

### I. Scientific Information - 10%

Acquires, maintains, and applies knowledge relative to physiology, medical terminology, pharmacology, and population health.

## A. Knowledge of:

- I. Healthy physiology and the ability to identify alterations in function.
- 2. Process of clinical trials and where to locate resources for more information.
- 3. Genetics and genomics and their integration into oncology nursing.
- 4. Anatomy, pathophysiology, pharmacology, pharmacokinetics.
- 5. Complex medical terminology.

## B. Skill or ability to:

- I. Differentiate between modifiable and non-modifiable risk factors.
- 2. Differentiate between incidence and prevalence in a population.
- 3. Apply knowledge of incidence and prevalence in a population in the care of patients.
- 4. Differentiate between relative risk and absolute risk.
- 5. Apply knowledge of relative risk and absolute risk in consulting with patients.
- 6. Translate complex medical terminology to answer patient questions.
- 7. Lead, conduct, and/or participate in the process of clinical trials and counsel patients regarding available trials.

### II. Cancer As A Disease - 16%

Applies knowledge of the diagnosis and pathophysiology of cancer and its associated toxicities to patient care.

### A. Knowledge of:

- I. Steps that can be taken to prevent, detect, or modify the risk of disease.
- 2. Identification of carcinogenesis.
- 3. Biology, genomics, and cellular mechanisms by which cancer develops, and metastasizes, as well as how it affects the body in response to treatment.
- 4. Cancer pathogenesis and the natural progression of the disease.
- 5. Mechanisms of cancer metastasis and how it affects the body.
- 6. Common Risk factors, diagnoses, prognoses, incidence, prevalence, mortality, and treatments for solid tumors and hematologic malignancies.
- 7. Pathological and clinical grading and staging of cancer.
- 8. Immune system and how it relates to cancer and its treatment.
- 9. At-risk populations and major complications for those patients.
- 10. Pathophysiology of each major cancer type.
- 11. Genomics of cancer and the necessary testing for treatment.
- 12. Impact of cancer and cancer-related treatment on sexual and reproductive functioning.



## B. Skill or ability to:

- Communicate information about prevention, detection, and risk modification to help facilitate the patient's decision-making.
- 2. Identify and respond to acute side effects and adverse events of cancer and its treatment, including impacts to treatment considerations.
- 3. Apply knowledge of biologic, genomic, and cellular mechanisms related to cancer diagnosis to create plans of care.
- 4. Review and explain genetic and genomic results and make appropriate referrals.

## III. Assessment and Decision-Making - 20%

Conducts systematic assessments of people with cancer considering physical, emotional, psychological, and spiritual needs, applying evidence-based knowledge and critical thinking to interpret findings and prioritize actions.

## A. Knowledge of:

- I. Population based and at-risk screening recommendations for different cancer types and the age at which to begin screening.
- 2. Age-appropriate oncology assessment tools and when and how to administer the tools.
- 3. Purpose and importance of diagnostic tests.
- 4. Oncologic emergencies.

- I. Interpret, assess, and implement primary, secondary, and tertiary preventive measures related to cancer and its treatment.
- 2. Assess, interpret, and analyze medical data related to the pathogenesis of cancer, comorbidities, and treatment.
- 3. Conduct and interpret population-based and at-risk screenings for different cancer types.
- 4. Identify high-risk factors in family history to refer patients to genetic counseling.
- 5. Apply age-appropriate oncology assessment tools.
- 6. Analyze and interpret procedural, imaging, laboratory, and genetic testing results.
- 7. Monitor and assess biological and laboratory markers to guide treatment options and to measure intervention response.
- 8. Assess and evaluate patient findings related to the behavioral, physical, emotional, social, and spiritual status of the patient using interview, observation, and physical examination techniques.
- 9. Use toxicity screening tools to reduce potential impact on health, function, and safety.
- 10. Recognize abnormalities in diagnostic values.
- II. Apply knowledge of oncologic implications in the use of procedural, imaging, laboratory, and genetic testing.



- 12. Assimilate patient and medical data relevant to the diagnosis from multiple sources, including laboratory values (current and historic) pathology, imaging, consultant notes, and outside documentation.
- 13. Assess the patient's and caregiver's knowledge of the disease and treatment throughout the cancer trajectory.
- 14. Grade patient symptoms.
- 15. Assess patient pain and corresponding adverse effects of the pain.
- 16. Evaluate the outcomes of an intervention.
- 17. Recognize and assess oncologic emergencies and provide appropriate interventions.

## IV. Treatment Modalities - 20%

Acquires, maintains, and applies knowledge relative to the administration of cancer treatment, incorporating evidence-based assessment, treatment, and symptom management techniques.

## A. Knowledge of:

- I. Mechanisms of action, diagnostics, dosing, administration, and side effect management for antineoplastic medication therapy, immunotherapy, hormonal therapy drugs.
- 2. Radiation therapy modalities and their appropriate applications based on cancer sites.
- 3. Surgical procedures and their appropriate applications based on diagnosis, staging criteria, and cancer sites.
- 4. Potential interactions among recommended cancer treatment and current prescription medications as well as nutrition, homeopathic treatments, vitamins, supplements, herbals, and over the counter treatments.
- Cellular therapy preparative regimens, dosing, administration, and management of complications.
- 6. Complementary and alternative therapies and their appropriate applications.
- 7. Types of personal protective equipment and when and how to use.
- 8. Risks of hazardous drug exposure, identification of hazardous drugs, and using personal protective equipment to minimize the risk of exposure to healthcare workers, patients, and caregivers.
- 9. Access device use in treatment administration and cancer care.
- 10. Pharmacologic and nonpharmacologic interventions related to pain management.
- II. Risk of secondary malignancies and the ability to educate patients and caregivers.



## B. Skill or ability to:

- I. Assess patient status, safely administer medications and treatments as ordered and monitor patient response.
- 2. Apply knowledge of potential interactions among recommended treatments, prescribed medications, homeopathic treatments, vitamins, supplements, herbals, and over the counter treatments to recommend necessary changes.
- 3. Review and ensure the accuracy of the dosage and frequency of current medications (over the counter and prescribed), supplements, vitamins, and alternative therapies.
- 4. Use and manage access devices in treatment administration and cancer care.
- 5. Define and differentiate between acute, late-onset, and long-term side effects and their impact on treatment.
- 6. Implement symptom management interventions and monitor parameters based on selected therapies.
- 7. Manage pain with pharmacologic and nonpharmacologic interventions.
- 8. Conduct conversations about opioid medications.
- 9. Assess and manage adherence to oral anticancer medications, recommended treatments, related appointments, and the patient's response.

## V. Care Management - 15%

Develops, implements, and advocates for evidence-based care plans in collaboration with the patient, their caregivers, and the interprofessional team.

## A. Knowledge of:

- I. Care coordination, beginning at diagnosis and continuing through the cancer continuum and survivorship care planning.
- 2. Protective measures for immunocompromised patients.

- I. Assess, intervene, record, and report changes in a patient's condition.
- 2. Coordinate patient care.
- ${\it 3.}$  Advise patients and caregivers to understand the implications of prognosis.
- 4. Develop a comprehensive plan of care and implement cancer treatment modalities as part of the interprofessional team.
- 5. Ensure effective use of patient-centered care across the continuum of disease.
- 6. Provide patients and caregivers with information about their disease, treatment plan, medications, home care needs, follow-up appointments, emergencies, and referrals to community resources across the care continuum.
- 7. Identify patients at risk for adverse events and side effects.
- 8. Respond to patient-reported and observed side effects.



- 9. Integrate culturally sensitive interventions into plans of care for patients and their caregivers while recognizing one's own implicit bias.
- 10. Evaluate and identify the role of palliative care from initial diagnosis throughout the care continuum.
- II. Differentiate between hospice and palliative care.
- 12. Apply the principles of hospice and palliative care related to patient care.
- 13. Assess and care for individuals at the end of life, including grief, hospice, symptom management, palliative care, bereavement, patient and family support, psychosocial support.
- 14. Coordinate fertility preservation.

## VI. Patient and Caregiver Support- 10%

Provides patients and caregivers with information and resources relevant to identified diagnoses, health challenges, complications, or opportunities and implements interventions according to the established plan of care.

## A. Knowledge of:

- I. Psychology and human behavior to make appropriate resource recommendations, recognize behavioral and affective disorders, and identify stress in patients receiving oncology care.
- 2. Grief, appropriate communication techniques, and resources for referrals.
- 3. Parental consent.

- I. Identify resources available to patients, caregivers, and healthcare professionals.
- 2. Promote patient comfort, alleviate side effects of pharmacologic therapies, and provide personal assistance, medical attention, emotional support, and other personal care.
- 3. Implement strategies to support patient and caregiver well-being and reduce caregiver burden.
- 4. Facilitate and manage difficult conversations with and among patients, families, caregivers, and members of the care team.
- 5. Provide education and emotional support with compassion, empathy, and respect for the individual and their caregiver.
- 6. Identify patient access barriers, including social determinants of health, and identify potential solutions to provide quality and equitable care to the patient.
- 7. Assess the financial impacts for patients and families related to oncologic care to identify potential resources, including referrals to financial assistance programs.
- 8. Incorporate the physical, psychosocial, and spiritual needs of patients and caregivers.
- 9. Engage in shared decision-making to support the patient in making informed decisions.



## VII. Professional Practice - 9%

Contributes to and implements effective, evidence-based nursing practice and collaborative efforts related to the responsibilities, expectations, and procedures for practicing as an advanced oncology nurse.

## A. Knowledge of:

- I. Oncology requirements, standards, and guidelines related to the practice of safe, equitable, and quality cancer care.
- 2. Professional codes of ethics.
- 3. Professional standards and guidelines, relevant statutes, rules, and regulations.
- 4. Compensation for care and services (e.g., insurance/payer, stakeholders, authorizations, appeals).

- I. Recognize and use evidence-based clinical practice guidelines, symptom management tools, standards, and protocols in patient evaluation and care.
- 2. Participate in quality assurance, root cause analysis, and corrective and preventative action plans.
- 3. Advocate for the delivery of high-quality, patient-centered cancer care at the individual, local, and national level.
- 4. Advocate for the needs of the oncology profession at the individual, local, and national level.
- 5. Collaborate and interact with people of diverse backgrounds without cultural prejudice or bias.
- 6. Establish healthy boundaries with patients and their caregivers.
- 7. Participate in quality and continuous improvement.