



Nursing Knowledge and Practice Framework and Toolkit for Cancer Care



CANO
ACIO

Canadian Association of Nurses in Oncology
Association canadienne des infirmières en oncologie

Table of Contents

CANO NURSING KNOWLEDGE AND PRACTICE FRAMEWORK FOR CANCER CARE	3
Executive Summary.....	3
MESSAGE FROM THE PRESIDENT	4
ACKNOWLEDGEMENTS	4
PART 1: INTRODUCTION	5
Context.....	5
Purpose	5
Overview	5
Development Process	6
Audience	6
Assumptions	6
Guiding Principles.....	6
PART 2: FRAMEWORK OVERVIEW	8
CANO Nursing Knowledge and Practice Framework for Cancer Care	8
Framework Definitions.....	9
PART 3: STANDARDS	10
1. Comprehensive Health Assessment.....	10
2. Supportive and Therapeutic Relationships	12
3. Management of Cancer Symptoms and Treatment Side Effects	14
4. Teaching and Coaching.....	16
5. Facilitating Continuity of Care/Navigating the System	18
6. Decision Making and Advocacy.....	20
7. Professional Practice and Leadership.....	22
STAKEHOLDER INPUT	24
CONCLUSION.....	24
DEFINITIONS	25
REFERENCES.....	26

CANO Nursing Knowledge and Practice Framework for Cancer Care

Executive Summary

The incidence and prevalence of cancer is increasing and many patients are living longer. These patients navigate through a variety of health care settings and are cared for by multiple providers throughout their continuum of care. Although the *Practice Standards and Competencies for the Specialized Oncology Nurse* has existed since 2006, standards and competencies are lacking for nurses outside the Registered Nurse role, and/or working outside a specialized oncology setting. The *Nursing Knowledge and Practice Framework for Cancer Care* highlights oncology knowledge expected of all nurses irrespective of where they work and is meant for use by nurses, leaders, educators, and decision makers (*for Framework see figure 1*).

CANADIAN ASSOCIATION OF NURSES IN ONCOLOGY (CANO/ACIO)

The Canadian Association of Nurses in Oncology/ Association canadienne des infirmières en oncologie (CANO/ACIO) is the national professional organization for oncology nurses established in 1985. The mission of CANO/ACIO is to, “advance oncology nursing excellence through practice, education, research and leadership for the benefit of all Canadians.” CANO/ACIO is always committed to this mission through the development of standards and competencies, annual conferences, an oncology nursing journal, position statements, and practice resources. CANO/ACIO first developed Standards of Care in 2001, which focused on the care of people and families living with cancer. In 2006, CANO/ACIO finalized the Practice Standards and Competencies for the Specialized Oncology Nurse which details the foundational requirements of specialized oncology nursing practice with care primarily focused in oncology (CANO, 2001, 2006). These standards and competencies have been widely implemented in oncology care settings, which influence nursing practice standards for organizations and support individual nurses to build their practice through self-assessment. The standards were used to develop and inform the Canadian Nurses Association (CNA) certification exam for the specialized oncology nurse (CON(C)). Additionally, they are the foundation of other CANO/ACIO standards developed for specific cancer treatment modalities.

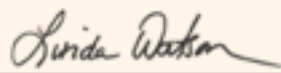
Message from the President

Cancer Care has long been thought of as a specialty area, that nurses could choose to specialize in, and when they made that choice they would receive the required education and training to practice safely in the cancer care environments, but this is no longer the case. The growing incidence and prevalence of cancer in Canada is putting significant strain on the Canadian cancer care system which is resulting in more and more cancer care services being transitioned to ambulatory settings in the community or to primary care. Further, with the advent of new types of cancer therapeutics with unique side effect profiles and more and more oral agents, the importance of ensuring that all nurses have some level of cancer specific knowledge is growing.

As the President of CANO/ACIO I am very proud to share this *Nursing Knowledge and Practice Framework for Cancer Care* with you. As the national professional association for oncology nurses in Canada, CANO/ACIO recognized the need to identify foundational cancer nursing knowledge that all nurses should have, regardless of work setting or level of specialization, to care for individuals with cancer along the continuum. To identify how best to meet this need a working group was established to articulate the breadth of cancer nursing roles and knowledge levels that collectively are required to provide high quality services to meet the needs of people at risk for and living with cancer, and ultimately reduce the burden of cancer in Canada.

We hope that this resource provides a helpful foundation to rethink and reimagine how nurses are prepared and supported to care for cancer patients regardless of their practice setting or educational preparation. We hope that you find the framework Informative and useful as we partner in new ways across all of healthcare to ensure we have the right human resources and educational preparation in the health care system to meet the growing cancer care needs of Canadians.

Sincerely,



Linda

Acknowledgements

This framework is adapted from Cancer Australia EdCaN Framework, A National Professional Development Framework (2009) and CANO/ACIO would like to thank them for allowing us to adapt the framework.

CANO/ACIO would like to acknowledge all the members and stakeholders who volunteered their time to provide input and insights in this initiative. We would also like to thank the commitment and dedication of the Professional Practice Committee for their work in developing the document.

CANO PROFESSIONAL PRACTICE COMMITTEE:

Allyson Nowell, *RN, MSc, CON(C)*, Ontario.
Director-at-Large, Chair

Colleen Campbell *RN-EC, MN, CON(C)*, Ontario. *Co Chair*

Amber Killam, *RN, MScN, CON(C)*, Ontario.

Kara Jamieson *RN, MN, CON(C)*, Nova Scotia.

Kira Cooksley, *RN, MN, CPHON*, Nova Scotia.

Krista Rawson, *RN, MN, NP*, Alberta.

Leslie Marvell, *RN BScN CHPCN(c) CON(c)*, Ontario.

Liz Ross, *RN, BScN, MHS*, Alberta.

Lorraine Martelli, *MN, RN(EC)*, Ontario.

Lynne Jolicoeur, *RN, MScN, CON(C)*, Ontario.

Meighan Kozlowski, *RN, BSN, CON(C)*, Saskatchewan.

Shauna Houshmand, *RN, MN, CON(C)*, Saskatchewan.

Sydney Farkas, *RN, MN, CON(C)*, Alberta.

Pat McCarthy *MSc(A), RN(EC)*, Ontario, Project Coordinator.

Part 1: Introduction

Context

The needs of individuals living with cancer, and the cancer care system have become increasingly complex within Canada and internationally. The incidence, prevalence and mortality of cancer is increasing, with 1 in 2 Canadians expected to develop cancer during their lifetime and an increasing prevalence of cancer with 60% of individuals living with cancer 5 years after their diagnosis (CCS, 2013, 2014 & 2018). The impact of cancer on individuals and their families is multidimensional. Cancer affects physical, psychological, social, functional, and financial areas of patients' lives (Fitch 2008; Harrington, 2010; Cooley, 2000; Soothill 2002). With the care of cancer patients expanding into the community from what traditionally had been delivered within specialized cancer centres, national discussions have highlighted the need for further support to address this shift. The complexity of cancer treatments is increasing, and patients may receive care from many health care providers and organizations. As the national professional association for oncology nurses in Canada, it is essential for CANO/ACIO to articulate a framework for the breadth of cancer nursing roles that collectively provides high quality services to meet the needs of people at risk for and living with cancer, and ultimately reduce the burden of cancer in Canada.

Purpose

The purpose of this paper is to share the development of the *Nursing Knowledge and Practice Framework for Cancer Care* for use by nurses, administrators, leaders and educators. CANO/ACIO established the framework to assist nurses and leaders to identify and meet practice standards in all settings. The goal of the framework is to identify foundational cancer nursing knowledge that all nurses should have, regardless of work setting or level of specialization, to care for individuals with cancer along the continuum. CANO/ACIO believes this framework will build a better understanding of cancer knowledge and safely support the scope and cohesion of all nursing roles across the continuum of cancer care. The framework and toolkit has been developed

by the Professional Practice Committee of CANO/ACIO and endorsed by the Board of Directors of CANO/ACIO.

It is CANO's vision and intent that the *Nursing Knowledge and Practice Framework for Cancer Care* will assist nurses to identify the knowledge they require to provide the best possible care to cancer patients and their families across all settings. Furthermore and at a broader level, this framework is intended to serve as a tool for hospital and community administrators and leaders to provide a better understanding of practice knowledge required to provide high quality cancer care. It will provide guidance for decisions in scope of practice for each nursing professional involved in caring for individuals with cancer. Finally, it is hoped that nursing programs at Universities and Colleges, as well as nurse educators within clinical settings, will utilize this cancer nursing knowledge and practice framework as a basis for development of course content and continuing education.

Overview

This document introduces the *CANO Nursing Knowledge and Practice Framework for Cancer Care* (frequently abbreviated to 'the Framework'). The Framework integrates and builds on the CANO Specialized Oncology Nurse Standards and Practice. The document also provides a toolkit of information to enhance understanding of the framework as well as assist with implementation into practice. The toolkit includes a description of the Framework, with accompanying definitions, and details about components of the Framework which are divided into the 7 practice standards from CANO's Specialized Oncology Nurse Standards. These Standards include: Comprehensive Health Assessment, Supportive and Therapeutic Relationships, Management of Cancer Symptoms and Treatment Side Effects, Teaching and Coaching, Facilitating Continuity of Care and Navigating the System, Decision making and Advocacy, and Professional Practice and Leadership. Each of the standards describes high-level cancer care needs, details cancer nursing knowledge required across the Framework, and provides practice examples. The document offers guidance on how to use the Framework, and shares views and recommendations from community stakeholders.

Development Process

The development of the *Cancer Nursing Knowledge and Practice Framework* has been a multiyear initiative involving many stakeholders. Extensive research, consultation, and stakeholder engagement was conducted throughout the development of the toolkit. The Framework was originally adapted from the National Professional Development Framework for Cancer Nursing through the EdCan project from Cancer Australia (Aranda, 2009). The adaption of Australia's model and the development of the toolkit came from extensive member and stakeholder engagement over 3 years. The work was part of CANO/ACIO's Professional Practice portfolio and was initiated with member and expert input through workshops at CANO/ACIO annual conferences and via teleconferences. It has included the devoted work of the CANO/ACIO Professional Practice Committee to review existing practice standards and competencies (Aranda 2009, CASN 2015, CNA 2008, 2012, 2015, CNO 2017, NANB 2015, Ryan 2014). The framework aligns with CANO/ACIO's strategic plan and mission to advance oncology nursing excellence through practice, education, research, and leadership for the benefit of all Canadians.

Audience

This framework will inform national, provincial and organizational nursing leaders to support nurses who care for individuals with cancer. It will apprise nursing academic curricula programs to articulate foundational knowledge requirements in the care of individuals with cancer across the continuum.

Assumptions

This document builds on foundational nursing knowledge and standards articulated by the CNA and provincial nursing regulatory and professional bodies. The CANO/ACIO standards were developed with the expectation all nurses adhere to their provincial professional associations' regulatory guidelines and practices. The CANO/ACIO Framework and practice standards are specific to caring for individuals with cancer. They are meant to provide general guidance and assist in decision-making and are not meant to be prescriptive. Individuals who use this document are required to make their own determination regarding specific safe and appropriate clinical practices within organizational policy and procedures.

The term 'nurse' is used throughout this document both within the Framework and the standards. CANO/ACIO and this document use the term 'nurse' as an umbrella term to refer to a family of regulated nursing roles that provide care to individuals with cancer and not as a recognized title. Each province has nursing regulatory bodies which determine recognized nursing titles, and these vary for each province. Therefore, when reading the document, these recognized titles must be considered separately, and adapted based on setting of practice.

Guiding Principles

ONCOLOGY KNOWLEDGE:

Individuals and families at risk for and living with cancer and adverse effects from treatment will intersect with nurses in many settings that are not focused solely on cancer care. In order to ensure high quality care for these individuals in all settings, nurses across the continuum require knowledge of cancer from screening, diagnosis, treatment, through to survivorship and end-of-life. The depths of this knowledge depends on their practice setting and oncology focus, but the expectation is that all nurses will have foundational oncology knowledge that develops and specializes as the individual's care requirements and needs increase or change over time.

NURSING FAMILY:

Individuals and families at risk for and living with cancer will intersect with nurses of various roles, specialization, and competencies. The Framework recognizes the definition that nursing is a profession focused on collaborative relationships that promote the best possible outcomes for clients. These relationships may be interprofessional, involving a variety of health care professionals working together to deliver quality care within and across settings; or it may be intraprofessional, with multiple members of the same profession working collaboratively to deliver quality care within and across settings (CNO 2018).

Nursing roles included in this document as part of the nursing family are: registered nurses (RN), licensed practical nurses (LPN), registered practical nurses (RPN, as recognized in Ontario) and advanced practice nurses (APNs), which include Clinical Nurse Specialists (CNS) and Nurse Practitioners (NP) and will cross specializations from oncology, surgery,

critical care, emergency, primary care and many others. The Framework presented in this document helps build an understanding of foundational oncology knowledge required to practice in different settings, regardless of specialization (e.g. Critical Care). However, all nursing roles (RNs, LPNs/RPNs, APNs) may practice in settings that are represented in different levels of the framework. The Standards discussed in this framework assume that all nursing roles will have the foundational nursing knowledge related to their practice setting regardless of role. For example, an NP in the Primary Care setting will have foundational knowledge of cancer care described in the 'All Nurses' level of the framework whereas a LPN/RPN working in a setting dedicated to cancer care will be expected to have specialized knowledge described in the 'Some Nurses' level of the Framework.

There are numerous models to help guide decisions about appropriateness for the nursing role assigned to an individual's care. These decisions are often complex and require careful consideration of multiple aspects impacting patient care. CANO/ACIO encourages the use of tools such as:

- The Canadian Nurses Association (CNA) Staff Mix Decision-Making Framework (2012)
- The Three-Factor Framework (the client, the nurse and the environment), developed by the College of Nurses of Ontario (CNO 2018) and adopted or referenced by other provincial regulatory bodies (NANB, 2015)

It is with the assumption that oncology nursing knowledge described in this document is supported within a particular practice setting. The goal is to ensure all nursing roles optimize their scope of practice across the cancer continuum. Similar to the 3-Factor Framework and CNA Staff Mix Framework, CANO/ACIO supports decision making for nursing roles to be aligned to patient complexity and predictability with regular reassessment as increasing complexity and unpredictability may emerge over the course of treatment (including symptom burden, change in treatment plan, and changes in personal

circumstances). This document integrates examples of areas of complexity and unpredictability, linked to the Framework, to help guide decision making around nursing roles involved in caring for oncology patients.

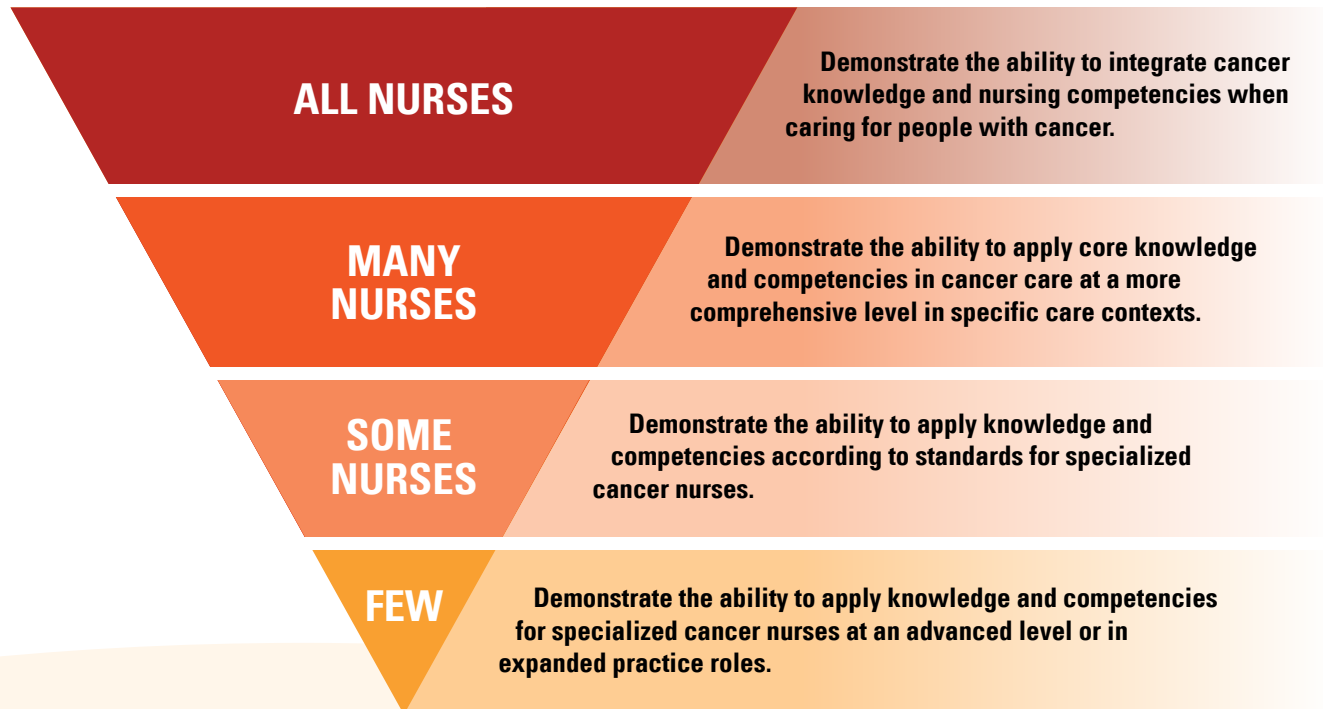
Therefore, LPN/RPN practice should be supported across all settings of the cancer continuum. In addition to the provincial regulatory bodies' requirements the LPN/RPN scope and involvement in cancer care should be determined based on patient factors of complexity and unpredictability as well as consideration of the individual nurse, environment, and organizational factors.

The Framework includes examples and descriptions of Advance Practice Nursing roles (APNs). Within this document the term APN refers to the umbrella term defined by the CNA *Advanced Nursing Practice: A Pan-Canadian Framework (2019)* which includes nurse practitioners (NP) and clinical nurse specialists (CNS). These roles cross all levels of the Framework appreciating, for example, that an NP may practice in a primary care setting with only a few individuals with cancer in their care. The cancer knowledge required for APNs across the Framework will vary like all nursing roles, with only those in specialized oncology settings falling under the "Few Nurses" portion of the Framework. However, we recognize that APNs have additional knowledge and practice expertise across all settings (CNA 2019). This is described as an, 'advanced level of clinical nursing practice that maximizes the use of graduate educational preparation, in-depth nursing knowledge and expertise in meeting the health needs of individuals, families, groups, communities and populations' (CNA 2008, CCO 2018).

There are many other roles included in the nursing family for cancer care but do not fall directly within the Framework. High quality cancer care across all settings could not happen without committed nursing managers, administrators, educators, and nurse researchers. Although these roles are not described within the *Nursing Knowledge and Practice Framework for Cancer Care*, they are essential to the uptake and implementation of the nursing knowledge described within the Framework.

Part 2: Framework Overview

CANO Nursing Knowledge and Practice Framework for Cancer Care



PURPOSE OF FRAMEWORK

To provide a framework for nursing practice and knowledge to guide care across the continuum for patients with cancer and their families.

OBJECTIVES OF FRAMEWORK

1. Highlight all nurses' contribution to high quality cancer care
2. Describe oncology nursing knowledge across the continuum of care for cancer patients (Standards and Competencies)
3. Discuss variability of nursing roles across the spectrum of cancer care

OVERVIEW OF FRAMEWORK

Underpinnings of Framework:

- Highlights oncology knowledge expected of all nurses irrespective of where they work
- To ensure best care of cancer patients it is essential to have collaboration of all nurses across continuum

Framework Definitions

ALL NURSES

Demonstrate the ability to integrate cancer knowledge and nursing competencies when caring for people with cancer.

- Spans across the cancer care continuum in non-oncology settings (i.e., community, general practice, long term care, general medicine or nurses entering practice)
- Patients being cared for with multiple comorbidities, of which cancer is one. The nurse may not be providing care for cancer specific issues, but requires foundational understanding of cancer care concepts and competencies to provide the best care to patients

MANY NURSES

Demonstrate the ability to apply core knowledge and competencies in cancer care at a more comprehensive level in specific care contexts.

- Participate more frequently or for intensive periods in the care of people affected by cancer
- May be specialized in another area and are addressing patient's specific health care needs often related to cancer (i.e. Enterostomal therapy, Interventional radiology) or their work context or setting has larger volumes of cancer patients (i.e. Surgical oncology inpatient units, palliative care)
- Nurses demonstrate capabilities at an enhanced level and require increased knowledge of specialized cancer care to apply to their role or context

SOME NURSES

Demonstrate the ability to apply knowledge and competencies according to standards for specialized cancer nurses.

- Nurses whose primary focus is with cancer care either at a specific phase of the cancer journey (i.e. radiation, Diagnostic Assessment Programs, systemic treatment) or across the cancer continuum (i.e. disease site, navigator)
- Nurses need to demonstrate specialized cancer knowledge in combination with cancer nursing experience
- See CANO Standards and Competencies for the Specialized Oncology Nurse

FEW NURSES

Demonstrate the ability to apply knowledge and competencies for specialized cancer nurses at an advanced level or in expanded practice roles.

- Nurses practice in an advanced and/or expanded practice role in cancer care with graduate level preparation (e.g. Clinical Nurse Specialists and Nurse Practitioners)
- Builds on the CANO Standards and Competencies for the Specialized Oncology Nurse and requires increased practice knowledge for providing care to patients with greater complexity, requiring advanced clinical decision making and enhanced leadership competencies impacting organizational and population levels

Part 3: Standards

1. Comprehensive Health Assessment

Individuals with cancer experience subtle and distinct health changes even prior to diagnosis. Comprehensive health assessments throughout the cancer continuum play a key role in early identification of both cancer and cancer related symptoms and complications. Knowledge about cancer and its varying treatments supports nursing practice across the continuum to perform these assessments. Nursing assessments are critical to ensure high quality cancer care and support for individuals with cancer and their families through physical, psychological, social, and emotional challenges, in all settings.

CANO STANDARD

The nurse conducts timely and comprehensive assessments of health and supportive care needs of the individual with cancer and their families across the cancer continuum using a systematic approach that is sensitive to language and culture. The nurse considers the situational context, needs, and responses of the individual and family, to determine the scope and depth of assessment.

ALL NURSES:

- perform a holistic assessment of the individual including psychosocial, spiritual and cultural domains.
- understand the potential impact of a cancer diagnosis, cancer treatments and stage of cancer on the individual/family.
- illustrate a foundational understanding of how a cancer diagnosis may impact an individual's overall health and other co-morbid conditions including assessment for cancer related symptoms.
- demonstrate foundational understanding of different cancer types (eg. solid tumours, hematological malignancies), stage of disease (eg. metastatic), and goals of care (curative vs. palliative).
- exhibit basic knowledge of cancer related treatments (Systemic Therapy, Radiation Therapy, Surgery), and their side effects.

PRACTICE SCENARIO

In assessing a resident in long-term care, the RPN/LPN notes that her patient is on an oral anti-cancer agent for metastatic breast cancer. The nurse realizes there are precautions when handling the medication and she should complete an enhanced assessment. The nurse checks the organizational policies and drug formulary and updates the care plan.

MANY NURSES:

- perform a holistic assessment of the individual including psychosocial, spiritual and cultural domains.
- demonstrate enhanced knowledge of cancer pathophysiology and specific solid tumour and hematological cancers including understanding of stage of disease (e.g. metastasis) and goals of care (curative vs. palliative).
- apply knowledge which links the impact an individual's cancer diagnosis to the specific setting and care provided.
- demonstrate enhanced knowledge of cancer related treatments (Systemic Therapy, Radiation Therapy, Surgery), and impact on the individual with cancer, including broad understanding of side effects of various treatments, and specialized understanding to those related to their area of care (eg. General Surgical Unit).

PRACTICE SCENARIO

On a general medicine floor, a nurse is caring for patient who recently received systemic treatment for lymphoma. On history and exam, the nurse finds the patient has been feeling unwell with vomiting, muscle weakness, palpitations, confusion and decreased urinary output. Realizing this is a potential oncological emergency; the nurse pages the oncology team.

SOME NURSES:

- demonstrate in-depth and specialized knowledge of all cancers and integration of knowledge into a comprehensive health assessment for individuals/families.
- develop a care plan that encompasses cancer and treatment related symptoms, psychosocial, spiritual and cultural assessment and development of targeted strategies to assist the individual/family coping with cancer.
- For full list of competencies see *Practice Standards and Competencies for Specialized Oncology Nurse*

PRACTICE SCENARIO

A nurse working on the oncology triage phone line receives a call from a family member of a patient who received chemotherapy two days ago. The patient is vomiting one to two times per day. Using evidence informed guidelines, the nurse does a complete assessment and recommends small meals, bland diet and optimizing antiemetic's. The nurse calls back in six hours to evaluate the plan of care.

FEW NURSES:

- build on specialized knowledge to incorporate advanced and targeted comprehensive health assessments.
- demonstrate advanced knowledge and management of cancer pathophysiology, treatments, complex symptoms and oncologic emergencies.
- may demonstrate in-depth knowledge of specific disease sites or treatment area.

PRACTICE SCENARIO

A 40-year-old gentleman is receiving aggressive systemic treatment for lung cancer. He presents at clinic for a pre-treatment review with the Nurse Practitioner. The patient is hypotensive, hypoxic, tachycardic and febrile. The NP orders appropriate blood work including cultures, begins fluid resuscitation and antibiotics while arranging for admission.



2. Supportive and Therapeutic Relationships

The cancer experience is typically a sudden and unexpected diagnosis which can vary from a short, rapid progression of disease, to a long, chronic disease with many treatments and health transitions. Nurses who work with individuals and families experiencing cancer require the ability to develop therapeutic relationships across a multitude of settings and support very intense periods of emotional and psychological distress.

CANO STANDARD

The nurse engages in caring and therapeutic relationships with individuals with cancer and their families. These relationships are supportive and sensitive to changing physical and psychosocial-spiritual responses.

ALL NURSES:

- demonstrate a basic understanding of the cancer experience and some of the feelings, fears, and losses that the individual/family may encounter as part of the cancer journey.
- apply knowledge of the individual's diversity and family dynamics to support the individual's adjustment to managing and living with the uncertainties of cancer as a chronic or palliative illness.
- identify individuals that require supportive, psychosocial and spiritual care (eg. depression), and refer in a timely manner.
- demonstrate an understanding of how to access supports through the cancer system as needed.

PRACTICE SCENARIO

A woman presents to an urgent care clinic with a history of mouth sores on the background of treatment for cholangiocarcinoma. The nurse asks about the patient's support systems since diagnosis and subsequently refers the patient to local social worker and dietician.

MANY NURSES:

- demonstrate enhanced understanding of the cancer experience and some of the feelings, fears, and losses that the individual/family may encounter as part of the cancer journey.
- engage in conversations with the individual/family that explore individual fears and concerns related to living with cancer (may include disease progression, mortality, dying, sexual health issues etc), and communicate with interdisciplinary teams involved in their care.
- work with individuals/families to identify support services needed to manage their cancer care and initiate referrals as appropriate, including accessing the cancer system as needed.

PRACTICE SCENARIO

A nurse working on the surgical floor during a night shift checks on her patient following stabilization of a pathological fracture. The patient is crying, not understanding why the fracture occurred or what it means. The nurse takes a few minutes to listen and explore the patient's concerns. Later in her shift, she assists the patient to find resources and support services.

SOME NURSES:

- demonstrate specialist knowledge of the cancer experience and the different needs, feelings, fears, and losses that the individual/family may encounter as part of the cancer journey and is able to discuss these comfortably with them.
- demonstrate enhanced knowledge to engage in conversations with the individual/family that explore individual fears and concerns related to living with cancer (may include disease progression, mortality, dying, sexual health issues) and communicates as appropriate with interdisciplinary teams involved in the individuals care.
- For full list of competencies See *Practice Standards and Competencies for Specialized Oncology Nurse*

PRACTICE SCENARIO

The RN is administering neoadjuvant systemic treatment to a young woman struggling with a recent diagnosis of breast cancer. The RN recognises the distress and explores concerns regarding anticipated changes to body image (surgery, hair loss). The nurse offers referral to social work for emotional support.

FEW NURSES:

- demonstrate advanced skills in establishing a therapeutic relationship often in complex or urgent situations to support the individual/family living with cancer.
- demonstrate advanced communication skills in order to actively engage individuals with cancer and their family to understand complex care needs including psychosocial, cultural and spiritual beliefs.
- demonstrate advanced knowledge in continually assessing and managing complex supportive care needs or ensuring accessing to specialist referrals (eg. Psychiatry).

PRACTICE SCENARIO

A patient is receiving concurrent treatment for esophageal cancer. The APN develops a supportive treatment plan including analgesic, hydration, dietician referral and weekly lab and visits with the patient to monitor and adjust the plan of care accordingly.



3. Management of Cancer Symptoms and Treatment Side Effects

Due to the increasing prevalence of cancer it is imperative that all nurses have a foundational knowledge of cancer and symptom burden associated with various cancers. Cancer also has unique treatment modalities which impact individuals with cancer during the diagnosis and treatment phases, as well as long term effects that can occur years after the treatment is completed. Nursing knowledge of symptom management is critical to supporting individuals throughout the cancer trajectory and has a significant impact on the individuals' experience and care.

CANO STANDARD

The nurse integrates and applies knowledge of cancer pathophysiology, disease progression, treatment modalities, treatment side-effects and complications, and symptom problems to assess, plan, implement and evaluate the outcomes of evidence informed care and other clinical interventions.

ALL NURSES:

- demonstrate foundational knowledge of assessment and nursing management of common cancer symptoms, treatment related effects, and knows how to access information on cancer related symptom assessment and management guidelines (eg. pain).
- understand the possible adverse events of cancer treatments and identify concerns requiring escalation to more specialist care or urgent/emergent response.
- demonstrate knowledge of treatment delivery devices, (eg. port a cath), frequently used in cancer care and understands associated organizational policies and how to access supports through the cancer system as needed.
- demonstrate knowledge regarding the impact of a cancer diagnosis and treatment on an individual/family's perception of health, body image, self-esteem, and impact on relationships, such as intimate and sexual functioning.

PRACTICE SCENARIO

A home care nurse is visiting a client who recently received radiation for bone metastasis. The nurse spoke with the radiation team and is aware the patient may a pain flare with increased analgesia requirements for a week or two. The home care nurse performs a symptom assessment with the client and teaches the client about the possible pain flare and using pain medication as needed.

MANY NURSES:

- demonstrate enhanced knowledge of cancer specific symptoms and treatment side effects for common treatment modalities including surgery, systemic treatment and radiation therapy specific to context and area of care.
- understand the basic principles of concurrent treatment, palliative treatment and the role of complementary and alternative treatments.
- anticipate and apply comprehensive symptom management within the interdisciplinary team using pharmacological, non-pharmacological and patient self-management techniques.
- demonstrate knowledge regarding assessment and treatment of oncological emergencies as pertain to population and care context.
- demonstrate enhanced knowledge and sensitivity of the impact of a cancer diagnosis on perception of health, body image, self-esteem, and impact on relationships, such as intimate and sexual functioning.

PRACTICE SCENARIO

A nurse in the emergency department assess a patient with colorectal cancer receiving continuous infusion of cancer therapy through a central line. Presenting diagnosis is fever and vomiting. The nurse consults with the oncology team prior to clamping the central line and removing the infusion per hospital policy.

SOME NURSES:

- demonstrate in-depth and specialized knowledge of disease pathophysiology and processes, treatment plans and protocols, symptom assessment, management, and evaluation of clinical interventions.
- demonstrate in-depth knowledge of use of combined and common treatment modalities in curative, progressive, relapse and palliative intent.
- apply specialist knowledge to identification and management of oncologic emergencies specific to all cancer population and treatments.
- For full list of competencies See *Practice Standards and Competencies for Specialized Oncology Nurse*

PRACTICE SCENARIO

The nurse working in an oncology clinic is phoned by a patient who is complaining of a mild back ache. The nurse completes a full assessment and uncovers that the patient has been experiencing some new lower back pain and leg weakness. The nurse tells the patient to come to clinic urgently and contacts the oncologist due to concern this could be spinal cord compression.

FEW NURSES:

- demonstrate advanced skills and knowledge of disease pathophysiology and processes, treatment plans and protocols, symptom assessment, management and evaluation of clinical interventions.
- demonstrate in-depth assessment and treatment of oncological emergencies.
- develop and implement plan of care for cancer and treatment side effects according to evidence informed guidelines.
- may have expanded and autonomous practice for specific populations.

PRACTICE SCENARIO

The Clinical Nurse Specialist volunteers for a provincial advisory council working on guidelines for symptom management.



4. Teaching and Coaching

The individual with cancer will be faced with large amounts of detailed and complex health information throughout the cancer continuum. Teaching and coaching is essential for individuals with cancer to not only understand their diagnosis and the care provided but to support the individual across the continuum to ensure holistic and high quality care of all aspects impacted by cancer.

CANO STANDARD

The nurse prepares individuals with cancer and their families for the many different aspects of the cancer experience providing education, psychosocial-spiritual support and counselling across the continuum.

ALL NURSES:

- demonstrate foundational knowledge of cancer and access to information to support general questions regarding cancer care from the individual/family.
- facilitate individual/family access to cancer information and their cancer team as necessary.
- assist individual/ family to formulate questions in preparation for appointments with their cancer care providers about:
 - Goals of care (cure vs palliation)
 - Possible treatments (systemic therapy, Radiation Therapy, Surgery etc.)
- encourage individual to engage in cancer prevention and screening (i.e. pap testing, colon cancer check, smoking cessation and other healthy lifestyles).

PRACTICE SCENARIO

A nurse working in a family practice setting returns a call from a patient recently diagnosed with cancer. The nurse spends time with the patient developing questions for the initial visit with the oncology team regarding goals of care. The nurse initiates contact with community resources.

MANY NURSES:

- demonstrate enhanced knowledge of the cancer experience to provide specific teaching to individuals with cancer. These may be targeted at certain points in their journey (e.g. surgical nurse post mastectomy) dependent on their practice setting.
- assist the individual/family to understand where they are in the cancer continuum and the chronic nature of cancer.
- provide self-management coaching to individuals with cancer including cancer survivors who experience long term side effects of cancer and cancer treatment.
- provide individuals/families with information to access cancer services and information.

PRACTICE SCENARIO

A nurse working in a surgeon's office is asked about peripheral neuropathy following colon cancer treatment. The nurse is aware this is likely a chronic adverse effect of treatment and refers the patient for pain management and home safety assessment.

SOME NURSES:

- demonstrate in-depth and specialized knowledge of all cancers and integration of knowledge into patient education and self-management coaching, especially at critical points in care such as transitions.
- enhance individual/family skills and confidence in managing their health and wellbeing through self-management coaching and specialized program referrals.
- For full list of competencies See *Practice Standards and Competencies for Specialized Oncology Nurse*

PRACTICE SCENARIO

The oncology nurse assesses a patient who has completed adjuvant treatment for cancer. The nurses anticipates anxiety associated with this transition point and offers resources, contact information, schedule of appointments and encourages follow up with the patients primary care provider.

FEW NURSES:

- demonstrate advanced knowledge in all cancers and skills in providing patient education and self-management support.
- build on specialized knowledge to develop and evaluate education programs aimed at supporting patients and families.
- facilitate other oncology nurses in building specialist knowledge regarding patient education, patient self-management and learning how to equip individuals/families in self-management coaching.

PRACTICE SCENARIO

The APN recognises a colleagues discomfort in discussing goals of care with a patient. The APN discusses her findings with the colleague, provides resources and helps to develop a learning plan. The APN develops a module for staff education and learning.



5. Facilitating Continuity of Care/Navigating the System

The cancer care system is complex, and for many individuals this means years of navigating through various specialists, teams, health professionals, and care settings. Nurses caring for individuals with cancer across all settings play a key role to provide timely access to diagnosis, care and treatment as well as support for individuals and families to understand the system and advocate on their behalf through complex transitions.

CANO STANDARD

The nurse promotes and facilitates continuity of care across care settings and between health care providers by sharing information on the individual/family's current situation, plan of care and goals. The nurse assists the individual/family to navigate the health care system through understanding its structure, system and process and providing them with strategies to work within that system.

ALL NURSES:

- have foundational knowledge of the cancer system and skills around advocating for access to care during transitions throughout the cancer journey.
- illustrate foundational understanding of patient safety and ability to advocate for cancer treatment to be provided in the appropriate care setting (community hospital vs. cancer center).
- display knowledge of cancer supports and resources in their local hospital and community including the cancer team and navigator (if applicable) and act as advocate for accessing supports.

PRACTICE SCENARIO

A nurse working in a family practice setting has a patient with new lung nodules. The nurse is aware of the diagnostic assessment program at the local cancer center and discusses appropriate referral with the team. She calls the patient and explains the program, giving appointment times and contact information.

MANY NURSES:

- apply knowledge of cancer and the cancer care system to facilitate patients understanding of their medical condition and the local cancer care system and setting.
- integrate unique cancer needs of individuals into a comprehensive care plan.
- facilitate coordination of care through collaboration with interprofessional teams, and demonstrate enhanced knowledge of cancer related treatments.
- facilitate involvement of frequently utilized resources such as physiotherapy, occupational therapy, dietitian, social work, and community resources, as appropriate.
- provide support to enhance individual/family understanding of key transitions such as survivorship and palliative care.

PRACTICE SCENARIO

A nurse working in a urology clinic is counselling a patient with prostate cancer. She provides the patient with community resources for cancer patients, along with a referral to social work to further assist the patient cope with changes in sexuality.

SOME NURSES:

- utilize specialist knowledge of treatment modalities, including clinical trials, and related diagnostic tests required to assess and support the individual/family's understanding of the cancer treatment plan.
- demonstrate in-depth knowledge of the impact of cancer care on the individual's/family's finances and work life and advocate for sources of support.
- coordinate care and mobilize services through in-depth knowledge of cancer system.
- apply specialist knowledge and skills to support complex transitions such as post treatment follow up, survivorship and palliative care.

PRACTICE SCENARIO

A patient's cancer has progressed during treatment and the patient is transitioned to palliative cancer treatment. The nurse explains the rationale and concept of palliative care. She introduces the palliative care nurse and communicates with community services the patients changing needs.

FEW NURSES:

- apply expert understanding of treatment modalities, protocols and their impact on patients and families.
- advanced knowledge, clinical expertise and leadership to meet the complex patient care needs, recognize gaps, and advocate for cancer system change.
- demonstrate advanced knowledge of resources and supports required to address diverse needs of patients during their treatment and into survivorship or palliative care.
- utilize evidence to design and implement practice and program change to improve continuity and quality of cancer care.

PRACTICE SCENARIO

A nurse practitioner receives a call from a primary care provider. A patient recently discharged from the cancer clinic has a new lump under her arm. The nurse practitioner arranges for a clinic visit, facilitates ultrasound and biopsy and consults with the medical oncologist within a short time frame. The nurse practitioner follows up with the patient, primary provider and develops an evaluation study of the discharge processes.



6. Decision Making and Advocacy

Individuals with cancer and families face many difficult decisions and transitions. Nurses must have a foundational understanding of these decisions and transition points to appropriately support and advocate for individuals and families. These decisions can encompass complex treatment options, procedures or, progression of disease, and often require nurses to advocate for care across the system to support the individual in all aspects of care.

CANO STANDARD

The nurse, in collaboration with other members of the interprofessional health care team, facilitates self determination and informed decision making for the individual with cancer and their family. The nurse advocates on behalf of the individual and family, communicating and documenting their preferred approach to care.

ALL NURSES:

- demonstrate foundational understanding of decision making required by the individual/family with cancer across the continuum of care (investigation and treatment decisions, location and type of care, end of treatment).
- apply foundational knowledge in supporting advanced care planning discussions to advocate for the wishes of the individual with cancer.
- assess the individual's understanding regarding decisions and communicates concerns to the cancer team.
- identify barriers to communication and facilitate supports to alleviate barriers (eg: medical translators).

PRACTICE SCENARIO

A home care nurse is visiting a woman who recently underwent surgery for Ewing's sarcoma. The client is a third year university student who will have to leave school for a year to undergo treatment. She lives on her own but has lots of friends who are supportive. The nurse and client develop a care plan that incorporates adapting the home environment for mobility issues in order to continue living independently and discuss strategies for friends and family to offer support.

MANY NURSES:

- understand the decision making required by individuals/families with cancer across the continuum of care (investigation and treatment decisions, location and type of care, end of treatment) while exploring and supporting their decisions.
- demonstrate enhanced communication skills when advocating and supporting individuals/ families regarding decision making across the continuum of cancer care, including advanced care planning.
- liaise with appropriate team members to provide support for individual/family decision-making.
- advocate for the individual with cancer to ensure care is consistent with the individuals wishes and beliefs.

PRACTICE SCENARIO

An individual recovering from breast cancer surgery 3 days ago is being cared for by the surgical nurses and is upset as she understood she was supposed to start on treatment right after surgery. The surgical nurse reassures the individual and walks through the standard care plan post breast surgery. The nurse also provides educational material about breast cancer and the basic information package about the cancer centre which includes all contact information.

SOME NURSES:

- facilitate individual /family understanding of the various treatment options available and implications of those treatment decisions.
- demonstrate enhanced communication skills and advocacy when supporting individual/family's decision making across the continuum of cancer care, including advanced care planning and goals of care discussions.
- advocate for the individuals wishes and decisions when developing the interprofessional plan of care.

PRACTICE SCENARIO

The oncology clinic nurse is caring for an individual whose cancer is metastatic and progressed on their 3rd line of treatment. They have been offered a Phase 1 clinical trial but are trying to decide whether to pursue any further treatment. The nurse spends time helping the individual think through the decisions and asks them about their wishes and values to assist them making their decision.

FEW NURSES:

- demonstrate advanced knowledge in supporting individuals/families facing difficult decisions regarding treatment, investigations, survivorship or end of life care planning.
- demonstrate advanced communication skills and advocacy when supporting individuals/families decision making across the continuum of cancer care, including advanced care planning decisions and goals of care discussions.
- regularly assess ongoing needs and the individuals preferred role in decision making along the cancer continuum and communicate the individual's wishes with all team members.
- organize multidisciplinary staff in services, meetings and debriefings to review complex cases and the impact of policies and legislation on care.

PRACTICE SCENARIO

The oncology APN sets up an in-service for the team, regarding new health legislation concerning medical assistance in dying, and invites the hospital bioethicist to attend. The APN recognizes that many staff are uncertain about their roles and need an opportunity to ask questions and express concerns.



7. Professional Practice and Leadership

Nurses are leaders with expertise which is essential to ensure high quality cancer care from the individual patient experience, to the entire health system. The complexity of cancer care requires nurses to have strong leadership skills that improves care of the individual, builds professional practice for all nurses and impacts cancer care across all settings.

CANO STANDARD

The nurse engages in critical thinking, integrates best practice and evidence informed knowledge, exercises ethical judgement and advocates for changes when institutional policies fail to meet the needs of oncology patients.

ALL NURSES:

- advocate for and participate in educational opportunities to build cancer knowledge and experience.
- participate with teams to coordinate care for cancer patients, including effective transitions and communication with interprofessional teams to achieve optimal outcomes.
- build capacity to mentor colleagues within the nursing family and interprofessional teams around cancer care.
- understand risks of compassion fatigue and burn out in cancer care and seek to support colleagues and self to use strategies to mitigate these risks.

PRACTICE SCENARIO

A novice palliative care nurse seeks out an experienced oncology nurse as a mentor and coach. The nurse recognizes the emotional impact of the role and debriefs with her mentor regularly.

MANY NURSES:

- understand the roles of the interdisciplinary team and participates to create practice strategies to meet the needs of the cancer patient/family.
- understand the importance of integrating cancer knowledge within their specialist practice (e.g. ICU, Surgery, ER) and identify or lead learning opportunities and practice change.
- initiate and participate in quality initiatives using CANO standards of practice and guidelines in evidence informed care.

PRACTICE SCENARIO

The nurses on a surgical unit experience increasing numbers of patients undergoing cancer surgery. The RPN/LPN identifies gaps in knowledge and collaborates with the educator to offer cancer specific education sessions on the unit.

SOME NURSES

- provide specialist oncology nursing support to interprofessional teams across the care continuum.
- contribute to oncology education and staff development.
- influence health care policy and practice through participation in local, regional and national committees.
- commit to continuing competence relevant to cancer care including maintaining Canadian Nurses Association Certification in Oncology.

PRACTICE SCENARIO

The oncology nurse works with the education committee at her organization to develop a patient class on immunotherapies. The nurse collects evaluations and submits an abstract for poster presentation at the CANO annual meeting.

FEW NURSES:

- provide a systems approach in cancer settings to achieve optimal outcomes.
- advocate for expansion of the advanced practice model to improve access to quality, cost effective cancer care within the clinical, political and professional context.
- participate in cancer research, education, and knowledge dissemination locally, regionally and nationally.
- lead teams formally or informally by providing mentorship and influence to improve quality cancer care.

PRACTICE SCENARIO

The APN collects and reports data on adherence to oral targeted therapies. The APN then leads a quality assurance project based on the data, evaluates the outcomes and writes a manuscript for publication.

Stakeholder Input

Prior to finalizing the Framework, a stakeholder survey was developed by the Professional Practice Committee and sent to nurse volunteers/reviewers from across the country. The primary purpose of the survey was to assess readability, relevance, and utility of the document for those working in settings primarily outside of oncology centres. A representative sample of 27 nurses were identified by committee members. The group comprised mostly of front line nurses (RNs & LPN/RPNs) and nurse educators who worked in a variety of acute care inpatient units, long term care and home care settings. Sixty-five percent (18/27) of those approached completed the survey. Reviewers found the document comprehensive and informative and gave specific recommendations for dissemination and uptake of the Framework. Below are a few examples of feedback from survey responders. The full survey and findings will be made available as a supporting document on the CANO website.

“With increasing rates of patient’s and families affected by a cancer diagnosis and along the cancer trajectory, this is a very timely document. As a RN, and being involved in nursing education, it helps to highlight the foundational knowledge and behaviors expected of recent graduates and those in non-oncology specific settings.”

“I could see how the Framework could be used as a guide for curriculum building for general staff training.”

Conclusion

CANO/ACIO is committed to developing and working in collaboration with nurses and other stakeholders in both non-oncology specific and oncology specific settings and through the work of the Professional Practice Committee a national Cancer Nursing Knowledge and Practice Framework has been developed. This framework reflects the realities of nurses providing care across the cancer continuum in the Canadian health care system today and it is inclusive of all nurses in a variety of roles, scope of practice and care settings who care for individuals and families facing cancer.

The shared goal of CANO/ACIO and the Professional Practice Committee is that this knowledge framework be implemented into current practice to support nurses as well as organizations and leaders to improve the quality of care for all Canadians affected by cancer.

Definitions

Advanced Practice Nurses: is an umbrella term describing an advanced level of clinical nursing practice that maximizes the use of graduate educational preparation, in-depth nursing knowledge, and expertise in meeting the health needs of individuals, families, groups, communities, and populations. (CNA, 2008).

Cancer continuum: is a concept involving an integrated system of care that guides and tracks patients over time through a comprehensive array of cancer services spanning all levels and intensity of care. It spans from primary prevention & screening, to long term survival, and end of life care.

Determinants of health: an array of factors that impact a person's health, and include biological, genetic, social, psychological factors as well as personal health beliefs and practices, and, environmental and economic components.

Evidence informed decision making: is a continuous interactive process involving the explicit conscientious and judicious consideration of the best available evidence to provide care. It is essential to optimize outcomes for individual clients, promote healthy communities and populations, improve clinical practice, achieve cost effective nursing care, and insure accountability and transparency in decision making within the health care system (CNA, 2010).

Scope of practice: is the activities that nurses are educated and authorized to perform as set out in legislation, and complemented by standards, guidelines and policy positions of provincial and territorial nursing regulatory bodies. (CNA, 2012).

Competencies: Competencies refer to the knowledge, skills, judgment and attributes required of an RN to practice safely and ethically in a designated role and setting (CNA, 2010).

Self-Management support (coaching): the systematic provision of education and supportive interventions by health care staff to increase patients' skills and confidence in managing their health problems, including regular assessment or progress and problems, goal setting, and problem-solving support (Adams et al, 2004).



References

- Adams, K., Greiner, A.C. & Corrigan, J.M. (Eds). (2004). *Report of a summit. The 1st annual crossing the quality chasm summit — A focus on communities*. Washington, DC: National Academies Press.
- Aranda, S., Yates, P. (2009). *A national professional development framework for cancer nursing*. 2nd edition. The National Cancer Nursing Education Project (EdCaN). Canberra, Cancer Australia. <https://www.Edcan.org.au/professional-development/edcan-framework>
- Canadian Association of Nurses in Oncology (2001) Standards of Care. Vancouver, BC: Author. https://cdn.ymaws.com/www.cano-acio.ca/resource/resmgr/standards/Standards_of_Care_ENG.pdf
- Canadian Association of Nurses in Oncology. (2006). *Practice Standards and Competencies for the Specialized Oncology Nurses*. Vancouver, BC: Author. https://www.cano-acio.ca/resource/resmgr/standards/CONEP_Standards2006September.pdf
- Canadian Association of Schools of Nursing (2015). *National Nursing Education Framework*. Ottawa: Author.
- Canadian Cancer Statistics Advisory Committee, (2018). *Canadian Cancer Statistics: A 2018 Special Report*. Toronto, ON: Canadian Cancer Society. <http://www.cancer.ca/Canadian-Cancer-Statistics-2018-En.pdf>
- Canadian Nurses Association. (2015). Framework for the practice of registered nurses in Canada. Ottawa: Author. <http://www.cna-aiic.ca/~media/cna/page-content/pdf-en/framework-for-the-practice-of-registered-nurses-in-canada.pdf>
- Canadian Nurses Association. (2012). Staff Mix Decision-making Framework for Quality Nursing Care. Ottawa: Author.
- Canadian Nurses Association. (2008). *Advanced nursing practice* (Position statement). Ottawa: Author.
- Canadian Nurses Association. (2010). *Evidence-informed decision-making and nursing practice* (Position statement). Ottawa: Author.
- Canadian Nurses Association. (2012). *Staff mix. Decision-making framework for quality nursing care*. Ottawa: Author.
- Canadian Nurses Association. (2019) *Advanced Practice Nursing: A Pan-Canadian Framework*. Ottawa: Author.
- Cancer Care Ontario. (2017). *Clarifying the roles of clinical nurse specialists and nurse practitioners in delivery of cancer care in Ontario*. Toronto, ON: Author. https://www.cancercareontario.ca/sites/ccocancercare/files/guidelines/full/APN%20Role%20Clarity_Final.pdf
- Cancer Care Ontario. (2017). Expert Recommendations Report on Clinical Nurse Specialist and Nurse Practitioner Roles in the Delivery of Adult Cancer Services in Ontario. Ontario Oncology Advance Practice Nursing Community of Practice Cancer Care Ontario. Toronto, ON: Author.
- College of Nurses of Ontario. (2002). Standards. Toronto, ON: Author.
- College of Nurses of Ontario. (2018). *The Three-Factor Framework. RN and RPN practice: The client, the nurse and the environment* (Practice guideline). Toronto, ON: Author.
- Cooley, M. (2000). *Symptoms in adults with lung cancer*. Journal of Pain and Symptom Management, 19(2), 137-153.
- Fitch, M. (2008). *Supportive care framework*. Canadian Oncology Nursing Journal. 18(1). p; 6-14.
- Harrington, C.B.C., Hansen, J.A., Moskowitz, M., Todd B.L. (2010). *It's not over when it's over: long term symptoms in cancer survivors: A systematic review*. International Journal of Psychiatry in Medicine, 40(2), 163-181.
- Ryan K, Connolly M, Charnley K, Ainscough A, Crinion J, Hayden C, Keegan O, Larkin P, Lynch M, McEvoy D, McQuillan R, O'Donoghue L, O'Hanlon M, Reaper-Reynolds S, Regan J, Rowe D, Wynne M. (2014). *Palliative Care Competence Framework*. Palliative Care Competence Framework Steering Group. Dublin: Health Service Executive.
- Soothill, K., Morris, S.M., Harman, J.C., Francis, B., Thomas, C., Mcillmurray, M.B. (2002). *Informal carers of cancer patients: what are their unmet needs?* Health and Social Care, 9(6), 476-489.

Nursing Knowledge and Practice Framework and Toolkit for Cancer Care



**CANO
ACIO**

Canadian Association of Nurses in Oncology
Association canadienne des infirmières en oncologie

CANO/ACIO Head Office

750 West Pender St, Suite 301,
Vancouver, BC, V6C 2T7

P: 604.874.4322

F: 604.874.4378

cano@malachite-mgmt.com

www.cano-acio.ca