OPTIMIZING AMBULATORY SYSTEMIC TREATMENT MODELS OF CARE

Recommendation Report

Ontario Health (Cancer Care Ontario) Models of Care, Person Centred Care, and Systemic Treatment Programs

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Ontario
Health

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Acronyms and Abbreviations

AMA	American Medical Association
BSC	Biological Safety Cabinets
CL	Clerk
CNS	Clinical Nurse Specialist
COSTARS	Canadian Oncology Symptom Triage and Remote Support
CPOE	Computerized Prescriber Order Entry
DAN	Drug Access Navigator
DAP	Diagnostic Assessment Pathway
EHR	Electronic Health Record
EMR	Electronic Medical Record
ESAS	Edmonton Symptom Assessment System
FNIMUI	First Nations, Inuit, Métis and urban Indigenous
GPO	General Practitioner in Oncology
HCA	Health Care Aide
HCCSS	Home and Community Care Support Services
HCP	Healthcare Provider
HIE	Health information Exchange
IV	Intravenous
LTC	Long-Term Care
MI	Medical Interpreter
MO/H/GO	Medical Oncologist/Hematologist/Gynecologic Oncologist
MRP	Most Responsible Provider
MS	Medical Scribe
NURS EXT	Nurse Extern
NP	Nurse Practitioner
OCP	Ontario Cancer Plan
OHT	Ontario Health Team
OMA	Ontario Medical Association
ONA	Ontario Nurses’ Association
OT	Occupational Therapist
OTA	Occupational Therapy Assistant
P	Porter
PA	Physician Assistant
PDOC	Psychiatrist
PDSA	Plan-Do-Study-Act
PH ASSIST	Pharmacy Assistant

PN	Patient Navigator
PRO	Patient-Reported Outcome
PROM	Patient-Reported Outcome Measure
PSO	Psychosocial Oncology
PSW	Personal Support Worker
PSYCH	Psychologist
PT	Physiotherapist
PTA	Physiotherapy Assistant
RCP	Regional Cancer Program
RD	Registered Dietitian
RPH	Registered Pharmacist
RPHT	Registered Pharmacy Technician
RPN	Registered Practical Nurse
RN	Registered Nurse
RNAO	Registered Nurses' Association of Ontario
SC	Supportive Care
SCP	Spiritual Care Practitioner
SLP	Speech Language Pathologist
SSW	Social Services Worker
ST	Systemic Treatment
ST-QBP	Systemic Treatment Quality Based Procedures
SW	Social Worker
VCC	Virtual Care Coordinator
YSM	Your Symptoms Matter
2SLGBTQIA+	Two-Spirit, Lesbian, Gay, Bisexual, Trans, Queer, Intersex, and Additional People

Definitions

Community Administration Site: This term refers to a variety of healthcare facilities, including community injection clinics, Home and Community Care Support Services, long-term care facilities, and private infusion clinics, which administer a range of treatments beyond systemic therapies.

Community Dispensing Site: This term refers to a variety of healthcare establishments, such as community pharmacies, Home and Community Care Support Services, and long-term care facilities which dispense a range of medications beyond systemic therapies.

Community Partner: Healthcare entities such as community dispensing or administration sites, community laboratories, and community diagnostic imaging clinics that collaborate and engage with the community to provide healthcare services.

Electronic Health Record (EHR): An EHR is a comprehensive digital record of a patient's health information that is designed to be shared securely across different healthcare organizations and settings. It includes the same types of information as an EMR but is intended to provide a broader view of a patient's health history. EHRs allow authorized healthcare providers to access and exchange patient data to support coordinated and continuous care. They can include information from various sources, such as hospitals, clinics, laboratories, pharmacies, and imaging centres.

Electronic Medical Record (EMR): An EMR is a digital version of a patient's medical information that is stored and maintained within a specific healthcare provider's system or practice. It contains the patient's medical history, diagnoses, medications, treatment plans, laboratory results, and other relevant clinical information. EMRs are typically used by healthcare professionals within a single organization or practice to document and manage patient care.

Home and Community Care Support Services: The regional health authorities that have the responsibility of coordinating in-home and community-based care for the residents of Ontario.

Local Cancer Program: Any hospital that is actively engaged in the provision and support of cancer care services. The specific structure and organization of Local Cancer Programs may vary across different regions. Each Local Cancer Program is tailored to the needs and resources of its catchment area, while aligning with provincial cancer care priorities and guidelines.

Local Organizations: Hospitals that have cancer programs included as part of their healthcare services.

Long-Term Care Facility: Provides residential accommodation and comprehensive care services to individuals aged 18 years and above who require assistance with their activities of daily living and/or continuous nursing care.

Nurse Extern: Externs are employed by the clinical area and receive training on scope of practice as unregulated health care providers. They contribute to the patient plan of care, perform clinical skills within their scope, building on knowledge and expertise to prepare for the role of becoming a Registered Nurse.

Oncology Care Team: A group of healthcare professionals who specialize in the diagnosis, treatment, and management of cancer. The team is typically led by an oncologist, hematologist or gynecologic hematologist and can include general practitioners in oncology, physician assistants, nurse practitioners, nurses, pharmacists, and other support staff who work together to provide coordinated and comprehensive care to cancer patients.

Ontario Health Teams: A new model of healthcare delivery that aims to integrate and coordinate healthcare services across multiple providers and organizations within a geographic region including but not limited to hospital-based care, primary care, home and community care, and mental health and addiction services.

Palliative Care: A philosophy of care that aims to relieve suffering and improve the quality of living and dying. It strives to help individuals and families to address physical, psychological, social, spiritual, and practical issues, and their associated expectations, needs, hopes and fears; prepare for and manage end-of-life choices and the dying process; cope with loss and grief; treat all active issues; prevent new issues from occurring; and promote opportunities for meaningful and valuable experiences, and personal and spiritual growth.

Palliative Care Providers: Healthcare professionals, including physicians, nurses, social workers, and other specialists, who have advanced-level competencies in palliative care, as specified in the Ontario Palliative Care Network’s Palliative Care Competency Framework.

Physician Extender: A healthcare provider who is never the most responsible practitioner providing patient care. Physician extenders must always practice under the supervision of a licensed physician within an approved physician extender program.

Primary Care: The first point of contact between a patient and the health care system and includes illness prevention, health promotion, diagnosis, treatment, and rehabilitation and counselling issue.

Primary Care Provider: A healthcare professional or a team that is responsible for the ongoing management of a patient's existing health concerns and is typically the first point of contact for individuals seeking access to healthcare services.

Psychosocial Oncology: Addresses the social, practical, psychological, emotional, spiritual, functional, and quality-of-life impact of cancer on patients and their families.

Psychosocial Oncology Providers: A group of healthcare professionals that includes Social Workers, Social Service Workers, Psychiatrists, Psychologists, Occupational Therapists, Physiotherapists, Registered Dietitians, Speech-Language Pathologists, and Spiritual Care Providers.

Regional Cancer Programs: A network of healthcare professionals, hospitals, and other agencies that deliver cancer care to people in a specific geographic area of Ontario. These networks provide leadership for the delivery and performance of high-quality, timely, and accessible cancer services within their regions.

Systemic Treatment: Any oral or parenteral cancer treatment including but not limited to hormonal, biological, immunotherapeutic, or chemotherapeutic agents. These anticancer agents may be hazardous cytotoxic, hazardous or of reproductive risk**.**

Systemic Treatment Facility: A hospital that provides systemic treatment services to individuals requiring medical intervention for cancer treatment.

Survivors: Patients who have completed their primary cancer treatment and have no current indications of active disease. Additionally, individuals who may be receiving ongoing adjuvant hormonal therapy are also considered to be survivors.

Trauma-Informed Care: Trauma-informed care is a framework that involves understanding, recognizing, and responding to the effects of all types of trauma. The principle behind trauma-informed care is based on the understanding that many people have had experiences of trauma in their lives, and those experiences often have long-lasting effects on an individual's physical and mental health.

Virtual Care: Any remote interaction between patients and healthcare providers facilitated using communication or information technologies such as computers, telephones (both landline and cellular), or other remote access tools. It can be an approach to care or a single interaction between a provider and patient. Different modalities include telephone-based care (also known as Telepractice or Telemedicine), real-time video-based care (videoconferencing), secure text messaging, and remote patient/care monitoring programs.

Well Follow-up Care: Also known as “post treatment follow-up care,” consists of activities and processes related to prevention of recurrent and new cancers; surveillance for cancer spread, recurrence, or secondary cancers; management of the consequences of cancer treatment (e.g., toxicities and late effects); and coordination of care.

Executive Summary

Purpose of the Document

There is a growing demand for updated models of systemic treatment for cancer patients in Ontario. Increased demand for systemic treatment is driven by an aging population and advances in treatment, resulting in more complex care. The shortage of health human resources has had a profound impact on the delivery of ambulatory systemic treatment, affecting both providers and patients. Provider burnout, extended wait times, delays, and diminished accessibility to services have significantly impacted patients, especially those belonging to equity-deserving groups. Given the prevalence of provider burnout, it has become necessary to re-evaluate our existing models of care within the Ontario cancer system. While virtual care has been adopted, it may not be suitable for certain patient populations or appointments and can impact the delivery of team-based care. In response, Ontario Health (Cancer Care Ontario) has developed recommendations to optimize service delivery models for oncology providers and patients, using a range of methodologies including current state surveys, interviews, a multidisciplinary working group and focus groups with clinicians, patients, families, and care partners. The recommendations aim to optimize health care resources, settings, and processes in the oncology clinic, oncology pharmacy, and systemic therapy suite, improving provider well-being, sustainability of the cancer system, patient experience and outcomes in cancer care.

A leading healthcare system is committed to weaving the principles of equity, inclusion, and diversity into its organizational fabric. This commitment forms the foundation for all our recommendations, which utilize an equity-focused lens to enhance outcomes for patients, families, care partners, and providers within the cancer care framework.

We acknowledge that Indigenous, Francophones, and equity-deserving communities face disparities in healthcare access and treatment outcomes. To address these disparities, we have crafted recommendations that specifically address the obstacles and challenges associated with ambulatory systemic treatment.

Our recommendations directly address the unique circumstances and needs of First Nations, Inuit, Métis, and Urban Indigenous (FNIMUI) communities, Francophones, and other underserved groups in Ontario. We recognize the distinct sociopolitical, historical, and geographical challenges these groups encounter, which influence their health disparities and outcomes. In accordance with our commitment to partner with FNIMUI communities, our efforts support the First Nations, Inuit, Métis, and Urban Indigenous Cancer Strategy 2019-2023, aiming to promote equitable access and smooth transitions for Indigenous people through the cancer care system.

In Ontario, the French Language Services Act (FLSA) guarantees that Francophones have access to services in their language within 27 designated areas across the province. The FLSA requires health service providers to actively offer and deliver services in French, ensuring the needs of Francophone communities are considered during the development and implementation of health programs, policies, and procedures.

While our recommendations highlight certain groups, the overarching aim is to improve healthcare accessibility, experiences, and outcomes for all communities deserving of equity. This commitment aligns with the Ontario Health Equity, Inclusion, Diversity, and Anti-Racism Framework, propelling us towards a more inclusive healthcare environment.

The responsibility for achieving these recommendations extends beyond the systemic treatment facilities alone. We commit to working collaboratively between Ontario Health and Regional Cancer Programs to establish and implement the necessary next steps for these recommendations. This collective approach ensures shared accountability and facilitates more comprehensive, equitable and sustainable improvements in systemic treatment delivery.

How to Read the Document

The recommendations are organized into the following sections:

- Referral to Diagnostic Services for Suspected Cancer
- Referral to Medical Oncology, Hematology, and Gynecologic Oncology Services
- Scheduling Appointments for the Oncology Clinic and Systemic Therapy Suite
- Service Delivery in the Oncology Clinic
- Patient Education
- Order Verification and Drug Preparation
- Dispensing and Administering Community-Based Treatments
- Service Delivery in the Systemic Therapy Suite
- Proactive Monitoring, Symptom and Toxicity Management, and Unplanned Care
- Service Delivery Through Virtual Care
- Transitions in Care: Survivorship and End-of-Life
- Provider Health and Well-Being
- First Nations, Inuit, Métis, and Urban Indigenous Peoples
- Francophone Populations and Equity Deserving Groups

Each section provides a set of recommendations along with an examination of the existing challenges, the importance of addressing them, key enablers for success, and implementation considerations and options. Appendix A provides further information on provider roles, which are discussed in more detail within the document.

The distinction between the Regional Models of Care for Systemic Treatment: Standards for the Organization and Delivery of Systemic Treatment (RSTP Standards) and this document lies in their purposes and functions. The Regional Models of Care for Systemic Treatment serve as established standards for organizing safe and effective care and act as a benchmark for consistency and quality in systemic treatment delivery.

On the other hand, this document takes an aspirational approach by presenting a vision for the future of systemic treatment. It acknowledges the need for updated models of care and proposes recommendations to optimize service delivery. Its aim is to inspire positive change and guide the transformation of systemic treatment practices, improving patient experience, provider well-being, and healthcare outcomes.

RECOMMENDATIONS

Referral to Diagnostic Services for Suspected Cancer

1. Expedited and standardized referral and diagnostic processes should be established to streamline entry into the cancer system.

- **1.1.** A diagnostic service for suspected cancer should be established to enable timely and coordinated investigations for patients (e.g., bloodwork, diagnostic imaging, and biopsy).
- **1.2.** Standardized referral criteria should be established to assist referring physicians in determining which patients require referral, to reduce unnecessary or duplicate testing.
- **1.3.** Standardized lab and diagnostic imaging order sets aligned with guidelines and best practices should be developed to support high-quality clinical decision-making and referral to the first appropriate service.

Referral to Medical Oncology, Hematology, and Gynecologic Oncology Services

2. A centralized referral intake system should be established to ensure that patients who require referral to medical oncology, hematology, or gynecologic oncology services are seen by the first available specialist within the hospital or region.

- **2.1.** A standardized workflow for new patient triage and prioritization should be developed to identify who reviews the referral and how quickly a consultation is scheduled based on clinical information, improving efficiency and workload balance among team members.
- **2.2.** The specialist should deliver the diagnosis to the patient, while also informing the physician who initially referred the patient to the diagnostic service.

Scheduling Appointments for the Oncology Clinic and Systemic Therapy Suite

3. Appointment scheduling for the oncology clinic and systemic therapy suite should be completed by individuals with knowledge and expertise to ensure that multiple interrelated factors related to scheduling are considered and adjusted based on changing resource availability.

4. Evidence-based tools and technologies should be used to optimize resources and scheduling processes in the outpatient oncology clinic and systemic therapy suite.

Service Delivery in the Oncology Clinic

5. Local Cancer Programs should expand the type of providers included in oncology care teams to manage increasing patient volumes and care complexity in the oncology clinic.

5.1. The care team should be designed around the patient with a focus on developing consistent patient-provider relationships to ensure safe and effective coordination and continuity of care**.**

5. Providers should receive support to build their proficiency in providing person-centred care, encompassing palliative and psychosocial oncology concepts, as well as addressing the unique needs and preferences of diverse individuals.

5.3. Additional roles should be integrated into the oncology clinic:

- Medical Oncologist/Hematologist/Gynecologic Oncologist
- Alternate Prescribers (General Practitioner in Oncology, Nurse Practitioner)
- Extenders (Physician Assistant)
- Pharmacists
- Clinical Nurse Specialists/Registered Nurses.

5.4. There should be established identification and referral processes in place to Psychosocial Oncology providers and Palliative Care teams along with other patient support roles (e.g., Drug Access Navigators, Patient Navigators).

5.5 Medical directives should be effectively utilized, enabling team members to work autonomously, promote shared care or supervision of systemic treatment patients, and improve workload management.

5.6. The roles and responsibilities of each team member should be clearly defined with expectations clarified about how each discipline will communicate with each other and collaboratively provide patient care.

5.7. Local Cancer Programs should consider exploring opportunities to collaborate with hospitals in their regions to help manage clinic visits and provide care close to home, where appropriate (e.g., new consult at Level 1 or 2 hospitals with follow-up and urgent care at Level 3 or 4 hospitals).

6. A non-same-day systemic treatment model should be implemented, where appropriate, to reduce patient wait times, increase provider and patient safety, and improve clinic flow and efficiency.
    - **6.1.** Local Cancer Programs should partner with community laboratories to enable patients to complete their bloodwork closer to home and utilize virtual care platforms to complete pre-treatment assessments, where clinically appropriate**.**
    - **6.2** Consider an 'exception' process for a one-day model for patients who may face barriers to accessing care.
7. A standardized process, utilizing medical directives where appropriate, should be developed and implemented to obtain a timely treatment decision for commonly observed abnormalities or out-of-range findings from blood work and/or pre-treatment assessment.

Patient Education

8. Patients, families, and care partners should have access to health literate, inclusive education materials in the language that they feel most comfortable using to support them in managing their care, making informed decisions, and actively participating in their care.

8.1 Resources should be evidence-based and incorporate health literacy best practices, including:
- Writing resources in plain language (e.g., less than grade 6 reading level, appropriate level of understandability and actionability, created with patient and family advisor input)
- Include diverse representation (e.g., adverse effects that may differ across skin tones, gender inclusive terms, cultural considerations)

8.2 Resources should be available in accessible formats, including:
- Compliance with the Accessibility for Ontarians with Disabilities Act (e.g., captions for images).
- Translation into multiple languages
- Availability in multiple formats (e.g., web, print, video, audio)

8.3 A resource library of multilingual, inclusive education materials in plain language should be created at the provincial level.

Order Verification and Drug Preparation

9. A tech-check-tech model should be utilized for systemic treatment preparation to ensure safe and efficient preparation practices, increasing pharmacy technician role satisfaction, while allowing pharmacists to focus on activities specific to their scope of practice.

10. Remote order verification and/or regional preparation and delivery of systemic treatment should be considered at facilities experiencing challenges with medication preparation efficiency, physical space needs, staffing challenges, and drug wastage issues.

Dispensing and Administering Community-Based Treatments

11. A two-step clinical verification process should be used for treatments dispensed (e.g., take-home cancer drugs) and administered (e.g., infusions, injections) in community settings to prevent serious harm or adverse reactions that can result from medication errors.

  11.1. Community sites dispensing (e.g., take-home cancer drugs) and/or administering (e.g., injections, infusions) systemic treatment should have access to additional patient information with every prescription (e.g., lab test results, clinical parameters, care plan) to enable the completion of the clinical verification process.

12. Dispensing (e.g., take-home cancer drugs) and/or administration (e.g., injections, infusions) of systemic treatment should be conducted at designated community sites that have received additional education and training to ensure that patients receive consistent care and medication management throughout their treatment journey.

Service Delivery in the Systemic Therapy Suite

13. Local Cancer Programs should explore opportunities to optimize workflows, allocate resources efficiently, and monitor nurse-patient assignments and the number of systemic treatments prepared per day to effectively manage the increasing patient and treatment volumes in the systemic therapy suite.

  13.1. Nurse-patient assignments should be distributed equitably throughout the day.

  13.2. The number of drug preparations that pharmacy staff can complete per day should take into account the availability of pharmacy technicians, number, and capacity of biological safety cabinets (BSCs) as well as the presence of any available technology (i.e., IV workflow solutions or robotics).

  13.3. Mid-cycle treatment assessments (e.g., Day 8 and 15) should be completed either virtually or in person before the patient meets with the administration nurse for infusion setup.

  13.4. Pre-approved orders with clinical parameters should be created to prevent unnecessary delays or interruptions on treatment day (e.g., through medical directives, built into Computerized Prescriber Order Entry regimen order sets).

  13.5. Chair time for patients on clinical trials should be reviewed and approved by the hospital-based pharmacy and therapeutics committee to ensure that it is used efficiently and effectively.

  13.6. Local Cancer Programs should work with other areas of the hospital (e.g., day medicine unit) to accommodate supportive care treatment (e.g., hydration, blood product infusions).

  13.7. Local Cancer Programs should consider exploring opportunities to collaborate with hospitals in their regions to improve patient access to treatment, where appropriate (e.g., administering the initial treatment at Level 1 or 2 hospitals, followed by subsequent treatment at Level 3 or 4 hospitals).

13.8. Patients who require supportive care or injections (e.g., hydration or hormone injections) should be referred to Home and Community Care Support Services (HCCSS), participating community pharmacies, as well as community-based injection services. Alternatively, patients who meet criteria can be taught to self-inject or have a care partner assist with injecting with proper education and training.

13.9. If private infusion clinics are utilized, Local Cancer Programs should establish oversight through a memorandum of understanding (MOU), in accordance with the Regional Models of Care for Systemic Treatment: Standards for the Organization and Delivery of Systemic Treatment.

Proactive Monitoring, Symptom and Toxicity Management, and Unplanned Care

14. Proactive monitoring, symptom, and toxicity management plans should be developed and implemented by Local Cancer Programs for patients receiving systemic treatment, particularly for high-risk patients (e.g., double immunotherapy, concurrent chemotherapy/radiation treatments, acute leukemia, head and neck cancers) to optimize self-management and decrease the need for acute care services.

15. Acute oncology structures should be established for unplanned care to reduce emergency department visits and hospital admissions.

Service Delivery Through Virtual Care

16. Local Cancer Programs should establish a dedicated Virtual Care Coordinator role to enhance the utilization, comfort, and overall experience of virtual care for patients and providers.

16.1. If patient volumes are low, smaller centres may assign the Virtual Care Coordinator's responsibilities to other administrative staff to ensure continuity of virtual care services.

17. Local Cancer Programs should explore opportunities to integrate virtual care services and implement standardized processes to optimize care delivery.

17.1. Local Cancer Programs should identify areas where virtual care can be used to optimize care delivery (e.g., follow-up visits, patient education).

17.2. Virtual care should be flexible and adaptable to address patient, family and/or care partner preferences including scheduling, language, and cultural considerations.

17.3. Virtual care should be designed to foster patient, family and/or care partner engagement and participation in their care (e.g., symptom screening tools, patient education).

17.4. Patients, families, and/or care partners should be provided with education and resources including proactive support to help them prepare for the virtual visit to avoid interruptions or delays during the appointment.

17.5. Virtual visits should be scheduled with a similar structure, including designated appointment times, as in-person appointments, with every effort made to reduce patient, family, and/or care partner waiting times.

18. Patients should have access to multidisciplinary care in the virtual setting to ensure that they receive all the supports and services they need for their care.

Transitions in Care: Survivorship and End-of-Life

19. Local Cancer Programs should have a transition model that provides standardized survivorship and follow-up care to support the ongoing needs of patients who have completed systemic treatment or are currently on adjuvant hormonal therapy.

19.1. Survivors should transition to a level of care that is more tailored to their current needs with access to specialized resources and support systems such as psychosocial oncology, structured self-management, and group-based programs.

19.2 A streamlined process should be established for re-entry into Local Cancer Programs, if required.

20. The oncology and palliative care teams, in collaboration with patients, families, and care partners, should regularly engage in discussions and utilize validated tools to guide palliative care provision and to determine the appropriate timing for transitions to end-of-life care.

20.1. The oncology care team should have access to palliative care supports and services in the community to help address the needs of systemic treatment patients when they become more extensive or complex than the oncology care team can manage.

Provider Health and Well-Being

21. Local Cancer Programs in conjunction with organization leadership should develop a comprehensive plan to address provider wellbeing.

21.1. Organizations should:

- Identify the root causes of provider burnout.
- Implement changes that are proposed to address the root causes.
- Measure and assess the change in provider well-being.
- Create dedicated leadership roles to address provider well-being.

21.2. Organizations should consider provider well-being in any process or policy change including technology and health information services.

First Nations, Inuit, Métis, and Urban Indigenous Peoples

22. Local Cancer Programs should develop and implement a voluntary, confidential self-identification process for patients who identify as First Nations, Inuit, Métis, or urban Indigenous to enrich the patient experience, improve health services, identify areas of need in the health care system, and provide data to measure the effectiveness of health care for Indigenous patients.

23. All members of the oncology team should be aware of the Non-Insured Health Benefits (NIHB) program and how to access it for eligible First Nations and Inuit patients.

  23.1. Ontario Health should advocate to the NIHB program to change processes to allow:
  - Indigenous Navigators to sign-off on patient applications.
  - Flexibility in providing supports through the NIHB program to enable additional care partners and family members to easily accompany First Nations and Inuit patients to medical appointments and pre-assessment tests.

24. In partnership with Indigenous leadership and health care providers, co-design patient resources, care delivery policies and processes that utilize grassroots, participatory and collaborative approach and incorporate cultural knowledge into all aspects of care.

  24.1. Facilitate the hiring of First Nations, Inuit, Métis and urban Indigenous peoples for navigation, coordination, peer support, and resource development roles within Regional Cancer Programs.

  24.2. Ontario Health, in partnership with Regional Cancer Programs, should advocate to formalize and appropriately resource the Indigenous Navigator role expansion across all regions to coordinate and connect patients with community care and social services programs, arrange language interpretation services, and facilitate connections with Indigenous Elders, Traditional Healers, or Knowledge Keepers and the oncology care team.

  24.3. Oncology care teams should work in partnership with Elders, Traditional Healers, Knowledge Keepers, and Indigenous providers, to support holistic care that addresses cultural, social, and medical needs.

  24.4. All members of the oncology care team should be required to complete mandatory Indigenous cultural safety and awareness training to ensure culturally appropriate, person-centred care delivery.

Francophone Populations and Equity Deserving Groups

25. Local Cancer Programs should enable patients to self-identify with a community or group and indicate specific preferences or needs at the onset of their cancer care, ensuring they are matched with appropriate information and supports, including translation and interpretation services, which remain accessible throughout their entire journey.

  25.1. Aligned with the *French Language Services Act* in Ontario, oncology care teams should identify Francophone and French-speaking individuals and be trained in active offer of French-language services to patients, families, and care partners.

26. The oncology care team should assess the financial, transportation, and other social supports or needs of all patients upon entry to the cancer system and identify and provide appropriate interventions, while facilitating access to supports and services based on the unique needs of each equity-deserving group.

- **26.1** In collaboration with community members, advocacy groups, and support organizations, Local Cancer Programs should strive to develop patient navigation services and peer support programs that are specifically tailored to the unique needs of Francophone populations and equity-deserving groups.
- **26.2.** Local Cancer Programs should increase awareness, promote, and enable access to existing patient and provider resources available, including French language materials, on the Ontario Health (Cancer Care Ontario) website.
- **26.3.** Local Cancer Programs should develop local content that can be translated into French and other non-English languages based on the demographic needs of their population.
- **26.4.** Local Cancer Programs should implement referral systems that facilitate a smooth transition and provide access to tailored community-based supports and programs for equity-deserving groups.

Introduction

Background

There has been a growing demand for systemic treatment for people with cancer across Ontario. This demand has been driven by several factors, including an aging population and advances in treatment that have resulted in more complex care delivery. This has led to an additional 40,000[1] antineoplastic systemic treatment cases and an additional 120,000 systemic therapy suite visits annually between 2014/15 to 2021/22. Moreover, new cancer cases are predicted to increase by 25.4% over the next 10 years, from approximately 91,846 cases in 2020 to 115,306 cases in 2030.[2]

The delivery of ambulatory systemic treatment has been impacted by health human resource shortages across the healthcare system. Recruiting and retaining medical oncologists, hematologists, highly specialized nurses trained to administer systemic therapy, and oncology-trained pharmacists and pharmacy technicians is especially challenging in the wake of the COVID-19 pandemic. In addition, the pandemic has exacerbated provider burnout, with factors such as increased workload, workflow inefficiencies, poor work-life balance, feeling undervalued and unappreciated, and insufficient training and support.

As healthcare providers face challenges, patients encounter longer wait times for appointments and treatments, as well as delays in receiving test results and reduced access to support services. Inadequate communication and coordination among healthcare providers result in fragmented care, and patients may be referred to services or a level of care that does not align with their needs. Moreover, Indigenous communities, Francophones, and equity-deserving groups face additional obstacles and limitations when accessing cancer care services, which were further compounded by the pandemic. These circumstances may cause frustration and distress to patients and their families, resulting in decreased utilization of services, reduced patient satisfaction, and suboptimal health outcomes. The pandemic also accelerated the adoption of virtual care in cancer care service delivery. Although this was necessary and overall, a positive change, some patients encountered obstacles in accessing virtual care due to limited access to technology or insufficient digital literacy, and some preferred face-to-face interactions. Virtual care was not suitable for certain patient populations or appointments, and it limited aspects of care such as multidisciplinary team consultations with patients, which are a key component of team-based care. In response, Ontario Health (Cancer Care Ontario) has developed recommendations for optimizing service delivery models for ambulatory systemic treatment. These recommendations aim to overcome the challenges faced by providers and patients, ensure equitable access to care for all patients and improve the well-being of healthcare providers involved in delivering cancer care services.

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[1] Activity Level Reporting, Ontario Health (Cancer Care Ontario)

[2] Model developed by Ontario Cancer Registry, Ontario Health (Cancer Care Ontario)

Objectives

The purpose of this initiative was to develop models of care recommendations for ambulatory systemic treatment from a patient, provider, cancer program, and organization perspective. These recommendations strive to:

- Optimize the utilization of health care resources, settings, and processes throughout the oncology clinic, oncology pharmacy, and systemic therapy suite.
- Enhance the experience of patients undergoing ambulatory systemic treatment.
- Improve the well-being of multidisciplinary team members involved in the delivery of this care.

Guiding Principles

The following are the guiding principles that were adhered to for recommendation development:

- Ensuring delivery of evidence-based, high quality, person-centred care.
- Facilitating timely access to care in appropriate settings, as close to home as possible.
- Enabling multi-disciplinary team members to collaborate effectively and work to their optimal scope of practice.
- Leveraging current and emergent technologies and therapies, where possible.
- Identifying, where possible, appropriate supports available to implement the new models of care.
- Exploring opportunities to address existing inequities for Indigenous communities and equity deserving groups.
- Ensuring alignment with regulatory and accreditation standards.

Methodology

Several methods were employed to inform and facilitate recommendation development, with the aim of ensuring that they were evidence-based, pragmatic, and effective in addressing the challenges facing the healthcare system.

Targeted literature review: A targeted literature review was conducted to understand the current state of research and best practices related to systemic treatment delivery in the ambulatory care setting. By reviewing studies and publications from 2013 to 2023, the Ontario Health (Cancer Care Ontario) team identified themes, topics, and questions to inform evidence-based recommendations. The review also highlighted gaps in knowledge and opportunities for future research, enabling the team to identify areas for innovation and improvement in systemic treatment delivery.

Current state survey and follow-up interview with systemic treatment facilities: A survey was conducted from May to June 2022, across 16 systemic treatment facilities in Ontario to explore clinical processes, staffing, and resource use for patient care in ambulatory settings. The facilities were chosen to ensure representation across all regions and hospital levels. The survey identified current strengths and areas for improvement in care delivery, while a subsequent interview with multidisciplinary teams provided more detailed feedback on their experiences, challenges, innovative practices, and priorities for the new model. The interview process gathered suggestions for improving care outcomes and addressed challenges encountered by the teams.

Focus groups with patients, families, care partners, and multidisciplinary providers: From September to December 2022, a total of five focus groups were conducted with different oncology healthcare professionals from the Regional Cancer Programs and patient and family representatives in Ontario. The focus groups included physicians (n=19), nurses (n=14, including Regional Oncology Nursing Leads who consulted with local nursing staff), advanced practice nurses (n=8), pharmacists and pharmacy technicians (n=19), and patient and family advisors (n=9). The focus groups aimed to obtain direct feedback from patients and providers on the challenges and facilitators of ambulatory systemic treatment. The focus groups also allowed for in-depth exploration of participants' experiences and perceptions, uncovering valuable insights that may not be captured through other data collection methods.

Jurisdiction scan in Canada and abroad: From September to December 2022, key informants from eight cancer agencies and programs in Canada and abroad, including Alberta Health Services, British Columbia Cancer Agency, Yale Cancer Centre, Dana-Farber Cancer Institute, Memorial Sloan Kettering Cancer Centre, Ireland National Cancer Control Programme, and National Health Services in Scotland and the United Kingdom, were interviewed to explore jurisdictional approaches to systemic treatment delivery in the ambulatory setting. The scan helped to identify successful approaches that could be adopted or adapted to improve ambulatory systemic treatment delivery in Ontario.

Project working group with patients, families, care partners, and multidisciplinary providers: Ontario Health (Cancer Care Ontario) established a Project Working Group (n=13 core members and n=8 ad hoc members) comprising patient and family advisors, senior administrators, and multidisciplinary providers from Regional Cancer Programs in Ontario. Members were nominated based on their extensive knowledge and experience in delivering systemic treatment in the ambulatory setting and convened monthly from October 2022 to February 2023. A Participation Agreement and Conflict-of-Interest Declaration were required for joining the group.
Feedback from working group members was essential in guiding the development of recommendations, providing insights into the practical aspects of care delivery and potential enablers for successful implementation.

Engagements with First Nations, Inuit, Métis, and urban Indigenous communities: From December 2022 to May 2023, a series of four community dialogues, focus group discussions and interviews were held, along with the distribution of surveys for providers. A total of three participants and nine providers were engaged. The purpose of these discussions was to gain a better understanding of the specific needs, experiences, and barriers to care that Indigenous people encounter when accessing ambulatory systemic treatment. It was important to co-design the recommendations with Indigenous populations and communities as they are often underserved and face unique challenges in accessing healthcare services.

Engagements with Francophone populations and equity-deserving groups: From December 2022 to May 2023, a series of thirteen community dialogues and discussions were held, engaging a total of 33 participants from diverse equity-deserving populations and communities. These sessions included individuals who identify as 2SLGBTQIA+, Black, Francophone, newcomers, and immigrants. The purpose of these discussions was to gain a better understanding of the specific needs, experiences, and barriers to care that these groups encounter when accessing ambulatory systemic treatment. It was important to co-design the equity-focused recommendations with these populations and communities as they are often marginalized and face unique challenges in accessing healthcare services.

Consultation process: Extensive consultations were conducted from April to June 2023, with Ontario Health Programs, subject matter experts, key stakeholders at local and regional levels, health administrators, and administration bodies. This allowed for a diverse range of perspectives to be considered, ensuring that the recommendations were relevant, feasible, and acceptable to those who will be affected by them.

Recommendations

Referral to Diagnostic Services for Suspected Cancer

What are the challenges?

- Patients with a suspicion of cancer may not have equal access to care if there are inconsistencies in referral and diagnosis processes. This can lead to some patients experiencing longer wait times or not receiving the appropriate level of care.
- A lack of standardized processes can lead to unnecessary tests, treatments, and referrals, which can increase the burden on the healthcare system.
- It can also lead to delays in the diagnosis of cancer. A timely cancer diagnosis is essential for ensuring the best possible outcomes for patients.
- Inconsistent processes can lead to confusion, frustration, and anxiety for patients and providers, who may not understand the referral process or why they are being referred to different services.

Why is it important to address these issues? [1–6]

- **Equal access to care:** Inconsistencies in referral and diagnosis processes can result in some patients experiencing longer wait times or not receiving the appropriate level of care, potentially leading to health disparities. It is important to address these issues to ensure that all patients, regardless of their background or circumstances, have equal access to high-quality care.
- **Reduced unnecessary burden on the healthcare system:** Standardized processes can optimize healthcare resources and reduce the burden on the healthcare system. By having clear guidelines, unnecessary tests, treatments, and referrals can be avoided, leading to more efficient and effective healthcare delivery as well as improved provider experience.
- **Timely cancer diagnosis:** Timely diagnosis of cancer can lead to better outcomes for patients, such as improved survival rates and quality of life, and can also reduce the need for more aggressive and costly treatments.
- **Improved patient experience:** Clear and consistent processes can improve patient satisfaction and reduce anxiety by providing patients with a better understanding of the referral process and what to expect from different services.

Recommendation 1. Expedited and standardized referral and diagnostic processes should be established to streamline entry into the cancer system.

1.1. A diagnostic service for suspected cancer should be established to enable timely and coordinated investigations for patients (e.g., bloodwork, diagnostic imaging, and biopsy).

1.2. Standardized referral criteria should be established to assist referring physicians in determining which patients require referral, to reduce unnecessary or duplicate testing.

1.3. Standardized lab and diagnostic imaging order sets aligned with guidelines and best practices should be developed to support high-quality clinical decision-making and referral to the first appropriate service.

What are the key enablers?

- **Educational outreach to referring providers:** Outreach to referring providers is important for early detection and referral of cancer patients. Providers need to be informed of the standardized referral and diagnostic processes and equipped with necessary resources to refer patients promptly. This can be achieved through targeted educational materials and outreach programs.
- **Standardized processes and protocols:** The development of standardized workflows and protocols for referral intake and diagnostic evaluation can help to ensure consistent, efficient, and effective care delivery.
- **Technology infrastructure:** Appropriate technology infrastructure, such as a secure and reliable electronic medical record (EMR) system or health information exchange (HIE), is necessary to support the flow of patient information and enable efficient communication between providers.
- **Quality improvement processes:** Ongoing monitoring, evaluation, and refinement of the referral and diagnostic processes are essential to ensure their effectiveness and sustainability over time. This involves the use of data to identify opportunities for improvement and the implementation of evidence-based practices to address identified gaps.

- **Interdisciplinary collaboration:** Effective communication relies on strong interdisciplinary collaboration among providers involved in the referral and diagnostic processes. Encouraging interdisciplinary teamwork, regular meetings, and open lines of communication promote shared decision-making, coordinated care, and prompt communication of findings.

What are the key implementation considerations and options?

Local Cancer Programs

- A diagnostic service for suspected cancer, whether in-person or virtual, would offer patients access to the necessary diagnostic tests to confirm or rule out a cancer diagnosis, and connect them with additional supports and services in the Regional Cancer Program while they await their results, such as patient navigation or social worker assistance. It is important to note that this diagnostic service differs from diagnostic assessment pathways (DAPs), which typically focus on a specific disease site, and follow a structured and standardized approach for diagnosis and management. Conversely, a general suspicion of cancer diagnostic service is designed to investigate any potential or suspected cancer, is disease agnostic, and is usually more comprehensive in scope, including a range of tests and procedures applicable to multiple types of cancer. If a cancer diagnosis is confirmed, the patient will be referred to the first appropriate service (e.g., medical, gynecologic, radiation, surgical oncology, or hematology). If a cancer diagnosis is ruled out, the referral will be redirected to another specialist, or the patient will be transitioned back to the referring physician. A diagnostic service for suspected cancer should be established at the local cancer program level. Implementation at the regional level can be considered based on factors such as patient population, geographical considerations, and catchment areas.
- Consider physician joint review where needed, with clerical staff to triage referrals and schedule patients into the next available time slot. Consider booking patients in available time slots that have been left open due to last-minute cancellations caused by illness or other unforeseen circumstances. This approach can help optimize clinic resources and ensure that patients are able to receive timely care.
- Patients may be seen by a medical oncologist, general practitioner in oncology or nurse practitioner. Refer to Ontario Health (Cancer Care Ontario) Disease Pathway Management Program Resources.
- Consider a Patient Navigation Day - a single-day event during which patients with a suspicion of cancer, along with their families or care partners, are guided through a fully coordinated, comprehensive diagnostic testing process.[7]
    - Patients first undergo a group teaching session during which patients receive a program orientation from both a nurse and a team social worker. Financial issues, commonly experienced emotions, and coping skills are discussed early on, facilitating open communication between the patient and staff.

  - To mitigate any potential problems in the rapid completion of the diagnostic phase of care, each patient meets one-on-one with a nurse who provides teaching about the upcoming testing and uses a self-reporting health history questionnaire and the Edmonton Symptom Assessment System (ESAS) to assess symptoms, emotional status, and social issues.
  - All necessary bloodwork is completed, teaching is initiated, contact numbers are reinforced for further questions, and a patient passport is provided and reviewed.

Ontario Health (Cancer Care Ontario)

- Partner with primary care to establish integrated diagnostic services supported by navigation and access to information to improve timely diagnosis and patient outcomes.

Referral to Medical Oncology, Hematology and Gynecologic Oncology Services

What are the challenges?

- Decentralized referral intake can lead to inconsistencies in the referral process, resulting in confusion and delays for both patients and healthcare providers.
- Inconsistencies in the referral review process, can lead to delays in scheduling consultations and potentially compromising patient care.
- The workload imbalance among healthcare providers may result in certain providers being overburdened while others are underutilized in terms of referral review.
- Inconsistent processes can result in some patients experiencing longer wait times or not receiving the appropriate level of care, which can negatively impact their outcomes.
- Failure to communicate a diagnosis in a timely and accurate manner to both patients and referring providers can result in negative consequences for patient care.

Why is it important to address these issues? [8–17]

- **Improved patient outcomes:** Implementing a centralized referral intake system and standardized workflow can improve patient outcomes by ensuring that patients who require specialist care are seen in a timely manner. This can lead to earlier diagnosis, appropriate treatment, and improved patient satisfaction.
- **Increased provider satisfaction:** A centralized referral system and standardized workflow can also improve workload balance among team members and reduce inefficiencies, which can lead to increased job satisfaction among healthcare providers.
- **Efficient utilization of resources:** Establishing a centralized referral system and standardized workflow can improve the efficient use of hospital and regional resources, which can lead to better allocation of resources.

- **Improved patient-provider communication**: When the specialist delivers the diagnosis directly to the patient, they can address any questions or concerns the patient may have in real-time. This can lead to better patient-provider communication and help build trust between the patient and their healthcare team.
- **Collaboration and coordination among providers:** Sharing the diagnosis with the referring provider promotes collaboration and coordination among healthcare providers, leading to a more efficient and effective care plan. This also helps establish clear expectations regarding individual responsibilities during the active treatment phase and at the end-of-treatment.

Recommendation 2. A centralized referral intake system should be established to ensure that patients who require referral to medical oncology, hematology, or gynecologic oncology services are seen by the first available specialist within the hospital or region.

2.1. A standardized workflow for new patient triage and prioritization should be developed to identify who reviews the referral and how quickly a consultation is scheduled based on clinical information, improving efficiency and workload balance among team members.

2.2. The specialist should deliver the diagnosis to the patient, while also informing the physician who initially referred the patient to the diagnostic service.

What are the key enablers?

- **Technology infrastructure** A centralized referral intake system relies on appropriate technology infrastructure, such as electronic referral and consult systems. An e-Consult service enables healthcare providers to electronically communicate with specialists to determine the suitability of a referral. An e-Referral tool allows for secure and accurate exchange of referral information between providers, reducing errors and facilitating better coordination of care.
- **Stakeholder engagement:** Engaging key stakeholders, such as referring providers, specialists, and administrative staff, is essential for identifying and addressing potential barriers to implementation, and ensuring the system meets the needs of all parties involved.
- **Standardized processes and protocols:** Developing standardized workflows and protocols for triage and prioritization of referrals, as well as for communication between specialists and referring providers, can help to ensure consistent, efficient, and effective care delivery.

- **Quality improvement processes:** Ongoing monitoring, evaluation, and refinement of the referral intake system are necessary to ensure its effectiveness and sustainability over time. This involves the use of data to identify opportunities for improvement and the implementation of evidence-based practices to address identified gaps.
- **Training and education:** Offering healthcare providers training and education on communication skills, cultural competency, and legal and ethical considerations can help them enhance the effectiveness of communication and prevent potential obstacles when conveying a diagnosis to a patient.

What are the key implementation considerations and options?

- Centralized intake models can greatly improve the referral process for patients. Such models should include an intake office that serves as a point of contact for patients and providers, as well as an e-Consult service and an e-Referral tool. Refer to Ontario Health (eHealth Ontario) e-Referral – e-Consult – HL7® FHIR® Implementation Guide.
- To ensure that patients are seen by the appropriate specialist in a timely manner, centralized intake models should also have standard participation and allocation rules for medical oncologists, hematologists, or gynecologic oncologists. Patients should be able to see the next-available specialist from the pool of participating specialists in the hospital or region, unless otherwise specified.
- When a referral is received, the specialist or delegate should send a notification acknowledging receipt to the referring provider and the patient.
    - **If the referral is accepted:** It is important to ensure that patients are well-informed about their upcoming appointments. To achieve this, patients should receive detailed information via email or a patient portal or alternatively, by telephone or regular mail for those with limited technological access or skills. This information should cover several important areas to ensure that patients are well-prepared for their appointments:
        - The date, time, location, and name of their medical oncologist/hematologist/ gynecologic oncologist, if available.
        - Any pre-appointment preparations should be communicated to the patient such as instructions on fasting, drinking fluids, or taking medication before the appointment.
        - General information about the hospital where their appointment is taking place such as details about transit, parking, and accessibility services.
        - An overview of programs, services, health information, and tools available to support them such as support groups, counseling services, or online resources.
        - Information about the systemic treatment facility's procedures and policies such as how to cancel or confirm appointments, and essential care partner and visitor policies.

    - Contact information for any questions or concerns they may have to ensure that patients feel supported and have access to the information they need to make the most of their appointments.
  - **If the referral is not accepted:** The specialist should provide an informative response to the referring provider and the patient, indicating the reasons why the referral was not accepted. This could be due to a variety of reasons, such as the referral not meeting the criteria for the service, insufficient information being provided, or the patient requiring a different level of care. The care team should also provide information about alternative care options that may be available to the patient. This could include referrals to other specialists or services, or guidance on how to access additional resources that can support their care needs.
- Local cancer programs or disease site teams should develop criteria for select referrals that should be prioritized for review by a medical oncologist/hematologist/gynecologic oncologist
  and/or
  Local cancer programs or disease site teams should develop criteria and parameters for referrals that could be reviewed and/or triaged by other team members with clinical expertise (e.g., general practitioner in oncology, nurse practitioner, physician assistant, clinical nurse specialist/ registered nurse, clerk) with support from medical oncologist/ hematologist/ gynecologic oncologist, as required.
- Consider a rotating triage schedule for team members to build capacity and share workload.
- Efforts should be made to reduce unnecessary administrative burdens on providers throughout the referral and triage process.

Scheduling Appointments for the Oncology Clinic and Systemic Therapy Suite

What are the challenges?

- Health human resource shortages can result in longer wait times for patients to see a specialist or receive treatment. This can delay diagnosis and treatment, which can have a negative impact on patient outcomes.
- Limited space in oncology clinics or systemic therapy suites can reduce the availability of appointments for cancer patients. This can result in longer wait times, fewer available appointment times, and decreased access to care.
- Limited availability of appointments can also reduce the flexibility of scheduling, which can make it more difficult to accommodate patient preferences or schedule urgent appointments.
- The type and duration of treatment may need to be taken into account when scheduling patients. For example, some treatments may require longer appointments or may be more complex, which can impact scheduling.

- Patients may need to schedule appointments with other healthcare providers, such as radiologists or surgeons, which can add to the complexity of scheduling.
- Unplanned patient care can disrupt schedules and require rescheduling or adjusting appointments.

Why is it important to address these issues? [18–26]

- **Patient access:** Efficient scheduling in oncology clinics or systemic therapy suites is essential for timely access to care and optimizing resource utilization. It minimizes delays in diagnosis and treatment, reduces wait times, minimizes idle time, and improves the overall patient flow.
- **Patient experience:** A well-managed schedule can help ensure that patients have a positive experience at the clinic or suite. This can help improve patient satisfaction and encourage patients to continue with their treatment.
- **Provider experience:** Provider experience can be enhanced by implementing effective schedule management practices, which can ensure a balanced distribution of workload and prevent providers from being overworked or underutilized. This, in turn, contributes to improved provider well-being and retention.

Recommendation 3. Appointment scheduling for the oncology clinic and systemic therapy suite should be completed by individuals with knowledge and expertise to ensure that multiple interrelated factors related to scheduling are considered and adjusted based on changing resource availability.

What are the key enablers?

- **Effective communication:** Effective communication between healthcare providers, patients, their families and care partners, is critical for successful scheduling. This includes clear and timely communication about appointment times, changes to schedules, and instructions for preparation or follow-up.
- **Electronic health records (EHRs):** EHRs can facilitate efficient scheduling by providing real-time information about patient appointments, availability of resources, and treatment plans. EHRs can also help providers track patient progress and coordinate care across different disciplines.
- **Person-centred care:** Person-centred care is an approach that prioritizes the needs, preferences, and values of patients when making decisions about their care. This can include flexible scheduling options, such as extended hours or weekend appointments, as well as support for transportation, childcare, or other logistical concerns.

- **Staffing levels:** Adequate staffing levels are critical for successful scheduling in oncology clinics and systemic therapy suites. This includes having enough oncology care team members and support staff to meet patient demand, their unique needs and ensure timely access to care.
- **Efficient use of space:** Efficient use of space can help maximize the number of patients that can be seen in the clinic or suite. This includes scheduling patients with similar treatment requirements in the same treatment spaces, using equipment and treatment spaces efficiently, and minimizing wait times.
- **Performance metrics:** Performance metrics can help Local Cancer Programs track the efficiency and effectiveness of scheduling processes. This can include measures such as wait times, patient satisfaction, and staff productivity, which can be used to identify areas for improvement and track progress over time.
- **Continuous improvement:** Continuous improvement is an approach that focuses on identifying and addressing inefficiencies in processes to improve patient outcomes and organizational performance. This includes ongoing monitoring of scheduling processes, soliciting feedback from patients and staff, and implementing changes through planned Plan-Do-Study-Act (PDSA) cycles to improve scheduling efficiency and patient access to care.

What are the key implementation considerations and options?

Systemic Treatment Facilities

- While practical experience in the role is a key factor in developing expertise in scheduling for oncology clinics and systemic therapy suites, an education and training program may also be beneficial for clerks who wish to grow into the role of scheduling specialist. By providing a structured and comprehensive learning experience, the program can help these individuals gain a deeper understanding of key concepts, skills, and complexity of this work including multi-criteria decision analysis, optimizing resource planning and allocation, accommodating variability such as provider schedules, no-shows, cancellations, late arrivals, and add-ons, and coordinating with other team members and departments for interventions like surgery or radiation. To ensure that staff can manage the scheduling demands of the program, hands-on training and ongoing support are also necessary.
- When an individual takes on the responsibility of scheduling in the systemic treatment program, they acquire a particular set of skills in scheduling, organization, and time management. It is essential to assess whether their current job responsibilities and compensation align with their abilities. Creating a new position, such as a Scheduling Specialist, which recognizes and utilizes their expertise, can improve the program's efficiency and productivity while offering opportunities for professional development.

Ontario Health (Cancer Care Ontario)

- Explore opportunities to create a training package for clerks/scheduling specialists with key concepts and skills for scheduling patients receiving systemic treatment and how to incorporate this into process transformation to improve workflows.

Recommendation 4. Evidence-based tools and technologies should be used to optimize resources and scheduling processes in the outpatient oncology clinic and systemic therapy suite.

What are the key enablers?

- **Clinical decision support tools:** Clinical decision support tools can help Local Cancer Programs make evidence-based decisions about scheduling clinic and treatment visits. This can include tools such as predictive analytics, decision trees, and risk stratification algorithms.
- **Resource optimization tools:** Resource optimization tools can help Local Cancer Programs allocate resources more efficiently. This can include tools such as simulation modeling, queuing theory, and optimization algorithms.
- **Electronic health records (EHRs):** EHRs can facilitate the use of scheduling and resource optimization tools by providing real-time access to patient information and clinical decision support tools. This can help Local Cancer Programs make more informed decisions about scheduling clinic and treatment visits.
- **Performance metrics:** Performance metrics can help Local Cancer Programs track the effectiveness of scheduling and resource optimization processes. This can include measures such as patient wait times, resource utilization, and staff productivity, which can be used to identify areas for improvement and track progress over time.
- **Continuous improvement:** Continuous improvement is an approach that focuses on identifying and addressing inefficiencies in processes to improve patient outcomes and organizational performance. This includes ongoing monitoring of scheduling processes, soliciting feedback from patients and staff, and implementing changes through planned Plan-Do-Study-Act (PDSA) cycles to improve scheduling efficiency and patient access to care.

What are the key implementation considerations and options?

Local Cancer Programs

- Utilize the Ontario Health (Cancer Care Ontario) *Systemic Treatment Quality-Based Procedures Management Tool* to plan the allocation of key health human resources, including physicians, nurses, pharmacy and support staff, for providing cancer care services in a timely and efficient manner. Email OH-CCO_ST-QBP@ontariohealth.ca for more information on the Tool and its application in resource allocation planning.
- Create a scheduling grid of oncology care providers that outlines their specific tasks and responsibilities, leveraging the scope of practice matrix (Appendix B) and use of medical directives, such as patient education, systemic treatment administration, and follow-up appointments.

- Effectively track and trend data on patient volumes, appointment types, and resource utilization to understand the patterns of service delivery and identify areas for improvement.
- Develop scheduling templates based on utilization patterns and allocate specific slots or chairs for new consults, systemic treatment starts, and follow-up appointments to optimize resource utilization and minimize patient wait times. For example, book follow-up visits 90 days prior to the next scheduled appointment, avoiding the need for subsequent cancellations or rebooking due to uncertain future schedules. This approach helps streamline the scheduling process and ensures appointments are efficiently managed without unnecessary advanced booking. Proactively communicate with patients and care partners about their follow-up appointments as patients may experience anxiety about not knowing when their next appointment is or may call the centre for follow-up, increasing the burden on the staff.
- Use data analysis to inform decision-making on the optimal number of health human resources and composition of care providers needed to deliver care on any given day, considering the volume and complexity of appointments and the skill mix required for providing safe and effective care.
- Consider implementing operating system software empowered with artificial intelligence capabilities. This advanced software enables automated workflows that accurately forecast patient volumes and service types, ensuring optimal allocation of chairs or beds, and maximizing resource capacity. It also optimizes staffing resources and minimizes patient wait times. As part of the implementation, consider creating demand-based clinic targets and incorporating them into the optimization models. Develop "block" scheduling on a regular basis (e.g., quarterly), with inputs such as vacation schedules received six months in advance, to help ensure efficient planning. It is also important to input constraints and optimization criteria that consider physician and staff preferences, further tailoring the scheduling process to individual needs and preferences. Consideration can be given to leveraging scheduling software as an input during electronic medical record (EMR) system implementation to streamline the process.
- Collaborate with other cancer programs to share data, scheduling templates, and best practices in resource allocation planning and appointment scheduling.
- Engage in development work with EMR vendors to design and implement scheduling models that better meet the unique needs of cancer programs, such as accommodating complex treatment regimens, ensuring interdisciplinary communication and collaboration, and supporting patient-centred care.

Ontario Health (Cancer Care Ontario)

- Explore opportunities to develop tools/ratios to assist with nursing assignments in the clinic.

Service Delivery in the Oncology Clinic

What are the challenges?

- Oncology clinics are experiencing capacity constraints as patients on active treatments require more clinic visits due to multiple lines of therapy and newer treatment protocols which are more complex and administered for longer periods.
- Capacity constraints can lead to increased stress and workload on providers, which can impact their ability to provide personalized care and maintain positive relationships with patients. This can result in providers feeling overworked and burnt out, leading to reduced job satisfaction, early retirements, and staff turnover.
- When providers have less time to spend with each patient due to capacity constraints or increased administrative burden, this leads to shorter appointments and less individual attention. This can make it challenging to establish a rapport and build a relationship with patients, which can negatively impact patient satisfaction and outcomes.
- As care complexity increases, there may be a need for timely care coordination among multidisciplinary team members (e.g., psychosocial oncology, palliative care providers), which can lead to potential communication breakdowns and fragmented care.
  - Patients and members of the oncology care team may sometimes mistakenly associate palliative care with end-of-life or terminal care, leading to concerns that introducing a palliative approach to care early in the disease process may potentially reduce life expectancy.
- While same-day models can be effective as an exception, it is important to carefully consider the challenges and limitations associated with this approach to ensure that patients receive the highest quality of care.
  - Same-day models limit the capacity available for systemic treatment appointments. Providers must make decisions on the day of treatment after receiving results from the pre-treatment assessment and bloodwork results. This may result in delays, cancellations, or the addition of supportive care treatments, adding further pressure and constraints to the systemic therapy suite resources or resulting in gaps in the schedule that could have been filled by other patients waiting for an appointment.
  - Same-day models may not be suitable for all patients, particularly those with complex treatment regimens or specialized interventions. Providers may also have limited time to adequately address patient concerns and questions, which can impact patient satisfaction and outcomes. Same-day models can be stressful for patients, who may feel rushed or overwhelmed by the fast-paced environment.

  - Same-day models have been shown to be more demanding for staff, resulting in increased workload and pressure to deliver safe and timely care, leading to burnout, decreased job satisfaction and performance. Patients' results and treatment plans must be reviewed on the day of treatment, resulting in delays with pending bloodwork, communication with the relevant team members to obtain treatment decisions, as well as order verification and preparation.

Why is it important to address these issues? [27–34]

- **Addressing the increasing complexity of cancer care:** As cancer treatments become more complex, it becomes increasingly important to have a multidisciplinary team that includes a wide range of healthcare providers with different areas of expertise. For example, a patient with advanced cancer may require the input of medical oncologists, palliative care specialists, and psychosocial oncology providers.
- **Managing staffing shortages:** Oncology clinics often struggle with staffing shortages, which can lead to long wait times, delayed diagnoses, and reduced quality of care. By expanding the type of providers on the oncology care team, clinics can address these staffing shortages and provide more timely and effective care.
- **Providing high-quality, holistic care:** A multidisciplinary care team can provide a holistic approach to care, taking into account the patient's physical, emotional, and social needs. This can result in improved quality of care, better communication among healthcare providers, and a more coordinated treatment plan.
- **Enhancing patient satisfaction:** By working together as a team, healthcare providers can provide more person-centred care and enhance the overall patient experience. This can lead to increased patient satisfaction and improved outcomes.
- **Improved provider well-being:** With team-based care, tasks and responsibilities are assigned to the appropriate team members, which allow them to focus on the areas of care that align with their specific training and expertise. This means that providers can work to their full scope of practice, using their skills and knowledge to deliver the highest quality care possible. When providers can work to the best of their abilities, they may experience a greater sense of job satisfaction, which can lead to improved well-being.
- **Improving safety:** Non-same-day models allow sufficient time for the oncology care team to review and analyze pre-treatment assessments and bloodwork results, make treatment decisions and changes, reducing the risk of errors or oversights during treatment planning and administration and reducing stress on the care team.
- **Timely access to care:** Where it is feasible, shared care between cancer programs in a region, such as Level 1 and 2 hospitals collaborating with Level 3 and 4 hospitals has the potential to improve access to multidisciplinary care closer to home. By reducing the burden of high patient volumes at Cancer Centres and enabling patients to receive timely and appropriate care, shared care can help enhance the overall quality of cancer care delivery.

Recommendation 5. Local Cancer Programs should expand the type of providers included in oncology care teams to manage increasing patient volumes and care complexity in the oncology clinic.

5.1. The care team should be designed around the patient with a focus on developing consistent patient-provider relationships to ensure safe and effective coordination and continuity of care.

5.2. Providers should receive support to build their proficiency in providing person-centred care, encompassing palliative and psychosocial oncology concepts, as well as addressing the unique needs and preferences of diverse individuals.

5.3. Additional roles should be integrated into the oncology clinic:

- Medical Oncologist/Hematologist/Gynecologic Oncologist
- Alternate Prescribers (General Practitioner in Oncology, Nurse Practitioner)
- Extenders (Physician Assistant)
- Pharmacists
- Clinical Nurse Specialists/Registered Nurses.

5.4. There should be established identification and referral processes in place to Psychosocial Oncology providers and Palliative Care teams along with other patient support roles (e.g., Drug Access Navigators, Patient Navigators).

5.5 Medical directives should be effectively utilized, enabling team members to work autonomously, promote shared care or supervision of systemic treatment patients, and improve workload management.

5.6. The roles and responsibilities of each team member should be clearly defined with expectations clarified about how each discipline will communicate with each other and collaboratively provide patient care.

5.7. Local Cancer Programs should consider exploring opportunities to collaborate with hospitals in their regions to help manage clinic visits and provide care close to home where appropriate (e.g., new consult at Level 1 or 2 hospitals with follow-up and urgent care at Level 3 or 4 hospitals).

What are the key enablers?

- **Team-based care model:** A team-based care model that involves multiple healthcare professionals with different specialities working together to deliver person-centred care can improve the coordination and continuity of care. Regular team meetings and case discussions can promote better understanding of the patient's condition and shared decision-making among team members. Clearly defining the roles and responsibilities of each team member helps ensure effective team functioning. It helps avoid confusion, reduce overlap of duties, and ensures every member understands their contribution to patient care.
- **Continuing Education Opportunities:** Provide ongoing continuing education opportunities focused on person-centred and palliative care as well as psychosocial oncology. These opportunities can include workshops, conferences, webinars, and online courses that keep providers updated on the latest research, best practices, and emerging trends in these areas.
- **Cultural competency training:** Integrate cultural competency training within the curriculum or training programs. This should include education on cultural diversity, sensitivity, and the impact of cultural factors on healthcare decision-making and outcomes. Offer resources and tools to help providers understand and adapt their care to meet the unique needs of diverse individuals.
- **Workforce Planning:** Strategic workforce planning can help identify necessary roles and the right candidates for these roles, leading to a multidisciplinary team that can address the diverse needs of patients. This includes assessing current staff skills, identifying gaps, and forecasting future staffing needs.
- **Collaborative Protocols:** Well-defined referral protocols and clear communication channels among providers can improve coordination of care. This includes setting clear expectations, establishing standardized procedures for referrals to other providers, and ensuring efficient information exchange. Implementing an integrated Electronic Health Record (EHR) system can streamline the referral process, reduce duplication, and enable seamless transfer of information. It can also enable tracking of patient progress, making it easier to coordinate care and make informed decisions.

- **Policies and Guidelines:** Creating clear policies and guidelines around the use of medical directives can help standardize procedures, reducing variability in care and improving patient safety. These guidelines should be easily accessible and regularly updated to reflect best practices.
- **Partnership Building:** Building partnerships with regional hospitals can help in extending the reach of cancer care services, providing patients with care closer to their homes. These partnerships can also aid in sharing resources, knowledge, and best practices.

What are the key implementation considerations and options?

Local Cancer Programs

For 5.2:

- Support staff in embedding person-centred care, including palliative and psychosocial oncology concepts, into practice by facilitating competency development and establishing systems that uphold these principles.

For 5.4.

- Provide access to Patient Reported Outcome Measures (PROMs)/symptom screening tools (e.g., *Your Symptoms Matter*) on tablets while patients are at home (online or via QR code), waiting for clinic appointments or during treatment visits to help initiate discussions and referrals to the appropriate multidisciplinary providers.
- Once the oncology care team has identified additional needs of the patient, the appropriate providers should be involved in a timely manner.
    - To address psychosocial oncology needs effectively, psychosocial oncology providers should be involved in a timely manner. These professionals play a key role in assisting with symptom and toxicity management, addressing financial challenges, providing individualized care, and delivering trauma-informed services. Refer to Ontario Health (Cancer Care Ontario) and the Recommendations for the Delivery of Psychosocial Oncology Services in Ontario.
    - For palliative care needs, palliative care providers should be involved in a timely manner to support complex symptom management, and goals of care discussions, particularly for individuals with advanced cancer. Refer to the Ontario Health Palliative Care Health Services Delivery Framework and Goals of Care Toolkit for Oncology Settings.

For 5.5.

- For patients having shared care from other providers for systemic treatment, Local Cancer Programs or Disease Site Teams should establish a minimum frequency and criteria for medical oncology, hematologist, or gynecologic visit (e.g., appointment at first and last cycle or with changes in care or treatment).

For 5.6.

- Appendix B (Scope of Practice Matrix for Systemic Treatment Providers) provides a detailed list of activities performed by the members of the care team across the episode of care, and outlines opportunities to task-shift and optimize scope of practice.

Collaboration between Local/Regional Cancer Programs and Ontario Health (Cancer Care Ontario)

- Plan for space expansion or additional cancer program locations based on current unmet needs and anticipated increases in future demand for cancer services.

Ontario Health (Cancer Care Ontario)

For 5.2.

- Explore potential funding opportunities for additional roles through a cancer system health human resources plan or a Systemic Treatment Quality-Based Procedures model refresh.
- Develop provincial standardized training and education requirements for alternate prescribers (general practitioner in oncology, nurse practitioner) and extenders (physician assistants) working in the outpatient oncology setting.
- Work with Regional Cancer Programs to better understand the current state of psychosocial oncology services at centres, assess the impact on patients who do not receive these services, and explore opportunities for enhancing data reporting and service accessibility.

Recommendation 6. A non-same-day systemic treatment model should be implemented, where appropriate, to reduce patient wait times, increase provider and patient safety, and improve clinic flow and efficiency.

6.1. Local Cancer Programs should partner with community laboratories to enable patients to complete their bloodwork closer to home and utilize virtual care platforms to complete pre-treatment assessments, where clinically appropriate.

6.2. Consider an ‘exception’ process for a same-day model for patients who may face barriers to accessing care.

What are the key enablers?

- **Robust treatment planning and coordination:** Non-same-day models require careful planning and coordination to ensure that patients receive the appropriate treatments at the right time. This requires robust treatment planning processes and clear communication channels between the oncology care team, and any other providers involved in the patient's care.
- **Flexibility and adaptability:** Non-same-day models may require flexibility and adaptability to adjust to changes in the patient's condition, treatment needs, or scheduling requirements. Providers should be prepared to make adjustments as needed to ensure that patients receive optimal care.
- **Clear communication with patients, families, and care partners:** Non-same day models may involve changes in the patient's treatment schedule or routine, which can be confusing or stressful for patients, families and their care partners. Clear communication about the treatment plan and expectations can help alleviate these concerns and ensure that patients feel supported and informed throughout the process.
- **Adequate resources and infrastructure:** Non-same day models may require additional resources and infrastructure to support the coordination and delivery of care. This may include additional staff, equipment, or technology to facilitate communication and tracking of patient care.
- **Continuous quality improvement:** Like any care model, non-same day models should be regularly reviewed and evaluated to identify areas for improvement and make changes as needed to enhance the quality of care provided to patients.
- **Community-based partnerships:** By partnering with community laboratories and diagnostic imaging services, patients can avoid traveling long distances or waiting for appointments at hospitals, making healthcare more accessible and convenient.

What are the key implementation considerations and options?

Local Cancer Program

- Ideal Model for Systemic Treatment Delivery:
  - Day 1: Patient has their bloodwork done at an internal or external lab (<24-hour turnaround time)
  - Day 2: Review bloodwork, conduct a pre-treatment assessment (consider opportunities for virtual care, where appropriate), and complete order verification; some drug preparation based on available stability information.
  - Day 3: Drug preparation and administration

Ontario Health (Cancer Care Ontario)

For 6.1.

- Explore partnerships with community laboratories and equitable access to lab tests regardless of setting.

Recommendation 7. A standardized process, utilizing medical directives where appropriate, should be developed and implemented to obtain a timely treatment decision for commonly observed abnormalities or out-of-range findings from blood work and/or pre-treatment assessment.

What are the key enablers?

- **Clear communication channels:** Clear and efficient communication channels between the various members of the oncology care team, as well as with the patient, can help ensure that abnormal or out-of-range findings are identified and addressed in a timely manner.
- **Rapid access to relevant information:** Oncology care team members need rapid access to relevant patient information, such as blood work results or pre-treatment assessments, to facilitate timely decision making.
- **Multidisciplinary approach:** A multidisciplinary approach to treatment decision making can help ensure that all relevant perspectives are considered in determining the appropriate course of action for addressing abnormal or out-of-range findings.
- **Adequate resources and support:** Adequate resources, including staffing, equipment, and technology, can help support the timely identification and management of abnormal or out-of-range findings.
- **Continuous quality improvement:** Continuous monitoring and evaluation of processes and outcomes can help identify areas for improvement and ensure that the multidisciplinary team is providing the highest quality of care possible.

What are the key implementation considerations and options?

Local Cancer Program

- The process to obtain a timely treatment decision should include the following components:
    - The action that is required for a particular level of observed abnormality/out-of-range finding.
    - Interdisciplinary team members who should be notified of the abnormality/out-of-range finding for decision-making, how they should be contacted, and alternatives or back-ups.
    - Response/turnaround time targets for which a decision should be obtained.
    - Processes for communicating changes to planned treatments to other team members (e.g., secure messaging functions in a platform such as MS Teams or in the electronic medical record such as QCL in MOSAIC), as well as the patient, due to impact on workflow and patient safety.

Patient Education

What are the challenges?

- Patients require effective patient education support to have a clear understanding of how to self-manage side-effects of systemic treatment including what to expect after treatment and identifying when they need urgent medical care.
- Health literacy refers specifically to an individual's ability to understand and effectively use health-related information. It goes beyond basic literacy skills and encompasses the knowledge, skills, and capacity to navigate the healthcare system, understand medical terminology, comprehend treatment instructions, and make informed decisions about healthcare.
- Low health literacy levels among most adults suggest that many people struggle to understand health information. This lack of understanding may complicate their ability to comprehend their care processes, make informed medical decisions, and participate effectively in their own care.
- Non-English speakers or individuals with limited proficiency in English may not fully benefit from teaching sessions during clinic visits or group patient education classes.
- Patients with disabilities or other individual accessibility needs may also require accommodations to effectively engage in their care.
- Adequate time may not be built into the clinic flow (e.g., nursing, pharmacy) for best practices in patient teaching to occur (e.g., using teach back, repeating key messages, documenting patient education in the EMR).
- Cancer is stigmatized in some cultures, and people may feel ashamed or afraid to discuss their illness or seek support and access resources to manage it. This can impact their willingness to seek out or participate in the medical care which has been recommended for them.
- Communities characterized by high rates of poverty, inadequate healthcare resources, and lack of internet access may struggle to access high-quality patient education materials and self-management support. These conditions can affect a patient's quality of life, experience, and outcomes.

Why is it important to address these issues? [35–41]

- **Empowering patients**: Patients may have existing barriers (e.g., limited health literacy, translation, accessibility needs) that make it difficult to access, understand and use health information. Following universal precautions to health literacy can help lessen the impact of these barriers for patients to engage in their care.[42] Patients who have a good understanding of their health and treatment options are better able to participate in their care and make informed decisions about their treatment.

- **Improving health outcomes:** Patients who have access to the information they need are more likely to seek appropriate medical care, and effectively participate in their care, leading to improved health outcomes. Patients who cannot understand their medical information are at a higher risk of medication errors, misdiagnosis, and other adverse outcomes.
- **Building trust and rapport:** Providing inclusive patient education materials can help to build trust and rapport between healthcare systems, providers, and patients. By demonstrating an understanding of a patient's identity, culture and language, providers can show that they are invested in the patient's well-being and are committed to providing high-quality care.
- **Supporting diversity and inclusion**: Inclusive patient education materials can help to support diversity and inclusion in healthcare settings. By acknowledging and valuing multilingual and cultural differences, providers can create a more welcoming and inclusive environment for all patients. Providing multilingual, inclusive resources supports the delivery of equitable care.

Recommendation 8. Patients, families, and care partners should have access to health literate, inclusive education materials in the language that they feel most comfortable using to support them in managing their care, making informed decisions, and actively participating in their care.

8.1. Resources should be evidence-based and incorporate health literacy best practices, including:

- Writing resources in plain language (e.g., less than grade 6 reading level, appropriate level of understandability and actionability, created with patient and family advisor input)
- Include diverse representation (e.g., adverse effects that may differ across skin tones, gender inclusive terms, cultural considerations)

8.2. Resources should be available in accessible formats, including:

- Compliance with the Accessibility for Ontarians with Disabilities Act (e.g., captions for images).
- Translation into multiple languages
- Availability in multiple formats (e.g., web, print, video, audio)

8.3. A resource library of multilingual, inclusive education materials in plain language should be created at the provincial level.

What are the key enablers?

- **Engaging community organizations:** Community organizations can play an important role in providing support and resources for creating inclusive and multilingual patient education materials. They can also help to ensure that these materials are culturally appropriate and meet the needs of their community members.
- **Access to interpreters and translators:** Facilitating access to professional interpreters and translators to ensure the accurate translation and cultural suitability of patient education materials, thereby reducing the risk of miscommunication, and promoting full comprehension of medical information by patients.
- **Access to technology and resources:** Having access to technology and resources, such as multilingual software and translation services, can help healthcare providers to create and distribute patient education materials in multiple languages. This can help to increase the reach and accessibility of these materials.
- **Training for healthcare providers:** Healthcare providers can benefit from training on how to create and use culturally relevant and inclusive patient education materials. This can help to improve their understanding of cultural competence and their ability to communicate effectively with patients from diverse backgrounds and identities.

What are the key implementation considerations and options?

Local Cancer Programs

- Collect detailed information on patient preferences and requirements with respect to culture, identity, and language.
- Materials should be accessible in various formats (e.g., printed/printable, video, multimedia) and readily available to patients, families, and care partners in any setting (e.g., in clinics, on the hospital website, through the patient portal, or on a digital platform).
- Consider providing access to interactive tools and digital education programs on tablets or personal mobile devices to reinforce teaching while patients are waiting for clinic appointments or receiving treatments.
- Provide contact information for follow-up questions related to education materials.

Ontario Health (Cancer Care Ontario)

- Coordinate with regional partners to develop and facilitate access to standardized, high-quality patient education resources.
- Work with Ontario Health Teams to improve dissemination of educational materials.

Order Verification and Drug Preparation

What are the challenges?

- Oncology pharmacies often have high demand for services due to the complex nature of cancer treatment and a high volume of patient cases. Cancer treatment protocols contain increasing number of medications with specialized reconstitution requirements. Limited health human resources with required knowledge and expertise confines throughput, which can lead to delays in treatment.
- Pharmacy staff may need to take on additional responsibilities and work longer hours to ensure that patients receive the care they need. This can lead to burnout, decreased job satisfaction, increased turnover, repetitive strain injury for pharmacy technicians and an increased risk of errors.
- Staff shortages can also lead to decreased quality of patient care, as pharmacists may not have the time or resources to provide comprehensive care to each patient. This can result in patients feeling dissatisfied with their care and outcomes.

Why is it important to address these issues? [43–49]

- **Improved efficiency:** The tech-check-tech model involves using specifically trained and qualified pharmacy technicians to check the accuracy of medications/diluent and volume of medication withdrawn by another technician. This can streamline systemic treatment preparation processes and reduce the workload of pharmacists. This enables pharmacists to focus on more complex patient care tasks (e.g., counselling, toxicity management), improving overall efficiency in the oncology pharmacy.
- **Improved job satisfaction:** The tech-check-tech model can lead to improved job satisfaction among pharmacy technicians, as it allows them to take on more responsibility and play a more active role in patient care.
- **Increased access:** Remote order verification and drug preparation can increase access to care for patients, particularly those who live in rural, remote, and underserved areas. By utilizing technology [e.g., pharmacy intravenous (IV) workflow management systems], oncology pharmacy staff can extend their services beyond their physical locations.

Recommendation 9. A tech-check-tech model should be utilized for systemic treatment preparation to ensure safe and efficient preparation practices, increasing pharmacy technician role satisfaction, while allowing pharmacists to focus on activities specific to their scope of practice.

What are the key enablers?

- **Comprehensive training:** To ensure the safety and efficacy of the tech-check-tech model, it is important for pharmacy technicians to receive comprehensive training in medication preparation, quality control, and safety protocols. This training should cover all aspects of medication preparation and technical verification, as well as the specific requirements of the tech-check-tech model.
- **Standardized processes:** Standardized processes are critical for ensuring that the tech-check-tech model is implemented consistently and effectively. These processes should outline the specific tasks that are allowed under the tech-check-tech model, as well as the procedures for verifying and documenting medication preparation.
- **Clear communication:** Effective communication is essential for the success of the tech-check-tech model. Pharmacy technicians should communicate clearly and effectively with each other, as well as with pharmacists and other members of the oncology care team. This can help to ensure that medications are prepared and verified accurately and efficiently.
- **Technology support:** Technology can play an important role in enabling the tech-check-tech model. Pharmacy automation systems, electronic health records (EHRs), and other technology solutions can help to streamline medication preparation and verification processes, reducing the risk of errors and improving workflow efficiency.

What are the key implementation considerations and options?

Local Cancer Programs

- Utilize qualified and specially trained (i.e., aseptic technique and hazardous drug preparation) pharmacy technicians to validate medications prepared by another technician.
- Provide adequate time for training and education to upskill pharmacy technicians on this task.
- Refer to the Ontario Health (Cancer Care Ontario) Regional Models of Care for Systemic Treatment: Standards for the Organization and Delivery of Systemic Treatment for training and education requirements for systemic treatment preparation.

Recommendation 10. Remote order verification and/or regional preparation and delivery of systemic treatment should be considered at facilities experiencing challenges with medication preparation efficiency, physical space needs, staffing challenges, and drug wastage issues.

What are the key enablers?

- **Technology infrastructure:** Remote order verification and preparation requires a robust technology infrastructure to support the secure transmission of patient information, medication orders, and other data. This may include electronic health records, pharmacy information systems, pharmacy intravenous (IV) workflow management systems, robotic systems and other technology solutions that support remote access and collaboration.
- **Quality control processes:** Quality control processes are critical to ensuring the safety and efficacy of medication preparation, especially when it is done remotely. This may include double-checking of medication orders, verification of patient information, and adherence to established safety protocols.
- **Staff training and support:** Staff members involved in remote order verification and preparation require specialized training to ensure that they understand the processes and procedures involved, as well as the importance of patient safety. This may include training on quality control processes, medication preparation protocols, and technology tools.
- **Collaboration with healthcare providers:** Effective collaboration with healthcare providers is essential to the success of remote order verification and systemic treatment preparation. This may include regular communication with physicians, nurses, and other members of the multidisciplinary team to ensure that medication orders are accurate and that patients receive appropriate care.

What are the key implementation considerations and options?

Local Cancer Programs

- Refer to the Ontario Health (Cancer Care Ontario) Regional Models of Care for Systemic Treatment: Standards for the Organization and Delivery of Systemic Treatment for training and education requirements for systemic treatment preparation.

Dispensing and Administering Community-Based Treatments

What are the challenges?

- When systemic treatment is prescribed in a hospital-setting and dispensed, prepared and/or administered in a community-based setting, there is a risk of communication errors between sites. This can lead to incorrect dosing, missed doses, or other medication errors.
- If the dispensing, preparation and/or administration of systemic treatment is done in the community, there may be delays in the delivery of the medication to the patient. This can lead to a delay in treatment, which can have a negative impact on the patient's outcome.
- Systemic treatments require special storage and handling procedures to maintain their potency and ensure patient safety. If the drugs are transported between locations, there is a risk of improper storage or handling, which can affect their efficacy and safety.
- Systemic treatments are complex and require specialized training and expertise to prepare, dispense and administer safely. If the staff at the community-based location where the drugs are prepared, dispensed, and/or administered are not properly trained or experienced in handling these drugs, there is a risk of medication errors and serious adverse events, negatively impacting patient outcomes.
- When preparation, dispensing, and administration of systemic treatment is done in a community-based setting, it can be difficult to provide high quality, comprehensive, person-centred care. While some care may be provided closer to home, certain patients may need to travel to different locations for their treatment, which can be burdensome and stressful, and they may not have access to the same level of support and resources as they would at a systemic treatment facility.

Why is it important to address these issues? [50,51,60–65,52–59]

- **Effective communication and collaboration**: Effective communication and collaboration between hospital and community-based sites is essential to ensure that medications are verified, prepared, dispensed, and administered correctly. All providers involved in a patient's care should have access to the same health information and work together to address any issues that arise.
- **Improved safety:** Additional education and training in oncology for community-based providers can help to improve the safety of medication use by ensuring that medications are verified, prepared, dispensed, and administered correctly, and that patients receive the appropriate supportive care throughout their treatment.
- **Improved efficiency:** Collaboration and communication between hospital and community-based sites can help to streamline verification, preparation, dispensing, and administration processes, reducing the likelihood of delays or errors in treatment.
- **Improved patient outcomes:** Collaboration can also help to improve patient outcomes and quality of life. This can include reducing the risk of adverse events, minimizing treatment delays, and ensuring that patients receive the appropriate supportive care to manage adverse effects.

Recommendation 11. A two-step clinical verification process should be used for treatments dispensed (e.g., take-home cancer drugs) and administered (e.g., infusions, injections) in community settings to prevent serious harm or adverse reactions that can result from medication errors.

11.1. Community sites dispensing (e.g., take-home cancer drugs) and/or administering (e.g., injections, infusions) systemic treatment should have access to additional patient information with every prescription (e.g., lab test results, clinical parameters, care plan) to enable the completion of the clinical verification process.

What are the key enablers?

- **Collaboration between cancer programs and community pharmacies:** Communication and collaboration between local cancer programs and community pharmacies can help to ensure that prescriptions are properly verified. This may involve establishing processes for prescription verification and communication between the two institutions.
- **Electronic prescriptions:** Electronic prescribing allows prescriptions to be sent directly from Local Cancer Programs to community pharmacies, eliminating the need for faxing. This can help to ensure that the prescription is received and verified by the community pharmacy in a timely and accurate manner.
- **Patient consent:** Consent is essential for the sharing of patient health information between healthcare providers in different settings. By obtaining patient consent, local cancer programs can share relevant health information with community-based dispensing or administration sites to verify prescriptions.
- **Access to Patient Health Information:** Sharing of patient health information from Local Cancer Programs to community-based dispensing and administration sites is essential for verifying prescriptions. Consider leveraging existing platforms such as Connecting Ontario Clinical Viewer Network.
- **Health information exchange (HIE):** HIEs, such as Connecting Ontario, facilitate the sharing of patient health information between healthcare providers, including local cancer programs and community dispensing and administration sites. By participating in an HIE, systemic treatment facilities can securely transmit patient health information to community dispensing and administration sites to verify prescriptions.
- **Secure messaging:** Secure messaging platforms allow for the secure transmission of patient health information between healthcare providers. Local cancer programs can use secure messaging platforms to communicate with community dispensing and administration sites about prescription verification.

What are the key implementation considerations and options?

Local Cancer Programs and Community Partners

- The first verification should occur at Local Cancer Programs followed by a second verification at community dispensing or administration sites, as per professional regulatory requirements.
- Consider using additional notes on the prescription or sending a patient information package with every prescription if HIE, secure messaging or access to EHRs have not been established with the community dispensing or administration site.
- Refer to Ontario Health (Cancer Care Ontario) Enhancing the Delivery of Take-Home Cancer Drugs, Clinical Verification of Cancer Drug Prescriptions Checklist: Cancer Centres and Specialty Pharmacies and Enhancing the Delivery of Oncology Systemic Treatment in the Home and Community in Ontario Recommendations Report

Ontario Health (Cancer Care Ontario)

- Leverage existing platforms (e.g., PrescribeIT® by Canada Health Infoway) to enable timely communication and seamless exchange of information between hospital and community providers.

Recommendation 12. Dispensing (e.g., take-home cancer drugs) and/or administration (e.g., injections, infusions) of systemic treatment should be conducted at designated community sites that have received additional education and training to ensure that patients receive consistent care and medication management throughout their treatment journey.

What are the key enablers?

- **Partnerships and collaborations:** Partnerships and collaborations between healthcare organizations, educational institutions, and other stakeholders can help to provide access to education and training resources, as well as facilitate the sharing of knowledge and best practices.
- **Outreach programs:** Outreach programs, where providers are visited by educators or trainers who provide education and training on-site, can be an effective way to reach providers in community-based settings.
- **Online learning platforms:** Online learning platforms, such as webinars, e-learning modules, and online courses, can be a convenient and accessible way to provide oncology education and training to providers in community-based settings.

- **Peer support and mentorship:** Peer support or mentorship with providers from Local Cancer Programs can help to facilitate learning and growth in oncology for community-based partners.

What are the key implementation considerations and options?

Local Cancer Programs and Community Partners

- Clearly defined roles, responsibilities and communication channels should be established between oncology care teams and community partners to facilitate an integrated approach to care (e.g., a single point of contact at Local Cancer Programs, access to a patient's electronic medical record).
- Education and training should include items such as understanding the required elements of systemic treatment prescriptions and the need for confirming body surface area where appropriate to validate drug dosages; role in patient education; steps to enhance patient and personal safety.
- This model would be best accomplished by selecting sites that are frequently used by patients of Local Cancer Programs.
- Refer to Ontario Health (Cancer Care Ontario) Enhancing the Delivery of Take-Home Cancer Drugs for components of a prescription required to complete clinical verification.

Ontario Health (Cancer Care Ontario)

- Explore opportunities to collaborate with the Ontario College of Pharmacists (OCP) on the standards of education and training for community practitioners who dispense take-home cancer drugs.

Service Delivery in the Systemic Therapy Suite

What are the challenges?

- Systemic therapy suites are experiencing capacity constraints due to the number of patients on active treatment and the escalating complexity of treatment protocols, resulting in an increased number of medications per protocol for a prolonged duration of time. Some treatments may require longer infusion times or specialized equipment, which can limit the number of patients that can be treated at any given time.
- Many systemic therapy suites are designed with limited space, which can make it challenging to accommodate patients as well as other activities that do not involve administering systemic treatment (e.g., assessments, blood draws). This can be due to the location of the suite, the size of the facility, or the availability of resources and/or funding to expand the space.
- Limited availability of equipment, such as treatment chairs or infusion pumps, can also limit the capacity of the systemic therapy suite. This may be due to budget constraints or difficulty obtaining the necessary equipment.

- Limited staffing can also contribute to capacity in the systemic therapy suite. There may not be sufficient specialized providers available to administer treatment, monitor patients, or manage patient care for patients receiving systemic treatment.

Why is it important to address these issues? [66,67]

- **Timely treatment:** Patients receiving systemic treatment require timely treatment to achieve the best possible outcomes. Optimizing capacity in the systemic therapy suite ensures that patients receive treatment on schedule, reducing the risk of treatment delays or interruptions that can negatively impact patient outcomes. This can also help to alleviate patient anxiety and stress and improve overall patient experience.
- **Optimal resource utilization:** The systemic therapy suite is a high demand area. Moving specific activities (i.e., those that do not involve administering cancer treatment, such as pre-treatment assessments, blood draws, supportive care) to other areas of the hospital or to community-based settings, can ensure that chairs or beds are used efficiently and effectively, minimizing same-day delays or the need to reschedule patients' appointments.
- **Provider satisfaction and retention:** Equitable nurse assignments can help to reduce stress and workload imbalances among nurses, improving job satisfaction and reducing the risk of burnout. Burnout can lead to high staff turnover rates, which can be costly and disruptive to the continuity of care. Reducing burnout can help with the retention of experienced and skilled nursing staff.
- **Improved patient safety and high-quality care:** When clinicians are overworked or fatigued, the risk of errors and adverse events increases. Balancing patient load among staff ensures that clinicians have the time and resources to provide safe, high-quality care, reducing the risk of errors and adverse events.
- **Improved access to care:** In cases where it is feasible, shared care between cancer programs in a region, such as Level 1 and 2 hospitals collaborating with Level 3 and 4 hospitals, has the potential to enhance access to cancer care by enabling patients to receive systemic treatment closer to home. This strategy can alleviate the high patient volumes at Cancer Centres and make it convenient for patients to receive timely and appropriate care.

Recommendation 13. Local Cancer Programs should explore opportunities to optimize workflows, allocate resources efficiently, and monitor nurse-patient assignments and the number of systemic treatments prepared per day to effectively manage the increasing patient and treatment volumes in the systemic therapy suite.

13.1. Nurse-patient assignments should be distributed equitably throughout the day.

13.2. The number of drug preparations that pharmacy staff can complete per day should take into account the availability of pharmacy technicians, number, and capacity of biological safety cabinets (BSCs) as well as the presence of any available technology (i.e., IV workflow solutions or robotics).

13.3. Mid-cycle treatment assessments (e.g., Day 8 and 15) should be completed either virtually or in person before the patient meets with the administration nurse for infusion setup.

13.4. Pre-approved orders with clinical parameters should be created to prevent unnecessary delays or interruptions on treatment day (e.g., through medical directives, built into Computerized Prescriber Order Entry regimen order sets)

13.5. Chair time for patients on clinical trials should be reviewed and approved by the hospital-based pharmacy and therapeutics committee to ensure that it is used efficiently and effectively.

13.6. Local Cancer Programs should work with other areas of the hospital (e.g., day medicine unit) to accommodate supportive care treatment (e.g., hydration, blood product infusions).

13.7. Local Cancer Programs should consider exploring opportunities to collaborate with hospitals in their regions to improve patient access to treatment, where appropriate (e.g., administering the initial treatment at Level 1 or 2 hospitals, followed by subsequent treatment at Level 3 or 4 hospitals).

13.8. Patients who require supportive care or injections (e.g., hydration or hormone injections) should be referred to Home and Community Care Support Services (HCCSS), participating community pharmacies, as well as community-based injection services. Alternatively, patients who meet criteria can be taught to self-inject or have a care partner assist with injecting with proper education and training.

13.9. If private infusion clinics are utilized, Local Cancer Programs should establish oversight through a memorandum of understanding (MOU), in accordance with Regional Models of Care for Systemic Treatment: Standards for the Organization and Delivery of Systemic Treatment.

What are the key enablers?

- **Capacity planning:** Capacity planning involves forecasting patient demand for systemic treatment and planning for the resources needed to meet that demand. This includes anticipating the number of patients expected to need systemic treatment, the number of systemic therapy chairs and infusion pumps required, and the number of staff needed to provide care.
- **Expanding hours of operation:** Local Cancer Programs can consider extending their hours of operation to accommodate more patients as a temporary measure or when there is no option to increase the size of the suite.
- **Patient scheduling:** Patient scheduling can help optimize the use of existing resources, such as treatment chairs, infusion pumps, and staff. This can involve implementing scheduling algorithms to match patient needs with available resources as well as reserving some for unplanned care (e.g., flex chairs). It also includes monitoring resource utilization and making adjustments as needed.

- **Streamlining processes:** Streamlining processes, such as patient registration and intake, medication preparation, and post-treatment assessment, can help to optimize the use of existing resources by reducing wait times and minimizing the time patients spend in the systemic therapy suite. This can include using technology to automate the check-in process, creating a dedicated space for activities that do not involve systemic treatment administration, and ensuring that staff are trained to manage patient flow efficiently.
- **Nurse and pharmacy workload management:** Effective management of nurse workload is essential for ensuring safe, high-quality care in the systemic therapy suite. This involves assigning appropriate patient workloads to nursing staff and providing them with the necessary resources and support to deliver safe and effective care. The workload of pharmacy staff should also be considered, including setting a limit on the number of drug verifications and preparations to be completed per day based on the availability of pharmacists and pharmacy technicians, number, and capacity of BSCs as well as the presence of any available technology (i.e., IV workflow solutions or robotics)
- **Flexible staffing:** Flexible staffing is important for managing patient volumes in the systemic therapy suite. This involves having a pool of nursing and pharmacy staff who can be called upon as needed to cover patient demand, and the ability to adjust staffing levels based on patient volumes.

What are the key implementation considerations and options?

Local Cancer Programs

For 13.1.

- Use evidence-based tools to assess patient acuity to support more equitable nursing assignments.[20,68]
- Stagger start times (e.g., starting treatments within a nursing pod at 8:15am, 8:30am and 8:45am) to improve patient flow.
- Avoid back-to-back intravenous pushes within a treatment chair to prevent repetitive strain injuries.
- Minimize the number of new systemic treatment starts per nursing assignment as this is a more resource intensive activity (e.g., patient education, addressing questions and concerns).
- Pool patients on the same treatments together (e.g., same nursing assignment, same start date) to facilitate patient education and support group learning.
- Include a mix of short and long treatments per nursing assignment to balance workload.
- Consider capping the number of treatments verified, prepared, and administered per day to reduce health and safety risks to pharmacy staff and nurses, respectively.

For 13.2.

- Conduct a nurse-led virtual or in-person assessment the day before treatment.
  - Ensure a prescriber is available if a patient needs medical interventions (e.g., home hydration set up, prescriptions sent to a community pharmacy) **or**
- Run a same-day assessment clinic with dedicated providers (e.g., alternate prescribers/extenders, nurses, pharmacists)
  - Schedule patients prior to treatment appointments outside of the systemic therapy suite.

For 13.3.

- Additional provider roles (as described in Recommendation 5.2) should be utilized, when possible, to provide mid-cycle pre-treatment assessments and scopes of practice be maximized, when appropriate.

For 13.4.

- Explore opportunities to share protocol builds to identify areas of opportunity for local discussion to streamline the approval process.

For 13.5

- Ensure the alternative location to administer supportive care treatments meets criteria for administering blood products and there is a process in place for oversight and managing reactions.

For 13.7

- Confirm that funding is available for administration in the community setting (e.g., Exceptional Access Program).

For 13.8

- Refer to Regional Models of Care for Systemic Treatment: Standards for the Organization and Delivery of Systemic Treatment.

Ontario Health (Cancer Care Ontario)

For 13.1

- Explore opportunities to adopt/develop a tool to assist with nursing assignments in the systemic therapy suite**.**

Proactive Monitoring, Symptom and Toxicity Management, and Unplanned Care

What are the challenges?

- There is an increasing need for timely involvement of multidisciplinary providers to support the management of complex symptoms and toxicities.
- Proactive monitoring, symptom, and toxicity management requires coordinated efforts across multiple healthcare providers and settings. This can be challenging due to differences in communication systems, care settings, and provider schedules, as well as issues and inequities with access to a regular primary care provider.
- Proactive monitoring, symptom, and toxicity management can be resource-intensive, requiring additional staff, training, and technology. Limited resources may make it difficult for healthcare providers to implement these interventions effectively.
- Standardization of symptom and toxicity assessment tools as well as management protocols can be challenging due to differences in patient populations, treatment regimens, and care settings.
- Collecting and managing data related to symptoms and adverse effects can be complex, particularly when multiple providers and care settings are involved. Ensuring the accuracy and completeness of data can also be challenging.
- Patients may be reluctant to report symptoms or adverse effects or may not be aware of the importance of monitoring their symptoms or adverse effects. Patients may also have difficulty using monitoring tools or may not have access to the necessary technology.
- Communication between patients and healthcare providers can be challenging, particularly in virtual settings where non-verbal cues are limited. Patients may also have difficulty communicating their symptoms or adverse effects clearly and understandably to providers.
- Cancer patients may experience delays in accessing urgent care due to a range of factors, including a lack of formalized processes, limited space, and/or availability of providers.
- In cases where urgent care processes are not in place, cancer patients, including those with symptom crises and/or palliative care needs, are more likely to visit an emergency department. They may experience long wait times, more exposure to infection, and receive care from providers that do not have the same level of expertise in managing cancer-related symptoms or adverse effects as the oncology care team. There may also be a lack of relevant patient clinical information available due to the absence of a provincial electronic medical record (EMR).

Why is it important to address these issues? [69–78]

- **Early detection:** Proactive monitoring can help detect complications and adverse effects of cancer treatment early, which can lead to better outcomes and improve the chances of successful treatment.
- **Improved quality of life:** Patients can experience symptoms and adverse effects, such as pain, fatigue, nausea, and depression. Proactive symptom and toxicity management can help alleviate these symptoms or toxicities, improve quality of life, and reduce the risk of treatment dose reductions, interruption, or discontinuation.
- **Preventive care:** Proactive monitoring can also help prevent complications and adverse effects. For example, detecting new drug interactions or recommending skin care measures to prevent rash.
- **Patient empowerment:** By providing patients with tools and resources to identify, monitor and understand their symptoms and adverse effects, patients can become more engaged in their care and take an active role in managing their health.
- **Better communication**: Proactive monitoring, symptom, and toxicity management can improve communication between patients and their healthcare providers. Patients who are more engaged in their care are more likely to communicate with their providers about their symptoms and adverse effects, which can help providers adjust treatment plans and improve patient outcomes.

Recommendation 14. Proactive monitoring, symptom, and toxicity management plans should be developed and implemented by Local Cancer Programs for patients receiving systemic treatment, particularly for high-risk patients (e.g., double immunotherapy, concurrent chemotherapy/radiation treatments, acute leukemia, head and neck cancers) to optimize self-management and decrease the need for acute care services.

What are key enablers?

- **Patient engagement:** Patients who are actively involved in their care are more likely to monitor their symptoms and adverse effects and report them to their providers. Patient engagement can be facilitated through education, support, and empowerment programs.
- **Health information technology**: Health information technology, such as patient portals and mobile health apps, can provide patients with tools to monitor their symptoms/toxicities and communicate with their providers. It can also help providers track patients' symptoms and adverse effects and adjust treatment plans as needed.

- **Multidisciplinary care teams:** Multidisciplinary care teams, as well as access to a regular primary care provider, can provide comprehensive care to patients and coordinate symptom and toxicity management across multiple specialties. This can help ensure that patients receive timely and effective treatment for their symptoms and adverse effects.
- **Care coordination:** Care coordination between providers and patients is critical for proactive monitoring, symptom, and toxicity management. This includes regular communication between providers and patients to ensure that symptoms are being monitored, adverse effects are being managed, and treatment plans are being adjusted as needed.
- **Standardized assessment tools:** Standardized assessment tools can help providers systematically evaluate and manage cancer-related symptoms and adverse effects. These tools can help ensure that symptoms and adverse effects are being monitored and managed consistently across different providers and care settings.
- **Patient-reported outcomes:** Patient-reported outcomes (PROs) are measures of health status and symptoms that are reported directly by patients. PROs can provide valuable information to healthcare providers about how patients are feeling and functioning and can help guide symptom and toxicity management.

What are the key implementation considerations and options?

Local Cancer Programs

- Clinics can be led autonomously by general practitioners in oncology and nurse practitioners or in collaboration with physician assistants, clinical nurse specialists/registered nurses, and/or pharmacists. Consider medical directives where appropriate.
    - Consult with the Palliative Care team if symptoms or other needs become complex.
- Developing a tailored plan for proactive symptom/toxicity management with each patient prior to the start of and at the end of treatment.
    - Integrate proactive monitoring plans as a standard component of Computerized Prescribed Order Entry (CPOE) systemic treatment regimen builds.
    - Coordinate care planning with other providers (e.g., Palliative Care Team, Psychosocial Oncology Providers, Pharmacists).
- Consider the use of patient portals as a tool for sharing symptom/toxicity management plans and self-management resources.
- Encourage the utilization of Patient Reported Outcome Measures (PROMs)/symptom screening tools (e.g., *Your Symptoms Matter*) in-person or remotely, to facilitate real-time communication with the care team.
    - PROMs should be easily accessible via the electronic medical record and reviewed in a timely manner for symptom response and early identification of symptoms requiring additional support (e.g., referral to psychosocial oncology services).

- Analyze PROMs data, along with patient information in administrative databases, to:
  - Identify patient populations with an elevated risk of severe symptoms who would benefit from referral to or follow-up with multidisciplinary team members.
  - Inform allocation of resources (e.g., palliative care, psychosocial oncology providers) to areas that serve patient populations with severe or specific symptom management needs.
  - Inform the team when patients require referral to more specialized care.
- Leverage virtual care and incorporate new additional care providers, as outlined in Recommendation 5.3, to improve timely symptom and toxicity management.
- Consider implementing proactive population, disease, or protocol-specific remote monitoring programs where an algorithm prioritizes patients and alerts the clinical team based on real-time biometrics and/or patient-reported outcomes.
- Consider using a digital triage tool for patients that generates a set of personalized triage advice such as self-management strategies, connecting with care team or seeking care in the appropriate setting, based on reported symptoms/adverse effects.
- Consider implementing a self-scheduling system where patients have the option to book directly into symptom/toxicity management clinics once the care team makes an initial referral.
- Establish an oncology care line/call centre to respond to patient-initiated calls for the care team and/or alerts from remote symptom monitoring programs during clinic hours.
  - Consider a model where a clerk completes initial intake and directs questions/concerns to the appropriate team members.
- Developing a process to follow-up on patients who access after-hours symptom management services (e.g., CareChart Digital Health).
- Consider a collaboration with community partners, such as primary care providers and specialized community pharmacists, to establish a coordinated symptom and toxicity management program.
- Refer to Ontario Health (Cancer Care Ontario) Managing Symptoms, Side Effects & Well-Being, Guidance for the Development of a Provincial Approach to Toxicity Management, and Oncology Nursing Telepractice Standards for additional evidence-based tools (e.g., COSTaRS).

Recommendation 15. Acute oncology structures should be established for unplanned care to reduce emergency department visits and hospital admissions.

What are the key enablers?

- **Adequate resources**: Providing urgent care to cancer patients requires additional resources, including staffing, physical space, equipment, and technology.
- **Care coordination:** Coordinating care across multiple providers and care settings ensures that patients receive the appropriate care in a timely manner.
- **Standardized criteria:** Standardized criteria help to ensure that appropriate referrals are made to acute oncology structures and patients receive the appropriate level of care based on their individual needs.

What are the key implementation considerations and options?

Local Cancer Programs

- Urgent assessments can be conducted autonomously by general practitioners in oncology and nurse practitioners or in collaboration with physician assistants through medical directives, where appropriate.
- Establish urgent care clinics for patients in need of medical stabilization, investigation and/or admission.
- Consider operating urgent care clinics after hours or setting up a short-term care unit or beds with patients admitted based on referral, potentially in collaboration with radiation and surgery services, to optimize resource allocation.

Service Delivery through Virtual Care

What are the challenges?

- Not all patients have access to the necessary devices, such as smartphones, computers, or tablets, or reliable internet connectivity, which can limit their ability to participate in virtual care services.
- Even if patients have access to technology, they may face technological barriers such as difficulty navigating virtual platforms or trouble with audio or video quality during virtual visits which can disrupt the appointment, cause delays or difficulties in communication. These barriers can lead to frustration and reduce the effectiveness of virtual care services.
- Providers may not have access to the necessary technology and/or feel comfortable using virtual tools, which can limit their ability to provide virtual care.
- Virtual care services may raise concerns about patient privacy and security, particularly when sensitive medical information is being shared over the phone or internet.
- Virtual care services are subject to a range of regulatory and legal issues, including licensure requirements for providers, liability issues, and telemedicine regulations.

- In a virtual setting, it can be more challenging to coordinate care between different healthcare providers (e.g., limited access to technology, differences in care settings and schedules) and Local Cancer Programs may not have standard protocols or guidelines for how to involve multidisciplinary providers in virtual care. This can lead to confusion and uncertainty about roles and responsibilities and how to collaboratively provide care.
- There is also a reduced ability to detect clinical deterioration, symptoms, and toxicities when assessing patients virtually.
- Scheduling conflicts (e.g., overlapping appointments) or completing administrative tasks (e.g., documentation, reviewing tests results) can cause providers to be late for virtual appointments.
- Waiting for a virtual care appointment for an extended period can be inconvenient for patients, families, and care partners, especially if they have scheduled their day around the appointment. This can cause frustration and dissatisfaction.

Why is it important to address these issues? [79–82]

- **Convenience:** Virtual care enables cancer patients to receive healthcare services from the comfort of their own homes or workplaces. This can save patients and their care partners time and money on travel, parking, and childcare, which can be particularly important for patients undergoing treatment.
- **Accessibility:** Virtual care can increase accessibility to healthcare services for patients who have mobility or transportation challenges, live in remote or rural areas, or have difficulty taking time off work or finding a care partner.
- **Coordinated and integrated care:** It is important for patients to receive multidisciplinary care in any setting to ensure that treatment plans consider the patient's specific needs and preferences and that they receive the necessary supports and interventions throughout their cancer care journey. This can lead to better outcomes and improved quality of life for the patient.
- **Improve patient and provider experience:** Patients and healthcare providers may need education and training on how to use virtual care platforms as well as what to do when they encounter technical issues while using virtual care platforms.

Recommendation 16. Local Cancer Programs should establish a dedicated Virtual Care Coordinator role to enhance the utilization, comfort, and overall experience of virtual care for patients and providers.

16.1 If patient volumes are low, smaller centres may assign the Virtual Care Coordinator's responsibilities to other administrative staff to ensure continuity of virtual care services.

What are key enablers?

- **Training and education:** A Virtual Care Coordinator must have the knowledge and skills to coordinate care effectively, including the unique needs of cancer patients and an understanding of existing hospital workflows and processes.
- **Collaborative team environment:** A Virtual Care Coordinator must communicate effectively and work collaboratively with a team of providers to ensure that patients receive coordinated care across different care settings.
- **Data analytics and reporting:** A Virtual Care Coordinator must have access to data analytics and reporting tools to track patient outcomes and identify areas for improvement.
- **Regulatory compliance:** A Virtual Care Coordinator must comply with regulatory requirements related to virtual care, such as ensuring that patient data is protected and that virtual care services are delivered according to legal, regulatory and ethical guidelines.

What are the key implementation considerations and options?

Local Cancer Programs

- To optimize the provision of virtual care services, Virtual Care Coordinators are essential in supporting the oncology care team and patients.
- For the oncology care team, the Virtual Care Coordinator should develop a plan to optimize workflows for virtual care services, emphasizing better communication and collaboration among team members. They should also provide ongoing technical training and support to staff, ensuring that they have the necessary tools and skills to provide virtual care services effectively.
- For patients, the Virtual Care Coordinator should oversee the electronic documentation and communication process, ensuring that it is secure and well-managed. They should also conduct a test of video-enabled technology or provide phone support to patients before their appointment to ensure they are comfortable and have no technical difficulties. The Virtual Care Coordinator should provide technical support and troubleshooting to patients throughout the virtual care process, ensuring they receive optimal care.

Recommendation 17. Local Cancer Programs should explore opportunities to integrate virtual care services and implement standardized processes to optimize care delivery.

17.1 Local Cancer Programs should identify areas where virtual care can be used to optimize care delivery (e.g., follow-up visits, patient education).

17.2. Virtual care should be flexible and adaptable to address patient, family and/or care partner preferences including scheduling, language, and cultural considerations.

17.3. Virtual care should be designed to foster patient, family and/or care partner engagement and participation in their care (e.g., symptom screening tools, patient education).

17.4. Patients, families, and/or care partners should be provided with education and resources including proactive support to help them prepare for the virtual visit to avoid interruptions or delays during the appointment.

17.5. Virtual visits should be scheduled with a similar structure, including designated appointment times, as in-person appointments, with every effort made to reduce patient, family, and/or care partner waiting times.

What are key enablers?

For Organizations

- **Technology infrastructure:** Organizations need to have a reliable and secure infrastructure in place to support virtual care delivery. This includes a high-speed internet connection, secure servers, and telehealth equipment and digital health technologies.
- **Regulatory and legal requirements:** Organizations need to ensure that they comply with regulatory and legal requirements around virtual care, including data privacy, cybersecurity, and licensing requirements for healthcare providers.

- **Staff training:** Providers need to be trained on how to use virtual care technologies and how to deliver care in a virtual setting. This includes training on how to conduct virtual assessments, manage telehealth equipment, and communicate effectively with patients using virtual platforms. Refer to Ontario Health (Cancer Care Ontario) Person-Centred Virtual Cancer Care Clinical Guidance.

For Patients

- **Access to reliable technology:** Patients need access to reliable technology, a stable internet connection, or reliable phone services to participate in virtual care. This includes both hardware (e.g., a computer, tablet, smartphone, or a basic telephone) and software (e.g., video conferencing platforms, remote monitoring devices, telecommunication services).
- **User-friendly interfaces:** Virtual care platforms should be user-friendly, easy to navigate, and offer clear instructions for patients to follow. Real-time helpdesk services and technical support should be available to assist patients with different levels of technological literacy, ensuring that they can effectively use the platform.
- **Education and resources:** Patients should be provided with education and resources including real-time support to help them prepare for virtual care appointments, such as tips for optimizing their home environment, ensuring that they have the necessary equipment, and a step-by-step guide on how to access and use the platform. Refer to Ontario Health (Cancer Care Ontario) Virtual Care: What to expect for your telephone or video visit.
- **Patient engagement tools:** Virtual care platforms should include tools that help engage patients in their care, such as symptom screening tools, appointment reminders, educational resources, and secure messaging.
- **Strong privacy and security measures:** Virtual care platforms should include strong privacy and security measures to protect patients' personal health information.
- **Effective communication:** Virtual care should facilitate effective communication between patients and healthcare providers, including the ability to share medical records, test results, and other health information.

What are the key implementation considerations and options?

Local Cancer Programs

For 17.1

- Virtual visits can be used to optimize care delivery, where appropriate, for:
    - Pre-appointment screening or assessments
    - Patient education
    - Best Possible Medication History and medication reconciliation
    - Post-treatment reviews where physical examination is not required.
    - Discussing routine test results

    - Routine well-follow up discussions without the need for physical assessment.
    - Patients on oral systemic treatment
    - Well patients on adjuvant hormonal treatment.
- Organizations need to review the existing reimbursement policies to ensure physicians can be compensated for their services. It is important to highlight that a variety of virtual care tasks can be carried out by non-MD providers who are not directly impacted by payment or salary issues.
- A review of existing workflows and processes should be conducted to ensure that they can be adapted to support virtual care delivery.
- Quality improvement programs should be established to monitor and evaluate the effectiveness of virtual care delivery and to identify areas for improvement. This can include soliciting feedback from patients directly or using patient satisfaction surveys to gauge satisfaction with virtual care services (e.g., *Your Voice Matters* survey).

For 17.2

- In advance of the visit, determine patient preference, compatibility, and comfort level to participate in a virtual care appointment (e.g., assess internet access and connection, video capabilities for a video visit).
- Determine if family or care partner support is preferred for the appointment and determine if the family or care partner will join from the same or other location.
- Determine if sign language or translation services are required for the appointment.

For 17.3

- Prompt and support patients, families, or care partners to complete intake forms and symptom screening tools (e.g., *Your Symptoms Matter*) in advance to inform clinical care.
- During the appointment, create a follow-up plan with the patient regarding access to Psychosocial Oncology services and other supports (e.g., patient navigation, Drug Access Navigator), as needed.

For 17.4

- Provide clear instructions on how to access and use virtual care platforms, including step-by-step instructions for joining virtual appointments, navigating the platform, and accessing educational resources.
- Proactively conduct a “test connection” with patients, families, and care partners prior to the appointment (carried out jointly with the Virtual Care Coordinator).
- Offer technical support to patients who may be having trouble accessing or using virtual care platforms. This can include help desk services, user guides, or access to technical support staff.
- Refer to Ontario Health (Cancer Care Ontario) Person-Centred Virtual Cancer Care Guidance.

For 17.5

- Monitor appointment wait time windows and adjust scheduling or staffing levels as needed to ensure that patients are seen in a timely manner.

Recommendation 18. Patients should have access to multidisciplinary care in the virtual setting to ensure that they receive all the supports and services they need for their care.

What are the key enablers?

- **Technology infrastructure:** Each member of the multidisciplinary team needs access to reliable and secure technology infrastructure to support virtual care. This includes both hardware (e.g., computers, webcams, and microphones) and software (e.g., video conferencing platforms, patient portals).
- **Clear roles and responsibilities:** Each member of the multidisciplinary team should have clearly defined roles and responsibilities, including communication protocols and decision-making processes.
- **Effective communication:** Effective communication among team members is critical for virtual multidisciplinary care. This includes regular meetings, case conferences, and shared access to patient information.

What are the key implementation considerations and options?

Local Cancer Programs

- Schedule a clinic appointment with multiple team members simultaneously, based on needs identified in the patient's recent *Your Symptoms Matter* questionnaire, using remote-access technology, **or** providing a short introduction together at the first visit and then organizing multiple consecutive appointments with team members.
- For patients who have unanticipated or greater needs in specific domains:
    - Providing a call-back option or moving them to a virtual waiting room to see team members following the initial appointment and sending a notification alerting them when they are next in the queue.
    - Initiating e-referral requests to team members within the electronic health record. Patients should be seen in a timeframe based on the urgency of the request.

Transitions in Care: Survivorship and End-of-Life

What are the challenges?

- Once active treatment is completed, patients may feel lost and uncertain about their next steps with respect to survivorship or palliative care and may not know how to navigate the healthcare system to receive the necessary care and support.
- Patients may experience a lack of continuity of care as they transition from active treatment to survivorship or end-of-life care, leading to potential gaps in care and increased risk of adverse outcomes.
- Patients may face barriers in accessing appropriate survivorship or palliative care, including geographic, financial, or systemic barriers.
- Patients may experience emotional and psychological distress as they transition to survivorship or end-of-life care, including anxiety, depression, and fear of recurrence or end-of-life issues.
- Many Local Cancer Programs struggle to obtain the necessary space and human resources to adequately meet the survivorship and palliative care needs of their patients.
- The current health human resources capacity limitations in primary care may prevent patients from receiving adequate care.
- The high number of unattached patients (those not connected to a primary care provider) presents an additional challenge to healthcare access and continuity.

Why is it important to address these issues? [83–88]

- **Improved quality of life for patients**: Addressing transitions for survivorship and palliative care can help to improve the quality of life for cancer patients. By providing appropriate support and care during these transitions, patients can better manage their symptoms and achieve a better overall quality of life.
- **Improved patient experience:** By addressing transitions for survivorship and palliative care, patients can access the right care at the right time. This includes effective symptom and toxicity management, emotional support, and a higher level of patient satisfaction with their care.
- **Improved care coordination for patients:** Addressing transitions for survivorship and palliative care can also help to improve care coordination between healthcare providers. By ensuring that patients receive the right care at each stage of their cancer journey, healthcare providers can better collaborate and coordinate care, reducing the risk of errors or delays in care.
- **Appropriate utilization of acute care services:** Addressing transitions for survivorship and palliative care can also reduce the burden on acute care services. By providing appropriate care and support during these transitions, patients are less likely to require hospitalization or emergency care.

- **Reduced care partner burden:** Addressing transitions for survivorship and palliative care can also help to reduce care partner burden. By providing appropriate support and care during these transitions, care partners are better able to manage their own emotional and physical well-being, reducing the risk of care partner burnout.

Recommendation 19. Local Cancer Programs should have a transition model that provides standardized survivorship and follow-up care to support the ongoing needs of patients who have completed systemic treatment or are currently on adjuvant hormonal therapy.

19.1. Survivors should transition to a level of care that is more tailored to their current needs with access to specialized resources and support systems such as psychosocial oncology, structured self-management, and group-based programs.

19.2 A streamlined process should be established for re-entry into Local Cancer Programs, if required.

What are key enablers?

- **Health Human Resources:** Having enough skilled healthcare professionals, such as physicians, nurses, and allied health professionals, who are trained in survivorship and follow-up care, is important for implementing the transition model effectively.
- **Comprehensive survivorship care plans:** Survivorship care plans provide patients with a roadmap for their ongoing care and can help to ensure that they receive appropriate follow-up care and support. These plans should include information about the patient's cancer diagnosis, treatment history, potential late and long-term effects, and a plan for ongoing surveillance and monitoring.
- **Patient education and support:** Patients need education and support to help them manage the physical, emotional, and psychological effects of cancer treatment. This can include information about healthy lifestyle habits, coping strategies, and available support services.
- **Coordination of care:** Effective communication and coordination of care between the patient's medical oncologist/hematologist, primary care provider, and other healthcare providers are critical to ensure that the patient receives comprehensive and appropriate care. This can involve sharing patient information and coordinating follow-up care, such as imaging studies and specialist referrals.

- **Access to psychosocial oncology and other supportive care services:** Patients may benefit from services such as nutrition counseling, pain management, and psychosocial support. These services can help to address the physical and emotional effects of cancer treatment and improve patients' quality of life.
- **Ongoing monitoring and surveillance:** Patients should undergo regular monitoring and surveillance to detect any potential recurrence or new cancer diagnoses. This can include regular physical exams, imaging studies, and blood tests.
- **Empowerment and engagement:** Empowering patients to be active participants in their care and encouraging them to engage in self-management activities can help to improve their outcomes and quality of life. This can include setting goals and developing action plans to achieve them and encouraging patients to communicate openly with their healthcare providers.

What are the key implementation considerations and options?

Local Cancer Programs and Community Partners

- There should be a designated point person from each Regional Cancer Program to better coordinate efforts, share information, and identify areas for improvements with the Survivorship Program at Ontario Health (Cancer Care Ontario).
- Refer to Ontario Health (Cancer Care Ontario) Follow-Up Model of Care for Cancer Survivors: Recommendations for the Delivery of Follow-up Care for Cancer Survivors in Ontario.

For 19.1

- Expectations should be communicated from the oncology care team to the patient, their families and/or care partners, prior to initiating systemic treatment, that they may be directed back to their primary care provider for routine follow-up care after completing active systemic treatment or if they are prescribed adjuvant hormonal therapy. Any potential gaps in primary care attachment should be addressed upon entering Local Cancer Programs. For those patients who are referred but not yet attached to a primary care provider, they should be encouraged and/or supported (e.g., social worker) to use available provincial resources such as Health Care Connect to locate a primary care provider. Additionally, a cohesive network of support can be found in Ontario’s Nurse Practitioner-Led Clinics (NPCLs) and Health 811 service. The NPCLs are dedicated to offering comprehensive and accessible, person-centred primary care, specifically catering to those who have not yet secured a primary healthcare provider. Alongside this, the Health 811 service complements the clinics by providing around-the-clock phone-based advice, assessments, and triage for health-related concerns, offering continuous support to these unattached patients.
- The survivor’s follow-up care plan should be prepared for the primary care provider and consist of two parts: (a) a treatment summary, which includes key clinical information such as cancer diagnosis, treatment received, and medications; and (b) an individualized plan of care

for follow-up, which includes guidelines for follow-up care, signs and symptoms of recurrence, psychosocial needs, and contact information for the oncology care team.

  - Designate a most responsible provider (MRP) for a survivor's ongoing follow-up care and document their contact information in the follow-up care plan. The MRP can be a primary care provider, an oncologist, GPO, or NP from Local Cancer Programs, or a healthcare provider from an affiliate program, chosen through a dialogue between the primary care provider and oncology care team based on criteria such as severity and risk of complications, need for specialized procedures, and risk of recurrence or secondary malignancies.
- When providing supportive care and information to the survivor, it is recommended to consider various delivery strategies such as consultation by phone, referral to credible online and/or community resources (e.g., psychosocial oncology programs at systemic treatment facilities, community, or online-based cancer support programs), and group-based educational sessions.
- Access to structured self-management programs and high-quality resources is important for the survivor to learn how to manage their physical and psychosocial symptoms (e.g., fatigue, pain). It is recommended to discuss self-management strategies with the survivor before completing active treatment and during their follow-up visits.

For 19.2

- There should be clearly defined communication channels between oncology care teams and primary care providers whenever consultation or re-referral is required.
  - The individualized care plan from the oncology care team should include instructions for referral or re-entry into Local Cancer Programs if there is suspicion of recurrence or secondary cancers. Various telecommunication solutions (e.g., e-Consults, health information exchange, hotline for rapid access to the oncology care team) should be considered to enable effective and timely communication.

Ontario Health (Cancer Care Ontario)

- Explore opportunities to develop self-management resources for survivors.
- Work with Ontario Health Teams to transition services for survivorship and follow-up care to the community.

Recommendation 20. The oncology and palliative care teams, in collaboration with patients, families, and care partners, should regularly engage in discussions and utilize validated tools to guide palliative care provision and to determine the appropriate timing for transitions to end-of-life care.

20.1. The oncology care team should have access to palliative care supports and services in the community to help address the needs of systemic treatment patients when they become more extensive or complex than the oncology care team can manage.

What are key enablers?

- **Effective communication:** Effective communication between patients, families and/or care partners and healthcare providers is critical to support integration of palliative care, and the transition to end-of-life care. This includes open and honest discussions about the patient's illness, prognosis, goals of care, preferences, and values.
- **Palliative care tools and supports:** To facilitate the planning and delivery of palliative care, the oncology care team should have access to validated assessment tools and other clinical resources. Please refer to the Ontario Palliative Care Network Palliative Care Toolkit.
- **Access to specialized palliative care services:** Palliative care teams are specialized in providing care and support for patients with serious illness and can help to manage symptoms, address spiritual and emotional needs, and provide guidance and support to patients, families and/or care partners.
- **Coordinated care:** Coordinated care between the oncology and palliative care teams, primary care providers, and other clinicians is essential to ensure that patients receive comprehensive and appropriate care. This can involve sharing patient information and coordinating care plans, such as medication management and symptom control.
- **Patient, family, and care partner education and support:** Patients, families, and care partners need education and support to understand the palliative approach to care and the care options available to them. This includes information about what to expect as the disease progresses, symptom management, advance care planning, and emotional and spiritual support.
- **Compassionate and respectful care:** Palliative care should be provided in a compassionate and respectful manner that acknowledges the patient's dignity and autonomy. This includes providing care that aligns with the patient's values, preferences, and cultural beliefs.

- **Attention to psychosocial and spiritual needs:** Palliative care should address the psychosocial and spiritual needs of patients and their families, including support for emotional and spiritual distress, grief and bereavement, and other challenges that may arise.
- **Considerations for end-of-life care:** As the end-of-life approaches, less emphasis should be placed on active management and more on the relief of symptoms, with an emphasis on quality of life and comfort. Needs across all domains of care should be regularly assessed and addressed through to the end of life.

What are the key implementation considerations and options?

Local Cancer Programs

- Use evidence-based and validated tools (e.g., ESAS) to assess the patient's overall health status, functional capacity, and quality of life. These tools can help the team identify the patient's specific care needs and preferences, as well as any potential barriers or challenges that may arise during the transition to end-of-life care. The use of such tools and ongoing discussions can help ensure that the patient's care is tailored to their individual needs and the transition to end-of-life care is as smooth and comfortable as possible. Additionally, it can provide patients and their families with the support and resources they need to make informed decisions about their care and end-of-life wishes. Refer to the Ontario Palliative Care Network resources.

Provider Health and Well-Being

What are the challenges?

- The landscape of cancer care has transformed, with treatments becoming increasingly complex and demanding.
- The provision of care now necessitates extensive multidisciplinary coordination, surpassing the levels observed in the past.
- Providers are facing an increasing workload due to staff shortages, which can lead to burnout. This can be particularly challenging in rural, remote, or underserved areas where there may be a limited number of providers available to care for a large population.
- Providers face high job demands, including long hours, high patient volumes, and administrative tasks. These demands can lead to physical and emotional exhaustion and contribute to burnout.
- Providers are exposed to emotional stress daily including dealing with patients who are in pain, suffering, or experiencing trauma. This can lead to compassion fatigue, emotional exhaustion, and burnout.
- Providers may not have access to the support they need to manage the stress and demands of their job. This can include access to mental health resources, peer support, or workplace wellness programs.

Why is it important to address these issues? [89,90]

- **Physical exhaustion:** Providers may experience physical exhaustion due to long working hours and high workload, leading to increased medical errors, poor decision making and decreased quality of care.
- **Increased stress and anxiety:** Providers may experience chronic stress and anxiety which can impact their mental and physical health, leading to decreased quality of life and increased medical errors.
- **Work-life imbalance:** Providers may struggle to balance work and personal life, leading to decreased quality of life and increased stress and burnout.
- **Reduced sense of accomplishment:** Providers may feel unappreciated and experience a lack of personal or professional fulfillment in their work leading to high turnover and early retirements.

Recommendation 21. Local Cancer Programs in conjunction with organization leadership should develop a comprehensive plan to address provider-well being.

21.1. Organizations should

- Identify the root causes of provider burnout.
- Implement changes that are proposed to address the root causes.
- Measure and assess the change in provider-well being.
- Create dedicated leadership roles to address provider well-being.

21.2. Organizations should consider provider well-being in any process or policy change including technology and health information services.

What are key enablers?

- **Supportive work culture:** Healthcare organizations that prioritize staff well-being and foster a positive work culture can help reduce burnout and improve well-being among providers. This includes encouraging work-life balance, providing resources for stress management, and promoting open communication.
- **Adequate resources and staffing:** Overworked and understaffed healthcare providers are more likely to experience burnout. Providing adequate resources and staffing levels can help reduce workload and support the well-being of providers.
- **Training and education:** Providing training and education on stress management, coping skills, and self-care can help providers develop skills to manage stress and prevent burnout.

- **Flexibility and autonomy:** Providers who have flexibility and autonomy in their work may have greater job satisfaction and well-being.
- **Technology and innovation:** Appropriate introduction and efficient use of technology and innovation can help streamline administrative tasks and reduce the workload of providers, freeing up time for patient care and reducing burnout.
- **Peer support:** Peer support programs and networks can provide providers with emotional support and opportunities for learning and growth**.**

What are the key implementation considerations and options?

Organizations

- Building a business case for organization leadership for initial and ongoing financial investments to address provider well-being.
    - This includes costs associated with retainment and/or recruitment of health care providers and administration personnel, health human resources turnover, decreased productivity, as well as financial risk and threats to the organization's long-term viability. Implications can include lower quality of care, decreased patient satisfaction, and patient safety issues that may occur due to provider burnout.
    - An article by Shanafelt and colleagues (2017) offers a variety of tools to help make a case.
- Reviewing and sharing the following resources with organization leadership:
    - Online programs and guides specifically designed for leaders on understanding and addressing burnout, workplace harassment and violence, and other issues related to provider well-being. Examples: Michael Garron Hospital: PowerPoint Presentation for Leadership, Registered Nurses' Association of Ontario (RNAO): Nursing Through Crisis, RNAO: Preventing and Mitigating Nurse Fatigue in Health Care, Ontario Nurses Association (ONA) Resources for Violence and Harassment, American Medical Association (AMA): Steps Forward Program, Ontario Medical Association (OMA): Healing the Healers - System-Level Solutions to Physician Burnout, Leslie Dan Faculty of Pharmacy, University of Toronto: Supporting the Resilience of the Pharmacy Workforce.
    - Resources to help leaders ensure good measurement practices and outcomes by using validated tools to evaluate aspects of burnout and well-being. Examples: RNAO Work and Well-being Survey, Maslach Burnout Inventory, National Physician Health Survey, Assessment of Physician Well-being, Part One: Burnout and Other Negative States, Assessment of Physician Well-being, Part Two: Beyond Burnout.
    - Resources to help leaders improve provider well-being through organization-directed interventions. Examples: Michael Garron Hospital: Providing Care and Support for our Staff, Emotional Support Handout, Emotional Support Response Team: Guiding Principles for Leadership, Patient Safety Institute: Creating a Safe Space Toolkit.

- Modify scheduling policies:
  - Staggered coverage or hours to match extended oncology clinic and systemic therapy suite hours, float pools, job-sharing, or cross-coverage for absences or when operating beyond standard hours, time-banking.
  - Protected time and additional coverage for clinicians to support key administrative tasks such as pre-clinic preparation, developing and maintaining systemic treatment regimen protocol builds, drug funding enrollments/applications, dealing with drug shortages and responding to provincial surveys when issues arise.
- Strategies to support the seamless integration of digital health tools into workflow:
  - Include providers as key partners in the procurement, design, implementation, ongoing optimization of digital health tools and electronic medical record platform transitions.
  - There should be routine assessments of the impact that new and existing health information services, as well as electronic tools used for care delivery, have on provider wellness.
  - Establish communities of practice with other organizations to learn and share strategies on digital health tools and electronic medical record platform transitions.

First Nations, Inuit, Métis, and Urban Indigenous Peoples

Indigenous people are not another ethnic group to Canada, but rather distinct constitutionally recognized nations with Aboriginal and Treaty Rights (Section 35 of the Constitution Act, 1982).[91] Due to the impacts of colonial and post-colonial events on the health of Indigenous peoples, they experience more barriers accessing health care services, receive culturally unsafe care, and experience systemic racism. These recommendations are important to ensure that Ontario's cancer care system reflects and addresses the needs of First Nations, Inuit, Métis and urban Indigenous (FNIMUI) peoples, and aligns with the health-related Truth and Reconciliation Calls to Action #18-24 and the First Nations, Inuit, Métis, and Urban Indigenous Cancer Strategy 2019-2023.[92,93]

What are the challenges?

- Individuals may not disclose their Indigeneity and/or may not be aware of hospital resources and supports available to Indigenous people, and thus are not provided access to supports such as interpretation services, access to an Indigenous Navigator and/or Indigenous Care Coordinator, and discharge planning coordination for a smoother transition to their home community.
- Lack of awareness by health care providers in connecting patients with Indigenous Navigators, causing a long lead time for patients to be assigned to one.

- The process for identification of Indigenous identity of patients is variable by region/community, resulting in inconsistent access to Indigenous-specific supports and resources.
- Indigenous people often travel long distances from remote areas and spend many days away from their home community to attend oncology appointments and access cancer care. This can be challenging to coordinate and often requires access to transportation and accommodation supports.
- The Non-Insured Health Benefits (NIHB) program provides eligible First Nations people and Inuit with a range of health benefits that are not covered through other social programs, private insurance plans, or provincial or territorial health insurance such as transportation and accommodation for patients and/or family members to access medically required health services. Lack of knowledge and awareness among health care providers of the processes for accessing the NIHB program, resulting in inconsistent offering of these supports to eligible First Nations people and Inuit.
- Navigators are not eligible to provide letters to the NIHB program on behalf of their patients, causing delays and backlogs in accessing services.
- Indigenous perspectives are often misinterpreted or dismissed by non-Indigenous perspectives, which are culturally inappropriate and perpetuate systemic racism.
- There is a lack of cultural safety and awareness among oncology care team members regarding the Truth and Reconciliation Calls to Action and the effects of intergenerational trauma and colonization on Indigenous people.
- Indigenous Navigators and providers are not properly supported or resourced, resulting in existing Navigators being overwhelmed by the volume of work, and difficulty and inconsistency in backfilling vacated Navigator positions.

Why is it important to address these issues? [94–99]

- **Improved patient access:** Some Indigenous patients face difficulties navigating the cancer system due to the lack of safe spaces and awareness of Indigenous-specific supports, such as Indigenous Navigators. Transportation barriers also contribute to missed appointments and delayed care, potentially leading to poorer health outcomes. Administrative and logistical elements, including scheduling coordination, transportation, and paperwork, pose significant barriers to positive health outcomes for FNIMUI peoples living with cancer.
- **Improved patient navigation**: Indigenous Navigators play a vital role in providing support and advocacy for FNIMUI patients, ensuring that their cancer journey is a culturally safe experience. Access to an Indigenous Navigator helps connect Indigenous patients to culturally appropriate supports and resources in a timely manner, improving their healthcare experience.
- **Reduced unnecessary burden on the healthcare system:** Standardized processes, such as implementing a voluntary and confidential self-identification process for Indigenous patients,

can optimize healthcare resources. This streamlined approach enables more efficient and effective healthcare delivery, benefitting both patients and the healthcare system.

- **Improved access to Non-Insured Health Benefits:** Access to Non-Insured Health Benefits (NIHB) that support eligible First Nations and Inuit patients and their family members to travel from remote regions is important for ensuring patient access to healthcare. Despite the availability of health benefits through Non-Insured Health Benefits (NIHB) program, accessing these supports can be difficult, with limitations on the extent of supports provided.
- **Improved collection of Indigenous identity data:** Collecting Indigenous identity data is important for measuring, identifying, and understanding health inequities. This data enables informed planning and development of services that meet the unique needs of FNIMUI patients and communities. Implementing a voluntary, confidential, and community-informed self-identification process for patients who identify as Indigenous supports the provision of efficient and effective healthcare delivery.
- **Improved patient experience:** Establishing a clear and consistent self-identification process improves patient satisfaction and reduces anxiety among Indigenous patients. It enables Indigenous patients to have a better understanding of available resources and supports, such as navigation services, translation and interpretation services and discharge planning to their home community. Traditional Healers, Knowledge Keepers, and Elders are needed in medical partnerships, decision-making processes, and patient care to address Indigenous patients' unique needs in an integrated and holistic manner.
- **Efficient utilization of resources:** Introducing a voluntary and confidential self-identification process for Indigenous patients can improve the efficient use of and access to an Indigenous Navigator, and use of other hospital resources.
- **Improved patient outcomes**: Emerging evidence indicates that Indigenous-led health service partnerships lead to holistic health improvements for Indigenous people. Such partnerships enhance access to care and promote patient compliance with care plans, ultimately leading to improved patient outcomes.

Recommendation 22. Local Cancer Programs should develop and implement a voluntary, confidential self-identification process for patients who identify as First Nations, Inuit, Métis, or urban Indigenous to enrich the patient experience, improve health services, identify areas of need in the health care system, and provide data to measure the effectiveness of health care for Indigenous patients.

What are the key enablers?

- **Electronic Health Records (EHRs):** EHRs provide real-time access to patient information and clinical decision support tools. This can help Regional Cancer Programs make more informed decisions about connecting patients and families with multidisciplinary providers, such as Indigenous Navigators.
- **Standardized processes and protocols:** The development of standardized workflows and protocols for self-identification can help to ensure consistent, efficient, and effective care delivery.
- **Training:** Ensuring healthcare providers are trained in the self-identification process for Indigenous patients, along with training on Indigenous data governance principles, can facilitate and enhance patient access to Indigenous-specific services and supports.
- **Data collection:** Data collection of patient demographics can help Regional Cancer Programs better understand the health needs of Indigenous individuals and communities in their regions. This demographic data can also help inform Indigenous partners' health programs and services. Adherence to Indigenous data governance principles and respectful community engagement can aid in facilitating data collection that benefits the community with proactive steps in place to minimize the potential for harm.
- **Partnership and collaboration:** Partnership with Indigenous leadership is key to support the co-development of a voluntary, self-identification process for Indigenous patients and family/care partners.

What are the key implementation considerations and options?

Local Cancer Programs

- A process for voluntary, self-identification should be co-developed in partnership with Indigenous leadership in the region.
- All patients should be systematically asked if they would like to voluntarily self-identify:
    - Response should be documented in patient's EMR.
    - If the field is blank, patient is asked at the next encounter.
    - Implement options and process for patients to opt out of responding and being asked at the next encounter.
- Indigenous data governance principles should be respected in developing a self-identification process.

Recommendation 23. All members of the oncology team should be aware of the Non-Insured Health Benefits (NIHB) program and how to access it for eligible First Nations and Inuit patients.

23.1. Ontario Health should advocate to the NIHB program to change processes to allow:

- Indigenous Navigators to sign-off on patient applications.
- Flexibility in providing support through the NIHB program to enable additional care partners and family members to easily accompany First Nations and Inuit patients to medical appointments and pre-assessment

What are the key enablers?

- **Non-Insured Health Benefits (NIHB) Lead:** Identify a Lead who is educated on and can help support NIHB administration and paperwork. This should not be the sole responsibility of the Indigenous Navigator.
- **Training and education:** Offering healthcare providers training and education on the available supports and challenges of the NIHB program for Indigenous patients, families, and care partners, to help enhance the provision of patient-centred care.
- **Standardized workflows and processes:** Developing standardized workflows and processes for application submissions to the NIHB program, as well as for communication among the oncology care team, can help to ensure consistent, efficient, and effective care delivery. A standardized application process, coordinated by the NIHB Lead, can also help to streamline administrative tasks, and reduce the workload of providers, allowing more time for patient care and reducing burnout.
- **Coordinated care:** Coordinated care between the oncology care team, Indigenous Navigators, and other healthcare or community-based providers is essential to ensure that FNIMUI patients receive access to health benefits. This can involve sharing patient information, processing applications, and coordinating travel and accommodation.

What are the key implementation considerations and options?

Local Cancer Programs

- If local organization vendor(s) are not covered by the NIHB program, local organizations should work with NIHB on adding vendor(s) to be included in coverage, if possible.
- Ensure information on NIHB-approved vendors in the region are shared with patients, families, and care partners.
- Healthcare providers can reach out to the Chiefs of Ontario NIHB Navigators to obtain further support for First Nations patients.
- Healthcare providers can refer to the Non-insured Health Benefits website and the contact information for Ontario for more information.

Ontario Health (Cancer Care Ontario)

- The Indigenous Cancer Care Unit at Ontario Health (Cancer Care Ontario) will advocate to the NIHB program regarding updating processes for application submissions and eligibility requirements for sign-off.

Recommendation 24. In partnership with Indigenous leadership and health care providers, co-design patient resources, care delivery policies and processes that utilize grassroots, participatory and collaborative approach and incorporate cultural knowledge into all aspects of care.

24.1. Facilitate the hiring of First Nations, Inuit, Métis and urban Indigenous peoples for navigation, coordination, peer support, and resource development roles within Regional Cancer Programs.

24.2. Ontario Health, in partnership with Regional Cancer Programs, should advocate to formalize and appropriately resource the Indigenous Navigator role expansion across all regions to coordinate and connect patients with community care and social services programs, arrange language interpretation services, and facilitate connections with Indigenous Elders, Traditional Healers, or Knowledge Keepers and the oncology care team.

24.3. Oncology care teams should work in partnership with Elders, Traditional Healers, and Knowledge Keepers, and Indigenous providers, to support holistic care that addresses cultural, social, and medical needs.

24.4. All members of the oncology care team should be required to complete mandatory Indigenous cultural safety and awareness training to ensure culturally appropriate, person-centred care delivery.

What are the key enablers?

- **Adequate resources and staffing:** Overworked and understaffed healthcare providers are more likely to experience burnout. Providing adequate resources and staffing levels of Indigenous Navigator roles can help reduce workload and support the well-being of providers, as well as facilitate improved access to care for patients**.**
- **Traditional and cultural practices:** Oncology care teams should work in partnership with Elders, Traditional Healers, and Knowledge Keepers, and Indigenous providers, to support holistic care that addresses cultural, social, and medical needs.
- **Needs assessment:** A needs assessment will support in the planning, identification of service gaps, and the demand for additional Indigenous Navigator roles and/or other coordination and peer support roles within each Regional Cancer Program.
- **Training and education:** All healthcare providers and staff in Regional Cancer Programs should complete Indigenous cultural awareness and safety training to gain a better understanding of the history and culture of FNIMUI peoples, and the impacts of colonization on the health of FNIMUI. This training will support healthcare providers in providing culturally appropriate, person-centred care.
- **Compassionate and respectful care:** Oncology care for FNIMUI patients should be provided in a compassionate and respectful manner, aligned with the patient's values, preferences, and cultural beliefs, and based on the principles of Shared-Decision Making. An enhanced understanding of Indigenous cultural awareness and safety will enable healthcare providers to support patient access to care and tailored supports and resources.
- **Partnerships and collaborations:** Establishing and fostering partnerships and collaborations between Regional Cancer Programs and FNIMUI communities and Indigenous-led organizations can result in innovative models of interprofessional collaboration. These relationships are critical to support the co-development of patient information and resources for Indigenous patients, families and care partners, and care delivery processes and policies.

What are the key implementation considerations and options?

Local Cancer Programs

- Align implementation of recommendations to the First Nations, Inuit, Métis, and Urban Indigenous Cancer Strategy 2019-2023 and subsequent First Nations, Inuit, Métis, and Urban Indigenous Cancer Strategies.

For 24.2

- Oncology care teams, including social workers, must be aware of the Indigenous Navigator position and their role in health care delivery for Indigenous patients.
- Develop a transition plan and/or guidance document that is available for the oncology care team and staff if the Indigenous Navigator is away or on leave.
- Consider developing a resource sheet for the oncology care team that includes information on Indigenous programs, supports, resources, cultural practice policies, Indigenous healing spaces, and key contacts to ensure there is no gap in care when the Indigenous Navigator is unavailable.
    - Refer to the Toronto Regional Cancer Program resource, as an example: https://www.trcp.ca/en/indigenous-cancer-program

For 24.4

- All Local Cancer Programs should promote Indigenous Cultural Safety and Awareness training and education for the oncology care team; key resources include:
    - Ontario Health Indigenous Relationship and Cultural Awareness Courses: https://elearning.cancercare.on.ca/
        - Clinicians should prioritize completing the following 4 modules: 1) *First Nations, Inuit and Métis Culture, Colonization, and the Determinants of Health; 2) Indigenous History and Political Governance; 3) Cultural Competence in Healthcare; and 9) Truth and Reconciliation Commission of Canada and the United Nations Declaration on the Rights of Indigenous Peoples*
    - Indigenous Primary Health Care Council (IPHCC) Indigenous Cultural Safety Training: https://iphcc.ca/cultural-safety-training/
    - San'Yas Anti-Racism Indigenous Cultural Safety Training Program: https://sanyas.ca/core-training/ontario
    - Review the health-related Calls to Action(#18 -24) from the Truth and Reconciliation Commission of Canada report: https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf

Ontario Health (Cancer Care Ontario)

- Explore funding opportunities for additional Indigenous Navigator positions.
- Work with Regional Cancer Programs to better understand the current state of Indigenous Navigator services at centres and discuss opportunities to increase Navigator positions, and improve onboarding, retention, and backfilling of roles.

Francophone Populations and Equity-Deserving Groups

There is also a significant gap in understanding the unique needs and barriers to care faced by individuals from various equity-deserving groups. These groups include Francophones, Black and racialized people, 2SLGBTQIA+ individuals, immigrants, refugees, newcomers to Ontario, patients with disabilities, adolescents and young adults, and low-income individuals lacking sufficient resources for long-term physical well-being, as well as individuals at the intersections of many of these identities. Canadian studies indicate that individuals who are disproportionately affected by health and social inequities face significant challenges in accessing adequate cancer care, resulting in higher mortality rates. These groups are more likely to be underrepresented in local cancer programs, diagnosed with preventable cancers or at advanced stages of the disease, receive suboptimal cancer care, and experience higher mortality rates from cancers that are typically curable or treatable.[100]

Francophone patients, families, and care partners, often encounter delays in accessing and navigating the cancer system due to a lack of provider knowledge regarding health care services and community-based supports available in French. The *French Language Services Act* (FLSA) guarantees access to services in French in 27 designated areas in the province. Approximately 80% of Francophones live in a designated area, with the largest concentrations in the Eastern and Northeastern regions.[101] Under the FLSA, there are over 250 designated agencies, including hospitals and community-based health care organizations, which have the capacity to actively offer French language services on a permanent basis and have met the designation criteria in providing French-language services. A new regulation on the active offer of services in French came into effect on April 1st, 2023, which describes measures that must be taken by a government agency, including designated health care organizations such as hospitals.

The following recommendations strive to create a more equitable and inclusive healthcare system that considers the diverse, cultural, and linguistic needs of individuals and addresses the unique challenges faced by underrepresented communities, ensuring their access to high-quality care. This should not preclude ensuring equity is a primary consideration when implementing all other recommendations in this document.

What are the challenges?

- Availability of services in the language patients are most comfortable using is limited, resulting in a lack of access to language-specific informational resources. This includes information regarding treatment options, symptom and toxicity management, medication instructions, as well as contact details for addressing questions and concerns.
- Challenges faced by patients, families, and care partners in accessing French-language healthcare services, resulting in difficulties navigating the cancer care system and delays in connecting with appropriate supports and resources.
- Insufficient knowledge or awareness among health care providers about providing an active offer of French-language services, in accordance with the *French Language Services Act* and its regulations. Under the *French Language Services Act*, patients should be offered to receive services in French from over 200 designated agencies across the province, including some hospitals and community health care agencies.
- Inadequate knowledge and awareness among healthcare providers regarding community-based supports and resources available to Francophone patients, care partners, and families.
- Low awareness among providers and cancer program staff about the risks associated with language barriers, including the use of non-inclusive language, which can lead to miscommunication, lower quality of health care delivery, and compromised patient safety.
- Limited utilization and awareness of professional translation and interpretation services by cancer programs.
- Patients, families, and care partners from equity-deserving populations may experience financial insecurity, food insecurity, transportation challenges, as well as language and communication barriers, which significantly limits access to cancer care treatment and supports.
- Lack of awareness of tailored community-based supports and resources for patients, families and care partners from equity-deserving groups and communities. Patients experience difficulties navigating the cancer care system and may not be connected or referred to key supports and resources (e.g., psychosocial services, mental health supports, wellness programs, nutrition, physical activity, peer support programs) in a timely manner.
- Patients from various equity-deserving groups may experience culturally insensitive healthcare. Discriminatory language and use of microaggressions by some health care providers and/or staff significantly impacts patient experience and may exacerbate their feelings of discomfort and distrust of cancer system and/or health care team.
- Newcomers/Immigrants are less likely to use health resources because of limited knowledge in navigating the system, social isolation, and financial barriers to health insurance access.

Why is it important to address these issues? [97,100,102–104]

- **Fulfilling ethical and legal obligations:** Healthcare providers are legally required to offer active French-language services in designated agencies as per the *French Language Services Act*. Overcoming provision challenges promotes compliance and linguistic rights. Moreover, it is essential to extend these ethical obligations to equity-deserving groups to promote equity, inclusion, and diversity. Fulfilling these obligations ensures that all patients receive respectful and appropriate care.
- **Increased patient experience and satisfaction:** By addressing challenges related to language barriers, cultural insensitivity, and limited awareness of tailored community-based supports, we can enhance the overall patient experience. Patients, families, and care partners feel more supported, respected, and understood, which improves their satisfaction with the healthcare system and their engagement in their own care.
- **Improved patient outcomes:** Access to language-specific informational resources, appropriate supports, and timely referrals can lead to better understanding of treatment options, improved symptom and toxicity management, adherence to medication instructions, and overall better quality of care. This, in turn, can positively impact patient health outcomes and reduce mortality rates**.**
- **Enhanced health system navigation and access:** When patients have access to appropriate resources and supports, they can navigate the system more effectively, reducing delays and improving the coordination of care. Patient navigators can also facilitate access to comprehensive and the most appropriate services and supports for each patient's individual needs by identifying tailored supports, facilitating communication with providers, and providing patient education. Accessible healthcare services and resources also contribute to overall well-being and help patients overcome barriers related to social isolation and limited knowledge of the healthcare system**.**
- **Improved patient safety:** Enhancing awareness of language barriers and promoting the utilization of professional translation and interpretation services helps to ensure accurate communication between patients, families, care partners, and healthcare providers. Clear communication reduces the risk of misdiagnosis, medical errors, and compromised patient safety.

Recommendation 25. Local Cancer Programs should enable patients to self-identify with a community or group and indicate specific preferences or needs at the onset of their cancer care, ensuring they are matched with appropriate information and supports, including translation and interpretation services, which remain accessible throughout their entire journey.

25.1. Aligned with the French Language Services Act in Ontario, oncology care teams should identify Francophone and French-speaking individuals and be trained in active offer of French-language services to patients, families, and care partners.

What are the key enablers?

- **Training and education:** Both administrative and clinical staff would need to be trained in patient identification processes to collect social and demographic identity information, such as their ethnicity, gender identity, their membership in a racialized group, use of desired pronouns or desired supports, as well as the provision of appropriate resources and supports based on the patient profile. This includes understanding the importance of cultural competence and linguistic sensitivity, especially when dealing with diverse patient populations. Staff can benefit from training on the provision of active offer of French-language services. In the case of French-speaking patients, language proficiency training would be needed for healthcare providers or the availability of trained interpreters.
- **Technology infrastructure:** A robust IT system would be important for capturing and maintaining patient level sociodemographic data elements, ensuring that support materials are accessible and up-to-date, and coordinating services over the duration of a patient's treatment. Technologies for remote, real-time interpretation or translation, could also be explored.
- **Standardized data-collection tools:** Standardized evaluation and data-collection tools can help Local Cancer Programs to better understand the cultural, linguistic and health needs of Francophones and underserved populations.

- **Collaboration and partnerships:** Building strong relationships with community organizations, interpreter services, patient advocacy groups, and other relevant stakeholders would be essential for providing comprehensive supports and enable patient access to tailored programs and resources that address the needs of equity-deserving individuals and groups. These partnerships and working relationships could also facilitate greater cultural understanding and promote a more person-centred approach to care.
- **Leadership and governance:** Strong leadership at all levels (from government and health system leaders to managers in local cancer programs) is necessary to champion these changes and ensure they are sustained over the long term. An appropriate governance structure should be established to oversee the implementation and ongoing management of these recommendations.

What are the key implementation considerations and options?

Local Cancer Programs

- Patient profiles for individuals should enable self-identification and/or association with a community, indicate use of desired pronouns, desired supports, and sociodemographic questions. This information can be used to create a tailored list of resources, programs and supports based on their needs, preferences, and priorities.
- Review and refer to the following resources to have a better understanding of Ontario's Francophone population:
  - Infographic: The French Presence in Ontario.
- Health Nexus and partner organizations have developed several resources on:
  - Understanding the Francophone context.
  - Legislation and institutional supports.
  - Engaging Francophones when you don't speak French.
  - Recruiting and retaining bilingual staff.
- The Réseau franco-santé du Sud de l'Ontario has an online platform to guide health organizations in recruiting and retaining bilingual staff to offer services in both official languages.
- Identify regional French-language service gaps and expand partnerships with community-based organizations to identify and enable access to support and resources for Francophones.
- Consider using real-time virtual certified medical interpretation technology.
- Develop partnerships with community-based interpretation services.
- Ontario Health offers a free online Cultural and Linguistic Sensitive Care learning program, featuring the history, demographics, and characteristics of the Francophone population to providers.
- Ensure access to French language health services is available through:
  - Training on Active Offer of French Language Health Services is accessible and offered for all multidisciplinary team members to promote safe and patient-centred care:

        - The Réseau du mieux-être Francophone du nord together with other Entités developed a free online training course on the active offer of French-language healthcare services: https://www.activeoffertraining.ca.
        - Entité 3 developed a free online active offer training highlighting the needs of Francophones in the Greater Toronto Area.
    - Identification of staff capable of offering services in French and enable matching of patients and identified staff to ensure services are offered in the language the patient understands.
    - Ensure awareness of and enable access to medical interpreters, American Sign Language Interpreters, and translation services in each local cancer program:
        - https://accessalliance.ca/access-alliance-language-services/
        - Remote Interpretation Ontario Network: https://accessalliance.ca/access-alliance-language-services/our-language-services-solutions-without-borders/remote-interpretation-ontario-network-r-i-o-network/
    - Local cancer programs, in collaboration with OHTs and other community-based supports, can work together to enhance the planning and design of French-language health services.
    - To ensure compliance with the *French Language Services Act*, the following considerations should be taken into account when providing an active offer of French-language services:
        - Access to bilingual services 24/7
        - Mechanisms to proactively identify Francophone patients.
        - Care coordination and planning available in French.
        - Referral to French health services based on patient needs.
        - All print and digital tools (including websites) are available in French, including admission forms and patient-facing documents, and are actively offered to French-speaking patients and families.
        - Visible identification of staff and providers proficient in French.
- Monitor and evaluate the capacity to offer French language services through patient satisfaction surveys and community engagement.
- Embed language access and preference questions into patient experience surveys to understand linguistic needs and preferences of patients.
    - Ensure performance measures across the quadruple aim are calculated and reported by linguistic identity.
    - Ensure a mechanism is in place to evaluate satisfaction with French-language services (i.e., patient satisfaction survey).

    - Ensure a complaint mechanism is in place for French-language services.
    - The Entités developed a provincial guide on the evaluation of French-language service delivery including sample questions.
- The Réseau franco-santé du Sud de l'Ontario, in collaboration with Société Santé en français, developed eQUITY-Link.ca, a learning platform to support the planning, implementation and evaluation of French language services in health, social services and/or community organizations.
- GREFOPS (a multidisciplinary and multiorganization research group) developed a tool to measure the active offer of social and health services in French minority contexts.
- Identify linguistic capabilities / fluency of all staff within multidisciplinary teams to support patient access to care in the language of their preference, including French.
    - Refer to French Language Oral and Written Skill Proficiency - Self-Assessment
- Ensure all French-speaking staff wear a *Je parle français* button or lanyard so that patients and other staff members can identify French-speaking staff.

Ontario Health (Cancer Care Ontario)

- Increase awareness, promote, and facilitate access to French and other language resources and supports for healthcare providers, patients, and families on the Ontario Heath (Cancer Care Ontario) website, including:
    - Patient education resources on systemic treatment, information on treatment options, symptom, and toxicity management
    - Information on French language services available across Ontario
    - Information on how to access translation and interpretation services.
- Leverage and build upon existing compilations of French language services supports by health system partners, including:
    - French Language Health Planning Entities (FLHPEs): refer to distribution of Entités across the province as well as the website of each Entité including Entité 1, Entité 2, Entité 3, Entité 4, RSSFE, and RMEFNO.
    - French language services resources for Ontario Health Teams
    - Ontario Health's French-Language Services Regional Representatives
    - eQUITY-Link.ca, a learning platform to support the planning, implementation, and evaluation of French language services in health, social services and/or community organizations.
- Work with regional French language health planning entities, French-Language Services Regional Representatives, and health service providers to identify and support the development of resources to facilitate the planning and delivery of French language services in health and oncology care settings.

- Advocate for the integration of language access into the standards of practice and policies of organizations, including local cancer programs, and in performance measures of the cancer care system.
- Advocate and explore opportunities to establish core funding for Regional Cancer Programs/organizations, ensuring that interpreting services are included in standard budget lines.

Recommendation 26. The oncology care team should assess the financial, transportation, and other social supports or needs of all patients upon entry to the cancer system and identify and provide appropriate interventions, while facilitating access to supports and services based on the unique needs of each equity-deserving group.

26.1. Cancer Programs should facilitate access to tailored supports and services for Francophone populations, including navigation, peer support, interpretation, and translation services, with a specific focus on providing French-language health services.

26.2. Cancer Programs should increase awareness, promote, and enable access to existing patient and provider resources available, including French language materials, on the Ontario Health (Cancer Care Ontario) website.

26.3. Local Cancer Programs should develop local content that can be translated into French and other non-English languages based on the demographic needs of their population.

26.4. Local Cancer Programs should implement referral systems that facilitate a smooth transition and provide access to tailored community-based supports and programs for equity-deserving groups.

What are the key enablers?

- **Training and education:** Both administrative and clinical staff would need to be trained in patient identification processes to collect social and demographic identity information, such as their ethnicity, gender identity, their membership in a racialized group, use of desired pronouns or desired supports, as well as the provision of appropriate resources and supports based on the patient profile. This includes understanding the importance of cultural competence and linguistic sensitivity, especially when dealing with diverse patient populations. Staff can benefit from training on the provision of active offer of French-language services. In the case of French-speaking patients, language proficiency training would be needed for healthcare providers or the availability of trained interpreters.
- **Technology infrastructure:** A robust IT system would be important for facilitating and coordinating several work processes, including capturing and maintaining patient level sociodemographic data elements, ensuring that support materials are accessible and up-to-date, and coordinating services over the duration of a patient's treatment. Technologies for remote, real-time interpretation or translation could also be explored.
- **Standardized data-collection tools:** Standardized evaluation and data-collection tools and definitions of data elements can help Regional Cancer Programs to better understand the cultural, linguistic and health needs of Francophones and of underserved populations.
- **Collaboration and partnerships:** Building strong relationships with community organizations, interpreter services, patient advocacy groups, and other relevant stakeholders would be essential for providing comprehensive supports and enable patient access to tailored programs and resources that address the needs of equity-deserving individuals and groups. These partnerships and working relationships could also facilitate greater cultural understanding and promote a more person-centred approach to care.
- **Leadership and governance:** Strong leadership at all levels (from government and health system leaders to managers in local cancer programs) is necessary to champion these changes and ensure they are sustained over the long term. An appropriate governance structure should be established to oversee the implementation and ongoing management of these recommendations.

What are the key implementation considerations and options?

Local Cancer Programs

- Use real-time virtual certified medical interpretation to bridge language gaps.
- Utilize GREFOPS' self-assessment tool for healthcare continuity in minority languages, aligning with standards like HSO 11012:2018 (E).
- Collaborate with resettlement agencies, community-based organizations, advocacy groups, and support organizations to provide tailored resources for Francophone and other equity-deserving groups.
- Equip primary care providers, social workers, navigators, and volunteers with necessary training to articulate available resources effectively.
- Upon diagnosis, provide patients with resources like contact details of the oncology team, support programs, hospital navigation guidance, and technical support for virtual resources.
- Assign nurses, social workers, or other providers to help patients understand the available supports and navigate the cancer system.
- Develop tailored services based on local needs, accessible in French and other non-English languages.
- Implement systems that link patients with appropriate community-based supports and programs.
- Ensure all staff members receive training to respect the diverse cultural and linguistic needs of the patient population.
- Regularly assess implementation strategies using patient feedback, audits, or surveys, and adjust services as necessary.
- Give patients clear and comprehensive information about accessing programs and resources, presented in both written and electronic formats.
- Collaborate with ethno-cultural community mental health agencies and equip social workers and navigators with details about coverage for various federal and provincial health programs.
- Ensure the oncology care team can make community-based referrals and has awareness of regional resources. Refer patients to existing resources, such as Wellspring's programs, UHN's Sexual & Gender Diversity in Cancer Care, Canadian Cancer Society's Community services locator, Mount Sinai Hospital's community and internet-based resources, and the Cancer Assistance Program (CAP).

Next Steps

The successful implementation of these recommendations goes beyond systemic treatment facilities and lies in the collective responsibility of multiple stakeholders. This collective commitment ensures shared accountability, facilitating comprehensive, equitable, and sustainable improvements in systemic treatment delivery. Recognizing this, we are committed to working collaboratively with Ontario Health and Regional Cancer Programs to establish and implement the necessary next steps for these recommendations. Regional Cancer Programs will play a pivotal role in this implementation process, and we acknowledge the potential for unique challenges and barriers to arise in each region. Therefore, this section offers a roadmap for the next steps, providing practical guidance and strategies to navigate these challenges. We emphasize that the specifics of implementation might vary based on regional needs and population demographics, necessitating an adaptable and locally informed approach. Our collaborative process will respect and acknowledge the autonomy and specific circumstances of each region while providing a supportive framework for change. The goal is to equip each Regional Cancer Program with the tools and strategies necessary to make meaningful and lasting improvements in cancer care delivery, ensuring an optimized and equitable system for all Ontarians.

Priority and Timelines for Recommendations

Recognizing that this document represents an aspirational vision for the future of systemic treatment, the implementation of these recommendations should serve as a catalyst for positive change. The aim is to inspire and guide the transformation of systemic treatment practices, with a particular focus on patient experiences, provider well-being, and health outcomes.

Successful implementation of our proposed recommendations is based on the understanding that each Regional Cancer Program in Ontario is unique, with specific needs and resources. Therefore, it is incumbent upon Regional Cancer Programs to determine the priority and timeline for each recommendation, tailoring them to their regional context and aligning them with the aspirational vision articulated in this document.

In setting priorities and timelines for the implementation of our recommendations, Regional Cancer Programs should consider several key factors. An integral starting point in this process is the completion of a gap analysis. This in-depth examination allows each program to identify where current practices fall short of the aspirational recommendations outlined in our report. By bringing these deficits to light, the gap analysis empowers the programs to determine which areas necessitate significant improvements and which recommendations should be prioritized for immediate attention. Among these, some recommendations may directly address critical gaps in current care models that have significant impact on patient outcomes. These should be treated as high priority, targeting them for immediate attention and short-term implementation.

Alongside the gap analysis, the feasibility of implementing each recommendation within the regional context is also important. Programs must assess available resources, such as skilled personnel, technology, and funding, and align recommendations accordingly. Those recommendations that align with the existing resource capacity or require minimal additional resources could be given higher priority. This approach ensures that the implementation efforts are not only achievable but sustainable within the regional setting.

Finally, each program must take into account its readiness to adopt the proposed changes. A thorough evaluation of the readiness and capacity for change within the system is necessary. Those systems more prepared for change, with established processes, supportive leadership, and engaged stakeholders, are more likely to experience a smoother and more successful implementation process.

By considering these factors when setting priorities and timelines, Regional Cancer Programs can effectively navigate the implementation process and achieve meaningful improvements in systemic treatment practices. This approach enables each Regional Cancer Program to customize its implementation strategy, acknowledging unique challenges while leveraging available resources within its region. This facilitates the transformation of systemic treatment practices in a strategic, efficient, and person-centred manner.

Overcoming Human Resources and Financial Barriers

Human resources and financial constraints pose significant barriers to the successful implementation of proposed recommendations. To overcome these challenges and facilitate a smooth transition, the adoption of a multi-faceted strategy is imperative. This approach requires a comprehensive evaluation that considers both the existing barriers and the potential opportunities that can be harnessed to optimize resource efficiency.

One key aspect of this strategy involves leveraging the skills and expertise of the existing staff members. It is important to recognize their competencies and identify areas for potential growth. Implementing targeted training programs can effectively address knowledge gaps and equip the staff with the necessary skills to efficiently manage new or evolving roles.

Concurrently, efforts should be directed towards optimizing multidisciplinary teams. Distributing workloads equitably not only reduces the risk of burnout but also enhances overall team performance. A comprehensive reassessment of roles and responsibilities within each team is recommended.

By making necessary adjustments that enable team members to maximize their scope of practice and competencies, optimal utilization of skills can be achieved, resulting in improved team performance.

Furthermore, conducting comprehensive financial assessments prior to implementation is essential. These assessments play a vital role in evaluating the financial implications of the proposed changes.

By examining direct costs, potential savings, and indirect costs associated with implementation, valuable insights can be gained. This information is instrumental in developing a comprehensive budget plan and identifying potential funding sources.

Fostering Equity and Empowerment

Promoting equity in healthcare is essential for delivering high-quality, person-centred care. To achieve this, proactive measures must be taken to address the distinct challenges and requirements of Indigenous people, Francophones, and other equity-deserving groups. Comprehensive planning, sustained efforts, and targeted interventions are necessary.

Our recommendations emphasize the importance of healthcare providers being prepared to understand, appreciate, and effectively address the unique needs First Nations, Inuit, Métis and urban Indigenous (FNIMUI) peoples, Francophone populations, and other equity-deserving groups. This necessitates cultural competence training, active community engagement, and ongoing professional development to enhance staff competencies.

Central to this preparation is robust and inclusive training programs that elevate cultural competence, address systemic biases, and incorporate health equity, diversity, and inclusive principles. These programs should remain current, practical, and sensitive to the specific demographics and patient populations within each Regional Cancer Program. Ongoing commitment to staff development, with regular refreshers and timely updates, ensures a sustained emphasis on equity.

Meaningful engagement with Indigenous communities, Francophone communities, and other equity-deserving groups is of utmost importance. Establishing open and constructive dialogue with these communities and populations provides invaluable insights into their unique needs, challenges, and experiences. These direct perspectives inform the development of interventions and training programs. Engagement should extend beyond consultation; Indigenous communities, Francophones, and other equity-deserving groups should be actively involved in decision-making processes, contributing to the formulation and implementation of initiatives designed to enhance equity. Their participation can help ensure that these initiatives are genuinely tailored to their needs and can effectively address the identified challenges.

Facilitating Change

Conducting thorough readiness assessments is a key first step before delving into the implementation phase. This involves conducting a comprehensive analysis of the region's current state, gathering valuable insights to effectively shape the course of action.

A core element of these assessments is the evaluation of existing skills and infrastructure. This process serves as an internal audit, identifying the strengths and capabilities within your teams and assessing the resources available for utilization. By proactively identifying potential gaps that may pose challenges to the successful execution of the proposed recommendations, it becomes possible to design targeted strategies for skill enhancement and infrastructure development.

Another significant aspect of readiness assessments is identifying and mitigating potential resistance to the impending changes. Resistance to change is a naturally occurring phenomenon in any transformation process. By anticipating potential sources of resistance and subsequently developing strategies to address them, we can create a more receptive environment for the proposed changes. This approach could involve increased staff training to increase confidence in new processes, transparent communication to clarify the rationale behind changes, and inclusive decision-making processes that value and incorporate diverse perspectives.

Following the readiness assessments, an impact assessment phase should be initiated to evaluate the potential effects and outcomes of implementing the proposed changes or initiatives. This evaluation encompasses a comprehensive analysis of potential effects, thoroughly examining the projected impact on patients, providers, and the broader health system. The assessment should account for potential benefits, risks, and any unintended consequences that may arise.

Concurrently, it is essential to maintain a focus on addressing health disparities and avoid inadvertently perpetuating them during the pursuit of improvement. This necessitates conducting tailored assessments for each equity-deserving group to ensure that the recommendations contribute positively towards equitable outcomes and do not inadvertently exacerbate existing health inequities.

Once the preliminary assessments are completed, the focus shifts to the implementation of the recommendations. The Plan-Do-Study-Act (PDSA) cycle offers a structured approach to guide this process. The iterative methodology begins with the 'Plan' phase, crafting a comprehensive action plan detailing resources, roles, and responsibilities. The 'Do' phase brings the plan to life in a controlled environment. The 'Study' phase evaluates outcomes through data collection and analysis. The 'Act' phase adjusts the plan based on evaluation results, while sharing lessons and practices with other regions. This step-by-step approach enables effective implementation, adaptation, and refinement of recommendations. Continuous learning drives ongoing enhancement of cancer care across Ontario.

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Conclusion

This document aims to address the growing demand for updated models of systemic treatment in Ontario by providing recommendations to optimize service delivery, enhance provider well-being, improve patient experiences, and achieve better outcomes in cancer care. It acknowledges the barriers faced by underserved groups and demonstrates a commitment to addressing health disparities and promoting equity.

To achieve these goals, collective efforts, and shared accountability from multiple stakeholders, including Ontario Health and Regional Cancer Programs, are essential. Collaboration is key in establishing and implementing the necessary steps for improvement. Regional Cancer Programs play a vital role in navigating the unique challenges and barriers that may arise in each region. Practical guidance and strategies are provided to support an adaptable and context-specific approach that respects regional autonomy.

The goal is to create an optimized and equitable system that serves all Ontarians. This necessitates setting priorities and timelines, considering readiness for change, addressing human resources and financial barriers, and fostering equity and empowerment. By prioritizing the well-being of providers, enhancing patient experiences, and improving health outcomes, we can continuously evolve and enhance systemic treatment practices.

Together, through collaboration, innovation, and a shared commitment to excellence, we can work towards a future where systemic treatment is compassionate, person-centred, and responsive to the diverse needs of individuals and communities. By implementing these recommendations and ensuring their sustainable impact, we can strive for an equitable and optimized healthcare system that delivers the highest quality care to all Ontarians.

Appendices

Appendix A: Education Requirements and Regulatory Status for Systemic Treatment Providers

Provider	**Education**	**Considerations**	**Regulatory Status**
Clerk	- Completion of high school or recognized equivalent.	- Completion of a Medical Terminology course	- Unregulated
Clinical Nurse Specialist	- Graduate education: Master's of Nursing or Doctoral prepared, and expertise in a clinical specialty - CNSs are RNs in the General Class	- Should work under specific medical directives. - Mentoring should be available by a medical oncologist/hematologist. - Refer to Ontario Health (Cancer Care Ontario) Advanced Practice Nursing Toolkit	- Self-regulated and licensed to practice through College of Nurses of Ontario
Drug Access Navigator	- Undergraduate degree in a health-related field - Registered Pharmacy Technician or Assistant certification preferred	- Working knowledge of systemic treatments, health system infrastructure, special access programs and third-party insurance plans	- Unregulated
General Practitioner in Oncology	- Medical Degree from an accredited program - Completion of Post-Grad Training in Family Medicine or Internal Medicine	- Mentoring should be available by a medical oncologist/hematologist/ gynecologic oncologist	- Self-regulated and registered to practice through the College of Physicians and Surgeons
Gynecologic Oncologist	- Medical Degree from an accredited program - Completion of Post-Grad Training in Internal Medicine - Completion of Post-Grad training in Obstetrics and Gynecology - Certificate of Special Competence in Obstetrics and Gynecology - Certification with Royal College of Physicians and Surgeons of Canada	N/A	- Self-regulated and registered to practice through the Royal College of Physicians and Surgeons of Canada

Provider	Education	Considerations	Regulatory Status
Health Care Aide	- Completion of an approved Health Care Aide Program from a recognized program or completion of a 1st year Nursing Program from an accredited college or university	N/A	- Unregulated
Hematologist	- Medical Degree from an accredited program - Completion of Post-Grad Training in Internal Medicine - Completion of Post-Grad training in Hematology - Certificate of Special Competence in Hematology - Certification with Royal College of Physicians and Surgeons of Canada	N/A	- Self-regulated and registered to practice through the Royal College of Physicians and Surgeons of Canada
Medical Interpreter	- Certification via Community Interpreter Language and Interpreting Skills Assessment Tool or Interpreter Language and Skills Assessment Tool	N/A	- Unregulated
Medical Oncologist	- Medical Degree from an accredited program - Completion of Post-Graduate Training in Internal Medicine - Completion of Post-Graduate Training in Medical Oncology - Certificate of Special Competence in medical oncology - Certification with Royal College of Physicians and Surgeons of Canada	N/A	- Self-regulated and registered to practice through the Royal College of Physicians and Surgeons of Canada
Medical Scribe	- Graduate of an approved program in Medical Transcription	N/A	- Unregulated
Nurse Extern	- Nursing students between second and fourth year of a College of Nurses of Ontario approved Baccalaureate Nursing program, or in their final year of a Practical Nursing program	- Externs work as part of an interprofessional team under the supervision of a registered nursing professional	- Unregulated

Provider	Education	Considerations	Regulatory Status
Nurse Practitioner	- Graduate education: Master's of Nursing or Doctoral prepared - Successful completion of an approved post-Master's NP specialty certificate: Nurse Practitioner-Adult, Nurse Practitioner- Pediatrics or Nurse Practitioner-Primary Health Care - NPs are RNs in the Extended Class	- Work autonomously and in collaboration with other providers. - Mentoring should be available by a medical oncologist/hematologist/ gynecologic oncologist Refer to Ontario Health (Cancer Care Ontario) [Advanced Practice Nursing Toolkit]()	- Self-regulated and licensed to practice through College of Nurses of Ontario -
Occupational Therapist	- Bachelor of Science degree in Occupational Therapy from a recognized university	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Self-regulated and licensed to practice under through the College of Occupational Therapists of Ontario
Occupational Therapy Assistant	- Certificate or Diploma in an Occupational Therapy Assistant Program from a recognized community college program	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Unregulated
Patient Navigator	- Currently, there are no standardized certification or educational pre-requisites for the role of a patient navigator in Ontario as the requirements may differ based on Cancer Programs.	N/A	- Unregulated
Personal Support Worker	- Completion of an approved Personal Support Worker Diploma/Certification from a recognized program or completion of a 1st year Nursing Program from an accredited college or university	N/A	- Unregulated
Pharmacy Assistant	- College diploma in Pharmacy Assistant program or related field or equivalent training and experience	N/A	- Unregulated

Provider	Education	Considerations	Regulatory Status
Physician Assistant	- Completion of two years of an undergraduate degree in any discipline at a Canadian University or Completion of the equivalent of two years of a Canadian University undergraduate program - Completion of accredited PA Education Program in Canada or the United States of America - Certification by the Canadian Association of Physician Assistants by completing the PA Certification Council of Canada PA Entry to Practice Certification Examination	- Should work within a defined scope and with identified populations. - Should work closely with the assigned supervising physician(s) within agreed upon guidelines and under specific medical directives. - Ongoing training and education.	- Unregulated
Physiotherapist	- Bachelors or master's degree in Physiotherapy	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Self-regulated and licensed to practice through the College of Physiotherapists of Ontario
Physiotherapy Assistant	- Certificate or Diploma in a Physiotherapy Assistant Program from a recognized community college program	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Unregulated
Porter	- Completion of high school or recognized equivalent	N/A	- Unregulated
Psychiatrist	- Medical Degree from an accredited program - Completion of Post-Grad Training in Psychiatry - Certification from the Royal College of Physicians and Surgeons	N/A	- Self-regulated and registered to practice through the Royal College of Physicians and Surgeons
Psychologist	- Master's degree or higher in Psychology from an accredited American Psychological Association or Canadian Psychological Association program	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Self-regulated and licensed to practice through the College of Psychologists of Ontario

Provider	Education	Considerations	Regulatory Status
Registered Dietitian	- Bachelor's degree in human nutrition and dietetics from a university program accredited by the Partnership for Dietetic Education and Practice, and a post-degree supervised practicum program accredited by the Partnership for Dietetic Education and Practice	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Self-regulated and licensed to practice through the College of Dietitians of Ontario -
Registered Pharmacist	- Graduate from an accredited university Pharmacy Program - Licensed under Part A of the Ontario College of Pharmacists -	- All pharmacists working primarily with patients and families with cancer in the RCPs (level 1–3) should obtain certification from a recognized program such as the Board of Pharmacy Specialties (e.g., Board Certified Oncology Pharmacist) or the University of Toronto's Oncology Program for Pharmacists (Advanced Oncology program) by their 5th year of practice. - All pharmacists working in satellite sites (level 4) should complete the University of Toronto's Oncology Program for pharmacists (Essentials of Oncology and Advanced Oncology Programs) by their 5th year of practice or have access to a pharmacist who has oncology certification.	- Self-regulated and licensed to practice through Ontario College of Pharmacists
Registered Pharmacy Student	- Currently a 3rd to 4th year student in an accredited university Pharmacy Program	- Students work as part of an interprofessional team under the supervision of a registered pharmacist	- Unregulated

Provider	Education	Considerations	Regulatory Status
Registered Pharmacy Technician	- Graduate of an approved Pharmacy Technician program from a recognized community college	- Receive specialized training in the preparation of systemic treatment doses. - Receive training or certification program for staff involved in the handing of cytotoxic agents with policy on re-training. This may be done at or in collaboration with an Integrated Cancer Program or affiliate institution and in compliance with National Association of Pharmacy Regulatory Authorities Model Standards for Sterile Preparation of Hazardous Drugs	- Self-regulated and licensed to practice through Ontario College of Pharmacists
Registered Pharmacy Technician Student	- Currently enrolled in a Pharmacy Technician program from a recognized community college	- Students work as part of an interprofessional team under the supervision of a registered pharmacy technician	- Unregulated
Registered Practical Nurse[3]	- 2–3-year diploma in Practical Nursing from an approved College of Applied Arts and Technology - RPNs are nurses in the General Class	- All nurses administering systemic parenteral therapy to patients affected by cancer, regardless of setting should: Be certified which includes completion of standardized education through the recognized de Souza Provincially Standardized Chemotherapy and Biotherapy course or Oncology Nursing Society Chemotherapy/ Biotherapy Certificate equivalent course and complete a supervised clinical practice component with evaluation to complete the certification process. - RPNs can administer supportive treatments as outlined and non-hazardous drugs	- Self-regulated and licensed to practice through College of Nurses of Ontario

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[3] RN and RPN nursing practice is not differentiated by the performance of psychomotor skills but by the ability to provide autonomous care to patients as determined by the complexity of their health care needs. The more complex the patient and the more dynamic the environment, the greater the need for the RN to provide the full range of care requirements.

Provider	Education	Considerations	Regulatory Status
Registered Nurse[3]	- 4-year University Bachelor's degree in Nursing - RNs are nurses in the General Class	- All nurses administering systemic parenteral therapy to patients affected by cancer, regardless of setting should: Be certified which includes completion of standardized education through the recognized de Souza Provincially Standardized Chemotherapy and Biotherapy course or Oncology Nursing Society Chemotherapy/ Biotherapy Certificate equivalent course and complete a supervised clinical practice component with evaluation to complete the certification process	- Self-regulated and licensed to practice through College of Nurses of Ontario
Spiritual Practitioner	- Master of Divinity or an equivalent degree from an accredited educational institution - Certified Specialist within the Canadian Association for Spiritual Care or candidate for certification (completion of two basic and two advanced units within Canadian Association for Spiritual Care program) preferred. - Registration with the College of Registered Psychotherapists in Ontario practicing in Spiritual Care preferred	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Unregulated
Speech Language Pathologist	- Master's degree or equivalent in speech pathology - Must be an Independent Authorizer with the Assistive Devices Program	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Self-regulated and licensed to practice through the College of Audiologists and Speech-Language Pathologists of Ontario

Provider	Education	Considerations	Regulatory Status
Social Service Worker	- Diploma in Social Service Work from an accredited college required.	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Self-regulated and licensed to practice through the Ontario College of Social Workers and Social Service Workers
Social Worker	- Master's degree in social work	- Recommended/optional: completion of standardized education through the recognized de Souza Interprofessional Psychosocial Oncology: Introduction to Theory and Practice course	- Self-regulated and licensed to practice through the Ontario College of Social Workers and Social Service Workers
Virtual Care Coordinator	- Bachelor's degree or diploma in health informatics, engineering, technology program or equivalent in education training, and experience	- Demonstrates adaptability and experience with diverse technology platforms. - Experience working in a client service environment focused on building relationships, coaching, and training. - Medical knowledge or a healthcare background with experience working with an Electronic Medical Record system	- Unregulated

Appendix B: Scope of Practice Matrix for Systemic Treatment Providers

DISCLAIMER: The scope of practice matrix provided is intended to serve as a general guideline for healthcare providers in identifying tasks that may be within their scope of practice. This matrix does not constitute legal or medical advice, and the inclusion of any task in the matrix should not be interpreted as a representation or warranty that a particular healthcare provider is qualified or authorized to perform that task. It is the responsibility of each healthcare provider to ensure that they have the appropriate training, education, and skill set to perform any task listed in the matrix. Healthcare providers must also comply with all applicable laws, regulations, and professional standards related to their practice. This matrix is subject to change and does not create any legal obligations for healthcare providers, healthcare organizations, or any other third parties. Users of this matrix assume all responsibility and risk for the use of the information contained herein.

REGULATED PROVIDERS LISTED IN THE MATRIX: Clinical Nurse Specialist (CNS), General Practitioner of Oncology (GPO), Medical Oncologist/Hematologist/ Gynecologic Oncologist (MO/H/GO), Nurse Practitioner (NP), Occupational Therapist (OT), Physiotherapist (PT), Psychiatrist (PDOC), Psychologist (Psych), Psychosocial Oncology Provider (PSO), Physiotherapist (PT), Registered Nurse (RN), Registered Practical Nurse (RPN), Registered Pharmacist (RPh), Registered Pharmacy technician (RPhT), Social Worker (SW), Social Service Worker (SSW), Psychologist (Psych), Registered Dietitian (RD), Speech Language Pathologist (SLP).

UNREGULATED PROVIDERS LISTED IN THE MATRIX: Clerk (CL), Drug Access Navigator (DAN), Health Care Aide (HCA), Occupational Therapy Assistant (OTA), Patient Navigator (PN), Pharmacy Assistant (Ph assist), Porter (P), Physician Assistant (PA), Physiotherapy Assistant (PTA), Spiritual Care Practitioner (SCP), Personal Support Worker (PSW), Medical Interpreter (MI), Medical Scribe (MS), Nurse Extern (Nurs. Ext), Virtual Care Coordinator (VCC).

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Referral Intake, Booking, Scheduling, And Patient Administrative Activities Receive and log incoming referral, review for completion, follow up as required	CL, MS	N/A	N/A	N/A
Prepare, assemble, and maintain documentation/ charts for internal triage process and clinic visits	CL, MS, PA, RN	N/A	N/A	N/A
Triage new referrals	MO/H/GO	N/A	GPO, NP, CNS, RN, PA (with MO/H/GO)	N/A
Provide clinical support services including patient registration, scheduling and coordinate appointments, referrals, investigations, test, procedures bookings, data entry, and follow-up	CL	N/A	N/A	N/A

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Answers telephone, sends/received faxes, responding to enquiries within scope of authority, or, directing to most appropriate person	CL	N/A	N/A	N/A
Provide information to patients about test/visit preparations, psychosocial oncology supports available, and make arrangements or accommodations for patient needs (e.g., interpreters, navigators, transportation)	CL, PN	N/A	N/A	N/A
Prepare clinic and next day patient lists for systemic therapy suite staff and notify appropriate personnel of patient movement, cancellations, and patient information	CL	N/A	N/A	N/A
Transcribe details of patient assessment, results of tests and procedures, conversations with patients, families and care partners, consultations with health care providers, and medical orders given	MS	N/A	N/A	N/A
Assist with OHIP, non-OHIP and third-party billing and follow-up on outstanding claims and resubmissions	CL	N/A	N/A	N/A
Support data collection processes required by Ontario Health (Cancer Care Ontario)	CL, VCC	N/A	N/A	N/A
Facilitate the coordination of virtual care services and provide technical training/support to patients and providers	VCC	N/A	N/A	N/A
Guide patients and families through the health care system to understand diagnoses, treatment options, and available resources	PN	N/A	N/A	N/A

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Consultation for Treatment Decision Obtain patient medical, spiritual, practical, psychosocial, and best possible medication histories	Any regulated HCP	N/A	N/A	Nurs. Ext, RPh Student - Rotation
Conduct physical examination to assess presenting symptoms/signs and to determine their impact on the diagnosis or treatment selection	MO/H/GO, GPO, NP, CNS	N/A	N/A	N/A
Determine and order any additional diagnostic, genetic or staging tests to support the cancer diagnosis and treatment planning	MO/H/GO, GPO, NP	N/A	N/A	N/A
Establish a cancer diagnosis	MO/H/GO, GPO	N/A	N/A	N/A
Discuss, and document goals of care	MO/H/GO, GPO, NP, CNS, PA, RN, RPN	N/A	N/A	N/A
Have an informed consent discussion about planned systemic cancer treatment	MO/H/GO	N/A	GPO, NP (with MO/H/GO)	N/A
Witness the signing of consent form for planned systemic cancer treatment	Any regulated HCP	N/A	N/A	N/A
Determine appropriate systemic cancer treatment/supportive care medications and generate the initial regimen order	MO/H/GO	N/A	N/A	N/A
Pre-Treatment Education for Patients, Families, and Care Partners				
Process orientation, appointment logistics, clinic flow, general inquiries	Any regulated HCP	N/A	N/A	N/A

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Pre-treatment education for individuals including psychosocial oncology and palliative care supports available	MO/H/GO, GPO, NP, PA, RN, RPN, RPh	N/A	N/A	Nurs. Ext, RPh Student - Rotation
Pre-treatment education for groups including psychosocial oncology and palliative care supports available	RN, RPN, PSO (e.g., SW, RD), RPh	N/A	N/A	Nurs. Ext, RPh Student - Rotation
Psychosocial Oncology and Other Patient Support Services Conduct psychosocial symptom screening	MO/H/GO, GPO, NP, CNS, RN, RPN, PDOC, PSYCH, SW	N/A	N/A	N/A
Conduct initial psychosocial assessment	MO/H/GO, GPO, NP, CNS, RN, RPN, PDOC, PSYCH, SW	N/A	N/A	N/A
Gathering information about a patient's ability to understand their current problems and appreciate the consequences of their treatment decisions/medical assistance in dying	MO/H/GO, GPO, NP, CNS, RN, RPN, PDOC, PSYCH, SW, OT	N/A	N/A	N/A
Provide medical interpretation services	MI, PN	N/A	N/A	N/A
Provide support for families and care partners	All providers	N/A	N/A	N/A
Provide nutritional support and education	RD, All providers	N/A	N/A	N/A
Provide rehabilitation services	OT, OTA, PT, PTA, SLP	N/A	N/A	N/A
Provide mental health crisis intervention	PDOC, Psych, SW	N/A	N/A	N/A

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Provide complex mental health care	PDOC, Psych, SW, CNS	N/A	N/A	N/A
Provide smoking cessation support/counselling	All providers	N/A	N/A	N/A
Provide other addiction support/counselling	PDOC, Psych, SW	N/A	N/A	N/A
Provide expert psychopharmacologic management	PDOC	N/A	N/A	N/A
Provide expert psychotherapeutic assessment and intervention	PDOC, Psych, SW, CNS, RN	N/A	N/A	N/A
Provide financial/disability services counselling	SW, SSW, OT	N/A	N/A	N/A
Provide sexual health assessment and intervention	MO/H/GO, GPO, NP, CNS, RN, RPN, PA, RPh, SW	N/A	N/A	N/A
Provide speech language therapy	SLP	N/A	N/A	N/A
Provide spiritual care	SCP (Chaplain)	N/A	N/A	N/A
Pre-Treatment Assessment				
Obtain vital signs	MO/H/GO, GPO, NP, CNS, RN, RPN, HCA, PA	N/A	N/A	Nurs. Ext
Obtain height and weight	MO/H/GO, GPO, NP, PA, CNS, RN, RPN, HCA, PSW, RPh	N/A	N/A	Nurs. Ext
Review and assess for symptoms or toxicities since last clinic assessment or treatment	MO/H/GO, GPO, NP, PA, CNS, RN, RPN, RPh	N/A	N/A	RPh Student - Rotation

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Conduct physical examination and considers differentials with abnormal findings or determines response to supportive treatments	MO/H/GO, GPO, NP,	PA, CNS (with MO/H/GO, NP)	N/A	N/A
Conducts a physical exam and identifies normal or abnormal findings	MO/H/GO, GPO, NP, RN, RPN, PA	N/A	N/A	Nurs. Ext
Review bloodwork for clinical significance and considers normal parameters	MO/H/GO, GPO, NP, CNS, RN, RPN, PA, RPh	N/A	N/A	N/A
Interprets and acts on abnormal/out of range findings, or bloodwork results	MO/H/GO, GPO, NP, RPh	PA, CNS (with MO/H/GO, NP)	N/A	N/A
Determines and prescribes pharmacologic interventions to prevent or manage toxicities	MO/H/GO, GPO, NP	N/A	N/A	N/A
Determines non-pharmacologic interventions to prevent or manage toxicities	MO/H/GO, GPO, NP, PA, CNS, RN, RPh	N/A	RPN (with MO/H/GO, NP, RN)	RPh Student - Rotation
Verification and Preparation – Hospital Based Drugs				
Medication Reconciliation	RPh, RPhT (Best Possible Medication History/ Allergies)	N/A	N/A	N/A
Investigate, coordinate, and obtain coverage for drugs administered in the systemic therapy suite	RPh, RPhT, DAN, Ph assist, SW	N/A	N/A	RPh Student – Rotation, RPhT Student
Identify/clarify systemic treatment in the order and check for appropriate supportive care medications	RPh	N/A	N/A	RPh Student - Rotation
Conduct clinical therapeutic check of the order	RPh	N/A	N/A	N/A

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Transcribe medication orders into pharmacy system	RPh, RPhT (review by RPh)	N/A	N/A	RPh Student – Paid (review by RPh)
Fills prescriptions by retrieving stock bottles, counting medications, and labeling	RPh, RPhT, Ph assist	N/A	N/A	RPh Student – Paid, RPhT Student
Conduct independent technical checks	RPh, RPhT, Ph assist	N/A	N/A	RPh Student – Paid
Conduct final product verification	RPh	N/A	N/A	
Hand out medication to patient/authorized care partner	RPh, RPhT, Ph assist	N/A	N/A	RPh Student – Rotation, RPhT Student
Provide medication counselling	RPh	N/A	N/A	RPh Student - Rotation
Verification and Preparation – Take Home Cancer Drugs				
Medication reconciliation	RPh, RPhT (BPMH/allergies)	N/A	N/A	RPh Student - Rotation
Investigate, coordinate, and obtain coverage for drugs administered in the systemic therapy suite	RPh (NDFP), DAN (PSPs), RPhT, SW (Trillium, Private)	N/A	N/A	RPh Student – Rotation, RPhT Student
Identify/clarify systemic treatment order and check for appropriate supportive care medications	RPh, RN administering	N/A	N/A	RPh Student – Rotation
Conduct clinical therapeutic check of the order	RPh	N/A	N/A	N/A
Transcribe medication orders into pharmacy system	RPh, RPhT	N/A	N/A	RPh Student – Paid (review by RPh)
Prioritize order of preparation (e.g., based on appt time, time to prep meds)	RPh, RPhT	N/A	N/A	RPh Student – Paid

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Stages drugs/IV bags for compounding and pass to biological safety cabinet	RPh, RPhT	N/A	N/A	RPh Student – Paid, RPhT Student
Aseptic preparation of patient-specific doses	RPh, RPhT	N/A	N/A	RPh Student – Paid, RPhT Student
Conduct independent double-checks	RPh, RPhT	N/A	N/A	RPh Student – Paid
Prepares sterile products and IV admixtures	RPh, RPhT	N/A	N/A	RPh Student – Paid
Documents information about compounded product (e.g., lot number, batch number, expiry date) and assigns beyond-use-date to stock	RPh, RPhT	N/A	N/A	RPh Student – Paid
Ensure appropriate procurement, storage, inventory, control, and relevant record keeping associated with this supply of medications	RPh, RPhT	N/A	N/A	RPh Student – Rotation, RPhT Student
Conduct final product verification	RPh	N/A	N/A	N/A
Packages and labels medications and places in bin for transportation	RPh, RPhT	N/A	N/A	RPh Student – Paid, RPhT Student
Organizes pick-up/ deliveries of medications within Cancer Centre and to peripheral hospital satellite sites	RPh, RPhT, DAN, P, SS	N/A	N/A	RPh Student – Paid, RPhT Student
Systemic Therapy Suite Set up primary IV line (e.g., priming lines)	RN, RPN, HCA, PSW	N/A	N/A	Nurs. Ext
Bring patient to chair	Any staff	N/A	N/A	N/A

Tasks	Practices autonomously within scope of practice	Practices with medical directive in place	Practices in consultation + collaboration with (specified provider)	Practices under direct supervision of licensed health care provider
Baseline vital signs, if required	RN, RPN, HCA	N/A	N/A	N/A
Chairside patient education	Provider administering treatment, RPh	N/A	N/A	RPh Student - Rotation
Complete equipment set up with appropriate filters, connections specific to drugs being administered	Provider administering treatment	N/A	N/A	N/A
Administration of systemic cancer treatments	RN	N/A	N/A	N/A
Monitor response to systemic cancer treatment while in the systemic treatment suite (e.g., infusion reactions)	RN	N/A	N/A	N/A
Administer blood transfusions, hydrations, electrolyte corrections, non-hazardous drugs including iron transfusions, vitamin B administration, and blood draws from central venous access devices for lab work	RN, RPN, RPh[4]	N/A	N/A	N/A
Monitoring, Management, and Unplanned Care Toxicity monitoring via proactive calls days 2-5/7-9 post treatment	NP, CNS, PA, RN, RPh	N/A	N/A	N/A
Symptom and toxicity management	RN, CNS, RPh		PA (with M/OH, NP)	
Most responsible provider for unplanned/urgent care clinics	GPO, NP	PA, CNS, RN (with MO/H/GO, NP)	N/A	N/A

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[4] As of July 1, 2023, pharmacists with injection training are authorized to administer substances listed in the amended regulations by injection or inhalation for purposes other than patient demonstration and education.

Well Follow-Up				
Order routine bloodwork/surveillance tests	MO/H/GO, GPO, NP	PA, CNS, RN, RPN	N/A	N/A
Tasks	**Practices autonomously within scope of practice**	**Practices with medical directive in place**	**Practices in consultation + collaboration with (specified provider)**	**Practices under direct supervision of licensed health care provider**
Review of interim health history and BPMH	Any regulated HCP or PA	N/A	N/A	Nurs. Ext
Obtain vital signs	MO/H/GO, GPO, NP, PA, CNS, RN, RPN, HCA	N/A	N/A	Nurs. Ext
Obtain height and weight	MO/H/GO, GPO, NP, PA, CNS, RN, RPN, HCA, PSW	N/A	N/A	Nurs. Ext
Conduct physical examination and considers differentials with abnormal findings or response to treatment	MO/H/GO, GPO, NP	PA, CNS	RN (with MO/H/GO, NP)	N/A
Conducts a physical exam and identifies normal or abnormal findings	MO/H/GO, GPO, NP, PA, CNS, RN	N/A	RPN (with MO/H/GO, NP, RN)	N/A
Review bloodwork/ surveillance tests for clinical significance and considers normal parameters	MO/H/GO, GPO, NP, PA, CNS, RN, RPN	N/A	N/A	N/A
Interpret and acts on abnormal/out of range findings, or bloodwork results	MO/H/GO, GPO, NP	PA, CNS, RN, RPN (with MO/H/GO, NP)	N/A	N/A

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