culturally realistic and appropriate for the patient regardless of position on the cancer care continuum.

3.5. Ensures that expected outcomes and individualized plans of care are used to provide direction for continuity of care.

3.6. Periodically reevaluates progress toward outcomes and aligns expected outcomes and the plan of care accordingly.

3.7. Documents expected outcomes as measurable goals derived from current evidence in a retrievable form available to the interprofessional team to facilitate continuity of care.

**Additional Competencies for the Graduate-Level–Prepared RN**

In addition to the RN competencies, the graduate-level–prepared RN:

3.8. Promotes staff development and maintenance of outcome planning skills.

3.9. Selects, formulates, and integrates a wide array of measurable outcomes into plans of care to provide a balanced and comprehensive view of healthcare delivery.
Additional Competencies for the APRN

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:

3.10. Collaborates with the interprofessional team to develop outcomes for the individualized plan of care with the recognition of associated risks, benefits, and costs to the patient and caregivers.

3.11. Modifies expected outcomes and the plan of care in response to changes in healthcare status of the patient and identifies priorities regarding continuity of care and long-term planning.

Standard 4. Planning

The oncology nurse develops an individualized and holistic plan of care that prescribes strategies to attain expected outcomes.

Competencies

The oncology RN:

4.1. Develops a plan of care based on knowledge of oncology nursing, evidence-based research, economic impact, and biologic, sociocultural, behavioral, and physical sciences, as well as knowledge of cancer and the cancer care continuum.

4.2. Supports a plan of care that is patient centered, outcome oriented, and based on individualized nursing diagnoses.

4.3. Incorporates appropriate preventive, therapeutic, rehabilitative, and palliative nursing interventions into the plan of care at each phase of the cancer care continuum.

4.4. Identifies community resources and support systems needed to address barriers that may interfere with successful implementation of the plan of care.

4.5. Supports a plan of care that reflects sensitivity and respect for the patient’s religious, spiritual, social, cultural, and ethnic beliefs and practices.

4.6. Prioritizes elements of the plan based on the patient’s goals, needs, and preferences.

4.7. Develops the plan of care in collaboration with the patient, caregivers, and interprofessional team.

4.8. Coordinates resources and consultative services to provide continuity of care and follow-up to the plan of care.
4.9. Communicates the plan of care to other members of the interprofessional team.
4.10. Documents the plan of care in a retrievable form available to the interprofessional team to facilitate continuity of care.
4.11. Modifies the plan of care according to the ongoing assessment of the patient’s response to interventions and progress toward expected outcomes.

Additional Competencies for the Graduate-Level–Prepared RN

In addition to the RN competencies, the graduate-level–prepared RN:
4.12. Promotes staff development and maintenance of care planning skills.
4.13. Actively participates in the development and continuous improvement of systems that support the planning process.

Additional Competencies for the APRN

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:
4.14. Uses data to collaborate with the interprofessional team to develop a plan of care for people at risk for or with a diagnosis of cancer based on identified problems, expected outcomes, and the patient’s goals, needs, and values.
4.15. Ensures that the plan of care reflects current clinical practice guidelines and is grounded in evidence.
4.16. Alters the plan of care as the patient moves through the continuum of care.

Standard 5. Implementation

The oncology nurse implements the plan of care to achieve the expected outcomes for the patient.

Competencies

The oncology RN:
5.1. Implements interventions according to the established plan of care in collaboration with the patient, caregivers, and interprofessional team.
5.2. Ensures that interventions are implemented in a safe, culturally congruent, caring, and humanistic manner.
5.3. Uses current evidence to guide implementation of interventions to achieve the mutually identified expected outcomes.

5.4. Leverages current and emerging technology to implement the plan of care, enhance nursing practice, and improve patient outcomes.

5.5. Uses critical thinking to closely monitor patient response to interventions and modifies strategies when patient status changes.

5.6. Facilitates access to community resources and support systems needed to implement the plan of care.

5.7. Documents interventions, the patient’s responses, and any modifications to the plan of care in a retrievable form available to the interprofessional team to facilitate continuity of care.

**Additional Competencies for the Graduate-Level–Prepared RN**

In addition to the RN competencies, the graduate-level–prepared RN:

5.8. Leads staff development and maintenance of skills for implementation of the plan of care.

5.9. Promotes care systems and environments that support effective implementation of the plan of care.

**Additional Competencies for the APRN**

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:

5.10. Prescribes or recommends evidence-based pharmacologic agents and treatments according to clinical indicators and results of diagnostic and laboratory tests.

5.11. Provides clinical consultation to healthcare professionals, patients, and caregivers on cancer-related issues to improve care and patient outcomes.

5.12. Applies oncology-specific clinical expertise when ordering (as allowed by the scope of practice in the state of licensure), recommending, conducting, and interpreting diagnostic tests and procedures to monitor and diagnose manifestations of cancer and its treatment.

5.13. Facilitates access to programs and services when implementing and integrating the plan of care.

5.14. Collaborates with the patient, caregivers, and interprofessional team in the implementation of the plan of care to pro-
mote autonomy and self-determination based on available resources.

**Standard 5A. Coordination of Care**

The oncology RN coordinates care during each episode of care and transition in care.

**Competencies**

The oncology RN:

5A.1. Coordinates implementation of the plan of care with attention to patient and caregiver goals, needs and preferences, resource availability, accessibility, quality, and financial considerations.

5A.2. Assesses for potential or actual barriers to effective implementation of the plan of care and the expected treatment plan based on knowledge of cancer, standards of care, and point on the cancer care continuum.

5A.3. Collaborates with other members of the interprofessional team to address potential or actual barriers to effective implementation of the plan of care and expected treatment plan.

5A.4. Facilitates smooth transitions between internal and external care settings by promoting communication among the interprofessional team, patient, and caregivers.

5A.5. Facilitates referrals to healthcare providers or resources to promote, maintain, or restore health to support continuity in care.

5A.6. Documents steps taken to ensure continuity of care in a retrievable form available to the interprofessional team to facilitate continuity of care.

**Additional Competencies for the Graduate-Level–Prepared RN**

In addition to the RN competencies, the graduate-level–prepared RN:

5A.7. Facilitates staff development and maintenance of care coordination skills.

**Additional Competencies for the APRN**

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:
5A.8. Leads the coordination of interprofessional care for integrated delivery of cancer care services to achieve safe, effective, efficient, timely, patient-centered, and equitable care (Shalala et al., 2011).

5A.9. Makes referrals to healthcare providers or resources to promote, maintain, or restore health to facilitate continuity in care.

5A.10. Synthesizes comprehensive assessment data to match patient and caregiver needs with available resources throughout the continuum of care.

**Standard 5B. Health Teaching and Health Promotion**

The oncology RN employs strategies to engage and empower patients to promote health and a safe environment at all phases in the cancer continuum from prevention through the end of life.

**Competencies**

The oncology RN:

5B.1. Assesses for and validates with the patient and caregivers their risks, current health beliefs and practices, readiness and ability to learn, and educational needs related to a potential or actual cancer diagnosis.

5B.2. Develops a patient education plan to address patient and caregiver learning needs associated with their potential or actual cancer diagnosis, values, beliefs, health practices, developmental level, educational level, readiness and ability to learn, communication barriers (e.g., language preference), spirituality, culture, and socioeconomic status.

5B.3. Collaborates with the interprofessional team to ensure that the education plan is holistic and provides the interventions and resources most likely to maintain or improve quality of life.

5B.4. Identifies, validates, and uses evidence-based resources and appropriate technologies to engage the patient and caregivers and support the goals of the patient education plan.

5B.5. Provides healthcare consumers with information about intended effects and potential adverse effects of the plan of care.
5B.6. Employs evidence-based techniques to validate patient and caregiver understanding and to evaluate whether learning needs have been met.

5B.7. Documents the education plan and health teaching completed and the patient response clearly and concisely in a retrievable form available to the interprofessional team to facilitate continuity of care.

Additional Competencies for the Graduate-Level–Prepared RN Including the APRN

In addition to the RN competencies, the graduate-level–prepared RN including the APRN:

5B.8. Participates in evidence-based educational strategies and the development of research ideas and proposals focused on the manifestations of cancer and its treatment.

5B.9. Leads the development and dissemination of cancer-related patient education resources.

5B.10. Leads the staff in the development and maintenance of patient and caregiver education and health promotion skills.

Standard 6. Evaluation

The oncology nurse systematically and regularly evaluates progress toward achievement of expected outcomes.

Competencies

The oncology RN:

6.1. Participates as part of an interprofessional, patient, and caregiver collaborative process in an ongoing evaluation of goals, needs, outcomes, and values of the patient and caregivers.

6.2. Conducts ongoing and systematic analysis of the nursing process in collaboration with the interprofessional team, the patient, and caregivers.

6.3. Compares actual to expected findings and uses data to revise the plan of care and implementation strategies.

6.4. Provides timely and accurate documentation of evaluation findings and changes to the plan of care in a retrievable form available to the interprofessional team to facilitate continuity of care.
Additional Competencies for the Graduate-Level–Prepared RN

In addition to the RN competencies, the graduate-level–prepared RN:

6.5. Synthesizes evaluation results to identify recurrent healthcare problems, deficiencies, and future educational, research, tool, and resource needs related to cancer and its treatment.

6.6. Assists the nursing staff in development and maintenance of evaluation skills.

Additional Competencies for the APRN

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:

6.7. Maintains a systematic and ongoing evaluation process of patient outcomes by collecting, synthesizing, and documenting data from all available sources.

6.8. Analyzes collected data in relation to expected outcomes and collaborates with the interprofessional team, the patient, and caregivers to implement and revise the plan of care.

Standards of Professional Performance

Oncology Nursing: Scope and Standards of Practice builds upon ANA’s (2015b) Nursing: Scope and Standards of Practice. Oncology nurses are expected to practice in accordance with the competencies identified in both documents.

Standard 7. Ethics

The oncology nurse practices ethically.

Competencies

The oncology RN:

7.1. Demonstrates ethical conduct when instructing and mentoring others, including students and staff members.

7.2. Recognizes and evaluates personal beliefs and values that influence patient care outcomes.

7.3. Values, understands, and incorporates ethical decision making into holistic care delivery that recognizes and protects patients’ individual rights, autonomy, confidentiality, values, beliefs, preferences, needs, and dignity.
7.4. Identifies clinical practice situations that evoke professional moral distress and influence nursing practice.
7.5. Responds to ethical concerns, issues, and dilemmas, enlisting available organizational resources (e.g., ethics team or chaplain consultation) to aid in resolution of ethical dilemmas.
7.6. Establishes and maintains a collegial interprofessional environment of open communication to facilitate ethical discussions.
7.7. Advocates for and assists patients and caregivers in decision-making discussions and healthcare team conferences to clarify goals of care, including end-of-life and advance care planning.
7.8. Prioritizes honoring patient wishes as documented in their advance directives or other documents.
7.9. Advocates for ethical care of patients in clinical trials and other research, especially as related to informed consent.
7.10. Maintains and protects patient confidentiality and privacy according to federal, state, and institutional requirements.
7.11. Communicates and acts if illegal, unethical, or unprofessional behaviors threaten the safety, professional integrity, or quality of care in the clinical practice.

Additional Competencies for the Graduate-Level–Prepared RN

In addition to the RN competencies, the graduate-level–prepared RN:
7.12. Applies knowledge of cancer genetics to evaluating the ethical, legal, and social implications of genetic and genomic technology and testing.
7.13. Facilitates education about ethical principles, application in practice, and use of ethical resources.

Additional Competencies for the APRN

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:
7.14. Seeks opportunities to participate in ethics committees, institutional review boards, and other ethics-related bodies.

Standard 8. Culturally Congruent Care

The oncology nurse practices in a manner that is congruent with cultural diversity and inclusion principles.
**Competencies**

The oncology RN:

8.1. Practices culturally sensitive care that is respectful, inclusive, and nonjudgmental.

8.2. Acknowledges and accommodates the patient’s and caregivers’ culturally congruent needs.

8.3. Uses skills and tools that are appropriately vetted for the culture, literacy, and language of the population served.

8.4. Analyzes his or her own behaviors for their culturally specific interpretation.

8.5. Supports the patient and caregivers in decision making, regardless of cultural influences.

8.6. Advocates for policies and practices to ensure culturally congruent care for all patients and caregivers.

8.7. Educates and informs the interprofessional team about cultural congruence in care delivery.

**Additional Competencies for the Graduate-Level–Prepared RN**

In addition to the RN competencies, the graduate-level–prepared RN:

8.8. Advances organizational policies, programs, services, and practices that reflect respect, equity, and values for diversity and inclusion.

8.9. Engages key stakeholders in designing and establishing internal and external cross-cultural partnerships.

8.10. Participates in the collection and use of evidence to advance culturally diverse healthcare initiatives.

8.11. Develops recruitment and retention strategies to achieve a multicultural workforce.

8.12. Leads interprofessional teams to identify and meet the cultural and language needs of diverse oncology populations.

**Additional Competencies for the APRN**

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:

8.13. Promotes shared decision-making solutions in planning, prescribing, and evaluating processes when the person at risk for or with a diagnosis of cancer has cultural preferences and norms that may be incompatible with evidence-based practice.
**Standard 9. Communication**

The oncology nurse communicates effectively in all areas of practice.

**Competencies**

The oncology RN:

9.1. Examines personal communication style and skills to identify and seek opportunities for improvement.

9.2. Identifies possible physical, psychological, developmental, cultural, and spiritual influences on effective communication among the interprofessional team, the patient, and caregivers.

9.3. Assesses patient and caregiver readiness, ability, and preferences and adapts communication methods to accommodate these.

9.4. Assesses for barriers to effective communication, such as cultural or language barriers or sensory, cognitive, or psychosocial barriers, and adapts communication methods and uses appropriate resources (e.g., interpreters) based on patient and caregiver needs.

9.5. Uses evidence-based models that foster mutual respect and shared decision making to enhance clinical outcomes, patient satisfaction, and healthcare system efficiencies.

9.6. Participates in information sharing that is transparent, free from personal bias, and supportive of the patient’s right to confidentiality of information.

9.7. Prioritizes, reports, and documents critical information using established communication methods.

9.8. Brings the nursing perspective to interactions with others and discussions with the interprofessional team.

**Additional Competencies for the Graduate-Level–Prepared RN**

In addition to the RN competencies, the graduate-level–prepared RN:

9.9. Assumes a leadership role in establishing or modifying environments that promote healthy communication.

9.10. Advances the development and maintenance of effective communication skills.

**Additional Competencies for the APRN**

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:
9.11. Uses expertise in communication to help the interprofessional team to employ timely, sensitive, and goal-oriented strategies when dealing with challenging individuals and situations.

**Standard 10. Collaboration**

The oncology nurse collaborates with the patient and caregivers, the interprofessional team, and community resources in the conduct of nursing practice.

**Competencies**

The oncology RN:

10.1. Participates in interprofessional collaborations to foster open communication, mutual respect, team learning, shared decision making, and ongoing team development.

10.2. Establishes expected outcomes in conjunction with colleagues, the patient, and caregivers and evaluates the effectiveness of interventions.

10.3. Participates in assessment of learning needs and development and delivery of educational programs that are focused on cancer care issues and targeted to nursing and interprofessional learners.

10.4. Collaborates with the interprofessional team to improve patient care processes to maximize safety, quality, communication, and coordination of care.

10.5. Coordinates care through collaborative practice and effective delegation to clinical team members to meet the healthcare needs of patients with cancer.

**Additional Competencies for the Graduate-Level–Prepared RN Including the APRN**

In addition to the RN competencies, the graduate-level–prepared RN including the APRN:

10.6. Leads in establishing, improving, and sustaining collaborative relationships to achieve safe, quality care.

10.7. Collaborates with and leads members of the interprofessional team in providing optimal care, including education, consultation, management, technological development, and research opportunities.
Standard 11. Leadership

The oncology nurse leads in the practice setting and in the nursing profession.

Competencies

The oncology RN:

11.1. Assumes accountability for the delegation, coordination, and outcomes of care provided by others who are under the direction of the RN.

11.2. Integrates evidence-based science into practice.

11.3. Participates in peer and colleague mentorship, education, and advancement of oncology nursing practice.

11.4. Identifies and advocates for vulnerable populations (e.g., older adults, very young patients, uninsured and underinsured individuals, those with psychiatric conditions, those living in poverty or with limited social support).

11.5. Participates in the development and implementation of strategies to integrate evolving technologies, modalities of treatment, supportive care, and needs of cancer survivors into practice.


11.7. Demonstrates the impact of specialty practice knowledge and skills on developing novel patient and caregiver education programs and in recruiting and retaining oncology nurses.

11.8. Participates in oncology professional organizations, boards, committees, and special interest groups (e.g., ACS, Leukemia and Lymphoma Society, ONS).

11.9. Supports continuing professional development of self and colleagues.

Additional Competencies for the Graduate-Level–Prepared RN

In addition to the RN competencies, the graduate-level–prepared RN:

11.10. Promotes discussions on cost and quality by translating and anticipating practice and patient learning requirements for new technologies.

11.11. Disseminates evidence-based clinical practice, quality improvement, and research findings through publications and presentations at professional meetings.
11.12. Serves as an oncology nursing role model, preceptor, mentor, and educator for advanced oncology nursing and within the interprofessional team.

11.13. Contributes to the identification of educational and research needs and to the development of creative and innovative practices for oncology nurses and oncology.

11.14. Serves as a liaison for oncology and oncology nursing to institutional, professional, and legislative bodies at the local, state, and national levels.

11.15. Leads nursing staff in the development of innovative nursing practices.

**Additional Competencies for the APRN**

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:

11.16. Provides leadership to promote interprofessional teamwork for optimal outcomes for people with cancer.

**Standard 12. Education**

The oncology nurse seeks new knowledge and competence that reflects the current state of oncology nursing and cancer care and promotes critical and futuristic thinking.

**Competencies**

The oncology RN:

12.1. Acquires and maintains knowledge and skills that support personal commitment to oncology nursing.

12.2. Participates in lifelong learning to maintain expertise and experience related to oncology scientific, nursing, and regulatory information.

12.3. Uses academic and certification credentials to represent specific knowledge and skills.

12.4. Focuses on quality outcome measures to evaluate effectiveness of education (e.g., pre- and post-tests, teach-back practices).

12.5. Identifies gaps in knowledge, skills, and practice of self and others and pursues education and training to address unmet needs.

12.6. Acquires knowledge and skills relative to the oncology nursing role, population, specialty, setting, and global or local health situation.
12.7. Mentors and serves as a role model for students, novice oncology nurses, and ancillary personnel regarding the unique care needs of the oncology patient population.

**Additional Competencies for the Graduate-Level–Prepared RN Including the APRN**

In addition to the RN competencies, the graduate-level–prepared RN including the APRN:

12.8. Consistently reviews and uses current evidence-based information to expand advanced oncology nursing performance.
12.9. Participates in lifelong learning to serve as a clinical expert and provides education to patients and other healthcare professionals.
12.10. Maintains licensure and credentials consistent with the advanced oncology nursing role and practice setting.
12.11. Demonstrates proficiency in professional activities, such as publications, presentations, performance improvement, and research.

**Standard 13. Evidence-Based Practice and Research**

The oncology nurse integrates the best available evidence and research findings into practice.

**Competencies**

The oncology RN:

13.1. Articulates the values of research and its application relative to the healthcare setting and practice.
13.2. Regularly accesses nationally recognized clinical practice guidelines to support evidence-based patient care.
13.4. In the absence of evidence, poses questions for further study and supports or participates in related research to close gaps.
13.5. Facilitates integration of new evidence into the development or modification of standards of practice, policies, practice guidelines, education, and clinical management strategies.
13.6. Consistently contributes to the fullest extent of scope of practice based on licensure and credentialing.
13.7. Collaborates with the interprofessional team to ensure sound translation of research into clinical practice.
13.8. Protects human participants in clinical research and promotes ethical principles of research.
13.9. Evaluates evidence-based findings for optimal application to practice.
13.10. Disseminates evidence-based findings to improve outcomes.

**Additional Competencies for the Graduate-Level–Prepared RN Including the APRN**

In addition to the RN competencies, the graduate-level–prepared RN including the APRN:

13.11. Performs rigorous critique of current evidence to drive quality nursing practice.
13.12. Promotes a climate of collaborative research and clinical inquiry to promote oncology and oncology nursing research.
13.13. Promotes incorporation of knowledge synthesized from evidence-based reviews into practice changes and analyzes practice changes to generate new testable hypotheses and knowledge.
13.14. Contributes to nursing and scientific knowledge by research participation and/or data synthesis, observations, and other clinical evidence.

**Standard 14. Quality of Practice**

The oncology nurse systematically evaluates the quality, safety, and effectiveness of oncology nursing practice.

**Competencies**

The oncology RN:

14.1. Ensures that nursing practice is safe, effective, efficient, equitable, timely, and patient centered (Kohn, Corrigan, & Donaldson, 2000; Richardson et al., 2001).
14.2. Identifies gaps in quality and seeks information about quality initiatives to improve outcomes.
14.3. Participates in quality assessment and improvement activities.
14.4. Participates in interprofessional teams to address organizational barriers to quality outcomes.
14.5. Participates in collaborative efforts to identify and address issues that do not enhance patient care or outcomes.
14.6. Incorporates evidence-based knowledge into standards of care, protocols, and procedures.
14.7. Collects, evaluates, and reports data to monitor the quality of nursing practice.
14.9. Participates in critical review of policies, procedures, and guidelines to improve outcomes.
14.10. Relies on results of quality monitoring to implement practice changes and participates in ongoing monitoring to evaluate the impact of such changes.
14.11. Disseminates information about practice that reflects quality and performance improvement initiatives.
14.12. Earns professional certification appropriate to role experience and work setting when eligible.

Additional Competencies for the Graduate-Level–Prepared RN

In addition to the RN competencies, the graduate-level–prepared RN:
14.13. Contributes the nursing perspective in quality initiatives by providing leadership and expertise in evaluation of current practices to derive quality cancer care.
14.15. Uses available benchmarks to evaluate practice at the individual, departmental, and organizational levels.
14.16. Provides leadership in the design and implementation of innovative quality improvement projects that improve health outcomes.
14.17. Disseminates information about quality-driven practice changes using distribution methods appropriate for each audience.

Additional Competencies for the APRN

In addition to the competencies of the RN and the graduate-level–prepared RN, the APRN:
14.18. Applies knowledge obtained from advanced preparation, as well as current research and evidence-based information, to
clinical decision making at the point of care to achieve optimal health outcomes.

**Standard 15. Professional Practice Evaluation**

The oncology nurse consistently evaluates his or her own and others’ nursing practice.

**Competencies**

The oncology RN:

15.1. Engages in self-reflection and self-evaluation of nursing practice on a regular basis, identifying areas of strength and areas in which professional growth would be beneficial.

15.2. Engages in formal evaluation and ongoing performance appraisal.

15.3. Routinely seeks feedback from interprofessional team members and patients to identify strengths and areas for improvement in knowledge, attitudes, and clinical skills.

15.4. Identifies areas for growth and sets personal goals for professional development and self-care.

15.5. Formulates and implements a plan to achieve personal goals for professional development and self-care.

15.6. Monitors progress toward personal goals and modifies the plan in response to evaluation data.

15.7. Ensures that nursing practice is consistent with regulatory, professional, and institutional requirements pertaining to licensure and relevant statutes, rules, and regulations.

15.8. Provides evidence of goal completion during formal evaluation with rationale for practice decisions and actions.

15.9. Promotes interprofessional evidence-based practice when contributing to organizational policies and procedures.

15.10. Provides peers and others with formal and informal constructive feedback regarding their practice or role performance.

15.11. Serves as a role model, mentor, and preceptor for new oncology nurses.

15.12. Promotes oncology nursing certification by encouraging and mentoring colleagues.

15.13. Maintains a professional record for self-evaluation and for evaluation by the institution, licensing agencies, and certification organizations.
**Additional Competencies for the Graduate-Level–Prepared RN Including the APRN**

In addition to the RN competencies, the graduate-level–prepared RN including the APRN:

15.14. Participates in formal and informal appraisal of professional colleagues to further strengthen overall healthcare team performance and effectiveness.

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**Standard 16. Resource Utilization**

The oncology nurse uses appropriate resources to plan, provide, and sustain evidence-based nursing services that are safe, effective, and financially responsible.

**Competencies**

The oncology RN:

16.1. Assesses patient care needs and available resources to achieve desired outcomes.
16.2. Assists the patient and interprofessional team in factoring costs, risks, and benefits into decisions about care.
16.3. Assists the patient in identifying and securing appropriate services and resources throughout the care continuum.
16.4. Participates in evaluation of new products to determine safety, effectiveness, and cost–benefit analysis.
16.5. Integrates technology and systems (e.g., telehealth, mobile health technologies) into practice to improve outcomes.
16.6. Critiques the adequacy of existing resources and identifies resource gaps.
16.7. Advocates for safe staffing levels, nurse–patient ratios, and nurse competencies to meet patients’ needs.
16.8. Demonstrates proficiency and appropriate use of the organization’s clinical informatics system.

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**Additional Competencies for the Graduate-Level–Prepared RN Including the APRN**

In addition to the RN competencies, the graduate-level–prepared RN including the APRN:

16.9. Recognizes and develops a plan to address inconsistencies in patient care needs and required and available resources.
16.10. Analyzes and participates in decisions to promote a work environment that supports efficient care and cost-effective resource use.

16.11. Identifies and uses cost-effective, culturally sensitive, quality-based programs that promote cancer prevention and early detection activities to reduce the costs, morbidity, and mortality associated with a cancer diagnosis.

16.12. Serves as a consultant to research and identify appropriate resource utilization.

Standard 17. Environmental Health

The oncology nurse practices in an environmentally safe and healthy manner.

Competencies

The oncology RN:

17.1. Actively engages in practices to promote a workplace and practice environment that is safe and healthy.

17.2. Adheres to regulatory requirements, related organizational policies, and ONS standards and guidelines for safe handling, administration, and disposal of chemotherapy and immunotherapy agents, as well as practices to minimize radiation exposure.

17.3. Uses products or treatments consistent with evidence-based practice to reduce environmental threats.

17.4. Provides the patient and caregivers with information and resources to limit hazardous drug and radiation exposure.

Additional Competencies for the Graduate-Level–Prepared RN
Including the APRN

In addition to the RN competencies, the graduate-level–prepared RN including the APRN:

17.5. Leads and promotes the development of a workplace environment that emphasizes health promotion for employees, patients, and families.

17.6. Establishes and promotes practices to promote safety for patients, caregivers, healthcare providers, and the environment related to the toxicity of cancer treatments.
References


advanced practice registered nurse (APRN)—A nurse who has completed an accredited APRN program (master’s or doctorate level) and has an active APRN license and/or holds specialty certification as required by the state in which the nurse practices.

antineoplastic therapy—Treatment used to prevent, cure, or control cancer.

cancer—Group of diseases in which abnormal cells divide uncontrollably and can invade surrounding tissue or spread to other parts of the body (metastasize) through the blood or lymph systems.

cancer care continuum—The phases of cancer care from prevention through end of life, including risk assessment, prevention, early detection, diagnosis, treatment, survivorship, and end-of-life care.

cancer survivor—An individual who has received a diagnosis of cancer. Cancer survivorship begins at diagnosis and extends for the remainder of the person’s life (O’Brien et al., 2014).

chemotherapy—The use of specific drugs to interfere with the growth of cancer cells by stopping cell division or killing the cells.

clinical trials—Research studies involving human participants to assess the safety and effectiveness of new ways to diagnose and treat diseases.

competency—“An expected and measurable level of nursing performance that integrates knowledge, skills, abilities, and judgment, based on established scientific knowledge and expectations for nursing practice” (American Nurses Association, 2015b, p. 86).

graduate-level–prepared nurse—A nurse who has a master’s or doctorate degree in nursing and an active RN license.

hematopoietic stem cell transplantation—Process of collecting hematopoietic stem cells, which make blood cells, from a donor and transplanting them into a patient who has damaged bone marrow function. Used to treat both cancer and nonmalignant
conditions that affect blood cell development (red blood cells, white blood cells, platelets). Also known as **bone marrow transplantation, stem cell transplantation, hematopoietic progenitor cell transplantation.**

**hospice**—An interprofessional care model for symptom management when life expectancy is estimated to be less than six months (National Comprehensive Cancer Network, 2019).

**immunotherapy**—Form of treatment that enhances or suppresses the immune system’s ability to fight cancer, infection, or other diseases.

**oncology**—A branch of medicine that focuses on the prevention, diagnosis, and treatment of cancer.

**oncology nurse**—An RN, graduate-level—prepared nurse, or APRN who provides care to people at risk for or with a cancer diagnosis in any traditional or nontraditional healthcare setting.

**palliative care**—“An approach to patient/family/caregiver-centered health care that focuses on optimal management of distressing symptoms, while incorporating psychosocial and spiritual care according to patient/family/caregiver needs, values, beliefs, and cultures” (National Comprehensive Cancer Network, 2019, p. PAL-1).

**precision medicine**—Use of information about a person’s cancer, such as genetic changes, to guide cancer prevention, diagnosis, and treatment. Also known as **personalized medicine.**

**quality measure**—Tool used to quantify adherence to an established standard.

**radiation therapy**—Treatment of cancer using high-energy x-ray particle waves or other radiation particles. Can be used alone or in combination with other types of cancer treatment, such as surgery, chemotherapy, or immunotherapy.

**registered nurse (RN)**—A nurse who has completed an accredited diploma, associate degree, or baccalaureate degree nursing program and has an active registered nurse license.

**standards**—“Authoritative statements defined and promoted by the profession by which the quality of practice, service, or education can be evaluated” (American Nurses Association, 2015b, p. 89).

**surgery**—An invasive procedure used to prevent, diagnose, stage, treat, or manage complications of a disease.

**targeted therapy**—Drugs that interfere with specific genes or proteins that are involved in the growth, progression, and spread of cancer.