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.¹ 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

A working group of seven highly experienced oncology nurses from various regions in Canada revised and updated the current list of competencies during a five-day meeting. The final list of competencies was approved by the Oncology Nursing Certification Exam Committee.

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¹ 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 environment:

1. The oncology nurse provides treatment and supportive care in a wide variety of practice settings across the cancer continuum. The practice settings may include the home, hospital, cancer treatment centre, ambulatory clinics, long-term care facilities, the community, palliative care/hospice units, rehabilitation, educational institutions and research facilities.

2. The oncology nurse may use various telecommunication technologies such as telephone, e-mail and video conferencing (e.g., symptom management clinics) to support the patient throughout the cancer continuum.

The patient:

1. Refers to the person(s) toward whom nursing activities are directed including the individual, the individual’s family and the individual’s community. The family and community are defined by the patient.

2. Includes those persons at risk for developing cancer, persons with cancer and persons who have survived cancer.

3. Includes persons of all ages, stages of growth and development and diverse backgrounds, (e.g., gender, sexual orientation, religions, spiritual beliefs, socio-economic status, philosophies, geographical location and politics).

4. Experiences various aspects of cancer care that may include health promotion, prevention, screening, early detection, pre-diagnosis, diagnosis, treatment, rehabilitation, survivorship, recurrent disease, secondary malignancies, palliation, end-of-life care and grieving process.

5. May enter the cancer continuum at various points and may move through the continuum at a different pace from other patients.

The oncology nurse:

1. Respects patients’ rights, the patient’s perception of cancer and self-determination of care.

2. Understands the impact of the determinants of health on the patient’s care, resources and health outcomes.
3. Demonstrates awareness of and observes boundaries of practice in accordance with professional and organizational role, descriptions, guidelines and standards.

4. Recognizes that beliefs, values and life experiences can influence and affect the therapeutic relationship within the context of cancer care.

5. Demonstrates respect for the uniqueness of the patient including recognition of diversity.

6. Utilizes principles of learning when educating patients.

7. Advocates for and facilitates the patient’s preferred role in decision-making throughout the cancer continuum.

8. Works collaboratively within an interprofessional team to provide patient-centred care.

9. Facilitates the patient’s navigation and transition through the multi-faceted, complex cancer continuum and health-care system as appropriate.

10. Integrates evidence-based research and/or best practice and acknowledges a responsibility to promote research and/or best practice.

11. Understands the impact of health and organizational policy in the delivery of cancer services.

12. Provides evidence-informed care while maintaining professional competence through ongoing education, research and skill development.

13. Recognizes the personal psychological impact of caring for the oncology patient and family and the need to seek support when appropriate.

14. Shows professional accountability to guide, mentor and share experiences with nurses, students and other health-care providers.

15. Responds to the changing population and demographics (e.g., geriatric, bariatric).

16. Recognizes the importance of documentation throughout the continuum of care.

**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.
Percentage of Competencies in Each Group

The following table presents the number and the percentage of competencies in each category.

Table 1: Percentage of Competencies in Each Group

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of competencies</th>
<th>Percentage of the total number of competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention, Early Detection and Screening</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>Diagnosis and Staging of Cancer</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>Knowledge of Cancer Diseases</td>
<td>38</td>
<td>20%</td>
</tr>
<tr>
<td>Treatment Modalities</td>
<td>34</td>
<td>18%</td>
</tr>
<tr>
<td>Symptom and Treatment Management</td>
<td>53</td>
<td>28%</td>
</tr>
<tr>
<td>Supportive Care</td>
<td>37</td>
<td>20%</td>
</tr>
<tr>
<td>Continuity of Care</td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>Ethics, Legal Obligations and Research</td>
<td>8</td>
<td>4%</td>
</tr>
</tbody>
</table>

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 2: Competency Sampling

<table>
<thead>
<tr>
<th>Categories</th>
<th>Approximate weights in the total examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention, Early Detection and Screening</td>
<td>3-11%</td>
</tr>
<tr>
<td>Diagnosis and Staging of Cancer</td>
<td>2-10%</td>
</tr>
<tr>
<td>Knowledge of Cancer Diseases</td>
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<tr>
<td>Treatment Modalities</td>
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</tr>
<tr>
<td>Ethics, Legal Obligations and Research</td>
<td>3-11%</td>
</tr>
</tbody>
</table>
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 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, 60 to 70 per cent of the questions are presented as independent questions and 30 to 40 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.2

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).

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

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

<table>
<thead>
<tr>
<th>Cognitive Ability Level</th>
<th>Percentage of questions on Oncology Nursing Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge/Comprehension</td>
<td>15-25%</td>
</tr>
<tr>
<td>Application</td>
<td>50-60%</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>20-30%</td>
</tr>
</tbody>
</table>

Contextual Variables

Patient Age and Gender: Two of the contextual variables specified for the Oncology Nursing Certification Exam are the age and gender 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 4 as percentage ranges, serve as guidelines for test development.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage of questions on the Oncology Nursing Certification Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>0 to 18 years</td>
<td>2-5%</td>
</tr>
<tr>
<td>19 to 64 years</td>
<td>17-26%</td>
</tr>
<tr>
<td>65+ years</td>
<td>21-29%</td>
</tr>
</tbody>
</table>
**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, ASI 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 Exam Development Guidelines

### Structural Variables

<table>
<thead>
<tr>
<th>Examination Length and Format</th>
<th>Approximately 165 multiple choice questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question Presentation</strong></td>
<td></td>
</tr>
<tr>
<td>60-70% independent questions</td>
<td></td>
</tr>
<tr>
<td>30-40% case-based questions</td>
<td></td>
</tr>
<tr>
<td><strong>The Cognitive Domain</strong></td>
<td></td>
</tr>
<tr>
<td>Knowledge/Comprehension</td>
<td>15-25% of questions</td>
</tr>
<tr>
<td>Application</td>
<td>50-60% of questions</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>20-30% of questions</td>
</tr>
<tr>
<td><strong>Competency Categories</strong></td>
<td></td>
</tr>
<tr>
<td>Prevention, Early Detection and Screening</td>
<td>3-11% of the questions</td>
</tr>
<tr>
<td>Diagnosis and Staging of Cancer</td>
<td>2-10% of the questions</td>
</tr>
<tr>
<td>Knowledge of Cancer Diseases</td>
<td>12-18% of the questions</td>
</tr>
<tr>
<td>Treatment Modalities</td>
<td>20-27% of the questions</td>
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<td>Continuity of Care</td>
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<tr>
<td>Ethics, Legal Obligations and Research</td>
<td>3-11% of the questions</td>
</tr>
</tbody>
</table>

### Contextual Variables

<table>
<thead>
<tr>
<th>Age and Gender</th>
<th>Age Group</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child &amp; Adolescent (0-18 years old)</td>
<td>2-5%</td>
<td>2-5%</td>
</tr>
<tr>
<td></td>
<td>Adult (19-64 years old)</td>
<td>17-26%</td>
<td>17-26%</td>
</tr>
<tr>
<td></td>
<td>Older Adult (65+ years old)</td>
<td>21-29%</td>
<td>21-29%</td>
</tr>
<tr>
<td>Patient Culture</td>
<td>Questions are included that measure awareness, sensitivity and respect for different cultural values, beliefs and practices, without introducing stereotypes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient Health Situation</td>
<td>In the development of the Oncology Examination, the patient is viewed holistically. The patient health situations presented also reflect a cross-section of health situations encountered by oncology nurses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health-Care Environment</td>
<td>It is recognized that oncology nursing is practised mainly in a hospital setting but that it can also be practised in a variety of other settings. The health-care environment is specified only where it is required for clarity or in order to provide guidance to the candidate.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 provincial, national and global level related to 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 genetics (e.g., family history, age, gender)
   1.2b lifestyle (e.g., smoking, diet, obesity)
   1.2c environmental exposures (e.g., occupational hazards, sun exposure, previous cancer treatments)
   1.2d comorbidities (e.g., inflammatory bowel syndrome)

1.3 Understands the purpose and implications of genetic testing, counselling and resources.

1.4 Provides teaching and support regarding genetic testing and counselling.

1.5 Prepares and/or monitors patients undergoing cancer screening and/or diagnostic tests.

1.6 Promotes public participation in prevention, screening and early detection (e.g., screening programs, self-assessment, HPV immunization).

II. Diagnosis and Staging of Cancer

The oncology nurse:

2.1 Integrates the findings of the history and physical exam, diagnostic investigations (e.g., surgery, radiological, tumour receptor status) and tumour markers (e.g., PSA, CA-125, CEA) as related to the diagnosis and staging of cancer.

2.2 Demonstrates an understanding of the pathophysiology of cancer (e.g., carcinogenesis, cell cycle, tumour growth, metastatic sites).

2.3 Demonstrates an understanding of how cancer is diagnosed (e.g., biopsy, surgery).

2.4 Assesses the patient’s understanding of the diagnosis and staging.

2.5 Facilitates patient learning regarding the diagnosis and staging based on the assessment using appropriate methods or tools.
III. Knowledge of Cancer Diseases

The oncology nurse:

3.1 Demonstrates an understanding of the clinical presentation, risk factors and prognostic factors in relation to the management of the following more common cancer diseases in adults. (Approximately 25% of the questions in this section)
   3.1a breast
   3.1b colorectal
   3.1c genitourinary (bladder, kidney, testicular)
   3.1d gynecological (ovarian, uterine, cervical)
   3.1e leukemia
   3.1f lung
   3.1g lymphomas
   3.1h melanoma
   3.1i prostate
   3.1j head and neck

3.2 Demonstrates an understanding of the standard treatments in relation to the management of the following more common cancer diseases in adults. (Approximately 30% of the questions in this section)
   3.2a breast
   3.2b colorectal
   3.2c genitourinary (bladder, kidney, testicular)
   3.2d gynecological (ovarian, uterine, cervical)
   3.2e leukemia
   3.2f lung
   3.2g lymphomas
   3.2h melanoma
   3.2i prostate
   3.2j head and neck

3.3 Demonstrates an understanding of the clinical presentation, risk factors and prognostic factors in relation to the management of the following less common cancer diseases in adults. (Approximately 10% of the questions in this section)
   3.3a brain and central nervous system
   3.3b gastrointestinal
   3.3c HIV-related
   3.3d myelomas
3.4 Demonstrates an understanding of the standard treatments in relation to the management of the following less common cancer diseases in adults. (Approximately 20% of the questions in this section)
3.4a brain and central nervous system
3.4b gastrointestinal
3.4c HIV-related
3.4d myelomas

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. (Approximately 5% of the questions in this section)
3.5a bone and soft tissue sarcomas
3.5b brain and central nervous system
3.5c leukemias
3.5d lymphomas
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. (Approximately 10% of the questions in this section)
3.6a bone and soft tissue sarcomas
3.6b brain and central nervous system
3.6c leukemias
3.6d lymphomas
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 or palliation).

4.1b Assists the patient’s understanding of the role of surgery in the treatment plan.

4.1c Facilitates patient learning regarding the expected outcomes of surgical interventions and pathological findings (e.g., ostomy care, disturbances in body image).

4.1d Assesses for risk of physical and/or psychosocial complications related to cancer surgery (e.g., thromboembolic events, lymphedema, body image disturbance, psychological distress).

4.1e Implements interventions to decrease the incidence and severity of complications related to cancer surgery (e.g., wound care, pharmacological intervention, psychosocial impact).
4.1f Assists the patient to understand the pathologic findings of the surgical intervention.

4.1g Facilitates patient learning regarding potential future treatment modalities based on the patient’s surgical outcomes.

### 4.2 Systemic Therapy: Chemotherapy, Biological Agents and Hormone and Targeted Therapies

**The oncology nurse:**

4.2a Understands the role of systemic therapy including chemotherapy, biological agents and hormone and targeted therapies (e.g., cure, control or palliation, adjuvant, neoadjuvant).

4.2b Demonstrates an understanding of the mechanism of action and side effects of systemic cancer therapy drugs.

4.2c Applies the principles of safe administration of systemic therapy (e.g., drug dose calculation using BSA/AUC, sequence of administration).

4.2d Applies the principles of safe handling for cytotoxic hazardous agents and their waste (e.g., tubing and body fluids, appropriate personal protective equipment).

4.2e Assists patients to understand the role of systemic therapy in their treatment plan (e.g., cure, control, palliation).

4.2f Facilitates patient learning regarding the outcomes of systemic therapy involving the immediate, early, late and delayed side effects (e.g., anaphylaxis, gastrointestinal dysfunction, myelosuppression, flu-like symptoms, skin reactions).

4.2g Implements interventions to decrease the incidence and severity of side effects and complications related to systemic therapy (e.g., hydration, medication, sperm banking).

### 4.3 Radiation Therapy

**The oncology nurse:**

4.3a Understands the role of radiation therapy in cancer treatment (i.e., cure, control or palliation).

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 Facilitates patient learning regarding the immediate, early, late and delayed side effects of radiation therapy (e.g., skin reactions, fatigue, cognitive dysfunction).
4.3e Facilitates patient and care provider learning regarding radiation protection and precautions (e.g., radioactive implants, isotopes).

4.3f Implements interventions to decrease the incidence and severity of side effects and complications related to radiation therapy (e.g., skin reaction protocol, pain and symptom management).

4.3g Implements radiation protection precautions and principles of safe handling/disposal of radioactive sources (e.g., time, distance and shielding).

4.4 Concurrent Combination Therapy

The oncology nurse:

4.4a Understands the role of concurrent combination therapy (e.g., concurrent chemotherapy and radiation).

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

4.5 Hematopoietic Stem Cell Transplant

The oncology nurse:

4.5a Understands the roles of hematopoietic stem cell transplants.

4.5b Understands the mechanism of action and principles of hematopoietic stem cell transplants.

4.5c Assists patient to understand the role of hematopoietic stem cell transplant in the treatment plan.

4.5d Recognizes the acute, chronic and late side effects of hematopoietic stem cell transplant (e.g., graft vs. host disease, veno-occlusive disease).

4.5e Initiates appropriate referrals to ensure that the patient receives comprehensive education regarding hematopoietic stem cell transplant (e.g., diet, social work, counselling).
4.5f Implements interventions to decrease the incidence and severity of side effects and complications related to bone marrow and hematopoietic transplant on an ongoing basis (e.g., hydration, transfusion, prophylactic medication).

4.6 Complementary Alternative Health Care

The oncology nurse:

4.6a Respects individual choices related to complementary alternative health care (e.g., massage, herbal remedies, acupuncture).

4.6b Facilitates patient learning regarding the importance of reporting the use of complementary alternative health care (e.g., antioxidants, high-dose vitamins, herbal remedies).

4.6c Uses interventions to reduce the potential interaction of complementary alternative therapies with conventional treatment modalities.

V. Symptom and Treatment Management

5.1 Oncologic Emergencies

The oncology nurse:

5.1a Identifies the clinical presentation and risk factors for the following metabolic oncologic emergencies.
   i) anaphylaxis
   ii) disseminated intravascular coagulation (DIC)
   iii) febrile neutropenia and sepsis
   iv) hypercalcemia
   v) syndrome of inappropriate antidiuretic hormone (SIADH)
   vi) tumour lysis syndrome

5.1b Identifies 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 and associated self-care strategies.
5.1d Implements interventions in response to the following metabolic oncologic emergencies.
   i) anaphylaxis
   ii) disseminated intravascular coagulation (DIC)
   iii) hypercalcemia
   iv) febrile neutropenia and sepsis
   v) syndrome of inappropriate antidiuretic hormone (SIADH)
   vi) 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 Treatment Delivery Devices and Systems

The oncology nurse:

5.2a Demonstrates safe and effective use of clinical procedures and technologies.

5.2b Understands the role of treatment delivery devices (e.g., venous access devices, infusion pumps).

5.2c Assesses the patient for the appropriate venous access devices.

5.2d Facilitates patient learning regarding the care, complications and safe management of treatment delivery devices.

5.2e Manages care and maintenance of the treatment delivery device for the patient.

5.3 Disease and Treatment-Related Side Effects and Symptom Management

The oncology nurse:

5.3a Assesses the patient for disease symptoms and treatment-related side effects, including alterations in the following.
   i) bone marrow function (e.g., myelosuppression)
   ii) mobility (e.g., safety, range of motion)
   iii) skin integrity (e.g., skin reactions, wounds)
   iv) neurological status (e.g., seizures, peripheral neuropathy)
   v) mental status (e.g., confusion, depression)
   vi) circulation (e.g., edema, pericardial effusion)
   vii) ventilation (e.g., dyspnea, effusion, fibrosis)
   viii) gastrointestinal function (e.g., bowel function, nausea, vomiting)
   ix) metabolic function (e.g., electrolyte, endocrine imbalances)
   x) urinary function (e.g., cystitis, anuria)
5.3b Assesses the patient’s pain and distress.

5.3c Understands the etiologic factors of the symptom and/or side effects related to the individual patient.

5.3d Facilitates patient learning regarding prevention and management of disease symptoms and treatment-related side effects (e.g., oral care, adhering to an antiemetic schedule, hydration).

5.3e Implements interventions related to the management of disease symptoms and treatment-related side effects including alterations in the following.
   i) bone marrow function (e.g., transfusions, antibiotics)
   ii) mobility (e.g., ambulation, assistive devices)
   iii) skin integrity (e.g., malignant and non-malignant wounds, skin reactions)
   iv) neurological status (e.g., medications, orientation)
   v) mental status (e.g., medications, referrals)
   vi) circulation (e.g., pleural, ascites drainage)
   vii) ventilation (e.g., oxygen therapy, medications)
   viii) gastrointestinal function (e.g., medications, nutritional counselling)
   ix) metabolic function (e.g., electrolytes, medications)
   x) urinary function (e.g., catheters and drains)

5.3f Implements pharmacological and/or non-pharmacological interventions related to the management of pain and distress.

5.3g Conducts ongoing evaluation of the effectiveness of interventions used in the management of disease symptoms and treatment-related side effects.

VI. Supportive Care

6.1 Patient Diversity (e.g., psychosocial, spiritual, cultural)

The oncology nurse:

6.1a Assesses the impact of the patient’s diversity (e.g., psychosocial, spiritual and cultural) on the illness.

6.1b Facilitates effective coping strategies in relation to the cancer experience.

6.1c Assesses on an ongoing basis the patient’s preferred role in decision-making along the cancer continuum.

6.1d Tailors the treatment plan and resources based on the patient’s individual needs.

6.1e Supports and/or advocates for patients in their decision-making.
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 cancer related to sexuality and intimacy.

6.2d  Selects and implements interventions related to the patient’s needs regarding alterations in the following.
   i) body and self-image
   ii) sexual function
   iii) sexual safety (e.g., cytotoxic body fluids)
   iv) fertility (e.g., drug teratogenicity)

6.2e  Initiates referral to supportive services to ensure comprehensive patient care related to alterations in the following.
   i) body and self-image
   ii) sexual function
   iii) fertility (e.g., sperm banking)

6.3  Patient and Family Support Throughout the Cancer Continuum

The oncology nurse:

6.3a  Assesses the patient’s perspectives and concerns (e.g., distress).

6.3b  Assesses the patient for level of distress, quality of life and coping abilities (e.g., burnout).

6.3c  Facilitates the development of self-care in managing stressors within the cancer continuum (e.g., developing support systems, journaling).

6.3d  Enhances the patient’s and family’s awareness of cancer support services and advocacy groups.
6.3e Initiates referral to supportive services to optimize patient care.
   i) therapy (e.g., speech, physical, occupational therapy, social work)
   ii) practical (e.g., travel, financial, insurance plan, home care)
   iii) resources (e.g., programs such as “Look Good Feel Better,” spiritual resources)

6.3f Evaluates on an ongoing basis the effectiveness of the patient’s care in relation to expected outcomes and quality of life and modifies the plan as necessary.

6.3g Adapts nursing interventions and plan of care based on an ongoing evaluation.

6.4 Rehabilitation

The oncology nurse:

6.4a Assesses the patient’s physical and psychological adaptation to living with cancer.

6.4b Uses interventions to assist the patient to achieve optimum quality of life.

6.4c Engages members of the interprofessional team to assist the patient’s rehabilitation.

6.5 Survivorship

The oncology nurse:

6.5a Recognizes the unique issues of cancer survivors.
   i) physical late effects (e.g., disability, drug-related toxicity)
   ii) psychosocial late effects (e.g., body image, fear of recurrence, cognitive disabilities)
   iii) age-specific issues (e.g., pediatric cancer, young adult, older adult)
   iv) risk of secondary malignancy

6.5b Facilitates learning for cancer survivors regarding the need for appropriate follow-up.

6.5c Refers the cancer survivor to appropriate information and resources to facilitate post-treatment adaptation (e.g., socio-economic, cognitive function, sexual health).

6.6 Palliation and End-of-Life Care

The oncology nurse:

6.6a Explains the goals of palliative supports and treatments to the patient.

6.6b Recognizes the unique needs of the patient transitioning to end of life.

6.6c Assesses the patient’s quality of life in relation to the goal of palliative care.

6.6d Implements interventions for symptom management based on the patient’s goal for care.
VII.  Continuity of Care

The oncology nurse:

7.1 Identifies and advises the health-care team of system issues impeding the patient’s continuity of care (e.g., wait times, multi-institutional involvement, non-insured costs).

7.2 Assists the patient to navigate the health-care system (e.g., transfer of care, accessing social support systems, care plan).

7.3 Communicates and collaborates with the interprofessional health-care team to ensure continuity of care (e.g., verbal and written care plan, consultation).

7.4 Assists the patient to access information and/or the appropriate health-care professionals to facilitate continuity of care.

VIII. Ethics, Legal Obligations and Research

The oncology nurse:

8.1 Recognizes and understands the implications of ethical principles in the care of the patient impacted by cancer (e.g., autonomy, beneficence, non-maleficence, justice).

8.2 Applies the 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).

8.3 Recognizes and understands the legal obligations related to the care of patients impacted by cancer with regards to decision-making (e.g., informed consent, substitute decision-makers, care directives, guardianship, adult protection).

8.4 Understands the purpose and design of research studies including the types and phases of clinical trials.

8.5 Recognizes the unique care requirements of patients undergoing a clinical trial.

8.6 Understands ethical principles associated with research.

8.7 Identifies patient populations that may be eligible for clinical trials and other research.

8.8 Refers the patient to the appropriate health-care provider to answer questions and/or ensure understanding of clinical trials and research studies.