Cancer Care Ontario Position Statement on Integrated Care Planning – An evidence-informed approach to designing and delivering coordinated, continuous & person-centred care for cancer patients
Purpose
This document synthesizes knowledge on integrated care planning and outlines an evidence-informed approach to planning integrated cancer care.

Introduction
Aging populations, inadequate quality of care, and financial constraints have fueled efforts around the world to deliver integrated care to patients (1,2). The Integrated Care Pilots in England, Accountable Care Organizations in the United States, Health Links in Canada, and Chains of Care in Sweden represent a small sample of the myriad international efforts underway to integrate care (3-6). Integrated care is care that is coordinated across professionals and organizations; maintained over time and between visits; tailored to patients’ needs and preferences; and based on shared responsibility between patients and professionals for optimizing health (7). Integrated care interventions aimed at linking diverse professionals and organizations have demonstrated a range of positive outcomes, including reduced emergency department visits and nursing home placements, lower institutional costs, higher patient satisfaction and improved health outcomes (1,8-12).

Integrated care offers an opportunity to address overall healthcare effectiveness and efficiency concerns. However, it is particularly relevant for patient populations with complex needs, such as the frail elderly, patients with cancer, and those with multiple co-morbidities (13-15). These patients require services from several healthcare professionals and organizations that frequently operate in silos, resulting in poor health outcomes. For example, over half of patients with cancer in Ontario have two or more comorbid conditions; these patients tend to have a delayed cancer diagnosis, poorer treatment adherence, and higher mortality than patients with one condition (16,17).

The Ontario Ministry of Health and Long-Term Care’s most recent strategy, “Patients First”, identifies “more coordinated care for patients with complex medical conditions” as a key priority (18). Similarly, at Cancer Care Ontario (CCO), integrated care is a key component of the Corporate Strategy where the goal is to develop the relationships, capabilities, and accountabilities necessary to deliver care that is better integrated (19). CCO’s fourth cancer plan (Ontario Cancer Plan IV) specifically identifies “integrated care plans” as a means to facilitate communication and coordination of care across multiple professionals and organizations (20). To achieve this objective, a common understanding is needed of the content and functions of an integrated care plan as well as how these plans are developed, implemented and maintained over time and across professionals and settings. On the basis of a scoping review of the academic literature with stakeholder consultations, this document presents an evidence-informed approach to integrated care planning, including the development and use of integrated care plans, for patients with cancer.

Methods
A scoping review on integrated care planning for patients with cancer was conducted to identify literature that could be used to define integrated care plans and planning, and identify associated best practices. Scoping reviews are exploratory projects that map key concepts underpinning a research area and the main sources and types of evidence available (21). Scoping reviews are often conducted when the relevant literature is thought to be vast and
diverse, and has not been reviewed comprehensively. A scoping review was appropriate given
the variety of terms similar to “care plan” used in the literature, including care map, care
pathway, and care protocol.

Five databases (Medline, CINAHL, Embase, PubMed and HealthStar) were searched for papers
published between 1995 and 2015 using the following search terms: care map, care pathway,
care plan, critical path/pathway, care conferences, patient care planning, advance care
planning, and cancer or neoplasm. Papers were included if they described care plans for adults
with cancer post-diagnosis for any disease site. Papers focused only on screening or the
diagnostic phase were excluded. Academic literature was supplemented by a search for
relevant reports and policy documents published by the American Society of Clinical Oncology
(ASCO), Canadian Association of Nurses in Oncology (CANO), Ontario Medical Association
(OMA), Institute of Medicine, and Agency for Healthcare Research and Quality (AHRQ).

The titles and abstracts of 1,061 papers were screened for inclusion independently by two
reviewers with 256 papers undergoing full text review, and 67 papers ultimately included. These
68 papers underwent systematic data abstraction, followed by a thematic analysis using NVivo
software. The thematic analysis involved identifying recurrent themes across included papers
(20).

The scoping review methodology outlined by Arksey and O’Malley strongly recommends
stakeholder consultation (21). As such, input from internal (CCO) and external stakeholders was
sought at multiple points during the review process, and was used to inform the search strategy
as well as the conceptualization and operationalization of ‘integrated care plans’ and ‘integrated
care planning’ in the context of the Ontario cancer system. For example, clinical vignettes based
on the trajectories of cancer patients (22) were used to test key components of the integrated
care planning process with various stakeholder groups, including nine CCO programs. External
stakeholders included patient and family advisors, and members of CCO’s Integrated Care
Advisory Panel, among others.

Additional details regarding the methods and results of the scoping review are available in an
academic publication by Khan et al. (23). This position statement synthesizes those results into
clear definitions and steps to guide oncology professionals through the process of integrated
care planning for patients with complex health care needs.

Results
Current State
Stakeholder consultations revealed several barriers to integrated care planning in Ontario, both
at the system level and the level of direct patient care. First, existing models of integrated care
(e.g., Health Links, survivorship transition plans) typically do not span the full continuum of
professionals and settings accessed by cancer patients. Second, existing electronic information
systems that could support integrated care planning (e.g., Integrated Assessment Record,
connectingGTA, Client Health and Related Information System) are not yet available province-
wide and across all settings of care, nor are they linked with electronic medical records. Finally,
although existing tools support the documentation and exchange of important patient
information (e.g., Diagnostic Assessment Program standard referral form, Health Links
Coordinated Care Plan, American Society of Clinical Oncology Treatment Plan), none of these
tools capture information that spans the full care journey and rarely are the tools shared across all professionals involved in a patient’s care.

At the point of direct care, key barriers to integrated care include that referrals are often incomplete; patient assessment and medication reconciliation are ad hoc or absent; patients are often not engaged in a discussion regarding their goals of care; care planning is fragmented across professionals and organizations; respective roles and responsibilities between professionals are not clarified and made explicit; and care plans are not shared with the patient or across all professionals.

In the context of these multi-level barriers, mitigation strategies are required as well as guidelines to enable a rigorous and systematic approach to integrated care planning for cancer patients.

Conceptualizing Integrated Care Planning

*Integrated care planning* is an organized approach to designing and delivering patient care over time and across professionals and settings. The planning process involves clarifying patient needs and goals, specifying the roles and responsibilities of various professionals over time, and determining the mechanisms by which coordinated, continuous and person-centered care will be achieved. The output of integrated care planning is an integrated care plan.

An *integrated care plan* (ICP) is a living document that captures information and decisions regarding how a care team intends to (and does) deliver evidence-based, coordinated, continuous and person-centered care to a particular patient over time and across professionals and settings. ICPs are used to organize and monitor integrated care delivery. ICPs incorporate elements of the following tools (Figure 1):

- clinical guidelines (i.e., standards of care based on evidence);
- treatment plans (i.e., goals of treatment, treatment options, possible side effects and expected length of treatment for a particular phase of care such as systemic treatment or survivorship);
- disease pathways (i.e., sequence of assessments and interventions for patients with a particular diagnosis); and
- personalized care plans (i.e., care goals and interventions are developed jointly with the patient).

Many CCO programs have developed care plans (e.g., Diagnostic Assessment Programs, Systemic Treatment, Palliative Care, Survivorship, Primary Care). However, these care plans reflect a particular phase of patient care. ICPs, on the other hand, reflect best evidence and the overall needs and goals of the patient across multiple phases of their care journey, including transitions into, within, and out of the cancer system.
Operationalizing Integrated Care Planning

The scoping review revealed that a systematic approach to integrated care planning is needed. No studies designed or implemented an ICP for the entire patient pathway (from diagnosis to either palliative or survivorship), and only 7% of the studies (n=5) focused on transitions between different phases of care. As such, it was necessary to combine the results of both this scoping review with stakeholder input to operationalize integrated care planning.

Based on the results of the scoping review and stakeholder input, ICP contents were specified and an eight-step integrated care planning process for cancer patients was developed. These eight steps are organized into four phases (16), (1) Identify, (2) Assess, (3) Plan, and (4) Manage, as defined by the NHS (24). These steps are depicted in Figure 2 and described below. The key components of integrated care planning and of integrated care plans, are also outlined in Tables 1 and 2 respectively.
Identify

1. **Identify suspicion of cancer**: Identify suspicion of cancer based on symptoms, positive screening result or incidental findings.
2. **Make a comprehensive referral**: Supply information needed to support assessment of eligibility for integrated care planning (e.g., patient identifiers, baseline vitals, allergies, recent health assessments and treatments, pre-existing conditions, medication list).

Assess

3. **Confirm eligibility for integrated care planning**: Confirm that the patient has a diagnosis of cancer plus two or more comorbid conditions, or would benefit from an ICP due to expected outcomes based on age, frailty, socioeconomic status, diagnosis of a complex or advanced cancer, or a palliative intent for treatment.
4. **Assess patient needs and goals**: Conduct a needs assessment of patient lifestyle factors, psychosocial status, functional status, and symptoms, and perform medication reconciliation. Discuss patient needs and goals, the treatment plan, expected changes and transitions, and possible risks. Plan for future situations, such as transitions and follow-up care post-treatment, accordingly. Record the above information in the ICP.

Plan

5. **Assign roles**: Identify the members of the core inter-professional care team who will participate in integrated care planning. Document the sequence of planned treatments,
interventions, referrals and symptom/outcome monitoring. Assign roles and responsibilities for the various phases of care, and identify key points and mechanisms of information exchange. Identify desired outcomes of the ICP at the patient level (e.g., health-related quality of life, satisfaction), professional level (e.g., uptake of ICPs, satisfaction) and system level (e.g., length of stay, readmission rates), where possible. Record the above information in the ICP.

6. **Share:** Ensure that all relevant professionals and the patient and family understand and have access to the ICP and associated instructional/educational resources.

Manage

7. **Monitor:** Assess concordance with the ICP and progress towards desired outcomes.
8. **Review and update:** Adjust the ICP as needed over time to reflect changes in patient needs and goals, treatment plans, medications, phase of care, or unexpected events (e.g., hospital admission). Obtain input from all members of the inter-professional care team.

<table>
<thead>
<tr>
<th>Table 1. Key Components of Effective Integrated Care Planning</th>
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<tr>
<td><strong>Key Components</strong></td>
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<tr>
<td>✓ Inter-professional and multi-disciplinary planning and delivery of care</td>
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<td>✓ Patient needs assessment and goals of care</td>
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<td>✓ Documentation of care planning and delivery in an integrated care plan (ICP), including roles and sequencing of care activities (See Table 4)</td>
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<td>✓ Point of contact for patients and providers regarding ICP</td>
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<td>✓ Patient and/or caregiver education</td>
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<td>✓ Early planning for transitions and follow-up post treatment</td>
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<td>✓ Information exchange and communication across professionals and organizations</td>
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<td>✓ Outcome measurement at the patient, provider and system levels</td>
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<td>✓ Patient and caregiver engagement in care planning and delivery</td>
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<td>✓ Ongoing customization of ICP based on evolving patient needs</td>
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Table 2. Integrated Care Plan Components Adapted from the Institute of Medicine (25)

<table>
<thead>
<tr>
<th>Category</th>
<th>Components</th>
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<tr>
<td>Patient Information</td>
<td>✓ Basic patient information (e.g., name, date of birth, allergies, baseline vitals)</td>
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<td>✓ Cancer diagnosis, including specific tissue information, relevant biomarkers, and stage</td>
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<td>✓ Pre-existing conditions</td>
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<td>✓ Medication list</td>
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<td>✓ Recent health assessments and treatments</td>
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<td>✓ List of care providers</td>
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<tr>
<td>Treatment &amp; Symptom Management</td>
<td>✓ Initial plan for treatment and proposed duration, including specific chemotherapy drug names, doses, and schedule as well as surgery and radiation therapy (if applicable)</td>
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<td>✓ Prognosis</td>
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<td>✓ Expected response to treatment</td>
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<td>✓ Treatment benefits and harms, including common and rare toxicities and how to manage these toxicities, as well as short-term and late effects of treatment</td>
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<tr>
<td>Patient Goals &amp; Experiences</td>
<td>✓ Treatment goals (curative, life-prolonging, symptom control, palliative care)</td>
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<td>✓ Information on quality of life and a patient’s likely experience with treatment</td>
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<td>✓ A plan for addressing a patient’s psychosocial health needs, including psychological, vocational, disability, legal, or financial concerns</td>
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<td>Care Coordination</td>
<td>✓ Who will take responsibility for specific aspects of a patient’s care (e.g., the cancer care team, the primary care/geriatrics care team, or other care teams)</td>
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<td>✓ Recent or planned referrals and plan for transitions</td>
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<td>✓ Goals of integrated care plan</td>
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<tr>
<td>Survivorship</td>
<td>✓ Survivorship plan, including a summary of treatment and information on recommended follow-up activities and surveillance, as well as risk reduction and health promotion activities</td>
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<tr>
<td>Palliative &amp; End-of-Life</td>
<td>✓ Advance care plans, including advanced directives and other legal documents</td>
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Organizational and System Context

Effective implementation of the proposed 8-step integrated care planning process requires a supportive organizational and system context. Enablers of integrated care planning for cancer patients with complex needs include:

- Involving all members of the inter-professional care team and maintaining continuity in team membership;
- Training of all staff in patient’s circle of care on integrated care planning and ICP development;
• Fostering buy-in and commitment to integrated care planning and ICPs by the care team, patient, and family;
• Dedicating time and resources to integrated care planning, such as a navigator to take ownership of the process (clinical focus) and/or an implementation point-of-contact within the team or organization (administrative focus)
• Using validated tools for patient assessment;
• Adopting integrated information systems and tools for data collection, information exchange, reporting and evaluation;
• Evaluating ICP uptake, patient and provider experiences, and patient outcomes regularly; and
• Implementing system-level policies to incentivize comprehensive integrated care planning and ICP use.

Conclusion
This document synthesizes academic literature with stakeholder input to provide guidance on how to conceptualize and operationalize integrated care planning for cancer patients in Ontario. In addition to presenting an eight-step approach to integrated care planning, this document distinguishes ICPs from similar tools used in practice, identifies information that should be included in an ICP, and highlights contextual factors that support integrated care planning.

The results of the scoping review suggest that integrated care planning and ICPs are mutually reinforcing. ICPs developed without a systemic approach to planning may be incomplete, inconsistent and static. A document cannot do the work of a process or fix a flawed process (26). Similarly, integrated care planning without an ICP increases the risk of losing key information and decisions regarding past and planned patient care. Foundational to both integrated care planning and ICPs is the involvement of inter-professional teams, patients, and families.

Despite substantial progress in streamlining care for patients within the cancer system, professionals and services outside the walls of cancer centres remain largely fragmented. Integrated care planning can help to bridge these gaps to enable continuous, coordinated and person-centered care. However, integrated care planning is a complex process that requires resources and collaboration. A phased approach to implementation is recommended that involves building on existing care plans and focusing on specific transitions, while maintaining a comprehensive view of the full continuum of care. Policy changes by CCO can facilitate this process by providing direction and incentives to support integrated care planning and delivery (19).
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- Diagnostic Assessment Programs
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- Person-Centred Care
- Primary Care
- Program in Evidence-Based Care
- Radiation Treatment
- Surgical Oncology
- Survivorship
- Systemic Treatment

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References


