

# ***Exam Blueprint and Specialty Competencies***

## **Introduction – Blueprint for the Oncology Nursing Certification Exam**

The primary function of the blueprint for the CNA Oncology Nursing Certification Exam is to describe how the exam is to be developed. Specifically, this blueprint provides explicit instructions and guidelines on how the competencies are to be expressed within the exam in order for accurate decisions to be made on the candidates' competence in oncology nursing.

The blueprint has two major components: (1) the content area to be measured and (2) the explicit guidelines on how this content is to be measured. The content area consists of the list of competencies (i.e., the competencies expected of fully competent practising oncology nurses with at least two years of experience), and the guidelines are expressed as structural and contextual variables. The blueprint also includes a summary chart that summarizes the exam guidelines.

### **Description of Domain**

The CNA Oncology Nursing Certification Exam is a criterion-referenced exam.<sup>1</sup> A fundamental component of a criterion-referenced approach to testing is the comprehensive description of the content area being measured. In the case of the Oncology Nursing Certification Exam, the content consists of the competencies of a fully competent practising oncology nurse with at least two years of experience.

This section describes the competencies, how they have been grouped and how they are to be sampled for creating an exam.

### **Developing the List of Competencies**

The final list of competencies was approved by the Oncology Nursing Certification Exam Committee.

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<sup>1</sup> Criterion-referenced exam: An exam that measures a candidate's command of a specified content or skills domain or list of instructional objectives. Scores are interpreted in comparison to a predetermined performance standard or as a mastery of defined domain (e.g., percentage correct and mastery scores), independently of the results obtained by other candidates (Brown, 1983).

## **Assumptions**

In developing the list of competencies for oncology nursing, the following assumptions were made.

### **The patient, the family and the community:**

1. The term “client” represents the patient, the family and the community. The “patient” is perceived as an individual recipient of care.
2. The client refers to those toward whom nursing activities are directed, including the individual, the individual’s family and/or community.
3. The family and the community are defined by the patient.
4. The patient and the community include those at risk for developing cancer, those with cancer and those who have survived cancer.
5. The client includes persons of all ages, stages of growth and development and diverse backgrounds (e.g., gender, sexual orientation, religion, spiritual beliefs, socioeconomic status, philosophy, geographical location and politics).
6. The client experiences various aspects of cancer care that may include health promotion, prevention, screening, early detection, suspicion of cancer, diagnosis, treatment, supportive care, rehabilitation, survivorship, recurrent disease, secondary malignancies, palliation, end-of-life care and the grieving process.
7. The patient may enter or leave the cancer continuum at various points and may experience the continuum at a different pace.

### **The oncology nurse:**

1. Respects the patient, their perceptions of cancer and the rights and self-determination of both the patient and their family.
2. Provides individualized, holistic care.
3. Understands the impact of the determinants of health on the client’s care, resources and health outcomes.
4. Practices in accordance with professional and organizational roles, regulations, descriptions, guidelines and standards.
5. Recognizes that beliefs, values and life experiences can influence and affect the therapeutic relationship within the context of cancer care.
6. Respects the uniqueness of each client and diversity of clients.

7. Educates clients using the principles of learning, growth and development.
8. Advocates for and facilitates the client's role in decision-making throughout the cancer continuum.
9. Works collaboratively within an interprofessional team to provide client-centred care and education.
10. Facilitates the patient's navigation through the health-care system throughout the cancer continuum in a manner that is respectful of their community.
11. Integrates and/or promotes evidence-based research and/or best practices.
12. Understands the impact of public policies on the delivery of cancer services.
13. Provides evidence-informed care while maintaining professional competence through ongoing education, research and skill development.
14. Recognizes the psychological impact of caring for the oncology patient and family and the need to seek support when appropriate.
15. Mentors, guides and shares experiences with nurses, students and other health-care providers.
16. Adapts to changes in cancer care, including demographics and new treatment options.
17. Provides care that is family centric and respectful of family resources and coping mechanisms.

**The environment:**

1. Includes a wide variety of practice settings across the cancer continuum. These practice settings may include the home, community hospitals, academic medical centres, cancer treatment centres, ambulatory clinics, long-term care facilities, the community (urban/remote/rural), hospices, educational institutions, research facilities, etc.
2. Includes the specialty units within these practice settings. These specialty units may include oncology, hematology, surgery, primary care, systemic therapy, rehabilitation, critical care, etc.
3. Encompasses various communication technologies such as telephone, e-mail and video conferencing to provide virtual care to support the client throughout the cancer continuum.

## Competency Categories

The competencies are classified under an eight-category scheme commonly used to organize oncology nursing.

Some of the competencies lend themselves to one or more of the categories; therefore, these eight categories should be viewed simply as an organizing framework. Also, it should be recognized that the competency statements vary in scope, with some representing global behaviours and others more discrete and specific nursing behaviours.

## Competency Sampling

Using the grouping and the guideline that the Oncology Nursing Certification Exam will consist of approximately 165 questions, the categories have been given the following weights in the total examination.

**Table 1: Competency Sampling**

Categories	Approximate weights in the total examination
Prevention, Early Detection and Screening	5-10%
Diagnosis and Staging of Cancer	5-10%
Knowledge of Cancer Diseases	10-15%
Treatment Modalities	20-25%
Symptom and Treatment Management	20-25%
Supportive Care	10-15%
Continuity of Care	5-10%
Ethics, Legal Obligations and Research	5-10%

## Technical Specifications

In addition to the specifications related to the competencies, other variables are considered during the development of the Oncology Nursing Certification Exam. This section presents the guidelines for two types of variables: structural and contextual.

**Structural Variables:** Structural variables include those characteristics that determine the general appearance and design of the exam. They define the length of the exam, the format and presentation of the exam questions (e.g., multiple-choice format) and special functions of exam questions (e.g., case-based or independent questions).

**Contextual Variables:** Contextual variables specify the nursing contexts in which the exam questions will be set (e.g., patient age, patient culture, patient health situation and health-care environment).

## Structural Variables

**Exam Length:** The exam consists of approximately 165 multiple-choice questions.

**Question Presentation:** The multiple-choice questions are presented in one of two formats: case-based or independent. Case-based questions are a set of approximately four questions associated with a brief health-care scenario (i.e., a description of the patient's health-care situation). Independent questions stand alone. In the Oncology Nursing Certification Exam, 55 to 65 per cent of the questions are presented as independent questions and 35 to 45 per cent are presented within cases.

**Taxonomy for Questions:** To ensure that competencies are measured at different levels of cognitive ability, each question on the Oncology Nursing Certification Exam is aimed at one of three levels: knowledge/comprehension, application and critical thinking.<sup>2</sup>

### 1. Knowledge/Comprehension

This level combines the ability to recall previously learned material and to understand its meaning. It includes such mental abilities as knowing and understanding definitions, facts and principles and interpreting data (e.g., knowing the effects of certain drugs or interpreting data appearing on a patient's record).

### 2. Application

This level refers to the ability to apply knowledge and learning to new or practical situation. It includes applying rules, methods, principles and theories in providing care to patients (e.g., applying nursing principles to the care of patients).

### 3. Critical Thinking

The third level of the taxonomy deals with higher-level thinking processes. It includes the abilities to judge the relevance of data, to deal with abstraction and to solve problems (e.g., identifying priorities of care or evaluating the effectiveness of interventions). The oncology nurse with at least two years of experience should be able to identify cause-and-effect relationships, distinguish between relevant and irrelevant data, formulate valid conclusions and make judgments concerning the needs of patients.

<sup>2</sup> These levels are adapted from the taxonomy of cognitive abilities developed in Bloom (1956).

The following table presents the distribution of questions for each level of cognitive ability.

**Table 2: Distribution of Questions for Each Level of Cognitive Ability**

<b>Cognitive Ability Level</b>	<b>Percentage of questions on Oncology Nursing Exam</b>
Knowledge/Comprehension	15-25%
Application	40-50%
Critical Thinking	30-40%

### Contextual Variables

**Patient Age:** The contextual variables specified for the Oncology Nursing Certification Exam is the age of the patients. Providing specifications for the use of these variables ensures that the patients described in the exam represent the demographic characteristics of the population encountered by oncology nurses. These characteristics, listed in Table 3 as percentage ranges, serve as guidelines for test development.

**Table 3: Specification for Patient Age**

<b>Age Group</b>	<b>Percentage of questions on the Oncology Nursing Certification Exam</b>
Children (0 to 13 years old)	5-10%
Adolescents and young adults (14-25 years old)	5-10%
Adults (26-64 years old)	35-50%
Older adults (65+ years old)	35-50%

**Patient Culture:** The oncology nursing exam is designed to include questions representing the variety of cultural backgrounds encountered while providing oncology nursing care in Canada. Although the exam does not test candidates' knowledge of specific values, beliefs and practices linked to individual cultures, it is intended to measure awareness, sensitivity and respect for diverse cultural values, beliefs and practices. Cultural issues are integrated within the exam without introducing cultural stereotypes.

**Patient Health Situation:** In the development of the Oncology Nursing Certification Exam, the patient is viewed holistically. The patient health situations presented also reflect a cross-section of health situations encountered by oncology nurses.

**Health-Care Environment:** It is recognized that oncology nursing is practised primarily in the hospital setting. However, oncology nursing can also be practised in other settings. For the purposes of the oncology nursing exam, the health-care environment is specified only where it is required for clarity or in order to provide guidance to the candidate.

## Conclusions

The blueprint for the Oncology Nursing Certification Exam is the product of a collaborative effort between CNA, Meazure Learning – Yardstick and a number of oncology nurses across Canada. Their work has resulted in a compilation of the competencies required of practising oncology nurses and has helped determine how those competencies will be measured on the Oncology Nursing Certification Exam. A summary of these guidelines can be found in the summary chart Oncology Nursing Certification Development Guidelines.

Oncology nursing practice will continue to evolve. As this occurs, the blueprint may require revision so that it accurately reflects current practices. CNA will ensure that such revision takes place in a timely manner and will communicate any changes in updated editions of this document.

# Summary Chart

## Oncology Nursing Certification Exam Development Guidelines

STRUCTURAL VARIABLES		
Examination Length and Format	Approximately 165 multiple choice questions	
Question Presentation	55-65% independent questions 35-45% case-based questions	
The Cognitive Domain	Knowledge/Comprehension	15-25% of questions
	Application	40-50% of questions
	Critical Thinking	30-40% of questions
Competency Categories	Prevention, Early Detection and Screening	5-10% of the questions
	Diagnosis and Staging of Cancer	5-10% of the questions
	Knowledge of Cancer Diseases	10-15% of the questions
	Treatment Modalities	20-25% of the questions
	Symptom and Treatment Management	20-25% of the questions
	Supportive Care	10-15% of the questions
	Continuity of Care	5-10% of the questions
	Ethics, Legal Obligations and Research	5-10% of the questions
CONTEXTUAL VARIABLES		
Patient Age	<b>Age Groups</b>	
	Children (0-13 years old)	5-10% of the questions
	Adolescents and young adults (14-25 years old)	5-10% of the questions
	Adults (26-64 years old)	35-50% of the questions
	Older adults (65+ years old)	35-50% of the questions
Patient Culture	Questions are included that measure awareness, sensitivity and respect for different cultural values, beliefs and practices, without introducing stereotypes.	
Patient Health Situation	In the development of the Oncology Nursing Certification Exam, the patient is viewed holistically. The patient health situations presented also reflect a cross-section of health situations encountered by oncology nurses.	
Health-Care Environment	It is recognized that oncology nursing is practised in a variety of settings including the community and the hospital. The health-care environment is specified only where it is required for clarity or in order to provide guidance to the candidate.	



# The Oncology Nursing Certification Exam

## List of Competencies

### I. Prevention, Early Detection and Screening for Cancer

*The oncology nurse:*

- 1.1 Demonstrates an understanding of epidemiological data at a community, provincial, national and global level related to the incidence and prevalence of cancer, mortality and survival.
- 1.2 Performs a comprehensive assessment related to identifying overall risk factors for cancer, including the following:
  - 1.2a host (e.g., family history, age, gender)
  - 1.2b behavioural (e.g., tobacco use, diet, obesity)
  - 1.2c environmental (e.g., occupational exposure, sun exposure, previous cancer treatments)
  - 1.2d biological (e.g., HIV, HPV and EBV viruses, inflammatory bowel syndrome, *H. pylori*)
- 1.3 Demonstrates an understanding of the purpose and implications of genetic testing, counselling and resources available to patients.
- 1.4 Provides teaching and support regarding cancer screening, diagnostic tests and/or genetic testing.
- 1.5 Supports patients regarding the implications of screening and test results.
- 1.6 Promotes individual and public participation in prevention, screening and early detection (e.g., screening programs, self-monitoring, HPV immunization).

### II. Diagnosis and Staging of Cancer

*The oncology nurse:*

- 2.1 Demonstrates an understanding of the pathophysiology of cancer (e.g., carcinogenesis, cell cycle, tumour growth, metastasis, pre-malignancy).
- 2.2 Demonstrates an understanding of how cancer is diagnosed (e.g., pathology, diagnostic imaging).
- 2.3 Integrates the findings of the history and physical exam, diagnostic investigations (e.g., pathology, radiological, tumour receptor status, tumour markers and cytogenetics related to staging of cancer).
- 2.4 Assesses the patient's understanding of diagnosis and staging.
- 2.5 Facilitates patient learning regarding diagnosis and staging.
- 2.6 Demonstrates an understanding of classification systems of malignant tumours.

### III. Knowledge of Cancer Diseases

*The oncology nurse:*

- 3.1 Demonstrates an understanding of the risk factors, clinical presentation and prognostic factors in relation to the management of the following more common cancer diseases in adults:
  - 3.1a breast
  - 3.1b prostate
  - 3.1c lung
  - 3.1d colorectal
  - 3.1e genitourinary (bladder, kidney, testicular)
  - 3.1f gynecological (ovarian, uterine, cervical)
  - 3.1g leukemia
  - 3.1h lymphoma
  - 3.1i melanoma
  - 3.1j head and neck (thyroid, tongue, laryngeal)
- 3.2 Demonstrates an understanding of the standard treatments in relation to the management of the following more common cancer diseases in adults:
  - 3.2a breast
  - 3.2b prostate
  - 3.2c lung
  - 3.2d colorectal
  - 3.2e genitourinary (bladder, kidney, testicular)
  - 3.2f gynecological (ovarian, uterine, cervical)
  - 3.2g leukemia
  - 3.2h lymphoma
  - 3.2i melanoma
  - 3.2j head and neck (thyroid, tongue, laryngeal)
- 3.3 Demonstrates an understanding of the risk factors, clinical presentation and prognostic factors in relation to the management of the following less common cancer diseases in adults:
  - 3.3a brain and central nervous system
  - 3.3b gastrointestinal
  - 3.3c multiple myeloma
  - 3.3d non-melanoma skin cancer
  - 3.3e neuroendocrine
- 3.4 Demonstrates an understanding of the standard treatments in relation to the management of the following less common cancer diseases in adults:
  - 3.4a brain and central nervous system
  - 3.4b gastrointestinal
  - 3.4c multiple myeloma
  - 3.4d non-melanoma skin cancer
  - 3.4e neuroendocrine
- 3.5 Demonstrates an understanding of the clinical presentation and prognostic factors in relation to the management of the following more common cancer diseases in children:
  - 3.5a leukemia
  - 3.5b brain and central nervous system

- 3.5c lymphoma
- 3.5d bone and soft tissue sarcomas
- 3.5e Wilms' tumour
- 3.6 Demonstrates an understanding of the standard treatments in relation to the management of the following more common cancer diseases in children:
  - 3.6a leukemia
  - 3.6b brain and central nervous system
  - 3.6c lymphoma
  - 3.6d bone and soft tissue sarcomas
  - 3.6e Wilms' tumour

## **IV. Treatment Modalities**

### **4.1 Surgery**

*The oncology nurse:*

- 4.1a Understands the role of surgery in cancer treatment (i.e., cure, control, palliation, prophylactic).
- 4.1b Assists the patient's understanding of the role of surgery in the treatment plan.
- 4.1c Assesses for risk of physical and/or psychosocial complications related to cancer surgery (e.g., wound care, thromboembolic events, lymphedema, body image disturbance, psychological distress).
- 4.1d Implements interventions to decrease the incidence and severity of complications related to cancer surgery (e.g., wound care, pharmacological intervention, supportive care, psychosocial impacts).
- 4.1e Facilitates patient learning regarding the expected outcomes of surgical interventions (e.g., ostomy care, wound management, pain management).
- 4.1f Facilitates patient learning regarding potential future treatment modalities based on the patient's pathological findings.

### **4.2 Systemic Therapy: Chemotherapy, Biological Agents, Targeted Therapies, Immunotherapy, and Hormonal Therapies**

*The oncology nurse:*

- 4.2a Understands the role of systemic therapy in cancer treatment (e.g., cure, control or palliation, adjuvant, neoadjuvant, combination).
- 4.2b Demonstrates an understanding of the mechanism of action and side effects of systemic cancer therapy drugs.
- 4.2c Assists patients and family to understand the role of systemic therapy in their treatment plan (e.g., cure, control, palliation).
- 4.2d Demonstrates an understanding of various routes of (or principles of) systemic therapy administration (e.g., intravenous, p.o, intrathecal, intraperitoneal, subcutaneous, intraarterial).

- 4.2e Applies the principles of safe administration of systemic therapy (e.g., drug dose calculation using BSA/AUC, sequence of administration).
- 4.2f Applies the principles of safe handling for cytotoxic hazardous agents (e.g., body fluids, appropriate personal protective equipment).
- 4.2g Recognizes potential side effects related to concurrent systemic therapy.
- 4.2h Facilitates patient learning regarding the outcomes of systemic therapy involving the immediate, early, late and delayed side effects.
- 4.2i Implements interventions to decrease the incidence and severity of side effects and complications and promote self-care related to systemic therapy (e.g., hydration, pharmacological intervention, fertility management).
- 4.2j Facilitates patient learning regarding systemic therapy administration at home (e.g., safe handling, monitoring, oral compliance).

### **4.3 Radiation Therapy**

*The oncology nurse:*

- 4.3a Understands the role of radiation therapy in cancer treatment (e.g., cure, control or palliation, adjuvant, neoadjuvant, combination, prophylaxis).
- 4.3b Understands the mechanism of action and principles of various types of radiation therapy (e.g., stereotactic, brachytherapy, radioactive isotopes, hyperfractionation).
- 4.3c Assists patient to understand the role of radiation therapy in the treatment plan.
- 4.3d Demonstrates an understanding of the principles of safe practice regarding radiation (e.g., time, distance and shielding).
- 4.3e Facilitates patient learning regarding radiation safety (e.g., radioactive implants, isotopes).
- 4.3f Recognizes potential side effects related to radiation therapy.
- 4.3g Facilitates patient learning regarding the immediate, early, late and delayed side effects of radiation therapy (e.g., skin reactions, fatigue, cognitive dysfunction).
- 4.3h Implements interventions to decrease the incidence and severity of side effects and complications related to radiation therapy (e.g., skin care, pharmacological intervention).

### **4.4 Concurrent and/or Combination Therapy**

*The oncology nurse:*

- 4.4a Understands the role of concurrent combination therapy (e.g., systemic therapy and radiation, combination systemic therapies).
- 4.4b Assists patients to understand the role of concurrent combination therapy in their treatment plan.
- 4.4c Recognizes potential side effects related to concurrent combination therapy.
- 4.4d Facilitates patient learning regarding the outcomes of concurrent combination therapy involving immediate, early, late and delayed side effects.

- 4.4e Implements interventions to decrease the incidence and severity of side effects related to concurrent combination therapy (e.g., pharmacological intervention, mouth care).

## **4.5 Cellular Therapy**

*The oncology nurse:*

- 4.5a Understands the roles of cellular therapy (e.g., hematopoietic stem cell transplants and chimeric antigen receptor T-cell therapy [CAR T-cell therapy]).
- 4.5b Understands the mechanism of action and principles of cellular therapy.
- 4.5c Assists the patient to understand the role of cellular therapy in the treatment plan.
- 4.5d Recognizes the acute, chronic and late side effects of cellular therapy (e.g., graft-versus-host disease [GVHD], veno-occlusive disease, cytokine release syndrome, neurological side effects).
- 4.5e Implements interventions to decrease the incidence and severity of side effects and complications related to cellular therapy (e.g., hydration, transfusion, pharmacological intervention).

## **4.6 Complementary or Alternative Therapies**

*The oncology nurse:*

- 4.6a Encourages the patient to report the use of complementary or alternative therapies (e.g., antioxidants, high-dose vitamins, herbal remedies, acupuncture, massage, physical therapy, medical marijuana).
- 4.6b Assesses patient use of complementary or alternative therapies.
- 4.6c Uses interventions to reduce the potential interaction of complementary or alternative therapies with conventional treatment modalities (e.g., pharmacist consult, dietitian consult).

## **4.7 Treatment Delivery Systems**

*The oncology nurse:*

- 4.7a Demonstrates an understanding of the role of treatment delivery systems (e.g., venous access devices, infusion pumps).
- 4.7b Demonstrates safe and appropriate use of treatment delivery systems.
- 4.7c Advocates for the appropriate venous access device for the patient.
- 4.7d Facilitates patient learning regarding the safe use, care and potential complications of treatment delivery devices.
- 4.7e Manages the care and maintenance of the treatment delivery device for the patient.

## V. Symptom and Toxicity Management

### 5.1 Oncologic Emergencies

*The oncology nurse:*

- 5.1a Recognizes the clinical presentation and risk factors for the following metabolic oncologic emergencies:
  - i) cytokine release syndrome
  - ii) disseminated intravascular coagulation (DIC)
  - iii) febrile neutropenia and sepsis
  - iv) hypercalcemia
  - v) hypersensitivity reaction (e.g., anaphylaxis)
  - vi) syndrome of inappropriate antidiuretic hormone (SIADH)
  - vii) tumour lysis syndrome
- 5.1b Recognizes the clinical presentation and risk factors for the following structural oncologic emergencies:
  - i) increased intracranial pressure
  - ii) malignant bowel obstruction
  - iii) neoplastic cardiac tamponade
  - iv) spinal cord compression
  - v) superior vena cava syndrome
- 5.1c Facilitates patient learning regarding the signs and symptoms of potential oncologic emergencies, reporting and self-care strategies.
- 5.1d Implements interventions in response to the following metabolic oncologic emergencies:
  - i) cytokine release syndrome
  - ii) disseminated intravascular coagulation (DIC)
  - iii) febrile neutropenia and sepsis
  - iv) hypercalcemia
  - v) hypersensitivity reaction (e.g., anaphylaxis)
  - vi) syndrome of inappropriate antidiuretic hormone (SIADH)
  - vii) tumour lysis syndrome
- 5.1e Implements interventions in response to the following structural oncologic emergencies:
  - i) increased intracranial pressure
  - ii) malignant bowel obstruction
  - iii) neoplastic cardiac tamponade
  - iv) spinal cord compression
  - v) superior vena cava syndrome

## 5.2 Disease- and Treatment-Related Side Effects and Symptom Management

*The oncology nurse:*

- 5.2a Understands that symptoms have culture-specific meanings and that clients from diverse backgrounds will describe their symptoms differently, will have different ideas of what might have caused it, will have different acceptance of it, and will have different ideas about what kind of treatment they would seek for it.
- 5.2b Assesses patient comorbidities and medication profiles that may impact disease and related side effects.
- 5.2c Assesses the patient for disease symptoms and treatment-related side effects using a standardized grading system (e.g., CTCAE), including alterations in the following:
  - i) bone marrow function (e.g., myelosuppression)
  - ii) mobility (e.g., gait, range of motion)
  - iii) skin integrity (e.g., skin reactions, wounds, extravasation)
  - iv) neurological status (e.g., seizures, peripheral neuropathy)
  - v) mental status (e.g., confusion, depression)
  - vi) circulation (e.g., edema, pericardial effusion, venous thromboembolism [VTE], cardiac function)
  - vii) pulmonary function (e.g., dyspnea, effusion, cough)
  - viii) gastrointestinal function (e.g., diarrhea, constipation, nausea, vomiting)
  - ix) metabolic function (e.g., electrolyte or endocrine imbalances)
  - x) urinary function (e.g., cystitis, anuria)
- 5.2d Facilitates patient learning regarding prevention and management of disease symptoms and treatment-related side effects (e.g., mouth care, adhering to an antiemetic schedule, hydration).
- 5.2e Implements interventions related to the management of disease- and treatment-related side effects, including alterations in the following:
  - i) bone marrow function (e.g., transfusions, antibiotics)
  - ii) mobility (e.g., assistive devices)
  - iii) skin integrity (e.g., topical medication, skin care)
  - iv) neurological status (e.g., pharmacological intervention)
  - v) mental status (e.g., pharmacological intervention, referrals)
  - vi) circulation (e.g., elevation, compressive therapy)
  - vii) pulmonary function (e.g., oxygen therapy, pharmacological intervention)
  - viii) gastrointestinal function (e.g., pharmacological intervention, nutritional counselling)
  - ix) metabolic function (e.g., monitoring electrolytes, pharmacological intervention)
  - x) urinary function (e.g., insertion and monitoring of catheters and drains)
- 5.2f Assesses the patient for immune-related adverse effects using a standardized grading system.
- 5.2g Implements interventions to manage immune-related adverse effects (e.g., increased monitoring, pharmacological intervention).
- 5.2h Facilitates patient learning regarding immune-related adverse effects and interventions (e.g., the need to consult with an organ-specific specialist).

- 5.2i Identifies common toxicities related to systemic treatment drug classes (e.g., cardiotoxicity with anthracycline, pulmonary toxicity with bleomycin, peripheral neuropathy with vinca alkaloids).
- 5.2j Assesses the patient's pain.
- 5.2k Implements pharmacological and/or non-pharmacological interventions related to the management of pain.
- 5.2l Advocates for appropriate pain-control interventions for clients who use substances.
- 5.2m Delivers appropriate pain-control interventions for clients who use substances.
- 5.2n Evaluates the effectiveness of interventions used in the management of disease- and treatment-related side effects, immune-related adverse effects and pain.

## **VI. Supportive Care**

### **6.1 Patient Diversity**

*The oncology nurse:*

- 6.1a Assesses the impact of patient diversity and family dynamics along the cancer care continuum (e.g., age of the patient, psychosocial, spiritual, cultural, socioeconomic, LGBTQ2+).
- 6.1b Facilitates effective coping strategies in relation to the cancer experience.
- 6.1c Facilitates the patient's role as a partner in planning care along the cancer continuum.
- 6.1d Facilitates interprofessional communication in order to tailor the treatment plan and resources based on the patient's individual needs.
- 6.1e Considers health literacy when providing information, education and care along the cancer continuum.
- 6.1f Demonstrates an awareness of the range of Indigenous health knowledges and practices (traditional and non-traditional) among Indigenous peoples.

### **6.2 Sexuality and Intimacy**

*The oncology nurse:*

- 6.2a Demonstrates an understanding of factors related to the patient, disease and treatments that may affect sexuality and intimacy (e.g., patient's lifestyle and attitudes, body image, safety, sexual function, role changes).
- 6.2b Assesses factors related to the patient, disease and treatments that may affect sexuality and intimacy.
- 6.2c Facilitates patient learning regarding the impact of disease and treatment related to sexuality and intimacy.
- 6.2d Implements interventions regarding alterations in the following:
  - i) body and self-image (e.g., alopecia, fatigue)
  - ii) sexual function (e.g., erectile dysfunction, vaginal dryness)
  - iii) safe sexual practice (e.g., cytotoxic body fluids)



iv) fertility (e.g., diminished or loss of fertility)

- 6.2e Evaluates the effectiveness of the interventions implemented to ensure that the patient's sexuality and intimacy needs are met.

### **6.3 Patient and Family Support Throughout the Cancer Continuum**

*The oncology nurse:*

- 6.3a Provides patient and family-centred care (e.g., for pediatric patients).
- 6.3b Assesses the patient and/or family for level of distress, quality of life and coping abilities.
- 6.3c Facilitates self-care in managing stressors along the cancer continuum (e.g., developing support systems, journaling).
- 6.3d Provides education to the patient and family regarding cancer support services and advocacy groups.
- 6.3e Evaluates the effectiveness of services to meet the patient's supportive care needs.

### **6.4 Rehabilitation**

*The oncology nurse:*

- 6.4a Assesses the patient's physical and psychological adaptation to the changes caused by cancer and/or treatment (e.g., lymphedema management, oxygen therapy, speech therapy, physical therapy, occupational therapy, home care).
- 6.4b Implements interventions to assist the patient in achieving optimum function and quality of life.
- 6.4c Evaluates the effectiveness of interventions for the patient's optimal functioning and quality of life.

### **6.5 Survivorship**

*The oncology nurse:*

- 6.5a Recognizes the unique needs of cancer survivors:
  - i) physical, chronic and late side effects (e.g., disability, drug-related toxicity)
  - ii) psychosocial late effects (e.g., body image, fear of recurrence, cognitive changes)
  - iii) developmental-specific issues (e.g., pediatric, young adults, adults, older adults)
  - iv) risk of secondary malignancy
  - v) ongoing treatment (e.g., maintenance therapy)
- 6.5b Provides education regarding the need for surveillance and primary care follow-up.
- 6.5c Provides education regarding healthy lifestyle choices and risk-reduction activities (e.g., tobacco cessation, diet, exercise).

## 6.6 End-of-Life Care

*The oncology nurse:*

- 6.6a Determines the patient and family goals for end-of-life care (e.g., hospice care, home care).
- 6.6b Recognizes the unique needs of the patient and family transitioning to end-of-life care.
- 6.6c Implements interventions for end-of-life symptom management based on the patient's goals for care.

## 6.7 Palliative Approach to Care

*The oncology nurse:*

- 6.7a Understands key elements of the palliative approach to care along the cancer continuum.
- 6.7b Explains palliative supports and treatments to the patient and family.
- 6.7c Facilitates ongoing discussions with the patient and family regarding their goals of care (e.g., living with advanced cancer, substitute decision-maker, advance health-care directive).
- 6.7d Assesses the patient's quality of life in relation to their palliative care.

## 6.8 Medical Assistance in Dying (MAiD)

*The oncology nurse:*

- 6.8a Identifies the nurse's role and professional responsibilities related to MAiD.
- 6.8b Identifies available resources to support inquiries and requests related to MAiD.
- 6.8c Understands that nurses must not impose their own views and values about MAiD onto others nor use their position to influence, judge or discriminate against those whose values are different from their own.
- 6.8d Adheres to current legislation, professional regulatory standards and employer policies regarding MAiD, including IT security safeguards that protect and preserve the privacy of the person.
- 6.8e Understands that when there is conscientious objection to MAiD, care unrelated to the activities associated with MAiD must continue to be provided.

# VII. Continuity of Care

*The oncology nurse:* 7.1 Identifies and advises the interprofessional team of system issues impeding the patient's continuity of care (e.g., wait times, transition points, non-insured costs).

- 7.2 Identifies the personal issues of the patient and family that impede the continuity of care (e.g., travel, financial issues, child care, caregiving).
- 7.3 Assists the patient and family to navigate the health-care system.

- 7.4 Collaborates with the interprofessional oncology health-care team to ensure continuity of care (e.g., referral, coordination of treatment, consultation).
- 7.5 Initiates referral to supportive services to optimize patient care (e.g., speech therapy, physical therapy, sexual health, fertility management, spiritual resources, community resources).
- 7.6 Collaborates with external health professionals to assure continuity of care (e.g., survivor care, rehabilitation).

## **VIII. Ethics, Legal Obligations and Research**

*The oncology nurse:*

- 8.1 Recognizes and understands the implications of ethical principles along the cancer continuum (e.g., autonomy, beneficence, non-maleficence, justice).
- 8.2 Applies an ethical framework to address ethical dilemmas (e.g., family/substitute decision-maker involvement, confidentiality, allocation of resources, artificial nutrition and hydration, negotiating goals of care, end of life, do not resuscitate/allow natural death, voluntary consent, MAiD requests).
- 8.3 Recognizes and understands the legal obligations along the cancer continuum regarding decision-making (e.g., informed consent, substitute decision-makers, care directives, guardianship, adult protection).
- 8.4 Critically reflects on their own beliefs and values about substance use and other high-risk behaviours.
- 8.5 Understands the purpose and design of research studies, including the types and phases of clinical trials (e.g., eligibility criteria).
- 8.6 Recognizes the unique care requirements of patients participating in a clinical trial (e.g., following protocols).
- 8.7 Refers the patient to the appropriate health-care provider to answer questions and/or ensure understanding of clinical trials and research studies.