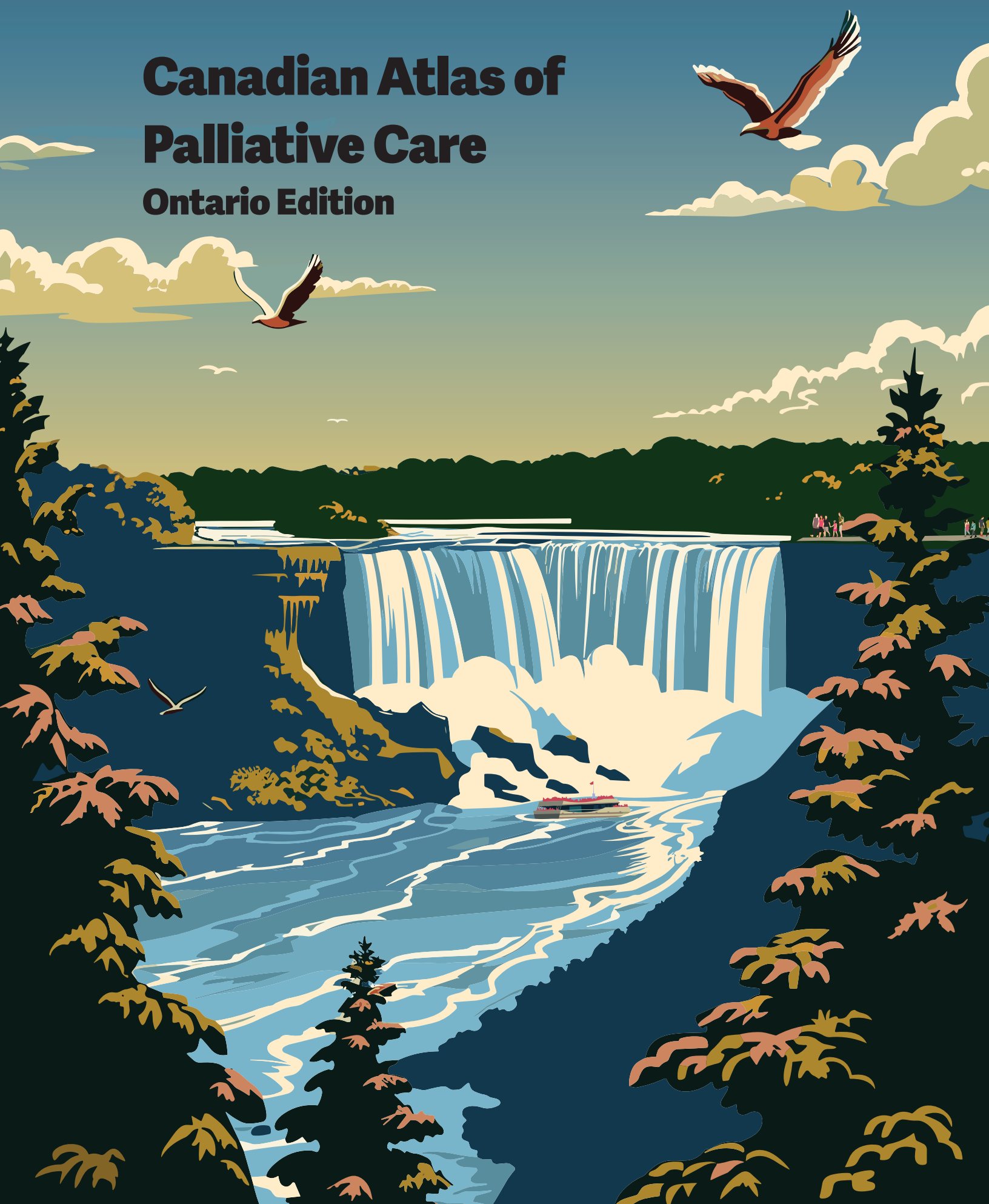
Canadian Atlas of Palliative Care

Ontario Edition



Canadian Atlas of Palliative Care: Ontario Edition

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December 2024

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PSI Foundation

Pallium Canada

Canadian Atlas of Palliative Care: Ontario Edition

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CANADIAN ATLAS OF PALLIATIVE CARE PROJECT FOUNDING RESEARCH GROUP (2019)

In 2019, the Palliative Care Atlas of Canada Project was first initiated by Pallium Canada, in collaboration with the Dr. Joshua Shadd Pallium Canada Research Hub in the Division of Palliative Care at McMaster University. The founding research group was responsible for developing the preliminary research protocol.

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Pallium Canada

Pallium Canada commissioned, supported, and collaboratively led the development of the Canadian Atlas of Palliative Care, including this Ontario edition, in partnership with key stakeholders.

Pallium Canada is a national registered charitable organization founded in 2000 and focused on building professional and community capacity to help improve the quality and accessibility of palliative care in Canada.

Ontario Health and the Ontario Palliative Care Network

Ontario Health is an agency created by the Government of Ontario to connect, coordinate and modernize the province's health care system. They work with partners, providers and patients to make the health system more efficient so everyone in Ontario has an opportunity for better health and wellbeing. Ontario Health oversees health care planning and delivery across the province to build a person-centred health care system. Their work includes overseeing the delivery and quality of clinical care services for many clinical areas, including palliative care. Their mandate is to create a coordinated and standardized approach for delivering palliative care services in the province.

The Ontario Palliative Care Network, a partnership of health service providers, community and social support service organizations, health systems planners, as well as patient and family/caregiver advisors, plays a key role in advising on the strategic direction for palliative care in Ontario and engaging interest holders.

Joshua Shadd Research Hub

The Joshua Shadd Pallium Research Hub represents a close collaboration between the Division of Palliative Care in the Department of Family Medicine at McMaster University and Pallium Canada. The Hub is an opportunity to undertake scholarship in several areas of mutual interest to the Division of Palliative Care and Pallium Canada. Both, for example, champion the role of primary- or generalist-level palliative care (also known as the palliative care approach) across different settings. Both champion interprofessional learning and collaboration and support a public health approach to palliative care.

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The Canadian Atlas of Palliative Care: Ontario Edition would not have been possible without the shared vision and generous donations by the following supporters.

Lead Funder:

PSI Foundation

Established in 1970 by the physicians of Ontario, PSI Foundation is a physician-centred non-profit foundation with the mission to improve the health of Ontarians.

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Canada Gives – Stait Family Fund

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A special thank you to Esri Canada for their generous in-kind support and valuable expertise in developing the StoryMaps for the Ontario Health Central East Region pilot, showcasing their leadership in leveraging the power of location and spatial analytics.

LAND ACKNOWLEDGEMENT

Based at McMaster University, we recognize and acknowledge that we are currently on the traditional territory shared between the Haudenosaunee confederacy and the Anishinabe nations, which was acknowledged in the Dish with One Spoon Wampum belt. That wampum uses the symbolism of a dish to represent the territory, and one spoon to represent that the people are to share the resources of the land and only take what they need.

We also recognize that the land we call Ontario is still home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work and live on this land. We recognize the contributions of Métis, Inuit, and other Indigenous peoples have made in shaping and strengthening the province.

RESEARCH ETHICS BOARD REVIEW AND APPROVAL

The Canadian Atlas of Palliative Care: Ontario Edition was reviewed and approved by the Hamilton Research Ethics Board in Hamilton, Canada (REB # 16070, May 23, 2023).

CONTRIBUTORS: ONTARIO EDITION

The following individuals have contributed to this edition by participating in surveys, interviews, focus groups or other data collection and verification activities. These persons represent front-line health care professionals, managers, directors, policymakers, educators, researchers and health care and community advocates.

In addition to the people listed here, there are many others who supported and contributed to this Atlas.

We are very thankful to everyone who helped create this Atlas.

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Executive Summary

BACKGROUND

Palliative care atlases map the status of palliative care in a country or jurisdiction across several domains and indicators. Several palliative care atlases have previously been developed internationally at continent and country levels. Domains include Policy, Education, Professional Activities, Resources and Services in different populations and settings. Atlases are used to identify successes and gaps across these domains (including access to palliative care services) to help guide policy development and planning, and facilitate the allocation of resources.

The Canadian Atlas of Palliative Care is initially being done sequentially province by province and their regions. The goal of this report is to summarize the findings of the Ontario Edition of the Atlas.

METHODS

The domains and indicators used internationally were adapted to the Canadian context and guided data collection and reporting. We used mixed methods. Data collection was done in several sequential phases: 1) a search of public-facing information (such as websites); 2) standardized online surveys (based on the domains and indicators) were completed by provincial and regional palliative care leaders and educators; 3) semi-structured interviews with provincial and regional palliative care leaders to clarify, expand and explain data collected from phases 1 and 2; 4) focus groups with leaders and front-line palliative care health care professionals to further confirm, expand and explain data from preceding phases; and 5) member checking with regional leaders for final input on results. Data is reported graphically, with tables, and additional text to provide context for some of the findings and to highlight special successes.

KEY FINDINGS

In the policy domain, there are provincial-level and regional-level structures in place to oversee the ongoing development of palliative care, as well as province-level strategic plans in some key areas that include access to palliative care in community and hospital settings. There has been recent government legislation related to improving palliative care in long-term care.

Generally, across the province, there is a high level of access to specialist palliative care teams in hospitals, especially in medium to large-sized ones. However, there appears to be significant variability in terms of the integration of palliative care across various hospital inpatient and outpatient services. Overall, palliative care is relatively well established in cancer services across the province, but largely lacking across many other specialty areas. There are examples of excellence in different specialty areas in different regions that can be spread more broadly.

There is an adequate number of palliative care unit (PCU) beds, relative to population size, identified for the province. However, an imbalance may be present with respect to the types of PCU beds available. While some units are acute units, many others focus on end-of-life care (in the last days) and some on chronic care, longer term care.

The number of hospice beds in the province is inadequate. New beds are being planned. Hospices continue to play an important role in the provision of palliative care in the province.

Across the province, there is a high presence of specialist-level palliative care services (clinicians and/or teams) in the community, especially in medium to large urban centres. Although access was present in some rural regions, a lack of 24/7 access still exists in many rural regions. Significant heterogeneity was found in terms of the models practiced by specialist palliative care teams. Some teams provide a *Consultation* support model (sometimes with *Shared Care*), while others practise predominantly in a *Takeover* model.

There is significant variability across the province in the provision of primary palliative care by primary care clinics and services. In some communities and sub-regions, a high proportion of clinics provide a palliative care approach and there is evidence of upskilling on this approach with various continuing professional development programs available in the province. However, these communities and sub-regions are more the exception than the norm.

In long-term care (LTC), there is also considerable variability regarding the integration of palliative care. There is growing attention on palliative care in this setting, with examples across the province's regions of increased efforts to integrate palliative care in these facilities. However, widespread integration of palliative care in LTC is still missing.

In the domain of education, palliative care training is reported in the curricula of most medical schools (undergraduate training), and some nursing schools. There are palliative care residency programs across the province to train specialist-level palliative care physicians, and some spots for pediatric palliative care residency training.

While there are some examples of pediatric palliative care programs in the province, including two hospices and some pediatric palliative care inpatient and outpatient services, access across the province to pediatric palliative care is still not widespread, and remains an area for improvement.

There are no specific province-wide strategic plans and initiatives to address the palliative care needs of populations such as 2SLGBTQI+ persons, homeless and marginally housed persons, incarcerated persons, and refugees and immigrants. There are isolated examples of excellence in the provision of palliative care to homeless and vulnerably housed populations and refugee and immigrant communities.

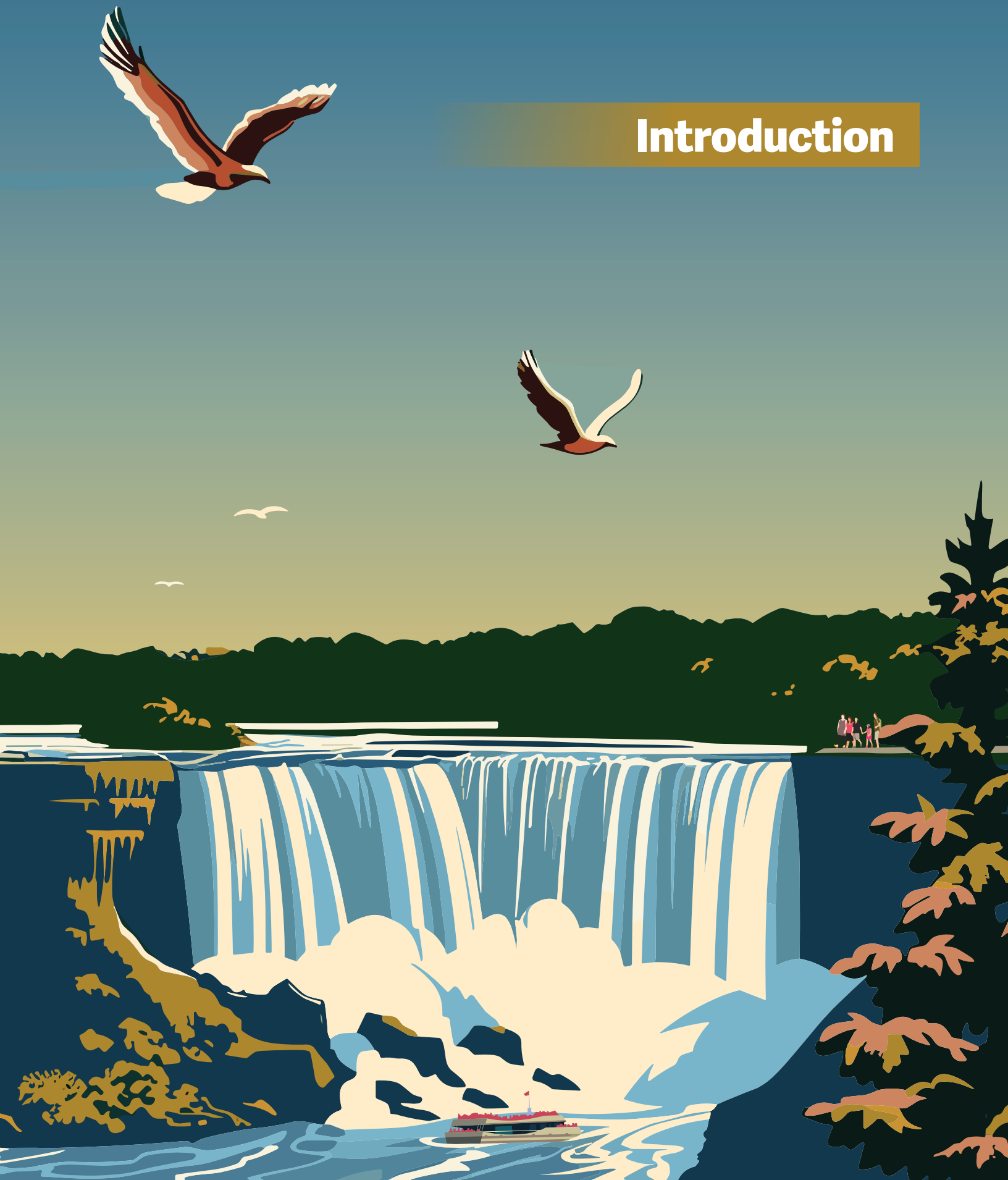
There is considerable community involvement across the province in all regions and many subregions. This is evidenced by many volunteer programs and compassionate community initiatives. Hospice programs (residences and community programs) often serve as hubs for these activities.

This Atlas explores each of Ontario's six health regions in more detail across the domains and indicators, including providing maps and tables depicting the presence or absence of access to services. Readers are encouraged to read each of the region sections for details.

CONCLUSIONS

The Canadian Atlas of Palliative Care: Ontario Edition provides a comprehensive view of palliative care as of 2024 in Ontario. The Atlas outlines many examples of excellence throughout the province, and also shows opportunities for improvement and gaps in service. Overall, there are high levels of access to specialist-level palliative care services across the province with significant work in the last decade to increase access. Significant variability across the province and within regions is noted in some indicators, including the level of primary palliative care, integration of palliative care across different specialty services, hospitals and long-term care, and access to specialist palliative care support in some rural regions.

Introduction



Background

WHAT ARE PALLIATIVE CARE ATLASES AND THEIR ROLE?

Palliative care atlases are resources that provide easy-to-read graphical and text descriptions of the status of palliative care across several domains in a jurisdiction, usually at country and continental levels. They analyze and depict the state of palliative care in a country, region or jurisdiction at a given time (cross-sectional), highlighting successes and excellence, identifying gaps, and informing planners and policymakers with the goal of overall ongoing system quality improvement. Atlases are not minimum data sets or reports of minimal data sets.

The domains and indicators include policy, services, education, community engagement, and professional activities, among others. Refer to Appendix A for the details on the domains and indicators included within this Atlas.

Worldwide, atlases have become important tools and agents of change to inform continuous improvements in palliative care in a jurisdiction by highlighting strengths, identifying gaps, and prompting improvements across the jurisdictions studied.

Atlases also provide opportunities for comparative analyses across jurisdictions. Usually, for continent-level atlases, it allows for comparisons across countries. In the case of the Canadian Atlas (as with the Scottish Atlas), it also allows for comparisons between provinces and territories and their respective regions and subregions.

THE HISTORY OF PALLIATIVE CARE ATLASES

The evolution of palliative care atlases has recently been documented by the Atlantes Program at the University of Navarra[1] in Spain, which has been a leader in the development of palliative care atlases internationally, following on initial pioneering work by the Lancaster End of Life Observatory in the United Kingdom.

One of the earliest palliative care atlases, of seven European countries, was published in 2000.[2] Since then, several international palliative care atlases have been developed, largely led by the Atlantes Program. These have included European editions (2013 and 2019) and editions for Africa (2017), the Middle East and North Africa (2017) and Latin America (2013 and 2021). Copies of these atlases can be accessed at the University of Navarra's Digital Repository.[3]

In 2019, led by the Atlantes Program, a large group of experts from across the world reviewed and updated the domains and indicators that are used for atlases; a consensus-based, Delphi-type approach was used for this.[4] The list includes 25 indicators across several domains. It was complemented by another study by Baur et al.[5]

The domains and indicators, study methods and methods of reporting, including cartography and infographic designs, undergo periodic updates and improvements as part of a continuous improvement strategy.

1 Tripodoro VA, Pons JJ, Bastos F, Garralda E, Montero Á, Béjar AC, et al. From static snapshots to dynamic panoramas: the evolution and future vision of palliative care atlas in cross-national perspectives. Research in Health Services & Regions. 2024 Apr 18;3(1).
2 Clark D, ten Have H, Janssens R. Common threads? Palliative care service developments in seven European countries. Palliative Medicine. 2000 Sep;14(6):479–90.
3 DADUN: Library - University of Navarra Home [Internet]. Unav.edu. 2024 [cited 2024 Dec 3]. Available from: https://dadun.unav.edu/home
4 Arias-Casais N, Garralda E, López-Fidalgo J, et al. Brief manual health indicators monitoring global palliative care development. Houston, TX: IAHPC Press; 2019.
5 Baur N, Centeno C, Garralda E, Connor S, Clark D (2019) Recalibrating the world map of palliative care development. Wellcome Open Res 4:77

THE DIRECTION OF PALLIATIVE CARE IN CANADA

Access to palliative care is increasingly recognized as a human right;[6] providing palliative care for all citizens with life-threatening illnesses and their families is now recognized as a health care and social priority across the world. The World Health Assembly passed a resolution in 2014 calling on all member states to ensure access to palliative care for all its citizens, including different levels and services of palliative care and education.[7]

Over the past two decades, the Canadian federal government and several provincial and territorial governments have made significant improvements in palliative care. These successes are noteworthy and merit attention. However, ongoing gaps persist across the country and considerable variability exists across Canadian jurisdictions.

In 2018, the federal government released a national *Framework on Palliative Care in Canada*.[8] It identified palliative care as a priority and called for, among other things, increased preparedness of the workforce on the palliative care approach and improved data collection on palliative care across Canada. It also called on continual monitoring of the status of palliative care in the country. Subsequently the *Action Plan on Palliative Care*[9] outlined aims to improve the quality of life for people living with life-limiting illnesses, families and caregivers, and to enhance access to and quality of care alongside health systems' performance.

The Canadian Institute for Health Information (CIHI), in its *Access to Palliative Care in Canada* 2018 report underscores the importance of undertaking a systematic process to understand the status of palliative care in the country, states that it is "... only when the state of publicly funded palliative care in Canada is understood can health system planners identify service gaps and develop strategies for improving care."[10]

HISTORY OF THE CANADIAN ATLAS OF PALLIATIVE CARE AND ITS PROVINCIAL AND TERRITORIAL EDITIONS

In response to the call by the federal *Framework on Palliative Care in Canada* to improve the assessment and monitoring of palliative care across Canada, and as a national leader in building palliative care capacity with an extensive network of partners across Canada, Pallium Canada decided in 2019 to develop the Canadian Atlas of Palliative Care, informed and guided by the international atlases developed at the University of Navarra.

An initial research team was formed and consisted of palliative care and primary care leaders, researchers, clinicians and educators from different organizations and provinces and included representation from the University of Navarra.

Through an iterative process by the research team, which also included consultations with key community organizations and institutions, the methodology and the international domains and indicators were adopted and adapted where necessary, and then tested through a pilot study involving two Ontario regions that included urban and rural geographies and demographics. The experiences and learnings from the pilots informed additional modifications to the process, the domains and indicators, and the protocol used in this provincial atlas.

The ultimate vision is to have thirteen provincial and territorial editions, each with regional subsections, and a federal-level Atlas summarizing the status of palliative care at a country-wide level (to allow comparisons with other countries).

UPDATES

This Canadian Atlas of Palliative Care: Ontario Edition serves as a cross-sectional view of the status of palliative care in Ontario as of 2023 and 2024, providing a baseline going forward. Similar to other palliative care atlases, the goal is to update it every five years.

6 Brennan F. Palliative Care as an International Human Right. Journal of Pain and Symptom Management. 2007 May;33(5):494–9.
7 World Health Organization. Sixty-Seventh World Health Assembly: Strengthening of palliative care as a component of comprehensive care throughout the life course [Internet]. Geneva: WHO; 2014 May. Available from: https://apps.who.int/gb/ebwha/pdf_files/wha67/a67_r19-en.pdf
8 Health Canada. Framework on Palliative Care in Canada [Internet]. Ottawa, ON: Health Canada; 2018. Available from: https://www.canada.ca/content/dam/hc-sc/documents/services/health-care-system/reports-publications/palliative-care/framework-palliative-care-canada/framework-palliative-care-canada.pdf
9 Health Canada. Action plan on palliative care. Ottawa, ON: Health Canada; 2019. Available from: https://www.canada.ca/content/dam/hc-sc/documents/services/health-care-system/reports-publications/palliative-care/action-plan-palliative-care/action-plan-palliative-care-eng.pdf
10 Canadian Institute for Health Information. Access to Palliative Care in Canada. [Internet]. Ottawa, ON: CIHI; 2018. Available from: https://www.cihi.ca/sites/default/files/document/access-palliative-care-2018-en.pdf

WHY THIS EDITION OF THE ATLAS DOES NOT INCLUDE PALLIATIVE CARE FOR INDIGENOUS POPULATIONS

This edition of the Canadian Atlas of Palliative Care does not seek to reflect palliative care services and programs of First Nations, Inuit, or Métis peoples in Canada. Instead, with humility and in the spirit of reconciliation, Pallium Canada is dedicated to collaborating in a distinct process, led and developed by Indigenous Peoples, to describe palliative care across Turtle Island provided by, with and for Indigenous peoples. Such mapping will adhere to the First Nations Principles of Ownership, Control, Access, and Possession (OCAP®)[11], Manitoba Métis principles of OCAS (Ownership, Control, Access and Stewardship)[12], and Inuit Qaujimajatuqangit.[13]

11 Welcome to The Fundamentals of OCAP® - The First Nations Information Governance Centre [Internet]. The First Nations Information Governance Centre. 2023 [cited 2024 Nov 30]. Available from: https://fnigc.ca/ocap-training/take-the-course/

12 University of Manitoba. Framework for Research Engagement with First Nation, Metis, and Inuit Peoples [Internet]. Available from: https://umanitoba.ca/health-sciences/sites/health-sciences/files/2021-01/framework-research-report-fnmip.pdf

13 Tagalik S. Inuit Quajimajatuqangit: The Role of Indigenous Knowledge in Supporting Wellness in Inuit Communities in Nunavut [Internet]. National Collaborating Centre for Aboriginal Health (NCCAH); 2010 [cited 2024 Nov 30]. Available from: https://www.ccnsa-nccah.ca/docs/health/FS-InuitQaujimajatuqangitWellnessNunavut-Tagalik-EN.pdf

Overall Aims

The overall aims of the Canadian Atlas of Palliative Care: Ontario Edition include raising awareness of the current state of palliative care in Ontario; improving equitable and timely access to palliative care; identifying and spreading excellence; guiding and informing policymaking, planning and capacity building in the provision of palliative care; and enhancing the quality of palliative care in a jurisdiction.

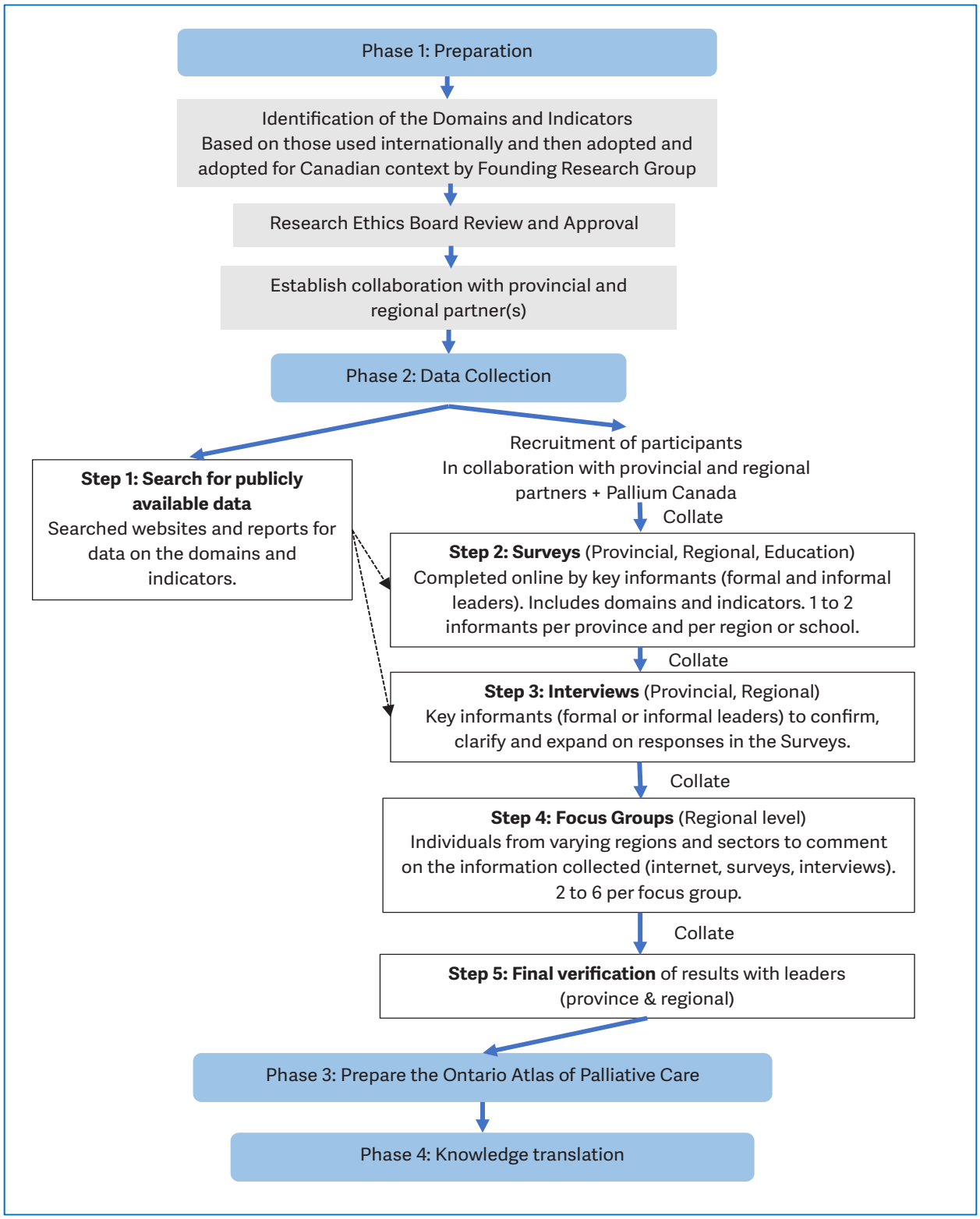
SPECIFIC OBJECTIVES

The Canadian Atlas of Palliative Care: Ontario Edition will:

- Describe the current state of palliative care across several domains and indicators in Ontario and across Canada (federal, provincial and territorial, and regional levels).
- Identify and highlight areas of strengths and successes with the goal of scale and spread.
- Identify areas for improvement.
- Raise awareness of the status of palliative care for populations that require special attention, including children, 2SLGBTQI+ persons, incarcerated persons, recent immigrants and refugees, and homeless and marginally housed.
- Inform ongoing health system changes and improvements in palliative care to ensure equitable and timely access for all who need it.

Methods

A multi-phased, mixed-methods approach was used. See Figure 1 and Appendix B for additional details of the data collection and validation process. Methods were mainly adopted from the international atlases previously developed. However, Step 4 was added to obtain perspectives from front-line professionals and is unique to this project.



REPORTING OF DOMAINS AND INDICATORS

Overall, the reporting of results of indicators presented in this Atlas falls into one of the following categories:

1. **Objective results:** These indicators are relatively straightforward to identify and measure, such as the presence or absence of a policy or law, or the presence of a palliative care unit or hospice residence. These are reported as existing or not (YES/NO). In some cases, they exist but partially, such as the coverage of palliative care medications or supplies in a home setting. In these cases, we have reported them as "Partial."

2. **Global impression:** Some indicators are challenging to measure accurately and across the whole province. The level of integration of palliative care across all hospital services and across all communities is not feasible given the resources available, availability of data and the significant variability that often exists across communities and regions. For these, a global judgment, based on the multi-source input received, is made. Some parameters and ranges have been used to guide the input received through surveys, interviews and focus groups. For example, minimal integration, partial integration, or full integration. The presence of some indicators, such as access to specialist palliative care teams in hospitals or communities, is reported as "Minimal or Absent," "Partial Low," "Partial High," or "Full," depending on the analyses undertaken. The results reported therefore reflect the judgments of individuals who participated in data collection and the research team's analysis. Refer to the limitations section for more detail.

3. **Using an established standard:** This is possible in the case of the presence of inpatient palliative care beds in a region and province or territory. For this purpose, what is referred to as "The Catalonia formula"[1] has been used. This formula calls for at least 10 beds for every 100,000 population, with two or three of these beds being allocated to palliative care units (PCU) and seven to eight being hospice or palliative care continuing care type beds. Based on this formula, a region is rated has having an adequate number of beds. For the purposes of this Atlas, beds were deemed adequate if the number of beds was within 10% of the target number based on the Catalonia formula. The conservative number of two per 100,000 was used to determine adequacy for PCU beds.

When there is variability in the domains and indicators across a region, where possible, this Atlas provides some contextual information collated from the multi-source input in the form of Context text boxes. Some tabulated results are also further explained and contextualized through footnotes to the tables.

LIMITATIONS OF THE DATA

To obtain the best possible representation of the status across the different indicators and to explore some of the context, and to reduce the risk of potential biases or inaccurate impressions of both informants and researchers, this study has used a mixed-methods, multi-phase, multi-source, and multi-informant approach.

In some cases, specific data is not available or would require large-scale studies requiring significant resources and time to collect, both of which fell outside the resources and scope of this Atlas. The indicators related to the integration of palliative care across different hospital services across a region's hospitals and the provision of primary palliative care by primary care professionals are examples. In these cases, the study relies on a general global impression inferred from the multi-source data and informants. In some cases, despite some reminders and outreaches to some informants (as described in the study protocol approved by the research ethics board), information was not forthcoming.

It must be noted that the study initially occurred during the end phases of the COVID-19 pandemic, and some potential informants were either redeployed or given added responsibilities. In the domain and indicator related to the provision of palliative home care, the research team had to rely on clinical and frontline informants to provide their impressions, as the provincial home care leadership structure did not give permission to their regional and provincial leads to provide input.

In the last three to four years, Ontario has undergone a significant restructuring and reorganization of its health care system. Prior to this, the province was divided into fourteen regions referred to as Local Health Integration Networks (LHINs). Each of these had well established palliative care leaders (formal and informal). The reorganization has led to the merger of several of these LHINs into six large regions called Ontario Health Regions, with new leadership structures and often new leaders. Many of these leaders were being orientated into their new roles during the study, and often, while they had a good understanding of the subregions (previously LHINs) in which they had worked, they lacked knowledge or experience of the status of palliative care across other subregions in their new Ontario Health Region.

We aimed to mitigate any biases or limitations of individual participants' knowledge and experiences by ensuring multiple perspectives and multiple sources, including health system leaders and frontline clinicians.

Participant recruitment posed some challenges, resulting in certain regions and/or professions being more prominently represented in the dataset than others.

1 Gómez-Batiste X, Porta J, Tuca A, Stjernswärd J. Organización de Servicios y Programas de Cuidados Paliativos. 1st ed. Madrid, Spain: Arán Ediciones, S.L.; 2005.

Atlas Conventions and How to Read It

HOW IS THE ATLAS ORGANIZED?

The provincial edition of the Atlas is divided in two parts. Part A reports at a Provincial Level and Part B at a Regional Level. The latter is further divided into six sub-sections, each one corresponding to one of the six Ontario Health regions. The different domains and indicators are reported in both parts of the six sub-sections to allow comparison across the regions and to provide more detail given the large and varied geographic and demographics that is Ontario.

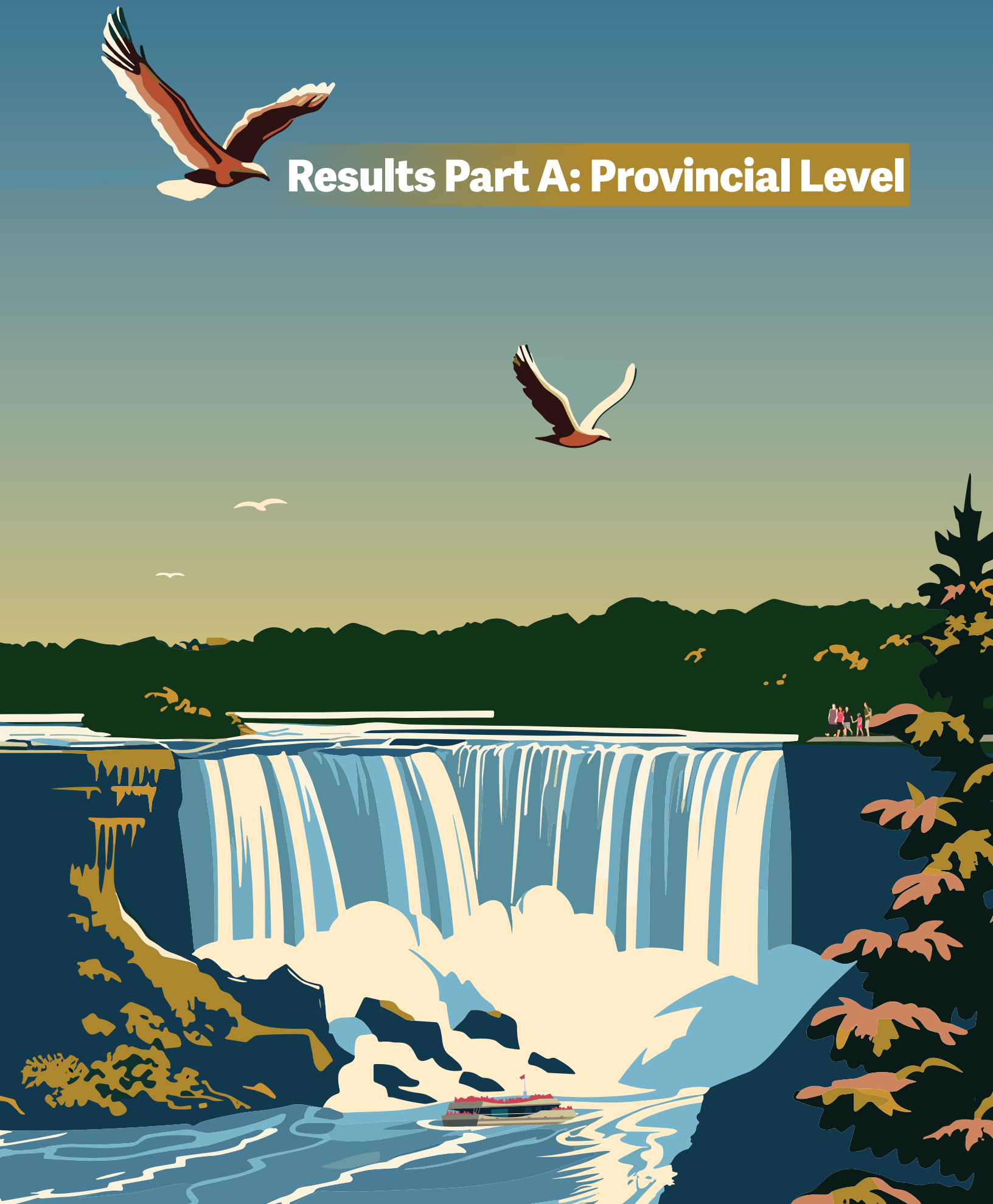
HOW IS THE INFORMATION REPORTED AND DISPLAYED (CONVENTION)?

CONVENTION		EXPLANATIONS			
Maps	The extent to which the services or resources are present or absent in a region. The colours correspond to levels of presence or availability.	Minimal/ Absent	Partial Low 	Partial High 	Full 
Dashboard	The extent to which a service or resource is available or integrated. The more circles coloured, the higher the level of presence or access.	Minimal/Absent 			
		Partial Low 			
		Partial High 			
		Full 			
	Indicates a region is mostly as depicted; however, some areas may be higher or lower	Variable	**V**		
Highlights	A unique innovation, program and strategy in the region to improve palliative care delivery.				

DATA DICTIONARY, GLOSSARY AND DEFINITIONS

The Data Dictionary (Appendix C) provides more information on specific terms, definitions, and standards for the benchmarking of palliative care services used in this atlas.

Results Part A: Provincial Level



Results: Context

HEALTH SERVICES ORGANIZATION

FUNDING AND OVERSIGHT

In Canada, each province or territory is responsible for overseeing its own health care delivery. However, they must adhere to the federal Canada Health Act, enacted in 1984. This act ensures that all Canadian residents have access to medically necessary hospital and physician services without direct charges.

The Canada Health Act sets out the primary principles of public administration, comprehensiveness, universality, portability, and accessibility, which provinces and territories must adhere to receive federal health transfer payments. Each province and territory then determines its service delivery model given its context, priorities and realities. The Canada Health Act does not list palliative care or home care as essential services, and therefore, whether palliative care is funded and to what extent varies from province to province and across the territories.

In Ontario, health care funding comes from both the provincial and federal governments, with the majority (about 70%) coming from the province. Ontario's health care system covers a wide range of medically necessary services, including hospital care, physician services, and some community and home care services. Prescription drugs are covered for certain populations, including seniors, those with low incomes and those requiring palliative care at varying degrees. Additional services, such as extra home care supports and some supplies, may require private insurance or out-of-pocket payment.

ORGANIZATION OF PALLIATIVE CARE

Government ministries that have palliative care-related responsibilities include the *Ministry of Health (MoH)*, who is responsible for overall health policy, health services, public health, and hospitals, and the *Ministry of Long-Term Care (MoLTC)*, which focuses on policies and programs related to long-term care. There are other ministries that may also cover some aspects of health and social support. Within the MoH, there are specific agencies (under *Ontario Health*) that are involved in the organization and provision of palliative care, including the *Ontario Palliative Care Network, Cancer Care Ontario, the Ontario Renal Network* and *Ontario Health atHome (home care)*.

Ontario Health Regions

Legend

- Major Cities

Ontario Health Region

- Central
- East
- North East
- North West
- Toronto
- West

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Populated Places 2023 (DMTI Spatial).

The *Ontario Palliative Care Network (OPCN)* is a partnership of health service professionals, community and social support service organizations, health systems planners, and patient and family/care partner advisors formed to develop a coordinated and standardized approach for delivering palliative care services in Ontario. The OPCN acts as principal advisor to the MoH and MoLTC on quality, coordinated palliative care in Ontario and leads regional and local integration of palliative care services and delivery.

THE PROVINCE AND ITS HEALTH REGIONS

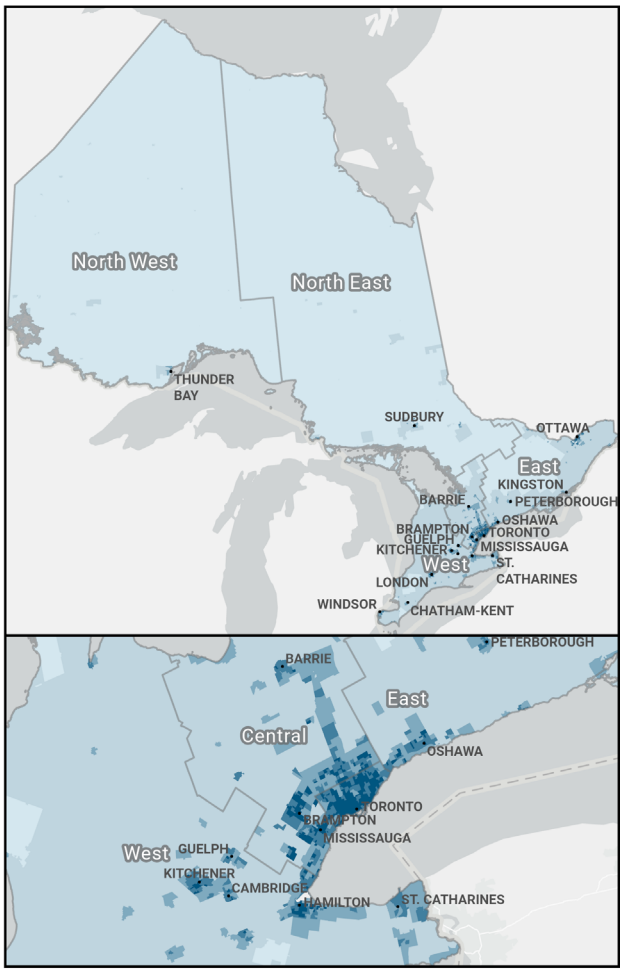
Ontario is divided into six Ontario Health regions: *Toronto, Central, East, West, North East* and *North West*. Each region has a leadership structure that reports directly to and collaborates with *Ontario Health*. The leadership structures of these regions work with local health care professionals and community partners to improve patient experience, health outcomes, and the efficiency of the health care system. They also oversee the implementation of system changes, fund health care professionals, and monitor health care performance. Each region has a *Palliative Care Leadership* team.

Within each region, there are also multiple *Ontario Health Teams (OHTs)*, which are groups of health care professionals and organizations that work together to deliver coordinated care to a defined population. The goal of OHTs is to ensure patients receive seamless care across different services and settings, reducing fragmentation and improving outcomes.

COMMUNITY ENGAGEMENT AND INVOLVEMENT

Community participation and volunteerism, as in the rest of Canada, play an important role in Ontario, contributing significantly to the social, economic, and health sectors, including palliative care. Volunteers provide companionship, emotional support, respite care for families, and practical assistance to patients and their families, including assistance with daily activities. In Ontario, volunteerism has played a key role in establishing hospices and providing support in hospice community and residence services. Increasingly, the Compassionate Communities movement is spreading across Ontario, with communities being mobilized to help care for persons with advanced illnesses and frailty and support their families.

Population Density Across Ontario Health Regions



Legend

Ontario Health Region

Population Density, people/km2

- 0.00 - 10.59
- 10.60 - 144.49
- 144.50 - 1,478.44
- 1,478.45 - 3,270.57
- 3,270.58 - 77,545.30

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

PROVINCIAL POPULATION AND DEMOGRAPHICS

Population: 15,736,627
Population density: 15.9 people per sq km
Total provincial area: 892,411.76 km²
GDP for province: 852.7 billion (2023)
Life expectancy: Males: 80; Females: 84

AGE RANGE	POPULATION SIZE[1]	PERCENTAGE
0-19	3,053,250	21%
20-64	8,532,985	60%
65-74	1,504,495	11%
75+	1,133,215	8%

[1]Data taken from 2021 Canadian Census

REGION	POPULATION SIZE	POPULATION DENSITY PER KM²
East	3,522,772	68.6
Central	4,623,620	311.9
Northeast	559,296	0.1
Northwest	230,223	0.6
Toronto	2,794,356[1]	4427.8
West	4,006,360	104.5

[1]This number reflects the most recent available population estimate as per Ontario Health Toronto

CAUSE OF DEATH	NUMBER OF DEATHS	PERCENTAGE
Accidents/ Unintentional Injuries	7,091	6%
Cancer	30,452	24%
Cardiovascular	28,265	23%
Dementia/Alzheimer Disease	1,852	1%
Lung and Respiratory Diseases	14,273	11%
Other (including renal, neurological, etc.)	42,824	34%

Results Part A: Provincial Level

POLICY

POLICIES, STRUCTURES AND LAWS	PRESENCE
Designated office, secretariat or program responsible for palliative care	YES
A formal palliative care strategic plan, policy or framework	YES[1]
Law to ensure palliative care access	YES[2]
Standards and norms for palliative care	YES
Designated palliative care leads	YES
Law related to advanced care planning	YES[3]
Compassionate care benefits	YES[3]
FORMAL STRATEGIES	**PRESENCE**
Home and community care	YES[4]
Inpatient and outpatient hospital services (cancer and non-cancer)	YES[5]
Long-term care facilities	YES
Rural and remote	NO[6]
Paramedic/emergency services	PARTIAL[7]
GOVERNMENT FUNDING	**PRESENCE**
Palliative care home service	PARTIAL
Hospice residences	PARTIAL
Community hospice services	PARTIAL
Medications: In hospital	FULL
Medications: Out of hospital	PARTIAL[8]
Supplies and equipment: In hospital	FULL
Supplies and equipment: Out of hospital	PARTIAL[8]
Continuing palliative care education in various settings	PARTIAL

Context:

[1]The Ontario Palliative Care Network (OPCN) Palliative Care Health Service Delivery Framework includes recommendations for models of palliative care. The Ontario Provincial Framework for Palliative Care was developed after the passing of the Ontario Compassionate Care Act (2020).

[2]The Ontario Compassionate Care Act (2020).

[3]Provincial legislation and regulations apply

[4]The OPCN Community Model of Care.

[5]The OPCN Hospital Model of Care.

[6]The OPCN Community Model of Care applies in all community settings; however, there is not an explicit strategy for rural and remote access.

[7]Paramedic services trained and able to provide a palliative care approach and allowed to treat palliative care patients at home when appropriate. Implementation is variable by local municipalities who are responsible for emergency services.

[8]Based on coverage of the provincial palliative care benefits plan, which is publicly funded.

SERVICES

PALLIATIVE CARE AND HOSPICE BEDS IN THE PROVINCE

	TYPES OF BEDS	NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative Care Units (PCUs)	35		
	Palliative Care Unit beds	579[1]	ADEQUATE	
	Other palliative care beds	55 V		
	Hospice residences	64		
	Hospice beds in residences	533	INADEQUATE	52.5%
	Other hospice beds	45 V		
	Total number of inpatient palliative care beds (PCU and Hospice combined)	1,212[1]	INADEQUATE	77%

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

[1]Includes beds in units dedicated solely to palliative care, and beds dedicated solely for palliative care in mixed units (where a section is dedicated to palliative care and other sections care for patients from other services such as oncology). This number excludes "floating" beds across hospital units that are designated for palliative care periodically when the bed is available for palliative care patients.

Palliative care beds are located in hospitals and may be dedicated (only used for palliative care) or designated (may be used for other purposes). Hospice beds in Ontario are mainly located in free-standing home residences of about eight to ten beds. In a few regions, where there are a range of beds, the lower number is used because it is the more consistent number in terms of availability. See Regional sections for more details. Although the number of palliative care unit beds is adequate, the most common profiles are end-of-life units, and some are mainly chronic palliative care.

Total Palliative Care Beds:

There are a total of 1,212 palliative care and hospice beds in the province. This is inadequate (77.0% of target) for the provincial population.

SETTING: ACUTE CARE

HOSPITALS

Access to specialist-level palliative care teams in hospitals	●●●○ V[1]
Funding models for palliative care physicians	MIXED – V[2]

Context:

[1]Access to specialist palliative care teams in hospitals is overall high, especially in the larger urban centres, where most hospitals have in-house palliative care consultation teams (full or part-time). 24/7 access may vary. There is more variability in smaller and rural community hospitals. In the latter, given the context, economies of scales do not allow in-house hospital consultation teams and so support is often provided by palliative care clinicians who serve both community and hospital settings.

[2]Physicians in hospital and community settings are remunerated across the regions and their subregions through different funding models; alternate funding plans (a salary-type model) in some communities and subregions, and fee-for-service in others (paid by submitting billing codes for clinical services rendered). Nursing, allied health professionals and administrative staff are generally funded through hospital budgets.

INPATIENT UNITS AND OUTPATIENT CLINICS

Integration* in inpatient units	●●●○
Integration* in outpatient clinics—Cancer	●●○○
Integration* in outpatient clinics—Other**	●●○○

*Integration means services with core palliative care competencies providing primary or generalist level palliative care and collaborating closely with and referring to specialist palliative care teams when needed and in a timely manner.

**Cardiology, respirology, nephrology, and neurology.

Context:

Overall, the palliative care approach is not widely integrated within non-cancer services. There are, however, examples of good integration in some services across the province, including nephrology services (see Highlight below) and some cardiac services (e.g., in Ottawa and Toronto). There is, however, variability across specific cancer tumour clinics in terms of the integration of the palliative care approach early and referrals to palliative care services. The INTEGRATE Palliative Care Project (2014-2016) increased the integration in some cancer clinics and primary care teams. When integration initiatives are undertaken, Pallium Canada's LEAP courses are often used to train staff in the palliative care approach.

Highlight:

Since 2015, the Ontario Renal Network (ORN) has been implementing a provincial palliative care framework for the integration of palliative care within chronic kidney disease care, including several key initiatives, such as person-centred decision making, palliative care training with Pallium Canada's LEAP Renal course, and the identification of local champions for palliative care for each of the 26 regional renal programs.

SETTING: COMMUNITY

COMMUNITY

Access to community specialist care teams	●●●○ V[1]
Communities with 24/7 access to specialist palliative care teams	●●●○ V

Context:

[1]Access is relatively high, except in the more rural areas where it is less. In rural areas, some subregions have established rural-based consultation support teams, while in others access is provided virtually by regional community-based or hospital-based teams. Access is influenced by human health resource shortages and geography. The model of practice of community palliative care teams varies considerably across the province, its regions and their subregions. Some regions and subregions use a predominantly *Takeover Model*, while in others, a *Consultation* and *Shared Care* models are used.

PALLIATIVE HOME CARE

Access to palliative home care services	●●●○ V
Availability of 24/7 access	●●○○ V

Context:

There is variability across the regions with respect to: a) the level of support that can be provided (number of hours, daytime only vs. 24/7), and b) the continuity of nursing home care support due to difficulties with retention and high staff turnover.

Palliative home care is provided in some regions by generalist home care nursing services, not by specifically designated palliative home care teams. Information on home care was difficult to obtain.

PRIMARY CARE

Overall provision of primary palliative care	●●○○ V[1]
Providing palliative care to ambulatory patients	●●○○
Providing palliative care home visits	●○○○ V[2]
Clinics providing 24/7 on-call coverage	●○○○
Standards/indicators for providing primary palliative care	YES
Training for primary care professionals on the palliative care approach	PARTIAL[3]

Context:

[1]There is considerable variability across the province in the extent to which family physicians and primary care clinics provide primary palliative care to their own patients and their level of training to provide a palliative care approach. There are some regions where primary palliative care is being largely provided by primary care professionals, supported by palliative care teams (e.g., Hamilton, Guelph and some parts of Ottawa). Family physicians in predominantly rural areas provide primary palliative care. In other regions (e.g., Kitchener/Waterloo, Toronto, Windsor), primary care professionals generally do not provide palliative care, except for patients who are still ambulatory and do not have many palliative care needs. In some subregions, mixed approaches apply.

Given the current primary care workforce, organization and funding situation, there are challenges with capacity and competency for home visits and after-hours care. Some areas have call groups to provide more coverage.

[2]There are examples of primary care clinics across the province undertaking palliative care training with Pallium Canada's Learning Essential Approaches to Palliative Care LEAP courses and taking on ownership of providing primary palliative care, including doing home visits and providing on-call coverage.

[3]Funding is available to support training programs on the palliative care approach, such as Pallium Canada's LEAP, the Comprehensive Advanced Palliative Care Education (CAPCE) program, the Fundamentals of Hospice Palliative Care program, and others. There is evidence of primary health care professionals of different professions undertaking LEAP training across the province, in urban and rural regions.

RURAL AND REMOTE AREAS

Access to specialist palliative care services	●●○○[1]
Strategic plan to build primary palliative care capacity	NO[2]
Standards/indicators for access to primary palliative care	YES
Funding for education on the palliative care approach	YES
Training of primary care professionals on the palliative care approach available	PARTIAL

Context:

[1]There is considerable variability across rural regions in the province in terms of access to specialist palliative care teams and many gaps exist, particularly for remote regions. Access is predominantly virtual for many regions.

[2]The Ontario Palliative Care Network (OPCN) Palliative Care Health Service Delivery Framework applies to settings, but does not include a specific strategy for rural and remote regions.

Family physicians in rural areas are the main health care professionals providing primary palliative care. There is evidence of Pallium Canada's LEAP courses and other courses on the palliative care approach being taken by rural health care professionals across regions.

HOSPICE SERVICES

Standards/indicators for hospice residences	PARTIAL
Hospice residences	661
Community hospice organizations*	85

***Due to data collection methods and the wide range of organizations and community groups that provide hospice services, this may be an underrepresentation.**

Context:

Most hospice residences are stand-alone facilities. New hospice beds have been approved by Ontario Health and will open within the next three years. Hospices are partially funded for clinical services by the province (public funds), while the rest has to be covered through fundraising and charity efforts, including donations or direct payments by patients who can afford it.

LONG-TERM CARE (LTC)

Access to specialist palliative care services	●●○○ V
Integration of palliative care approach	●●○○ V
Standards/indicators for providing palliative care	YES[1]
Formal standards of training on palliative care approach	YES[1]
Training programs on the palliative care approach available	YES
Funding for education on the palliative care approach	PARTIAL

Context:

[1]Provincial legislation (Fixing Long-Term Care Act 2021) requires that LTC facilities integrate palliative care in the care they provide.

Access and integration of the palliative approach in LTC varies across regions and subregions. However, there are growing efforts to improve access and integration.

Highlight:

The Northwest Region has many quality improvement initiatives for palliative care within LTC (e.g., early identification and palliative care education for staff), and many homes in the region have integrated a palliative approach.

There are examples in most regions of initiatives, usually collaborations between individual public or private long-term care homes and local palliative care services, to improve palliative care in the facilities. These initiatives consist mainly of training staff on the palliative care approach using resources such as Pallium Canada's LEAP Long-Term Care (LTC) course, LTC SPA and/or Life and Death Matters; Advance Care Planning and family conferences upon admission of the resident to the home; and consultations with palliative care teams. Two private long-term care agencies in the province (Sienna Senior Living and Extendicare Long-Term Care) have an active strategy and initiative in place, with dedicated funding, to train their staff, using mainly LEAP LTC.

PARAMEDIC EMERGENCY SERVICES

Training paramedics in palliative care	PARTIAL - V

Context:

There is no provincial strategy or initiative. The decision to train paramedics and to allow paramedics to provide a palliative care approach at home is often done by counties across the province and must be approved by the province. Some counties (subregions within the various regions) have active palliative care paramedic programs supported by training programs such as Pallium Canada's LEAP Paramedic course and policies to allow patients to remain at home following treatment by paramedics.

PALLIATIVE CARE RESOURCES

Advance Care Planning resources/programs	YES[1]
Palliative care competencies elaborated for different professions and levels	YES[2]

Context:

[1]Many provincial organizations provide resources for patients, families, and health care professionals. Speak Up Ontario is a commonly used resource.

[2]The OPCN has elaborated specialist and primary level competencies for palliative care across professions, where the primary or generalist refers to core palliative care competencies allowing these non-specialist professionals to provide a palliative care approach.

MAPS

Access to Specialist Level Care Support Teams in the Community

Legend

- Major Cities
- Partial High
- Partial Low
- Minimal/Absent

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Access to Specialist Level Care Support Teams in Long-term Care Homes

Legend

- Major Cities
- Partial High
- Partial Low
- Minimal/Absent
- Information Not Provided

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Access to Specialist Level Care Support Teams in Hospital

Legend

- Major Cities
- Full
- Partial High
- Partial Low
- Minimal/Absent

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Access to Palliative Home Care Services

Legend

- Major Cities
- Full
- Partial High
- Partial Low

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Ontario Health by the Ontario Palliative Care Network and by Health Quality Ontario. Some system performance indicators for Ontario and its health regions has been reported by the Canadian Institute for Health Information (CIHI) 2023 Palliative Care Report and by the Canadian Partnership Against Cancer (CPAC) in 2017.

EDUCATION

MEDICAL AND NURSING SCHOOLS*	
Medical schools	6
Nursing schools (RPN, RN, graduate, post-graduate programs)	36

POSTGRADUATE EDUCATION AND CERTIFICATION	
Physician Education	
Palliative Care Residency Training Programs:	
College of Family Physicians of Canada Certificate of Added Competence in Palliative Care	6
Royal College of Physicians and Surgeons of Canada Subspecialty in Palliative Medicine	4 ADULT 2 PEDIATRIC
Nursing Education	
Nursing specialization or certification in palliative care**	YES

*Refer to regional reports for the extent to which palliative care appears in undergraduate and postgraduate curricula.

**Nursing specialization is through CHPC(N) national certification

Context:

A new medical school will open in 2025 at the Toronto Metropolitan University (TMU), increasing the total to seven.

The number of residency spots per program varies annually with typically one or two spots per program.

This Atlas focuses on medical and nursing training, as mapping out curricula across all the other health professions is outside the resource capacity of this Atlas. We acknowledge that palliative care requires interprofessional and multidisciplinary collaboration and various professions provide important aspects of care for patients with palliative care needs and their families.

PROFESSIONAL ACTIVITIES

Palliative care association or organization	YES
Existence of palliative care directory of services	YES
Dedicated resources to organize palliative care continuing professional development	YES[1]
Palliative care conference/symposia provincially	YES
Research activities	YES[2]
Palliative care quality improvement initiatives	YES[3]

Context:

[1]The provincial government, some regional health entities and some service professionals, like home care agencies and some long-term care homes, do allocate funds to support continuing professional development initiatives related to training on the palliative care approach. Well-established training programs like Pallium Canada's interprofessional Learning Essential Approaches to Palliative Care (LEAP) courses, Serious Illness Conversations (SIC), Life and Death Matters, CAPACITI (mentoring of primary care teams), Fundamentals of Hospice Palliative Care Program and the Comprehensive Advanced Palliative Care Education (CAPCE) program (largely for allied health) have been used and supported. More training is still needed across all settings of care and professions on the palliative care approach as many gaps exist.

[2]There are several active palliative care research groups in the province, undertaking studies across several domains related to palliative care and actively publishing in peer review journals. The groups are primarily at McMaster University, the University of Ottawa, the University of Toronto and Queen's University. Collaboration occurs across the groups and different professions and disciplines are involved. A national Canadian palliative care research network is coordinated by a palliative care research group in Ottawa. Refer to Sample Publications below for more information.

[3]Over the last few years, quality improvement initiatives related to palliative care across different care settings, including hospitals, communities and long-term care, have also been promoted.

Sample Publications:

Bush SH, Skinner E, Lawlor PG, Dhuper M, Grassau PA, Pereira JL, MacDonald AR, Parsons HA, Kabir M. Adaptation, implementation, and mixed methods evaluation of an interprofessional modular clinical practice guideline for delirium management on an inpatient palliative care unit. BMC Palliat Care. 2022 Jul 16;21(1):128.

Campos E, Isenberg SR, Lovblom LE, Mak S, Steinberg L, Bush SH, Goldman R, Graham C, Kavalieratos D, Stukel T, Tanuseputro P, Quinn KL. Supporting the Heterogeneous and Evolving Treatment Preferences of Patients With Heart Failure Through Collaborative Home-Based Palliative Care. J Am Heart Assoc. 2022 Oct 4;11(19):e026319.

Cheon S, Tam J, Herx L, Nowak J, Goldie C, Kain D, Iqbal M, Sinnarajah A, Mathews J. Care Coordination Between Family Physicians and Palliative Care Physicians for Patients With Cancer: Results of a Quality Improvement Initiative. JCO Oncol Pract. 2024 Jul;20(7):964-971. doi: 10.1200/OP.23.00560. Epub 2024 Mar 13. PMID: 38478801.

Evans JME, Mackinnon J, Pereira J, Earle C, Gagnon B, Arthurs E, Gradin S, Walton T, Wright F, Buchman S. Building Capacity for Palliative Care Delivery in Primary Care Settings: A Mixed Methods Evaluation of the INTEGRATE Project. Canadian Family Physician 2021;67: 270-278.

Gill A, Meadows L, Ashbourne J, Kaasalainen S, Shamon S, Pereira J. "Confidence and Fulfillment": A Qualitative descriptive study exploring the impact of palliative care training on long-term care physicians and nurses. Palliative Care and Social Practice. 2024; Mar 5;18:26323524241235180. doi: 10.1177/26323524241235180. PMID: 38449569; PMCID: PMC10916492.

Howard M, Fikree S, Allice I, Farag A, Siu HY-H, Baker A, Pereira J, Hosseini S, Grierson L, Vanstone M. Family physicians with certificates of added competence in palliative care contribute to comprehensive care in their communities: a qualitative descriptive study. Palliative Medicine Reports. 2023; 4:1, 28–35, DOI: 10.1089/pmr.2022.0057.

Kaasalainen S, Mccleary L, Vellani S, Pereira J. Improving End-of-Life Care for People with Dementia in LTC Homes During the COVID-19 Pandemic and Beyond. Canadian Geriatrics Journal. 2021;24(3):164-169.

Kelley ML. Developing a compassionate community: a Canadian conceptual model for community capacity development. Palliat Care Soc Pract. 2023 Aug 28;17:26323524231193040.

Lapp JM, Stukel TA, Chung H, Bell CM, Bhatia RS, Detsky AS, Downar J, Isenberg SR, Lee DS, Stall N, Tanuseputro P, Quinn KL. Association of virtual end-of-life care with healthcare outcomes before and during the COVID-19 pandemic: A population-based study. PLOS Digit Health. 2024 Mar 13;3(3):e0000463.

Maybee A, Winemaker S, Howard M, Seow H, Farag A, Park HJ, Marshall D, Pereira J. Palliative care physicians' motivations for models of practicing in the community: A qualitative descriptive study. Palliat Med. 2022 Jan;36(1):181-188.

McCarthy E, Takami K, Lamichhane S, Herx L, Goldie C, Kain D, Iqbal M, Hopman W, Sinnarajah A, Myslik F, Mathews J. Point-of-care ultrasound in palliative medicine residency programs: report of a national survey and local workshop. Support Care Cancer. 2024 Dec 3;32(12):847. doi: 10.1007/s00520-024-09046-5. PMID: 39623051.

Pereira J, Herx L, Simoni J, Klinger CA. Mapping primary and generalist palliative care: Taking a closer look at the base of the pyramid. Palliat Med. 2024 Jul 28:2692163241265255.

Pereira J, Klinger C, Seow H, Marshall D, Herx L. Are we Consulting, Sharing Care, or Taking Over? Palliative Medicine Reports. 2024 Feb 23;5(1):104-115.

Pereira J, Meadows L, Kljujic D, Strudsholm T, Parsons H, Riordan B, Faulkner J, Fisher K. Learner Experiences Matter in Interprofessional Palliative Care Education: A Mixed Methods Study. J Pain Symptom Manage. 2022 May;63(5):698-710.

Quinn KL, Stukel T, Stall NM, Huang A, Isenberg S, Tanuseputro P, Goldman R, Cram P, Kavalieratos D, Detsky AS, Bell CM. Association between palliative care and healthcare outcomes among adults with terminal non-cancer illness: population based matched cohort study. BMJ. 2020 Jul 6;370:m2257.

Seow H, Bainbridge D, Winemaker S, Stajduhar K, Pond G, Kortes-Miller K, Marshall D, Kilbertus F, Myers J, Steinberg L, Incardona N, Levine O, Pereira J. Increasing palliative care capacity in primary care: study protocol of a cluster randomized controlled trial of the CAPACITI training program. BMC Palliat Care. 2023 Jan 5;22(1):2. doi: 10.1186/s12904-022-01124-x. PMID: 36604714; PMCID: PMC9813458.

Shamon S, Gill A, Meadows L, Kruizinga J, Kaasalainen S, Pereira J. Providing palliative and end-of-life care in long-term care during the COVID-19 pandemic: a qualitative study of clinicians' lived experiences. CMAJ Open. 2023 Aug 22;11(4):E745-E753.

Stajduhar KI, Giesbrecht M, Mollison A, Dosani N, McNeil R. Caregiving at the margins: An ethnographic exploration of family caregivers experiences providing care for structurally vulnerable populations at the end-of-life. Palliat Med. 2020 Jul;34(7):946-953.

Wang C, Grassau P, Lawlor PG, Webber C, Bush SH, Gagnon B, Kabir M, Spilg EG. Burnout and resilience among Canadian palliative care physicians. BMC Palliat Care. 2020 Nov 6;19(1):169.

Webber C, Valiulis AO, Tanuseputro P, Schulz V, Apramian T, Schreier G, Hamilton K. An Active In-Home Physician Model of Palliative Care and Its Resulting Performance Indicators Related to Home Deaths, Unplanned Emergency Department Visits and Unplanned Hospital Admissions. J Palliat Care. 2021 Jan;36(1):46-49.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

Formal strategy for pediatric palliative care	NO
Pediatric hospice residence(s)	2[1]
Outpatient palliative care programs for pediatric populations	YES
Respite pediatric palliative care (hospice or hospital setting)	YES
Pediatric palliative care consultation team(s)	YES
24/7 access to specialist pediatric palliative care consult team(s)	PARTIAL[2]
Education program(s) for pediatric palliative care	YES

Context:

[1]The hospices are located in the Toronto and Ottawa areas. Other hospices, such as Darling Home, in Milton and Andy's House in Port Carling, also accept pediatric patients when needed.

[2]Outside of university hospital tertiary care centres in Ottawa, Toronto, Hamilton and London, access to pediatric palliative care consultations is primarily virtual.

OTHER FOCUSED POPULATIONS

POPULATION	FORMAL STRATEGY	PROGRAM/INITIATIVE
2SLGBTQI+*	NO	NO[1]
Homeless and marginally housed	NO[1]	NO[2]
Incarcerated people (correctional facilities)	NO	NO[3]
Recent immigrants and refugees	NO	NO[4]
Francophone population	NO	NO

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Plus population.

Context:

[1]While there is no formal provincial-level strategy or program/initiative on access to this population, there is growing attention and some isolated projects to address palliative care needs in these populations. Examples include works on the palliative care needs of 2SLGBTQI+ persons by Kortes-Miller et al. and by Grassau et al. The OPCN Community Model of Care calls for the needs of all populations to be addressed.

[2]The Mission Hospice in Ottawa and the PEACH (Palliative Education and Care for the Homeless) program in Toronto are examples of programs of excellence in this area.

[3]There is no provincial-wide formalized strategy or program specifically for this population; however, some significant isolated work in this area has been done, such as in the East Region.

[4]There are isolated examples in the province of pioneering work being done to address the needs of this population, including in the West Region, the Toronto Region, and the Central Region.

See Regional Results for more information.

COMMUNITY ENGAGEMENT

VOLUNTEERS

Formal strategy for palliative care volunteers	NO
Programs or initiatives for volunteers	YES[1]
Training programs for volunteers available	YES

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/resources*	YES
Grief and bereavement services	YES[2]
Formal strategy for support of informal caregivers	YES[3]
Programs or initiatives for informal caregivers	YES[3]

*e.g., Death Cafes, visiting programs and support groups.

Context:

[1]Hospice Palliative Care Ontario, the provincial palliative care association, offers education for staff and standardized training programs for volunteers (in-person or online). Most hospice programs (community and residence) in the province provide training and opportunities for volunteers.

[2]Most hospices offer community grief and bereavement support programs. In many cases, these are not formally funded by public sources, relying on charity and fundraising. Some are supported by local health service professionals. There is a high level of reliance on hospice organizations to provide grief and bereavement support across the province. Social support services and programs are generally available at cancer centres, and in rural areas, reliance is on rural-based family physicians and social workers to provide grief and bereavement care.

[3]The Ontario Caregiver Organization supports caregivers across the province. Most hospice organizations also provide caregiver support and education.

OTHER ACTIVITIES

In 2009, Ontario introduced a unique program through a palliative care rehabilitation outpatient clinic in Ottawa, designed to support ambulatory patients with palliative care needs. Although this clinic has since closed, a similar palliative rehabilitation clinic is currently operating at the William Osler Health Centre (Brampton Hospital), supported by an interprofessional team. Other clinics may exist in other communities across the province.

In the Champlain region, there is a French-language hospice called La Maison de l'Est that is working to ensure equitable access to services in both of Canada's official languages. However, in general, accessing palliative care services in French (or their preferred language) across the province can be a challenge for patients.

Results Part B: Regions

North West

DEMOGRAPHICS

Ontario Health North West is one of six Ontario Health regions. It is comprised of mainly rural and remote communities with a few urban centres.

Area	526,417.35 km²
Population	230,223
Population density/km²	0.6 PERSONS/KM²

POLICY

POLICIES, STRUCTURES AND LAWS	PRESENCE
Designated office, secretariat or program responsible for palliative care	YES[1]
A formal palliative care strategic plan, policy or framework	YES[2]
Standards and norms for palliative care	YES
Designated palliative care leads	YES

FORMAL STRATEGIES	PRESENCE
Home and community care	YES[2]
Inpatient and outpatient hospital services (cancer and non-cancer)	YES[3]
Long-term care facilities	YES[4]
Rural and remote	NO
Paramedic/emergency services	NO

GOVERNMENT FUNDING	PRESENCE
Palliative home care services	PARTIAL[5]
Medications: In hospital	YES
Medications: Out of hospital	PARTIAL[5]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[5]
Continuing palliative care education in various settings	PARTIAL

Context:

[1]Established by St. Joseph's Care Group in 2015, now under shared responsibility with Ontario Health.

[2]Apply provincial strategies (OPCN Framework, OPCN Community Model of Care).

[3]Apply provincial strategy (OPCN Hospital Model of Care).

[4]Apply provincial strategy (Fixing Long-Term Care Act).

[5]According to eligibility of provincial palliative care coverage.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●○○ V
Access to specialist-level palliative care support teams 24/7	●○○○ 1
Funding models for palliative care physicians	ALTERNATIVE FUNDING PLANS (AFP)/ FEE-FOR-SERVICE

Context:

[1]There is only one specialist palliative care team in the region, based in Thunder Bay, with 3.7 FTE physician coverage. Access to specialist support in hospitals in Thunder Bay is therefore higher. This physician group also provides 24/7 on-call support virtually to any physician or nurse practitioner in the region. One other community hospital has a 0.5 FTE palliative care nurse supported by the hospital.

Most hospitals do not have access to specialist palliative care clinicians or services 24/7.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●○○ 1
Integration* in outpatient clinics—Cancer	●●●● 2
Integration* in outpatient clinics—Other**	●○○○

*Integration means services with core palliative care competencies providing primary or generalist level palliative care and collaborating closely with and referring to specialist palliative care teams when needed and in a timely manner.

**Cardiology, respirology, nephrology and neurology

Context:

[1]St. Joseph's Care Group implements early identification using the Registered Nurses' Association of Ontario (RNAO) Best Practice Guidelines. The large regional cancer centre has also completed serious illness conversation training for some physicians and nurse practitioners.

[2]The Thunder Bay Regional Health Sciences Centre - Cancer Centre provides specialist palliative care consultations in a palliative care outpatient clinic.

Palliative Care Units (PCUs)

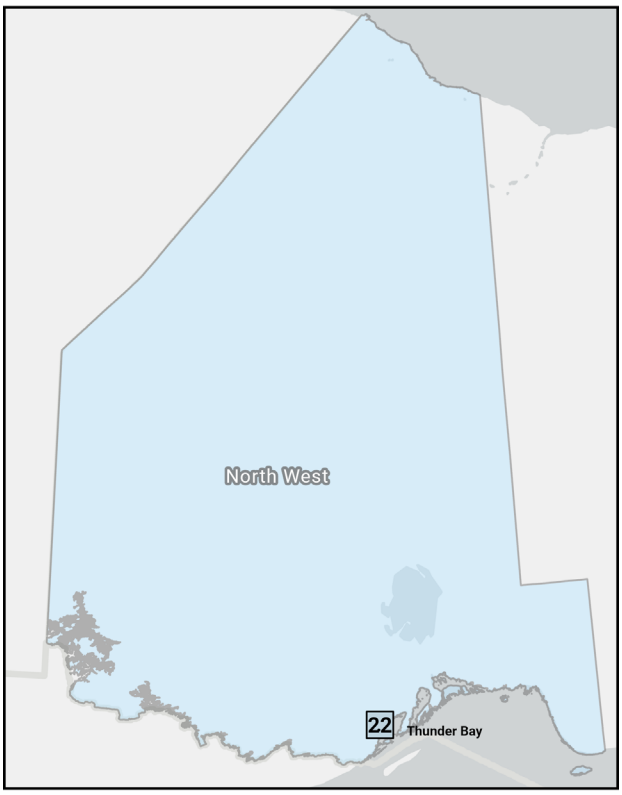
		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative Care Units (PCUs)	1		
	Palliative Care Unit beds	0	INADEQUATE	0%
	Other palliative care beds	22 - V		
	Total palliative care beds	22 - V		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

This is a mixed unit. All the beds are funded as continuing care beds and designated for palliative care use, and as such, availability for palliative care varies (average ~10 beds). Beds are often used for patients receiving Alternate Levels of Care. The same unit also has 10 hospice beds (reported in *Setting: Community*).

Palliative Care Units in North West Region



Legend

- Ontario Health Region
- Major Cities

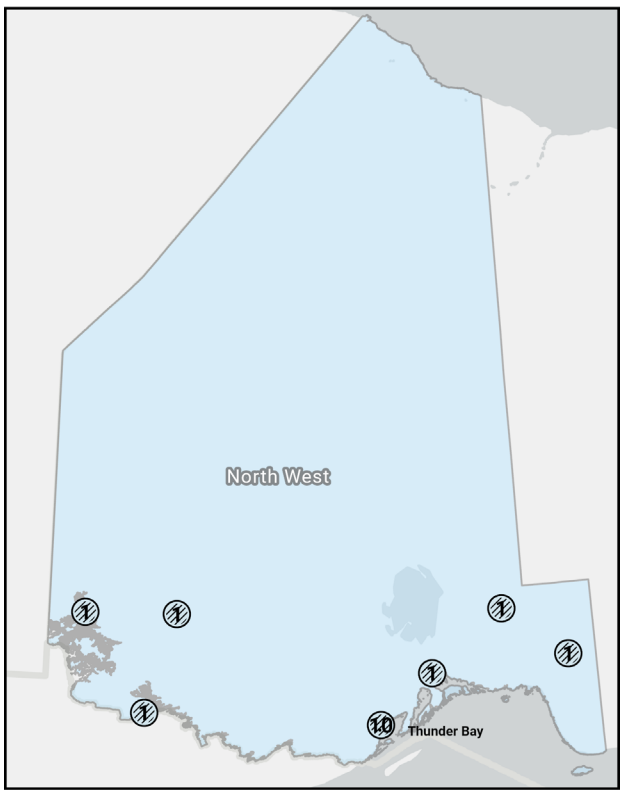
Facility, Type

- PCU, Acute
- PCU, EOL
- PCU, Mixed
- PCU, Information Not Provided
- Other Palliative Care Beds, EOL
- Other Palliative Care Beds, Mixed

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Hospices in North West Region



Legend

- Ontario Health Region
- Major Cities

Facility, Patients, Location-type

- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Co-located
- Hospice Residence, Pediatric, Stand-alone
- Hospice Residence, Pediatric, Co-located
- Hospice Residence, Mixed, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	0		
	Hospice beds in residences	0		
	Other hospice beds	16		
	Total hospice beds	16	ADEQUATE	
	Standards/indicators for hospice residences	NOT APPLICABLE		
	Community hospice organizations**	2		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

**This may not include all community organizations that provide hospice or palliative care-related services and support.

Context:

There are no standalone hospice residences in the region. The designated hospice beds are only found in hospitals, 10 of which are located in the PCU.

Total Palliative Care Beds:

There are a total of 38 palliative care and hospice beds in the region. This is Adequate for the region's population, assuming all the beds are used for palliative care.

Community

Access to community specialist care teams	●●○○ V[1]
Communities with 24/7 access to specialist palliative care teams	●○○○ V[2]
Standards/indicators for access to community palliative care teams	YES[3]
Models of practice of specialist palliative care teams	VARIABLE[4]

Context:

[1]High level of access in Thunder Bay, and then variable across the rest of the region. Some communities have access to in-person community based palliative care teams. Outside of Thunder Bay, access is primarily available via virtual consult through a 24/7 regional palliative care telemedicine link (nurse-led). Physicians are also available for consultation through the specialist palliative care consult team, which is based out of Thunder Bay.

[2]Less than 10% of the region has access to in-person, after-hours (24/7 coverage) to specialist palliative care teams.

[3]Apply the provincial strategy (OPCN Community Model of Care).

[4]The main models of care vary across the region with the *Consultation, Shared Care* and *Takeover* models all being used.

Palliative Home Care

Availability of palliative home care nursing	●●○○
Availability of 24/7 access	●○○○
Restrictions on coverage	YES[1]
Training of staff in palliative care approach available	YES

Context:

[1]Eligibility criteria based on Ontario Health atHome.

Coverage and access vary greatly across the region and are highest in the city of Thunder Bay and in the immediate surrounding communities. Palliative home care services are typically activated within one to three months prior to death.

Due to human health resources and high rurality of the region, some areas have daytime access only or weekday daytime access. Some will have no services at times. Access to a nurse practitioner is variable.

Primary Care

Overall provision of primary palliative care	●●○○ V
Providing palliative care to ambulatory patients	●●●○
Providing palliative care home visits	●●○○
Clinics providing 24/7 on-call palliative care coverage	●○○○
Standards/indicators for providing primary palliative care	YES[1]
Training for primary care professionals on the palliative care approach available	YES[2]

Context:

[1]Apply the provincial strategy (OPCN Community Model of Care).

[2]Funding is available for educational programs like Pallium Canada's LEAP courses for family physicians and other primary care professionals through the Regional Palliative Care Program.

Many primary care professionals offer palliative care to their patients. There are challenges with primary palliative care provision in small, rural and remote communities due to shortages of family physicians and nurse practitioners.

Rural and Remote Areas

Access to specialist palliative care teams	●●○○ 1
Standards/indicators for access to primary palliative care	NO
Funding for education on the palliative care approach	YES
Training of physicians and primary care professionals on palliative care approach available	YES[2]

Context:

[1]Virtual access is available 24/7 across the region through the physician on call group, run by the five palliative care physicians in the region.

[2]Through the Regional Palliative Care Program, Centre for Education and Research on Aging & Health, and the Health Care and Continuing Services (HCCSS) North West Palliative Care Educator.

Long-Term Care (LTC)

Access to specialist palliative care services	●●●○
Integration of palliative care approach	●●●○
Standards and/or indicators for providing palliative care	YES[1]
Standards for training of staff on palliative care approach	YES[1]
Training programs for staff on palliative care approach available	YES[2]
Funding to provide palliative care education for staff	PARTIAL

Context:

[1]Apply provincial government strategy (Fixing Long-Term Care Act).

[2]Through the Regional Palliative Care Program, Centre for Education and Research on Aging & Health, HCCSS North West Palliative Care Educator.

The Regional Palliative Care Program 24/7 palliative care consultation line provides access to a palliative care nurse/palliative care physicians. There is also support from the HCCSS North West palliative care educator.

Highlight:

North West Palliative Care has done a lot of work in long-term care (LTC). Most LTC homes are working on integrating palliative care, and there is a dedicated clinical coach for LTC homes. They also have an LTC Palliative Care Community of Practice hosted by the regional program. Some homes participate in the Canadian Hospice Palliative Care Association (CHPCA) Community of Practice and utilize the Ontario Centres for Learning, Research and Innovation in Long-Term Care (Ontario CLRI) supporting a palliative approach to care in LTC resources.

Examples of initiatives:

The Pioneer Ridge Caregiver Café have regular meeting of caregivers to chat about issues, such as anticipatory grief, with speakers at the sessions. Other LTC homes in the Community of Practice are replicating this initiative.

Hogarth Riverview and Bethammi Nursing Home have dedicated quality improvement resources to develop and implement early identification of patients with palliative care needs.

Paramedic Emergency Services

Training of paramedics in palliative care	PARTIAL - V

Context:

Some work has been done to embed palliative care into seniors' checkups by paramedic services, but implementation varies. Some paramedics have completed Pallium Canada's LEAP courses. There is interest but not enough capacity in the region.

Advance Care Planning

Advance Care Planning resources	YES

Context:

In addition to provincial initiatives, a local hospice, Hospice Northwest, has developed a personal planning guide, Don't Duck the Conversation.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Ontario Health by Ontario Palliative Care Network and by Health Quality Ontario. Some system performance indicators for Ontario and its health regions have been reported by the Canadian Institute for Health Information (CIHI) 2023 Palliative Care Report and by the Canadian Partnership Against Cancer (CPAC) in 2017.

EDUCATION

MEDICAL SCHOOLS

	NORTHERN ONTARIO SCHOOL OF MEDICINE (THUNDER BAY CAMPUS)
UNDERGRADUATE EDUCATION	
Inclusion of palliative care in undergraduate curriculum	MANDATORY
POSTGRADUATE EDUCATION	
Palliative Care Residency Training Programs	
Royal College Subspecialty Certification in Palliative Medicine	NO PROGRAM
College of Family Physicians Certificate of Added Competence in Palliative Care	NO PROGRAM

OTHER SPECIALTY RESIDENCY TRAINING PROGRAMS	PALLIATIVE CARE EDUCATION/EXPERIENCES
Anesthesia	MANDATORY: CLINICAL ROTATION
Cardiology	NOT APPLICABLE
Critical care	NOT APPLICABLE
Emergency medicine	NOT APPLICABLE
Family medicine	OPTIONAL: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Geriatrics	OPTIONAL: CLINICAL ROTATION
Internal medicine	OPTIONAL: CLINICAL ROTATION
Neurology	NOT APPLICABLE
Radiation oncology	NOT APPLICABLE
Medical oncology	NOT APPLICABLE
Psychiatry	NONE
Respirology	NOT APPLICABLE
Surgery	MANDATORY: CLASSROOM LEARNING

Highlight:

The Northern School of Medicine offers a simulation-based Advance Care Planning (ACP) workshop when transitioning to clerkship (clinical rotations).

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
Confederation College	NO INFORMATION PROVIDED
Lakehead University	NO INFORMATION PROVIDED

*Refers to classroom learning; however, it does not address adequacy (number of hours or clinical versus classroom learning).

PROFESSIONAL ACTIVITIES

Existence of palliative care directory of services	NO
Dedicated resources to organize palliative care continuing professional development	YES
Palliative care conference/symposia regionally	YES
Active palliative care research	YES
Palliative care quality improvement initiatives	YES

Highlight:

The Centre for Education and Research on Aging and Health (CERAH) program at Lakehead University is known nationally and internationally for its research in the following areas: palliative care for Indigenous populations; integration of palliative care in long-term care (LTC); access to palliative care in rural and remote regions; and the integration of palliative care into communities: by communities for communities.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

Formal strategy for pediatric palliative care	NO
Pediatric hospice residence(s)	NO
Outpatient palliative care program(s) for pediatric populations	NO
Respite pediatric palliative care (hospice or hospital setting)	NO
24/7 access to specialist pediatric palliative care team(s)	PARTIAL LOW
Education program(s) for pediatric palliative care	NO

Context:

Local care for pediatric palliative care patients is provided by the adult palliative care consult team and pediatricians in Thunder Bay. The region will consult with University Hospital in London, virtually as needed.

OTHER FOCUSED POPULATIONS

POPULATION	FORMAL STRATEGY	PROGRAMS AND/OR INITIATIVES
2SLGBTQI+*	NO	NO
Homeless and marginally housed	NO	YES
Incarcerated people (correctional facilities)	NO	NO
Recent immigrants and refugees	NO	NO

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Plus population.

Context:

Palliative Advocacy Care Team (PACT) and Hospice Northwest Journey Home Program.

Highlight:

The Palliative Advocacy Care Team (PACT), through the Healthcare Excellence Canada Improving Equity in Access to Palliative Care program, has a community outreach worker that supports the identification of clients who are marginalized, vulnerably housed or homeless and provides linkages to case management and access to palliative care services and supports. Partners on this project include Hospice Northwest, St. Joseph's Group Northwest Regional Palliative Care Program, Thunder Bay Palliative Care Associates, the Centre for Education and Research on Acting and Health, and the NorWest Community Health Centre.

Hospice Northwest has the Journey Home program which provides support to clients with a life-limiting illness who are vulnerably housed.

COMMUNITY ENGAGEMENT

VOLUNTEERS

Formal strategy related to incorporating and/supporting volunteers	NO
Volunteer opportunities in palliative care	YES
Volunteer training activities in palliative care available	YES

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/resources*	YES
Grief and bereavement services	YES
Formal strategy for support of informal caregivers	NO
Programs or initiatives for informal caregivers	YES

*e.g., Death Cafes, visiting programs and support groups.

Context:

Volunteer opportunities and training are available through the two community hospice programs in the region. The hospices also provide grief and bereavement support.

Hospice Northwest offers caregiver workshops and a dedicated caregiver support phone line.

North East

DEMOGRAPHICS

North East is one of six Ontario Health Regions. The region is mostly rural and remote communities. This region has some communities that are only accessible by plane and/or boat (no access by car), which limits general health care access, let alone palliative care services.

Area	406, 926 KM²
Population	559, 296
Population density/km²	1.4 PERSONS/KM²

POLICY

POLICIES, STRUCTURES AND LAWS	PRESENCE
Designated office, secretariat or program responsible for palliative care	YES
A formal palliative care strategic plan, policy or framework	YES[1]
Standards and norms for palliative care	YES
Designated palliative care leads	YES

FORMAL STRATEGIES	PRESENCE
Home and community care	YES
Inpatient and outpatient hospital services (cancer and non-cancer)	NO[2]
Long-term care facilities	YES[3]
Rural and remote	NO
Paramedic/emergency services	NO

GOVERNMENT FUNDING	PRESENCE
Palliative home care services	PARTIAL[4]
Medications: In hospital	YES
Medications: Out of hospital	PARTIAL[4]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[4]
Continuing palliative care education in various settings	PARTIAL

Context:

[1]Apply provincial strategies (OPCN Framework, OPCN Community Model of Care).

[2]Apply provincial strategy (OPCN Hospital Model of Care).

[3]Apply provincial strategy (Fixing Long-Term Care Act).

[4]Based on medications, supplies, equipment and home care restrictions in the provincial palliative care plan.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●○○ V
Access to specialist-level palliative care support teams 24/7	●●○○ V
Funding models for palliative care physicians	ALTERNATE FUNDING PLANS

Context:

There are three regions with palliative care specialists—Sudbury, Sault Saint Marie, and North Bay. There is a palliative care on-call group at the regional cancer centre in Sudbury with 11 physicians, three of whom are palliative care specialists.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●○○
Integration* in outpatient clinics—Cancer	●●●○
Integration* in outpatient clinics—Other**	●○○○ V

*Integration means services with core palliative care competencies providing primary or generalist level palliative care and collaborating closely with and referring to specialist palliative care teams when needed and in a timely manner.

**Cardiology, respirology, nephrology and neurology

Context:

There is some integration in the renal clinics in the region.

Palliative Care Units (PCUs)

		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative Care Units (PCUs)	0		
	Palliative Care Unit beds	0	INADEQUATE	0%
	Other palliative care beds	4-6 -V		
	Total palliative care beds	4-6 -V		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

The regional tertiary hospital in Sudbury has four to six designated palliative care beds, but no dedicated palliative care team or unit. Physicians and nurses caring for patients in these beds may not have palliative care training. In general, designated beds can be used for other purposes and admission for palliative care is not guaranteed. Most of the patients are admitted for end-of-life care. The low population number and density does not provide a critical mass to have a dedicated PCU.

Palliative Care Units in North East Region

Legend

- Ontario Health Region
- Major Cities

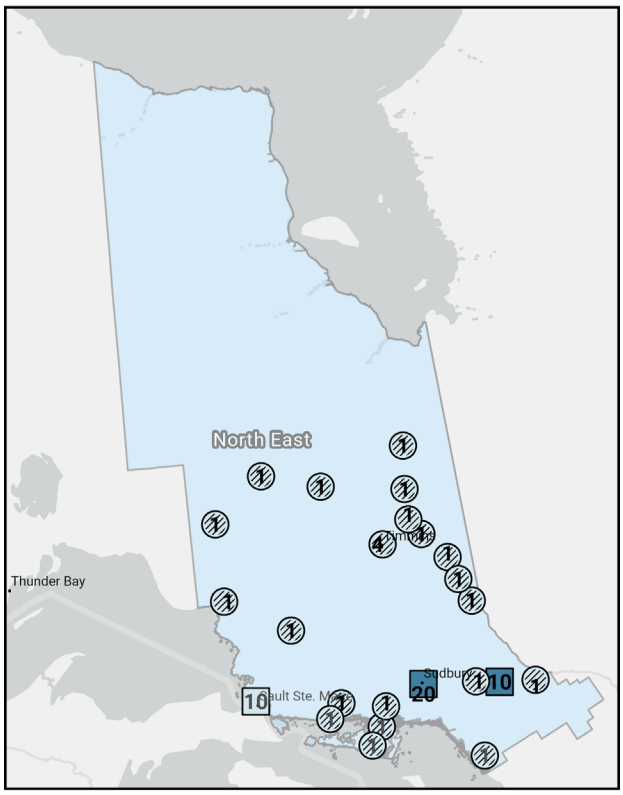
Facility, Type

- PCU, Acute
- PCU, EOL
- PCU, Mixed
- PCU, Information Not Provided
- Other Palliative Care Beds, EOL
- Other Palliative Care Beds, Mixed

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Hospices in North East Region



Legend

- Major Cities

Facility, Patients, Location-type

- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Co-located
- Hospice Residence, Pediatric, Stand-alone
- Hospice Residence, Pediatric, Co-located
- Hospice Residence, Mixed, Stand-alone
- Other Hospice Beds, Adult, Co-located
- Ontario Health Region

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	3[1]		
	Hospice beds in residences	40	ADEQUATE	
	Other hospice beds	21-24 – V[2]		
	Total hospice beds	61-64 - V		
	Standards/indicators for hospice residences	YES[3]		
	Community hospice organizations**	14		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

**This may not include all community organizations that provide hospice or palliative care-related services and support.

Context:

[1]The three hospice residences are stand-alone buildings. They are primarily for adults; however, two of them have a room that can be converted into a pediatric suite with pediatric support.

[2]There are 20 rural hospitals across the region, each of which have one hospice bed. Three of the beds are dependent on a budget surplus and are, therefore, not guaranteed. One hospital has four hospice beds.

[3]Hospice Palliative Care Ontario (HPCO) standards are available but not uniformly applied at this time.

Total Palliative Care Beds:

Using the conservative numbers, there are a total of 65 palliative care and hospice beds in the region. This is Adequate given the region's population, assuming all the beds are used for palliative care.

Community

Access to community specialist care teams	●○○○ V
Communities with 24/7 access to specialist palliative care teams	●○○○
Standards/indicators for access to community palliative care teams	YES[1]
Models of practice of specialist palliative care teams	CONSULTATION/ SHARED CARE

Context:

[1]Apply provincial strategies (OPCN Framework, OPCN Community Model of Care).

Levels of access to services and palliative care may be higher in Sudbury (urban center) and surrounding regions; however, responses reflect the overall majority of access. Sudbury and the surrounding areas can access in-person and virtual support. Support is through informal methods, not a formal on-call system.

Palliative Home Care

Availability of palliative home care nursing	●●○○
Availability of 24/7 access	●○○○
Restrictions on coverage	YES[1]
Training of staff in palliative care approach available	NO[2]

Context:

[1]Eligibility criteria based on Ontario Health atHome.

[2]Optional programs are available, but there are challenges with buy-in and funding.

Most home care is provided by generalist home care nurses with limited availability in the evenings and on weekends. The few specialists in the region are mostly available on weekdays during the day. People are often already on service for home care and then transition to palliative home care services as appropriate. Rural and remote communities often experience service gaps.

Primary Care

Overall provision of primary palliative care	●●○○
Providing palliative care to ambulatory patients	●●○○
Providing palliative care home visits	●●○○[1]
Clinics providing 24/7 on-call palliative care coverage	●○○○
Standards/indicators for providing primary palliative care	YES[2]
Training for primary care professionals on the palliative care approach available	YES[3]

Context:

[1]Family physicians in rural areas are more likely to provide home visits for their housebound patients, but they make up only about 10% of all family physicians in the region.

[2]Apply provincial strategy (OPCN Community Model of Care).

[3]Funding for palliative care education is available to primary care professionals and staff. There are multiple programs and opportunities within the region.

Rural and Remote Areas

Access to specialist palliative care teams	●●○○ V
Standards/indicators for access to primary palliative care	NO
Funding for education on the palliative care approach	YES
Training of physicians and primary care professionals on palliative care approach available	YES

Context:

Rural and remote communities, like James and Hudson Bay Coast, are under-serviced. While many have access on paper, issues of distance and health human resources mean that far fewer people receive standardized care. Access to symptom relief kits, pain management supplies and palliative expertise is a barrier in many communities. This region has communities that are not accessible by car.

Long-Term Care (LTC)

Access to specialist palliative care services	●○○○ V[1]
Integration of palliative care approach	●●○○ [2]
Standards and/or indicators for providing palliative care	NO
Standards for training of staff on palliative care approach	NO
Training programs for staff on palliative care approach available	YES[3]
Funding to provide palliative care education for staff	PARTIAL

Context:

[1]Support is provided through informal methods, not a formalized system.

[2]In collaboration with Ontario Centres for Learning, Research and Innovation in Long-Term Care (CLRI).

[3]Many LTC staff have taken Pallium Canada's LEAP training or the Ontario Centres for Learning, Research and Innovation in Long-Term Care (CLRI) course. This aligns with the provincial Fixing Long-Term Care Act.

Paramedic Emergency Services

Training of paramedics in palliative care	PARTIAL - V

Context:

Targeted palliative care paramedic training and education are available.

In Sudbury, there is an Emergency Department diversion program where palliative patients are registered with EMS through home care. When there is a 911 call from that number, the paramedics follow medical directives that enable them to treat and release the patient rather than taking them to the Emergency Department.

Advance Care Planning

Advance Care Planning resources	YES

Context:

Many regional organizations provide resources for patients, families, and health care professionals. Speak Up Ontario is a commonly used resource.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Ontario Health by Ontario Palliative Care Network and by Health Quality Ontario. Some system performance indicators for Ontario and its health regions have been reported by the Canadian Institute for Health Information (CIHI) 2023 Palliative Care Report and by the Canadian Partnership Against Cancer (CPAC) in 2017.

EDUCATION

MEDICAL SCHOOLS

	NORTHERN ONTARIO SCHOOL OF MEDICINE (SUDBURY CAMPUS)
UNDERGRADUATE EDUCATION	
Inclusion of palliative care in undergraduate curriculum	MANDATORY
POSTGRADUATE EDUCATION	
Palliative Care Residency Training Programs	
Royal College Subspecialty Certification in Palliative Medicine	NO PROGRAM
College of Family Physicians Certificate of Added Competence in Palliative Care	NO PROGRAM

OTHER SPECIALTY RESIDENCY TRAINING PROGRAMS	PALLIATIVE CARE EDUCATION/ EXPERIENCES
Anesthesia	MANDATORY: CLINICAL ROTATION
Cardiology	NOT APPLICABLE
Critical care	NOT APPLICABLE
Emergency medicine	NOT APPLICABLE
Family medicine	OPTIONAL: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Geriatrics	OPTIONAL: ROTATION
Internal medicine	OPTIONAL: ROTATION
Neurology	NOT APPLICABLE
Radiation oncology	NOT APPLICABLE
Medical oncology	NOT APPLICABLE
Psychiatry	NONE
Respirology	NOT APPLICABLE
Surgery	MANDATORY: CLASSROOM

Context:

Students are also trained using a simulation-based Advance Care Planning (ACP) workshop when transitioning to clerkship (clinical rotations).

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
Canadore College	MANDATORY
Cambrian College	INFORMATION NOT PROVIDED
Laurentian University	INFORMATION NOT PROVIDED
Nipissing University	INFORMATION NOT PROVIDED
Northern College	INFORMATION NOT PROVIDED
Sault College	INFORMATION NOT PROVIDED

*Refers to classroom learning; however, it does not address adequacy (number of hours or clinical versus classroom learning).

PROFESSIONAL ACTIVITIES

Existence of palliative care directory of services	YES
Dedicated resources to organize palliative care continuing professional development	YES
Palliative care conference/symposia regionally	YES
Active palliative care research	YES
Palliative care quality improvement initiatives	YES

Context:

Regional palliative care organizations offer professional development opportunities.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

Formal strategy for pediatric palliative care	NO
Pediatric hospice residence(s)	NO[1]
Outpatient palliative care program(s) for pediatric populations	NO
Respite pediatric palliative care (hospice or hospital setting)	NO
24/7 access to specialist pediatric palliative care team(s)	NO
Education program(s) for pediatric palliative care	PARTIAL

Context:

[1]All hospices have one room that can be converted into a pediatric suite, with pediatrician support. This happens one to five times a year in each location.

Pediatric palliative consultation for the region is available through the Children's Hospital of Eastern Ontario in Ottawa, SickKids in Toronto, or the Children's Hospital in London as needed.

OTHER FOCUSED POPULATIONS

POPULATION	FORMAL STRATEGY	PROGRAMS AND/OR INITIATIVES
2SLGBTQI+*	NO	NO
Homeless and marginally housed	NO	NO
Incarcerated people (correctional facilities)	NO	NO
Recent immigrants and refugees	NO	NO

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Plus population.

COMMUNITY ENGAGEMENT

VOLUNTEERS

Formal strategy related to incorporating and/supporting volunteers	NO
Volunteer opportunities in palliative care	YES
Volunteer training activities in palliative care available	YES

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/ resources*	YES
Grief and bereavement services	YES
Formal strategy for support of informal caregivers	NO
Programs or initiatives for informal caregivers	NO

*e.g., Death Cafes, visiting programs and support groups.

Context:

The volunteer opportunities and training processes are specific to each hospice; however, they do exist within the region.

East

DEMOGRAPHICS

Ontario Health East is one of six Ontario health regions. The region consists of diverse urban and rural communities, including the country's capital, Ottawa. The region has a large francophone population compared to other regions.

Area	51,371.17 KM²
Population	3,522,772
Population density/km²	68.6 PERSONS/KM²

POLICY

POLICIES, STRUCTURES AND LAWS	PRESENCE
Designated office, secretariat or program responsible for palliative care	YES
A formal palliative care strategic plan, policy or framework	YES
Standards and norms for palliative care	YES
Designated palliative care leads	YES

FORMAL STRATEGIES	PRESENCE
Home and community care	YES[1]
Inpatient and outpatient hospital services (cancer and non-cancer)	YES[2]
Long-term care facilities	YES[3]
Rural and remote	NO
Paramedic/emergency services	PARTIAL

GOVERNMENT FUNDING	PRESENCE
Palliative home care services	PARTIAL[4]
Medications: In hospital	FULL
Medications: Out of hospital	PARTIAL[4]
Supplies and equipment: In hospital	FULL
Supplies and equipment: Out of hospital	PARTIAL[4]
Continuing palliative care education in various settings	PARTIAL

Context:

[1]Apply provincial strategies (OPCN Framework, OPCN Community Model of Care).

[2]Apply provincial strategy (OPCN Hospital Model of Care).

[3]Apply provincial government strategy (Fixing Long-Term Care Act).

[4]According to eligibility of provincial palliative care coverage through Ontario Health atHome.

All Ontario Health regions follow OPCN strategies and frameworks. The Ontario Health East Region strategic plan is pending. While a formal strategy exists for long-term care, application of the strategy is not in place.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●○ V
Access to specialist-level palliative care support teams 24/7	●●●○ V
Funding models for palliative care physicians	VARIABLE

Context:

While medium to large hospitals across the region generally have access to specialist palliative care teams, access is very variable and sometimes absent in the region's small community hospitals. Some hospitals do have referral pathways in place.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●○○○
Integration* in outpatient clinics—Cancer	●●●○
Integration* in outpatient clinics—Other**	●●○○ V

*Integration means services with core palliative care competencies providing primary or generalist level palliative care and collaborating closely with and referring to specialist palliative care teams when needed and in a timely manner.

**Cardiology, respirology, nephrology and neurology

Context:

Within Ottawa, the outpatient clinics are well integrated with the palliative care approach compared to other regions. Other geographical areas do not have the same level of integration.

Highlight:

Palliative care is very well integrated in the Ottawa Heart Institute, specifically in terms of collaboration with a specialist palliative care team. There has been training across some cancer centers in the region on the palliative care approach using Pallium Canada's LEAP Oncology course.

Palliative Care Units (PCUs)

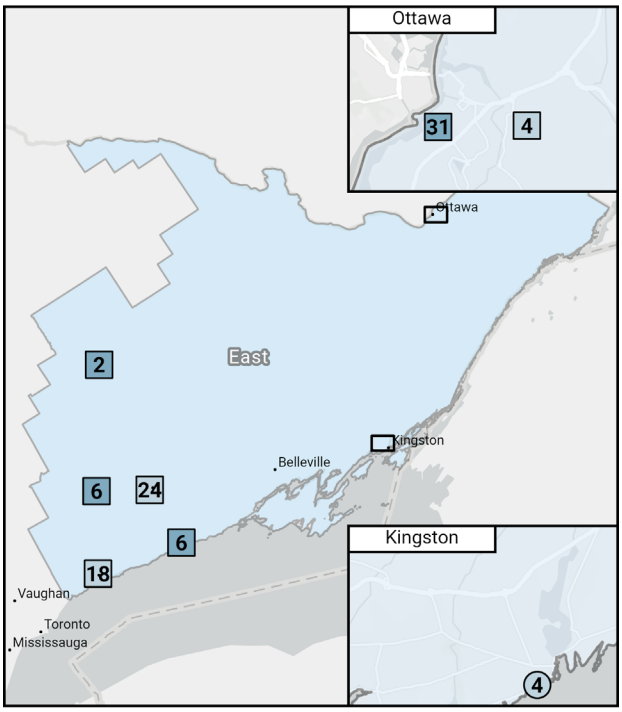
		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative Care Units (PCUs)	7		
	Palliative Care Unit beds	91	INADEQUATE	86.2%
	Other palliative care beds	4		
	Total palliative care beds	95		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

The PCUs are mainly mixed units; however, some acute or end-of-life units exist.

Palliative Care Units in East Region



Legend
- Ontario Health Region
- Major Cities

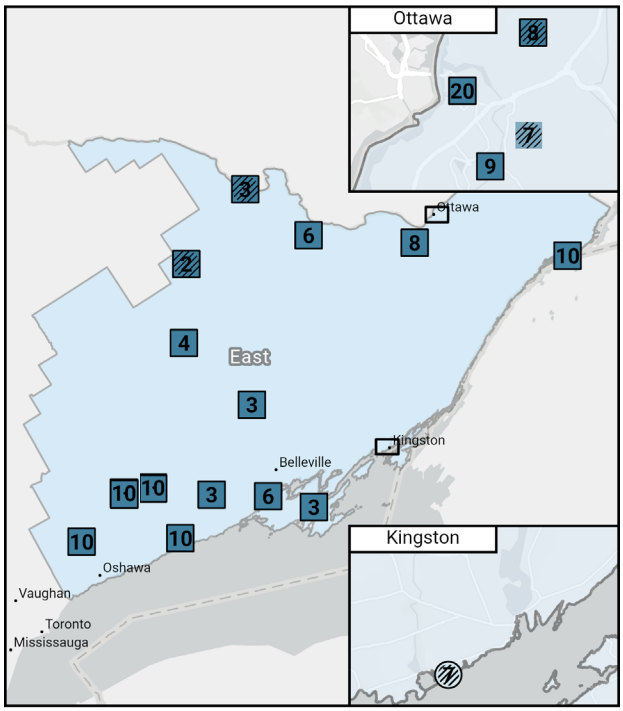
PCU

Facility, Type
- PCU, Acute
- PCU, EOL
- PCU, Mixed
- PCU, Information Not Provided
- Other Palliative Care Beds, EOL
- Other Palliative Care Beds, Mixed

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Hospices in East Region



Legend
- Ontario Health Region
- Major Cities

Facility, Patients, Location-type
- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Co-located
- Hospice Residence, Pediatric, Stand-alone
- Hospice Residence, Pediatric, Co-located
- Hospice Residence, Mixed, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	18		
	Hospice beds in residences	132		
	Other hospice beds	7		
	Total hospice beds	139	INADEQUATE	56.4%
	Standards/indicators for hospice residences	YES[1]		
	Community hospice organizations**	32		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

**This may not include all community organizations that provide hospice or palliative care-related services and support.

Context:

[1]HPCO standards are available, but not uniformly applied at this time.

These totals include a privately funded hospice that provides palliative care to incarcerated individuals and a pediatric hospice.

Total Palliative Care Beds:

In total there are 234 beds (palliative care and hospice beds), which is Inadequate (66.5%) for the region's population.

Community

Access to community specialist care teams	●●○○ V[1]
Communities with 24/7 access to specialist palliative care teams	●●○○ V[2]
Standards/indicators for access to community palliative care teams	YES[3]
Models of practice of specialist palliative care teams	CONSULTATION[4]

Context:

[1]In the larger cities, with some exceptions, there is generally high access to specialist palliative care community teams. In the Champlain subregion, there is a regional palliative care team that provides consultation support throughout the subregion, in urban and rural regions. Access is less consistent in other rural regions. There are rural regions with no access. Patients with no family physicians experience challenges to getting access to palliative care.

[2]Access is available 24/7 in most larger centres, but less in smaller communities.

[3]Apply the provincial OPCN Community Model of Care.

[4]*Consultation* is the main model but some areas do have *Takeover*.

There is variability across the region with respect to the models of care provided by specialist palliative care teams; however, *Consultation* is the main model, with some using *Takeover* models in place. Within the Champlain region, there is access to a 24/7 teleconsulting service. The South East subregion has 24/7 on-call support, although knowledge of this service is variable.

Palliative Home Care

Availability of palliative home care nursing	●●●○ V
Availability of 24/7 access	●●○○ V
Restrictions on coverage	YES[1]
Training of staff in palliative care approach available	PARTIAL

Context:

[1]Eligibility criteria based on Ontario health atHome.

The Champlain area (i.e., Ottawa) has very high access; however, the rest of the region has less access. Often, there is better access near the end of life.

Primary Care

Overall provision of primary palliative care	●●○○ V
Providing palliative care to ambulatory patients	●●○○ V
Providing palliative care home visits	●●○○
Clinics providing 24/7 on-call palliative care coverage	●○○○
Standards/indicators for providing primary palliative care	YES[1]
Training for primary care professionals on the palliative care approach available	PARTIAL[2]

Context:

[1]Apply provincial strategies (OPCN Framework, OPCN Community Model of Care).

[2]There are ongoing efforts across the region to build primary palliative care capacity, with subregional variation. In 2023–2024, regional funding for palliative care education was made available to train 300 clinicians in the community using Pallium Canada's LEAP courses and Serious Illness Conversation training.

Rural and Remote Areas

Access to specialist palliative care teams	●●○○ V
Standards/indicators for access to primary palliative care	NO
Funding for education on the palliative care approach	YES
Training of physicians and primary care professionals on palliative care approach available	YES

Context:

In the Champlain subregion, there is full access to specialist palliative care teams. In other subregions, there is variable access.

Paramedic Emergency Services

Training of paramedics in palliative care	PARTIAL - V

Context:

The Palliative Care Treat and Release program is being expanded. The Durham region is well integrated; however, the South East and rural settings have lower integration.

Long-Term Care (LTC)

Access to specialist palliative care services	●●○○ V
Integration of palliative care approach	●●○○ V
Standards and/or indicators for providing palliative care	YES
Standards for training of staff on palliative care approach	NO
Training programs for staff on palliative care approach available	YES
Funding to provide palliative care education for staff	YES

Context:

Although there is access, and the region's Palliative and Pain Support teams include a role of supporting and developing palliative care integration in LTC homes, there is considerable variability in terms of access by LTC homes of these services.

Advance Care Planning

Advance Care Planning resources	YES

Context:

Many provincial organizations provide resources for patients, families, and health care professionals. Speak Up Ontario is a commonly used resource. Resources are also available online and through community organizations.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Ontario Health by Ontario Palliative Care Network and by Health Quality Ontario. Some system performance indicators for Ontario and its health regions have been reported by the Canadian Institute for Health Information (CIHI) 2023 Palliative Care Report and by the Canadian Partnership Against Cancer *(CPAC)* in 2017.

EDUCATION

MEDICAL SCHOOLS

	QUEEN'S UNIVERSITY	THE UNIVERSITY OF OTTAWA
UNDERGRADUATE EDUCATION		
Inclusion of palliative care in undergraduate curriculum	MANDATORY: CLASSROOM LEARNING	MANDATORY: CLASSROOM LEARNING
POSTGRADUATE EDUCATION		
Palliative Care Residency Training Programs		
Royal College Subspecialty Certification in Palliative Medicine	YES – ADULT	YES – ADULT/PEDIATRICS
College of Family Physicians Certificate of Added Competence in Palliative Care	YES	YES
OTHER SPECIALTY RESIDENCY TRAINING PROGRAMS	**PALLIATIVE EDUCATION/EXPERIENCES**	
Anesthesia	NONE	MANDATORY: CLASSROOM LEARNING
Cardiology	NONE	NONE
Critical care	NONE	NONE
Emergency medicine	NONE	MANDATORY: CLASSROOM LEARNING
Family medicine	OPTIONAL: CLINICAL ROTATION	MANDATORY: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Geriatrics	OPTIONAL: CLINICAL ROTATION	MANDATORY: CLINICAL ROTATION
Internal medicine	MANDATORY: CLINICAL ROTATION	MANDATORY: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Neurology	OPTIONAL: CLINICAL ROTATION	MANDATORY: CLASSROOM LEARNING
Radiation oncology	OPTIONAL: CLINICAL ROTATION	MANDATORY: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Medical oncology	OPTIONAL: CLINICAL ROTATION	MANDATORY: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Psychiatry	NONE	MANDATORY: CLINICAL ROTATION
Respirology	NONE	NONE
Surgery	NONE	NONE

Context:

At the University of Ottawa, all residency programs have access to palliative care as an elective.

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
Durham College	NONE
Ontario Tech University	OPTIONAL: CLASSROOM LEARNING
Fleming College	NONE
Trent University	NONE
Centennial College	INFORMATION NOT PROVIDED
Collège La Cité	INFORMATION NOT PROVIDED
St. Lawrence College	INFORMATION NOT PROVIDED
Loyalist College	INFORMATION NOT PROVIDED
University of Ottawa	INFORMATION NOT PROVIDED
Algonquin College	INFORMATION NOT PROVIDED
Queens University	MANDATORY: CLASSROOM LEARNING

*Refers to classroom learning; however, it does not address adequacy (number of hours or clinical versus classroom learning).

PROFESSIONAL ACTIVITIES

Existence of palliative care directory of services	YES
Dedicated resources to organize palliative care continuing professional development	YES
Palliative care conference/symposia regionally	YES
Active palliative care research	YES[1]
Palliative care quality improvement initiatives	YES

Context:

[1]The Division of Palliative Care at the University of Ottawa has a very active research group that undertakes research across several areas, including clinical (e.g., delirium in palliative care), quality improvement, and health service access using large databases.

There is ongoing implementation of performance management data and reporting requirements submitted to the Ontario Palliative Care Network on a monthly and quarterly basis. There are multiple quality initiatives happening locally to increase opportunities for collaboration across subregions.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

Formal strategy for pediatric palliative care	NO
Pediatric hospice residence(s)	YES
Outpatient palliative care program(s) for pediatric populations	PARTIAL LOW
Respite pediatric palliative care (hospice or hospital setting)	YES
24/7 access to specialist pediatric palliative care team(s)	PARTIAL LOW
Education program(s) for pediatric palliative care	YES

Context:

Specialist palliative care for pediatrics is available in Ottawa through the Children's Hospital of Eastern Ontario and the Roger Neilson Children's Hospice. Outside of Ottawa, there is limited access to consultative support and access is only available by phone.

OTHER FOCUSED POPULATIONS

POPULATION	FORMAL STRATEGY	PROGRAMS AND/OR INITIATIVES
2SLGBTQI+*	NO	YES[1]
Homeless and marginally housed	NO	YES[2]
Incarcerated people (correctional facilities)	NO	YES[3]
Recent immigrants and refugees	NO	YES[4]

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Plus population.

Context:

[1]The Champlain Hospice Palliative Care Program offers caregiver support sessions for 2SLGBTQI+ individuals.

[2]Ottawa Inner City Health supports the Dianne Morrison Hospice, which provides acute residential hospice beds and accommodations for chronic palliative clients who are marginally housed or homeless. The Choice ANd Dignity in Death (CANDID) program is a service being offered by a Canadian Mental Health Association Nurse Practitioner Led Clinic in collaboration with home care. The Frontenac Lennox Addington Ontario Health Team has the Underserviced and Precariously Housed Population Palliative Care Strategies Working Group. The Kingston Community Health Centre has partnered with Queen's University Palliative Medicine to provide palliative outreach. Other partners include Home and Community Care Support Services, Street Health, Integrated Care Hub and Home Base Housing.

[3]Haley House provides palliative care services for incarcerated individuals who have a life-limiting diagnosis for reintegration within the community.

[4]Ottawa Inner City Health provides support to refugees and newcomers.

COMMUNITY ENGAGEMENT

VOLUNTEERS

Formal strategy related to incorporating and/supporting volunteers	NO
Volunteer opportunities in palliative care	YES
Volunteer training activities in palliative care available	YES

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/ resources*	YES
Grief and bereavement services	YES
Formal strategy for support of informal caregivers	YES
Programs or initiatives for informal caregivers	YES

*e.g., Death Cafes, visiting programs and support groups.

Context:

Hospices offering community palliative care beds and day programming are known to have established training programs for their volunteers, with ongoing efforts across subregional tables aimed at developing volunteer programming. Strategies are implemented at an individual hospice level if applicable.

OTHER ACTIVITIES

In the Champlain region, the French-language hospice, La Maison de l'Est, is working to ensure equitable access to services in both of Canada's official languages. However, in general, accessing palliative care services in French (or their preferred language) can be a challenge for patients.

Central

Ontario Health Central is one of six Ontario Health regions. The communities in the region range from large urban centres to small rural communities, including vacation destinations with fluctuating populations.

DEMOGRAPHICS

Area	14,824 KM²
Population	4,623,620
Population density/km²	311.9 PERSONS/KM²

POLICY

POLICIES, STRUCTURES AND LAWS	PRESENCE
Designated office, secretariat or program responsible for palliative care	YES
A formal palliative care strategic plan, policy or framework	YES
Standards and norms for palliative care	YES
Designated palliative care leads	YES

FORMAL STRATEGIES	PRESENCE
Home and community care	YES[1]
Inpatient and outpatient hospital services (cancer and non-cancer)	YES[2]
Long-term care facilities	YES[3]
Rural and remote	NO
Paramedic/emergency services	NO

GOVERNMENT FUNDING	PRESENCE
Palliative home care services	PARTIAL[4]
Medications: In hospital	YES
Medications: Out of hospital	PARTIAL[4]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[4]
Continuing palliative care education in various settings	PARTIAL

Context:

[1]Apply provincial strategies (Ontario Palliative Care Network (OPCN) Framework, OPCN Community Model of Care).

[2]Apply provincial strategy (OPCN Hospital Model of Care).

[3]Apply provincial government strategy (Fixing Long-Term Care Act).

[4]According to eligibility of provincial palliative care coverage through Ontario Health atHome.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●○
Access to specialist-level palliative care support teams 24/7	●●○○ V
Funding models for palliative care physicians	FEE-FOR-SERVICE

Context:

Physicians are generally paid fee-for-service or through alternate payment plans (varies across hospitals). Nursing, administration, and allied health professionals are often funded through hospital budgets.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●○○
Integration* in outpatient clinics—Cancer	●●●○
Integration* in outpatient clinics—Other**	●○○○

*Integration means services with core palliative care competencies providing primary or generalist level palliative care and collaborating closely with and referring to specialist palliative care teams when needed and in a timely manner.

**Cardiology, respirology, nephrology and neurology

Context:

In some subregions, hospitals are undertaking quality improvement (QI) and education initiatives to increase integration.

Palliative Care Units (PCUs)

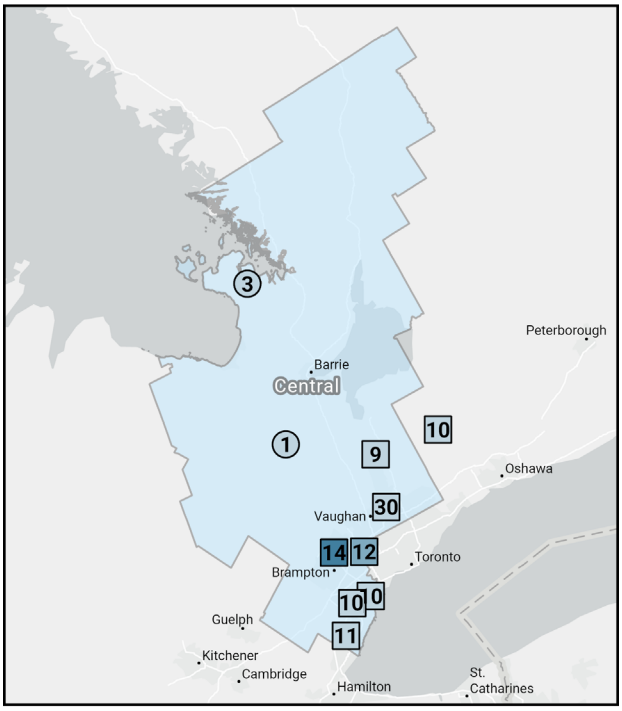
		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative Care Units (PCUs)	8		
	Palliative Care Unit beds	106 – V[1]	INADEQUATE	76.5%
	Other palliative care beds	4		
	Total palliative care beds	110 - V		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

[1]This number includes designated beds in mixed units with palliative care and other patients, such as oncology, and internal medicine. Therefore, the number of palliative care beds can fluctuate (i.e., is variable). The exact number of dedicated beds (beds allocated only to palliative care) was not provided. Most of the units are mixed with acute admissions for symptom management.

Palliative Care Units in Central Region



Legend

- Ontario Health Region
- Major Cities

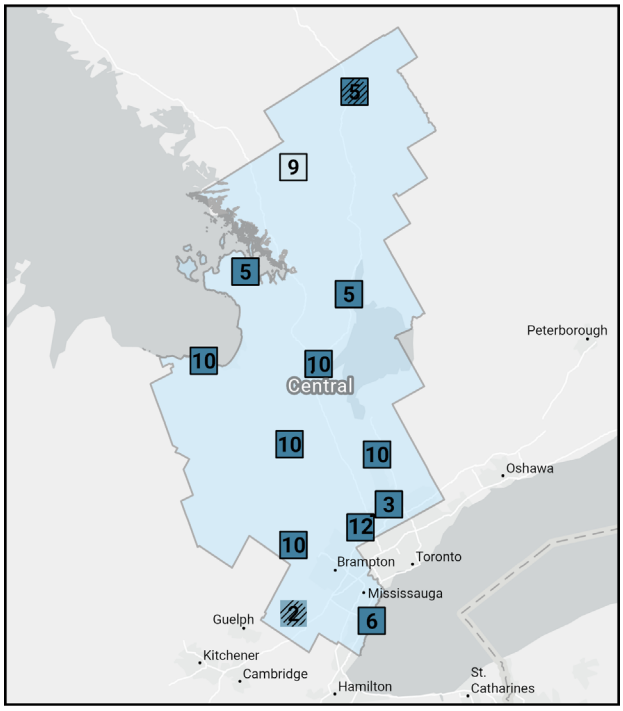
Facility, Type

- PCU, Acute
- PCU, EOL
- PCU, Mixed
- PCU, Information Not Provided
- Other Palliative Care Beds, EOL
- Other Palliative Care Beds, Mixed

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Hospices in Central Region



Legend

- Ontario Health Region
- Major Cities

Facility, Patients, Location-type

- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Co-located
- Hospice Residence, Pediatric, Stand-alone
- Hospice Residence, Pediatric, Co-located
- Hospice Residence, Mixed, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	13		
	Hospice beds in residences	97		
	Other hospice beds	0		
	Total hospice beds	97	INADEQUATE	30.0%
	Standards/indicators for hospice residences	YES		
	Community hospice organizations**	9		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

**This may not include all community organizations that provide hospice or palliative care-related services and support.

Context:

Hospices follow Hospice Palliative Care Ontario's (HPCO) hospice standards, although these are not mandatory. Most hospices are standalone. There is one hospice that provides care to pediatric patients.

Total Palliative Care Beds:

In total there are 203 (variable) beds (palliative care unit beds and hospice beds), which is Inadequate (43.9%) for the region's population.

Community

Access to community specialist care teams	●●●○ V
Communities with 24/7 access to specialist palliative care teams	●●●○ V
Standards/indicators for access to community palliative care teams	YES[1]
Models of practice of specialist palliative care teams	CONSULTATION/SHARED CARE/ TAKEOVER – V[2]

Context:

[1]Apply provincial strategy (OPCN Community Model of Care).

[2]Specialist palliative care teams in the community have varying models of care, including mainly *Consultation* or *Shared Care* in some areas, and mainly *Takeover* model in others, like Mississauga and Halton.

For patients with a prognosis of less than three months, there is good access in the community to specialist palliative care teams in the south of the region (more urban), including after hours. There is less availability in the north (more rural). Communities that do not have Community Palliative Care On-Call (CPOC) funding do not have on-call availability. There is a Nurse Practitioner program through Ontario Health atHome that provides varying after-hours supports across the province. In the Mississauga-Halton region, that program is available from 9 p.m. to 9 a.m. daily.

Palliative Home Care

Availability of palliative home care nursing	●●●○ V[1]
Availability of 24/7 access	●●○○ V[2]
Restrictions on coverage	YES[3]
Training of staff in palliative care approach available	YES[4]

Context:

[1]Most communities have palliative home care nursing services, but access varies according to geography. Access is high in urban and larger rural communities, but low and sometimes absent in very rural regions.

[2]Only some areas, such as Mississauga Halton and Central West, have 24/7 access to home care nursing.

[3]For most subregions, activation happens at the one to three-month prognosis. It is accessible for a prognosis of six months or less in Central West, and for 12 months or less in Mississauga Halton.

[4]Training programs are available and being used in the region.

Primary Care

Overall provision of primary palliative care	●●○○ V
Providing palliative care to ambulatory patients	●●○○
Providing palliative care home visits	●○○○
Clinics providing 24/7 on-call palliative care coverage	●○○○ 1
Standards/indicators for providing primary palliative care	YES[2]
Training for primary care professionals on the palliative care approach available	YES[3]

Context:

[1]Few family physicians provide palliative care home visits or 24/7 on call coverage across the region, but there are pockets of activity.

[2]Apply provincial strategy (OPCN Community Model of Care).

[3]OPCN has created a training inventory resource that includes training for primary care professionals on palliative care.

Rural and Remote Areas

Access to specialist palliative care teams	●○○○
Standards/indicators for access to primary palliative care	YES
Funding for education on the palliative care approach	NO
Training of physicians and primary care professionals on palliative care approach available	NO

Paramedic Emergency Services

Training of paramedics in palliative care	PARTIAL - V

Context:

The integration of palliative care and emergency services varies across communities in the region. However, there has been increased integration over the last three years with palliative care pathways in the Muskoka, Dufferin Country, Halton and York regions. Implementation varies across the region.

Advance Care Planning

Advance Care Planning resources	YES

Context:

Many provincial organizations provide resources for patients, families, and health care professionals. Speak Up Ontario is a commonly used resource. Resources are available online and through community organizations.

Long-Term Care (LTC)

Access to specialist palliative care services	●●○○V
Integration of palliative care approach	●●○○V
Standards and/or indicators for providing palliative care	YES[1]
Standards for training of staff on palliative care approach	NO
Training programs for staff on palliative care approach available	YES[2]
Funding to provide palliative care education for staff	PARTIAL

Context:

[1]Apply provincial government strategy (Fixing Long-Term Care Act).

[2]The OPCN Delivery Framework for Palliative Care in Community Settings recommends that LTC facilities train existing and new staff in palliative care approach competencies.

There is no formal region-wide strategy in place and integration is left to the individual LTC facility. Some subregional projects to build palliative care integration in LTC include the Centres for Learning Research & Innovation Long-Term Care (CLRI), the York region LTC palliative care integration project, the Western York region palliative care education project, and the Prevention of Error based Transfer (PoET) project that sometimes includes concepts related to providing end-of-life care. The regional funds for health service professionals are variable across the region.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Ontario Health by Ontario Palliative Care Network and by Health Quality Ontario. Some system performance indicators for Ontario and its health regions have been reported by the Canadian Institute for Health Information (CIHI) 2023 Palliative Care Report and by the Canadian Partnership Against Cancer (CPAC) in 2017.

EDUCATION

MEDICAL SCHOOLS

Context:

Some clinical sites may provide clinical rotations for McMaster University and University of Toronto undergraduate medical students. Residents from these medical schools may do rotations throughout the Central Region as well.

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
Georgian College	MANDATORY: CLASSROOM TEACHING OPTIONAL: CLINICAL EXPERIENCES
Humber College	INFORMATION NOT PROVIDED
Seneca College	INFORMATION NOT PROVIDED
Sheridan College	INFORMATION NOT PROVIDED

*Refers to classroom learning; however, it does not address adequacy (number of hours or clinical versus classroom learning).

PROFESSIONAL ACTIVITIES

Existence of palliative care directory of services	NO
Dedicated resources to organize palliative care continuing professional development	YES[1]
Palliative care conference/symposia regionally	YES[2]
Active palliative care research	YES[3]
Palliative care quality improvement initiatives	YES

Context:

[1]Varies by subregion.

[2]North Simcoe Muskoka Hospice Palliative Care Network organizes a subregional conference. Other subregions are able to attend.

[3]Some research is currently being undertaken by the palliative care program in Brampton, including studies on palliative rehabilitation and point of care ultrasound use in palliative care.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

Formal strategy for pediatric palliative care	NO
Pediatric hospice residence(s)	NO[1]
Outpatient palliative care program(s) for pediatric populations	YES
Respite pediatric palliative care (hospice or hospital setting)	YES
24/7 access to specialist pediatric palliative care team(s)	YES
Education program(s) for pediatric palliative care	YES

Context:

[1]The Darling Home for Kids in Milton provides some pediatric hospice care.

Locally, there is a clinical nurse specialist at Trillium Health Partners for pediatric palliative care who supports many patients and local physicians. The region has access to pediatric palliative care outpatient programs and on call specialist support through the Pediatric Palliative Medicine teams at Sick Kids in Toronto and McMaster Children's Hospital in Hamilton. The Darling Home provides admissions for respite, hospice and long-term residence for children with complex needs. Emily's House Children's Hospice in Toronto can also be accessed by residents in the region.

OTHER FOCUSED POPULATIONS

POPULATION	FORMAL STRATEGY	PROGRAMS AND/OR INITIATIVES
2SLGBTQI+*	NO	NO
Homeless and marginally housed	NO	PARTIAL
Incarcerated people (correctional facilities)	NO	NO
Recent immigrants and refugees	NO	NO

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Plus population.

Context:

A pilot project to offer palliative care to the homeless and marginally housed just commenced in Barrie.

COMMUNITY ENGAGEMENT

VOLUNTEERS

Formal strategy related to incorporating and/supporting volunteers	NO
Volunteer opportunities in palliative care	YES[1]
Volunteer training activities in palliative care available	YES[2]

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/ resources*	YES
Grief and bereavement services	YES
Formal strategy for support of informal caregivers	NO[3]
Programs or initiatives for informal caregivers	YES

*e.g., Death Cafes, visiting programs and support groups.

Context:

[1]Volunteer opportunities are available through residential and community hospices as well as hospitals.

[2]Some hospices provide specialized training for volunteers.

[3]Most hospice organizations provide support, education and programming for informal caregivers.

Toronto

DEMOGRAPHICS

Ontario Health Toronto is one of six Ontario Health regions. Toronto is the largest city in Ontario and Canada. The region is completely urban with no rural communities. Many people who reside outside of the Ontario Health Toronto region utilize medical and palliative care services provided within the region.

Area	631 KM²
Population	2,794,356
Population density/km²	4427.8 PERSONS /KM²

POLICY

POLICIES, STRUCTURES AND LAWS	PRESENCE
Designated office, secretariat or program responsible for palliative care	YES
A formal palliative care strategic plan, policy or framework	YES
Standards and norms for palliative care	YES
Designated palliative care leads	YES
FORMAL STRATEGIES	**PRESENCE**
Home and community care	YES[1]
Inpatient and outpatient hospital services (cancer and non-cancer)	YES[2]
Long-term care facilities	YES[3]
Rural and remote	NOT APPLICABLE
Paramedic/emergency services	NO
GOVERNMENT FUNDING	**PRESENCE**
Palliative home care services	PARTIAL[4]
Medications: In hospital	YES
Medications: Out of hospital	PARTIAL[4]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[4]
Continuing palliative care education in various settings	PARTIAL

Context:

[1]Apply provincial strategies (OPCN Framework, OPCN Community Model of Care).

[2]Apply provincial strategy (OPCN Hospital Model of Care).

[3]Apply provincial government strategy (Fixing Long-Term Care Act).

[4]According to eligibility of provincial palliative care coverage.

Funding for palliative care coverage is available in some cases. There may be exceptions for marginalized patients.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●●
Access to specialist-level palliative care support teams 24/7	INFORMATION NOT PROVIDED
Funding models for palliative care physicians	FEE-FOR-SERVICE[1]

Context:

[1]Most physician palliative care specialists are fee-for-service; however, other payment models exist and vary by the organization with which they are affiliated.

All hospitals in the region have some type of specialist palliative care access; however, the level of access (e.g., daytime or 24/7) for the region is variable, and largely unknown from data collection.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●●○
Integration* in outpatient clinics—Cancer	●●○○
Integration* in outpatient clinics—Other**	●●○○

*Integration means services with core palliative care competencies providing primary or generalist level palliative care and collaborating closely with and referring to specialist palliative care teams when needed and in a timely manner.

**Cardiology, respirology, nephrology and neurology.

Context:

Among outpatient specialty clinics (non-palliative care), integration varies across clinics in the region. For example, some nephrology and cardiology services demonstrate high levels of integration.

Palliative Care Units (PCUs)

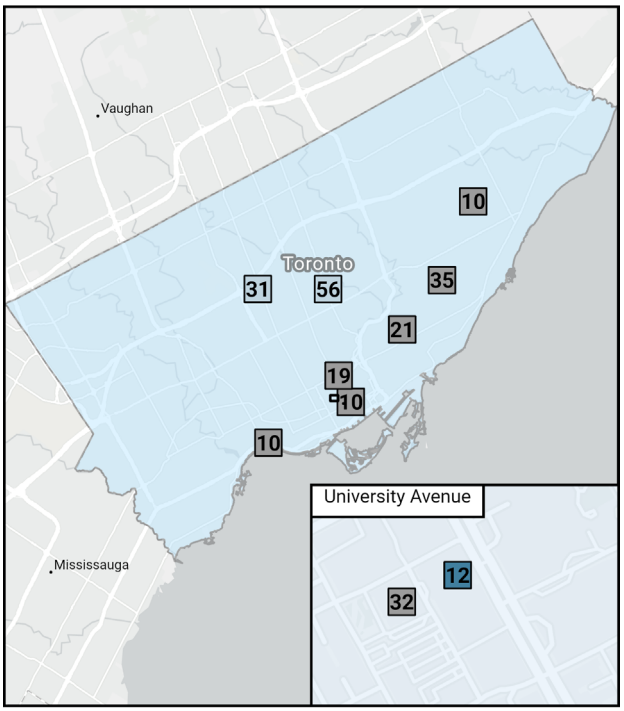
		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative Care Units (PCUs)	10		
	Palliative Care Unit beds	236	ADEQUATE	
	Other palliative care beds	0		
	Total palliative care beds	236		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

Information regarding the PCU's profiles (e.g., acute, end-of-life) was not provided.

Palliative Care Units in Toronto Region



Legend

- Ontario Health Region
- Major Cities

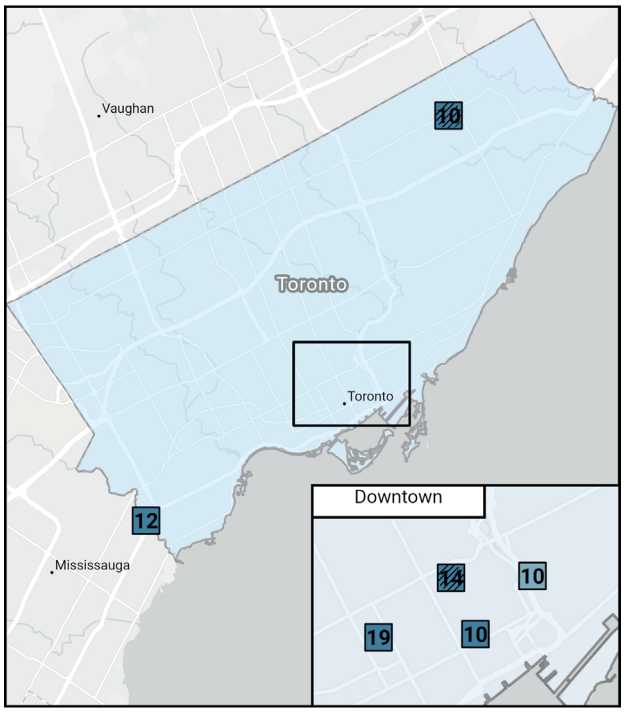
Facility, Type

- PCU, Acute
- PCU, EOL
- PCU, Mixed
- PCU, Information Not Provided
- Other Palliative Care Beds, EOL
- Other Palliative Care Beds, Mixed

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Hospices in Toronto Region



Legend

- Ontario Health Region
- Major Cities

Facility, Patients, Location-type

- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Co-located
- Hospice Residence, Pediatric, Stand-alone
- Hospice Residence, Pediatric, Co-located
- Hospice Residence, Mixed, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	5		
	Hospice beds in residences	75		
	Other hospice beds	0		
	Total hospice beds	75	INADEQUATE	38.3%
	Standards/indicators for hospice residences	YES[1]		
	Community hospice organizations**	10[2]		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

**This may not include all community organizations that provide hospice or palliative care-related services and support.

Context:

[1]Apply provincial organization, Hospice Palliative Care Ontario (HPCO) Hospice Standards, although not mandatory at this time.

[2]Community hospices and services are variable based on annual fundraising revenues, as most of these services are funded through charity and fundraising by the community.

Total Palliative Care Beds:

In total there are 311 beds (palliative care and hospice beds), which is Adequate for the population of the region.

Community

Access to community specialist care teams	●●●○ V
Communities with 24/7 access to specialist palliative care teams	●●●○ V
Standards/indicators for access to community palliative care teams	YES[1]
Models of practice of specialist palliative care teams	TAKEOVER[2]

Context:

[1]Apply provincial strategy (OPCN Community Model of Care).

[2]While all models are practice are used within the region, the *Takeover* model is more commonly used by community palliative care teams. The specialist palliative care teams provide all palliative care, primary and specialist levels. With some subregional exceptions, limited primary palliative care is provided by primary care physicians, teams and clinics.

Some areas of the region have waitlists for palliative care specialists, requiring more restrictive eligibility requirements and causing variability of available services, largely based on estimated prognoses (e.g., last three months of life). The specialist teams are hosted by different organizations (e.g., hospitals, home care). Access to 24/7 specialist-level palliative care support teams is variable; most subregions have it, but not all.

Palliative Home Care

Availability of palliative home care nursing	●●●●
Availability of 24/7 access	●●●●
Restrictions on coverage	YES[1]
Training of staff in palliative care approach available	YES

Context:

[1]Eligibility criteria based on Ontario Health atHome.

Toronto funds different types of education for different professionals and sectors yearly so availability will vary yearly.

Primary Care

Overall provision of primary palliative care	●○○○
Providing palliative care to ambulatory patients	●○○○
Providing palliative care home visits	●○○○
Clinics providing 24/7 on-call palliative care coverage	●○○○
Standards/indicators for providing primary palliative care	YES[1]
Training for primary care professionals on the palliative care approach available	PARTIAL[2]

Context:

[1]Apply provincial strategy (OPCN Framework, OPCN Community Model of Care).

[2]Toronto funds different types of education for different professionals and sectors yearly, so availability will vary yearly.

The *Takeover* model by specialist palliative care teams is the most commonly used model, with some exceptions in subregions. Overall, very limited primary palliative care is provided by primary care physicians, teams and clinics.

Highlight:

In North York, family physicians are actively involved with the Freeman Outreach Program and providing palliative home care. Additionally, family physicians provide ambulatory care and are connected to specialist palliative care consultations through SCOPE (Seamless Care Optimizing the Patient Experience).

SCOPE is a platform that promotes collaborative work between primary care, hospital services, and community health partners to serve patients with complex needs.

Rural and Remote Areas

Access to specialist palliative care teams	NOT APPLICABLE
Standards/indicators for access to primary palliative care	NOT APPLICABLE
Funding for education on the palliative care approach	NOT APPLICABLE
Training of physicians and primary care professionals on palliative care approach available	NOT APPLICABLE

*There are no rural or remote communities in the region.

Long-Term Care (LTC)

Access to specialist palliative care services	●●○○ V
Integration of palliative care approach	●●○○
Standards and/or indicators for providing palliative care	YES[1]
Standards for training of staff on palliative care approach	YES[1]
Training programs for staff on palliative care approach available	YES
Funding to provide palliative care education for staff	YES

Context:

[1]Apply provincial government strategy (Fixing Long-Term Care Act).

All LTC homes have access to a nurse led outreach team or a nurse practitioner STAT (Supporting Teams Averting Transfers) team, who may provide some palliative care consultations. However, these teams do not necessarily have a specialist palliative care professional or advanced palliative care training.

The Ontario Health Toronto region has established a Long-Term Care Local Support Model, which provides clinical pathways and processes to engagement with Ontario Health teams. Palliative care pathways are currently in development.

Paramedic Emergency Services

Training of paramedics in palliative care available	PARTIAL - V

Context:

The Ontario Health Toronto Community Paramedicine program helps individuals remain in their community setting, excluding LTC. Funding and opportunities for palliative care training vary.

Advance Care Planning

Advance Care Planning resources	YES

Context:

Many provincial organizations provide resources for patients, families, and health care professionals. Speak Up Ontario is a commonly used resource. Resources are available online and through community organizations.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Ontario Health by Ontario Palliative Care Network and by Health Quality Ontario. Some system performance indicators for Ontario and its health regions have been reported by the Canadian Institute for Health Information (CIHI) 2023 Palliative Care Report and by the Canadian Partnership Against Cancer (CPAC) in 2017.

EDUCATION

MEDICAL SCHOOLS

	UNIVERSITY OF TORONTO
UNDERGRADUATE EDUCATION	
Inclusion of palliative care in undergraduate curriculum	MANDATORY: CLASSROOM TEACHING OPTIONAL: CLINICAL ELECTIVE ROTATION
POSTGRADUATE EDUCATION	
Palliative Care Residency Training Programs	
Royal College Subspecialty Certification in Palliative Medicine	YES – ADULT/PEDIATRIC
College of Family Physicians Certificate of Added Competence in Palliative Care	YES
OTHER SPECIALTY RESIDENCY TRAINING PROGRAMS	**PALLIATIVE CARE EDUCATION/EXPERIENCES**
Anesthesia	OPTIONAL: CLINICAL ROTATION
Cardiology	OPTIONAL: CLINICAL ROTATION
Critical care	OPTIONAL CLINICAL ROTATION
Emergency medicine	MANDATORY: CLASSROOM TEACHING OPTIONAL: CLINICAL ROTATION
Family medicine	MANDATORY: CLINICAL ROTATION
Geriatrics	OPTIONAL: CLINICAL ROTATION
Internal medicine	OPTIONAL: CLINICAL ROTATION
Neurology	MANDATORY CLINICAL ROTATION
Radiation oncology	MANDATORY: CLINICAL ROTATION
Medical oncology	OPTIONAL: CLINICAL ROTATION
Psychiatry	MANDATORY CLINICAL ROTATION
Respirology	OPTIONAL: CLINICAL ROTATION
Surgery	OPTIONAL: CLINICAL ROTATION

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
College Boreal	NO INFORMATION PROVIDED
Nipissing University	NO INFORMATION PROVIDED
Toronto Metropolitan University	NO INFORMATION PROVIDED
George Brown College	NO INFORMATION PROVIDED
University of Toronto	NO INFORMATION PROVIDED
Durham College	NO INFORMATION PROVIDED
Ontario Tech University	NO INFORMATION PROVIDED
Fleming College	NO INFORMATION PROVIDED
Trent University	NO INFORMATION PROVIDED
Centennial College	NO INFORMATION PROVIDED
Sheridan College	NO INFORMATION PROVIDED
Seneca College	NO INFORMATION PROVIDED
Humber College	NO INFORMATION PROVIDED

*Refers to classroom learning; however, it does not address adequacy (number of hours or clinical versus classroom learning).

PROFESSIONAL ACTIVITIES

Existence of palliative care directory of services	YES
Dedicated resources to organize palliative care continuing professional development	NO
Palliative care conference/symposia regionally	YES
Active palliative care research	YES[1]
Palliative care quality improvement initiatives	YES[2]

Context:

[1]Within the region, there is research conducted at various sites, including the University Hospital Network, Mount Sinai Hospital, North York General Hospital, Sunnybrook Health Sciences Centre, and St. Michael's Hospital. The University of Toronto is also undertaking palliative care research in the following areas: access to palliative care, palliative care to refugee and homeless populations, patient reported outcomes, and large population data studies.

[2]Palliative care quality improvement initiatives are widespread across the region; however, not all hospitals are participating in these initiatives.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

Formal strategy for pediatric palliative care	NO
Pediatric hospice residence(s)	YES
Outpatient palliative care program(s) for pediatric populations	YES
Respite pediatric palliative care (hospice or hospital setting)	YES
24/7 access to specialist pediatric palliative care team(s)	PARTIAL HIGH
Education program(s) for pediatric palliative care	YES

Context:

Emily's House in Toronto is a specialized pediatric hospice residence. Outpatient palliative care services for children are provided by the Pediatric Advanced Care Team at SickKids. Pediatric palliative care in the community is provided by the Emily's House at Home service (visiting hospice consult service) and the Toronto Central Home and Community Care Support Services integrated palliative home care team.

Most pediatric palliative care is through tertiary pediatrics and maternal-fetal medicine centers using a Hub-and-Spoke model (tertiary specialist pediatric palliative care teams [hub] working with community partners [spokes]).

OTHER FOCUSED POPULATIONS

POPULATION	FORMAL STRATEGY	PROGRAMS AND/OR INITIATIVES
2SLGBTQI+*	NO	NO
Homeless and marginally housed	YES	YES
Incarcerated people (correctional facilities)	NO	NO
Recent immigrants and refugees	NO	YES[1]

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Plus population.

Context:

[1]G.P.S Health Navigators is a navigation clinic working with refugee patients on the Interim Federal Health Program to support those with palliative care needs.

Highlight:

Innovative programs for homeless and marginally housed persons, including hospice care, are provided through Palliative Education and Care for the Homeless (PEACH), Inner City Health Associates (ICHA) and Journey Home Hospice.

COMMUNITY ENGAGEMENT

VOLUNTEERS

Formal strategy related to incorporating and/supporting volunteers	NO
Volunteer opportunities in palliative care	YES[1]
Volunteer training activities in palliative care available	YES[1]

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/ resources*	YES
Grief and bereavement services	YES
Formal strategy for support of informal caregivers	NO
Programs or initiatives for informal caregivers	YES[2]

*e.g., Death Cafes, visiting programs and support groups.

Context:

[1]The majority of community hospice organizations have volunteer programs and training.

[2]Programs and education for informal caregivers offered through community or provincial organizations.

West

DEMOGRAPHICS

Ontario Health West is one of six Ontario Health regions. The region is home to more than 4 million people and has some of the most populated cities in Ontario. It also has many rural communities.

Area	38,338.4 KM²
Population	4,006,360
Population density/km²	104.5 PERSONS/KM²

POLICY

POLICIES, STRUCTURES AND LAWS	PRESENCE
Designated office, secretariat or program responsible for palliative care	YES
A formal palliative care strategic plan, policy or framework	YES[1]
Standards and norms for palliative care	YES
Designated palliative care leads	YES

FORMAL STRATEGIES	PRESENCE
Home and community care	YES
Inpatient and outpatient hospital services (cancer and non-cancer)	YES[2]
Long-term care facilities	YES[3]
Rural and remote	NO
Paramedic/emergency services	NO

GOVERNMENT FUNDING	PRESENCE
Palliative home care services	PARTIAL[4]
Medications: In hospital	FULL
Medications: Out of hospital	PARTIAL[4]
Supplies and equipment: In hospital	FULL
Supplies and equipment: Out of hospital	PARTIAL[4]
Continuing palliative care education in various settings	PARTIAL[5]

Context:

[1]Apply provincial strategies (Ontario Palliative Care Network (OPCN) Framework, OPCN Community Model of Care).

[2]Apply provincial strategy (OPCN Hospital Model of Care).

[3]Apply provincial strategy (Fixing Long-Term Care Act).

[4]According to eligibility of provincial palliative care coverage through Ontario Health atHome.

[5]Funding for community-based education varies on system demands. Funding is reserved for the community only.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●○
Access to specialist-level palliative care support teams 24/7	●●●○
Funding models for palliative care physicians	ALTERNATIVE FUNDING PLANS (AFP)/ FEE-FOR-SERVICE

Context:

Almost all hospitals have access to a specialist palliative care consult team. A few areas do not have 24/7 on-call support.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●●○
Integration* in outpatient clinics—Cancer	●●●○ [1]
Integration* in outpatient clinics—Other**	●○○○ [2]

*Refers to the extent to which specialist services across hospitals provide a palliative care approach themselves and collaborate closely with the inpatient specialist palliative care team if such a team is available.

**Cardiology, respirology, nephrology and neurology

Context:

[1]Palliative care has been integrated into most regional cancer programs and includes advanced care planning and psychosocial planning. Many centres rely on the specialist palliative care team for the provision of palliative care. Regional cancer clinics have received funding for education in hospitals and some cancer program staff have been trained in a palliative approach, for example, with Pallium Canada's LEAP courses.

[2]There is some integration in renal clinics.

Palliative Care Units (PCUs)

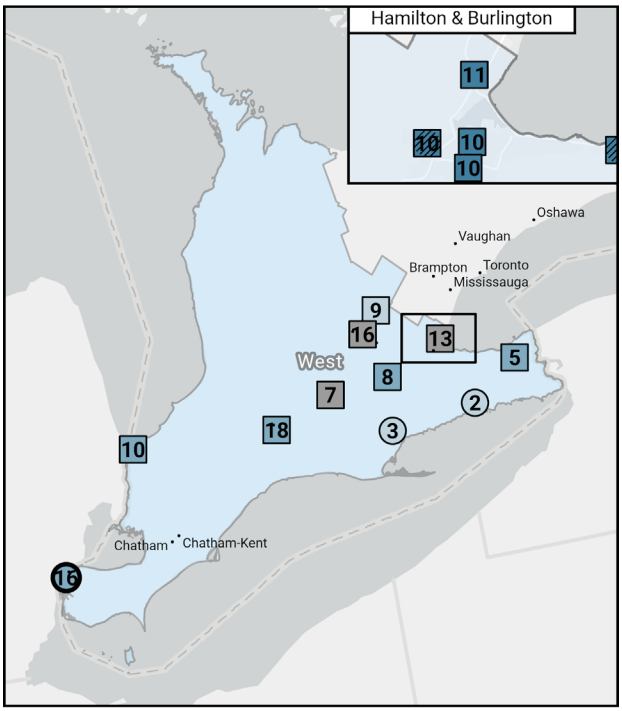
		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative Care Units (PCUs)	19		
	Palliative Care Unit beds	146[1]	ADEQUATE	
	Other palliative care beds	21		
	Total palliative care beds	167		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

[1]Some of the PCUs are mixed units that care for palliative care patients as well as patients with other needs, such as oncology care. In some cases, it is difficult to differentiate between the two. Therefore, not all beds included here are dedicated palliative care beds.

Palliative Care Units in West Region



Legend

- Ontario Health Region
- Major Cities

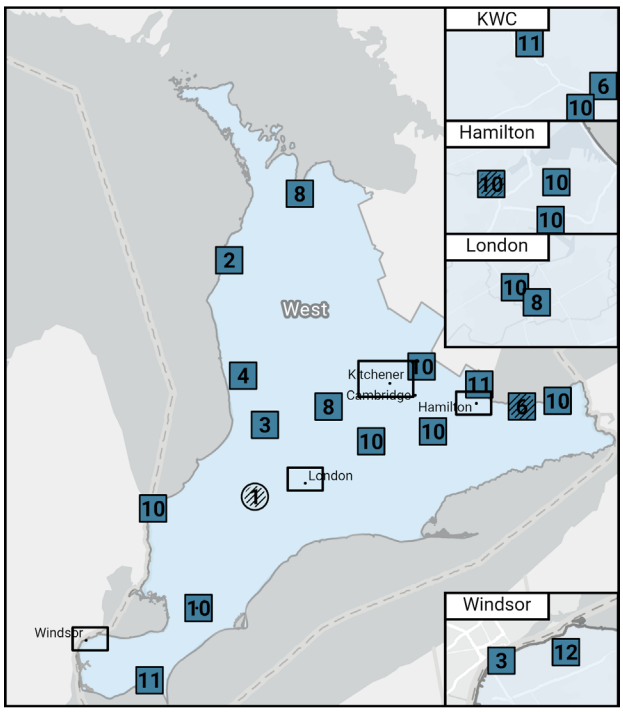
PCU

- PCU, Acute
- PCU, EOL
- PCU, Mixed
- PCU, Information Not Provided
- Other Palliative Care Beds, EOL
- Other Palliative Care Beds, Mixed

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

Hospices in West Region



Legend

- Ontario Health Region
- Major Cities

Facility, Patients, Location-type

- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Co-located
- Hospice Residence, Pediatric, Stand-alone
- Hospice Residence, Pediatric, Co-located
- Hospice Residence, Mixed, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Ontario Health Regions Boundaries (Ministry of Health); Major Cities (Data in Ontario Open Data Working Group).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	24		
	Hospice beds in residences	203		
	Other hospice beds	1		
	Total hospice beds	204	INADEQUATE	72.8%
	Standards/indicators for hospice residences	NO		
	Community hospice organizations**	17		

*Catalonia formula (10 beds per 100 000 population of which 3 are PCU beds, and 7 are hospice or continuing care type beds). Only dedicated beds are included.

** This may not include all community organizations that provide hospice or palliative care-related services and support.

Context:

Almost all hospices are standalone, and all provide care for adults. Journey Home Hospice in Toronto is a privately funded hospice that provides care for structurally vulnerable people.

Total Palliative Care Beds:

In total there are 350 (palliative care unit beds and hospice beds), which is Inadequate (87.3%) for the region's population.

Community

Access to community specialist care teams	●●●○
Communities with 24/7 access to specialist palliative care teams	●●○○
Standards/indicators for access to community palliative care teams	YES[1]
Models of practice of specialist palliative care teams	VARIABLE[2]

Context:

[1]Apply provincial strategy (OPCN Community Model of Care).

[2]All three models (*Consultation, Shared Care,* and *Takeover*) are used in the region and applied in varying proportions across the sub-regions.

The region has 24/7 access to palliative care nursing services and partial access to physicians based on funding models. The region promotes a *Shared Care* model as highlighted in the provincial strategy.

Palliative Home Care

Availability of palliative home care nursing	●●●●
Availability of 24/7 access	●●●●
Restrictions on coverage	YES[1]
Training of staff in palliative care approach available	YES[2]

Context:

[1]Eligibility criteria based on Ontario Health atHome.

[2]Training is available through the region. Ontario Health atHome may offer additional training, but that information was not provided.

Primary Care

Overall provision of primary palliative care	●●○○ V
Providing palliative care to ambulatory patients	●●●○ V[1]
Providing palliative care home visits	●○○○ (<10 %)
Clinics providing 24/7 on-call palliative care coverage	●○○○
Standards/indicators for providing primary palliative care	YES[2]
Training for primary care professionals on the palliative care approach available	YES[3]

Context:

[1]This varies across Ontario Health Teams as well as individual practices and depends on the funding model of the local specialist palliative care team. Areas using the specialist *Takeover* model generally have fewer family physicians involved in providing primary palliative care.

[2]Apply provincial strategy (OPCN Community Model of Care).

[3]OPCN has created a training inventory resource that includes training for primary care professionals on palliative care.

Rural and Remote Areas

Access to specialist palliative care teams	●●●○
Standards/indicators for access to primary palliative care	NO
Funding for education on the palliative care approach	YES
Training of physicians and primary care professionals on palliative care approach available	YES

Long-Term Care (LTC)

Access to specialist palliative care services	●●○○ V[1]
Integration of palliative care approach	●●○○ V[1]
Standards and/or indicators for providing palliative care	YES[2]
Standards for training of staff on palliative care approach	YES[2]
Training programs for staff on palliative care approach available	YES
Funding to provide palliative care education for staff	YES

Context:

[1]Some long-term care homes in the regions have undertaken palliative care education, have palliative care committees, and have engaged in work with CLRI. The extent of access and integration is quite variable across the region.

[2]Apply provincial legislation (Fixing Long-Term Care Act).

Paramedic Emergency Services

Training of paramedics in palliative care	PARTIAL - V

Context:

Three of the four subregions have implemented palliative care directives in both 911 activation and community paramedicine programming. This allows paramedics to treat and release patients rather than taking them to the emergency room.

Advance Care Planning

Advance Care Planning resources	YES

Context:

Many provincial organizations provide resources for patients, families, and health care professionals. Speak Up Ontario is a commonly used resource. Resources are available online and through community organizations.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Ontario Health by Ontario Palliative Care Network and by Health Quality Ontario. Some system performance indicators for Ontario and its health regions have been reported by the Canadian Institute for Health Information (CIHI) 2023 Palliative Care Report and by the Canadian Partnership Against Cancer (CPAC) in 2017.

EDUCATION

MEDICAL SCHOOLS

	WESTERN UNIVERSITY	MCMASTER UNIVERSITY
UNDERGRADUATE EDUCATION		
Inclusion of palliative care in undergraduate curriculum	MANDATORY	MANDATORY
POSTGRADUATE EDUCATION		
Palliative Care Residency Training Programs		
Royal College Subspecialty Certification in Palliative Medicine	NO PROGRAM	YES - ADULT
College of Family Physicians Certificate of Added Competence in Palliative Care	YES	YES
OTHER SPECIALTY RESIDENCY TRAINING PROGRAMS	**PALLIATIVE CARE EDUCATION/EXPERIENCES**	
Anesthesia	NONE	MANDATORY: CLINICAL ROTATION
Cardiology	NONE	OPTIONAL: CLINICAL ROTATION
Critical care	NONE	OPTIONAL: CLINICAL ROTATION
Emergency medicine	NONE	OPTIONAL: CLINICAL ROTATION
Family medicine	MANDATORY: CLINICAL ROTATION	MANDATORY: CLINICAL ROTATION
Geriatrics	OPTIONAL: CLINICAL ROTATION	MANDATORY: CLINICAL ROTATION
Internal medicine	INFORMATION NOT PROVIDED	MANDATORY: CLINICAL ROTATION
Neurology	NONE	OPTIONAL: CLINICAL ROTATION
Radiation oncology	NONE	MANDATORY: CLINICAL ROTATION
Medical oncology	MANDATORY: CLINICAL ROTATION	MANDATORY: CLINICAL ROTATION
Psychiatry	NONE	OPTIONAL: CLINICAL ROTATION
Respirology	NONE	OPTIONAL: CLINICAL ROTATION
Surgery	NONE	INFORMATION NOT PROVIDED

Context:

At Western University, individuals who do an extra year of Internal Medicine, Family Medicine and Oncology residency have a mandatory palliative care clinical rotation. At McMaster University, Nephrology has a mandatory clinical rotation in palliative care.

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
St. Clair College	MANDATORY: CLASSROOM LEARNING AND SIMULATION
Brock University	INFORMATION NOT PROVIDED
McMaster University	INFORMATION NOT PROVIDED
Niagara College	INFORMATION NOT PROVIDED
Windsor University	INFORMATION NOT PROVIDED
Lambton College	INFORMATION NOT PROVIDED
Georgian College	MANDATORY: CLASSROOM TEACHING OPTIONAL: CLINICAL EXPERIENCES
Western University	INFORMATION NOT PROVIDED
Conestoga College	INFORMATION NOT PROVIDED

*Refers to classroom learning; however, it does not address adequacy (number of hours or clinical versus classroom learning).

PROFESSIONAL ACTIVITIES

Existence of palliative care directory of services	YES
Dedicated resources to organize palliative care continuing professional development	YES[1]
Palliative care conference/symposia regionally	YES
Active palliative care research	YES[2]
Palliative care quality improvement initiatives	YES

[1]The region has dedicated staff for education.

[2]The Division of Palliative Care at McMaster University, which includes several sites in this region, has a very active research program with dedicated research staff and teams and multiple publications annually. General areas of research conducted by the division include models of palliative care delivery, palliative care education, Advance Care Planning, palliative care in long-term care and public health approach to palliative care.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

Formal strategy for pediatric palliative care	NO
Pediatric hospice residence(s)	NO
Outpatient palliative care program(s) for pediatric populations	YES
Respite pediatric palliative care (hospice or hospital setting)	NO
24/7 access to specialist pediatric palliative care team(s)	YES
Education program(s) for pediatric palliative care	YES

Context:

Most children will receive care either virtually or in-person through tertiary pediatrics and maternal-fetal medicine centres. Within the Ontario Health West region, there are two pediatric hospital catchment areas—McMaster Children's Hospital in Hamilton, and Victoria Hospital and Children's Hospital in London.

OTHER FOCUSED POPULATIONS

POPULATION	FORMAL STRATEGY	PROGRAMS AND/OR INITIATIVES
2SLGBTQI+*	NO	NO
Homeless and marginally housed	NO	YES[1]
Incarcerated people (correctional facilities)	NO	NO
Recent immigrants and refugees	YES	YES[2]

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Plus population.

Context:

[1]Journey Home Hospice in Windsor provides hospice care to people experiencing homelessness or who are marginally housed at end-of-life.

[2]G.P.S Health Navigators in the greater Hamilton area is a navigation clinic working with refugee patients on the Interim Federal Health Program to support those with palliative care needs.

COMMUNITY ENGAGEMENT

VOLUNTEERS

Formal strategy related to incorporating and/supporting volunteers	YES
Volunteer opportunities in palliative care	YES
Volunteer training activities in palliative care available	YES

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/ resources*	YES
Grief and bereavement services	YES
Formal strategy for support of informal caregivers	NO
Programs or initiatives for informal caregivers	YES

*e.g., Death Cafes, visiting programs and support groups.

Context:

Visiting hospice programs receive funding from the region. Volunteers are required to do the Hospice Palliative Care Ontario (HPCO) training program.

Discussion and Conclusion

Discussion

Palliative care in Ontario is well established and continues to expand, though regional and subregional variability and gaps persist across several indicators. There are many examples of excellence across the province, across the domains and indicators. In the policy domain, for example, there are provincial-level and regional-level structures in place to oversee the ongoing development of palliative care, as well as provincial-level strategic plans in some key areas that include access to palliative care in community and hospital settings. Recent government legislation related to improving palliative care in long-term care is beginning to accelerate its integration in this sector.

Generally, across the province, there is a high level of access to specialist palliative care teams in hospitals, especially in medium to large-sized ones. These are usually situated in medium to large urban areas. This provides a strong foundation for the integration of palliative care in acute care settings. However, there appears to be significant variability in terms of the integration of palliative care across various hospital inpatient and outpatient services. Overall, with some exceptions, palliative care is relatively well established in cancer services across the province. This often includes the presence of a palliative care team, palliative care clinics and the palliative care approach practiced by some oncology services. Ongoing maintenance and further spread of integration are required.

With some notable exceptions, the integration of palliative care in the care of persons with advanced organ diseases such as in cardiology and respirology remains an opportunity for improvement, as the level of integration is relatively low. This has been highlighted in previous Ontario-based studies.[2,3] However, there are examples of the integration of palliative care in these services. The initiatives undertaken by the Ontario Renal Network, for example, to train nephrology staff on the palliative care approach, have helped spread the palliative care approach in this area of care. Some individual services, including emergency services and hospital units, have taken it upon themselves to undertake training on the palliative care approach, in addition to collaborating closely with in-house palliative care teams. These serve as examples for other services.

The study team found different understandings of the concept of integration of palliative care amongst study informants, both in hospitals and in community settings. For the purposes of this study and report, optimal "integration" is understood to be a construct that includes the following elements: a) the clinicians and staff of that service or team are equipped with core competencies to provide a palliative care approach; b) the service provides a palliative care approach itself, including identification of patients with palliative care needs earlier in the illness; c) patients are referred in a timely manner to a palliative care service when needed; and, in some cases, d) a palliative care clinician embedded in the service or palliative care clinics within that service. These concepts are, to varying degrees, described in the growing literature base on the constructs of the palliative care approach and integration of palliative care.[4,5,6,7,8,9,10] The elaboration in Ontario of specialist-level as well as primary and generalist level palliative care competencies for different professions helps inform further integration.[11]

Overall, an adequate number of palliative care unit (PCU) beds, relative to population size, is identified for the province (as per the "Catalonia Formula" for inpatient palliative care beds, as first described by Xavier Gomez-Batiste et al.).[14] The number appears to have risen since 2015 when the last formal count was undertaken and submitted as a report to Cancer Care Ontario's

2 Quinn KL, Stukel T, Stall NM, Huang A, Isenberg S, Tanuseputro P, et al. Association between palliative care and healthcare outcomes among adults with terminal non-cancer illness: population based matched cohort study. BMJ. 2020 Jul 6;370:m2257.
3 Tanuseputro P, Budhwani S, Bai YQ, Wodchis WP. Palliative care delivery across health sectors: A population-level observational study. Palliative Medicine. 2016 Jul 10;31(3):247–57.
4 Brazil K. A Call for Integrated and Coordinated Palliative Care. Journal of Palliative Medicine. 2018 Jan;21(S1):S-27-S-29.
5 Hui D, Bruera E. Integrating palliative care into the trajectory of cancer care. Nat Rev Clin Oncol. 2016 Mar;13(3):159-71.
6 Maciver J, Ross HJ. A palliative approach for heart failure end-of-life care. Current Opinion in Cardiology. 2018 Mar;33(2):202–7.
7 Pereira J, Chasen MR. Early palliative care: taking ownership and creating the conditions. Current Oncology. 2016 Dec 22;23(6):367.
8 Sawatzky R, Porterfield P, Lee J, Dixon D, Lounsbury K, Pesut B, et al. Conceptual foundations of a palliative approach: a knowledge synthesis. BMC Palliative Care. 2016 Jan 15;15(1).
9 Stajduhar KI, Tayler C. Helene Hudson Lecture: Taking an "upstream" approach in the care of dying cancer patients: The case for a palliative approach. Canadian Oncology Nursing Journal. 2014 Aug 5;24(3):144–8.
10 Touzel M, Shadd J. Content Validity of a Conceptual Model of a Palliative Approach. Journal of Palliative Medicine. 2018 Nov;21(11):1627–35.
11 Ontario Palliative Care Network (OPCN). The Ontario Palliative Care Competency Framework A Reference Guide for Health Professionals and Volunteers [Internet]. Toronto: OPCN; 2019 Apr p. 1–181. Available from: https://www.virtualhospice.ca/Assets/OPCN%20-%20Competency%20Framework%20-%20April%202019_20190604120845.pdf

Palliative Care Program.[12] In that work, which included a consensus process by a large provincial expert group on what constitutes PCUs, 29 PCUs were confirmed (of 47 facilities contacted), with a total of 304 beds identified. In this Atlas study, 35 PCUs and a total of 601 PCU beds were identified. An additional 29 inpatient palliative care beds were identified but these appear to be single beds in small community hospitals or continuing care homes, usually in smaller communities where a multi-bed, dedicated PCU is not feasible. Another previous study (undertaken in 2009 but published in 2012) had identified 31 PCUs.[13]

It is, however, challenging to identify the exact number of PCU beds in the province because, in some cases, beds appear to be *designated* rather than *dedicated*; where *dedicated* means the bed is available only for palliative care patients, while *designated* means it can be used for other patients and may not necessarily always be available for palliative care patients. In addition, a number of the regions reported PCU beds that are funded and operationalized as hospice beds in hospital inpatient settings, so this may overrepresent the number of true PCU beds. This Atlas study used the definition of a PCU established by consensus by the 2015 study Ontario expert work group, a definition that was informed by Radbruch and Payne, von Gunten, and Elsayem et al.[14,15,16] A PCU was defined as a specialized, geographically defined hospital unit (or wing) dedicated to the management of patients with complex and/or acute palliative care needs across the illness trajectory. It is staffed by an experienced interprofessional palliative care team with specialist-level competencies in palliative care. In the 2015 study, almost half (13/29) of PCUs were standalone units, *dedicated* only for palliative care, while 14% (4/29) were *shared units*, in which a wing or section was dedicated only for palliative care, while another wing or section on the same unit was allocated to other patients (e.g., oncology or general medicine). Approximately 29% (8/29) were PCU beds in *mixed units* where some beds were designated for palliative care and others for other patients. However, the number and location of PCU beds were not fixed; their numbers and location changed depending on availability. In other cases, there was no specific hospital unit assigned for "palliative care." Any bed in the hospital or in pre-assigned units could be designated as "palliative" if occupied by a patient with predominantly palliative care needs. These are referred to as *floating* palliative care beds. The problem with these *mixed units* or *floating* beds is that they may not necessarily be available when patients with palliative care needs require inpatient admission to them, and the staff often have no or minimal palliative care training (or palliative care focus) to care for these patients, especially if they have complex needs. For that reason, *mixed unit* and *floating* beds are not generally considered as PCUs or PCU beds.

Although the number of PCUs and PCU beds appears to have increased since 2009 and 2015 (recognizing that in the 2015 study some facilities may not have), an imbalance may be present with respect to the types of PCU beds available. While some units are identified as being acute units, many others are largely end-of-life units (caring for persons in the last days of life) and some care for more chronic, longer-term palliative care populations. There are also some mixed units. The 2015 work had previously identified that PCUs in Ontario could be categorized into one of four types (or profiles); acute PCUs, end-of-life (EOL) PCUs, complex continuing care (CC) PCUs, or mixed units that included elements of the first three.[17] Of the 29 PCUs, only 14% (4 of the 29) identified themselves as acute PCUs (i.e., units for patients across the illness trajectory, relatively short median lengths of stay, rates of alive discharge rates exceeding 30 to 50% and high complexity of patients). he remainder were end-of-life units (only for persons in the last days of life and not necessarily of the highest complexity with alive discharge rates of less than 10%), continuing care type units (long median lengths of stay with alive discharge rates of less than 30%) and mixed units (with elements of the three). In this Atlas study, there was also evidence of these four profiles but the exact proportion of each was not known as information was missing for some units. Future studies need to more accurately determine numbers of dedicated PCU beds and characterize each PCU with the goal of exploring if and how the different profiles as well as numbers of beds are able to meet the population needs of the region they serve.

Overall, the number of hospice beds in the province is inadequate. There has been an increase over the last few years in the number of hospice beds because of government funding and advocacy by local communities and the provincial palliative care association, and new beds are being planned. As discussed earlier, in some regions, hospice funded beds were reported as PCU beds by health system administrators, so more accurate reporting is needed to understand the proportion and

12 Pereira J, Klinger C, Wentlandt K, Urowitz S, Walton T, Chahal M, et al. Palliative Care Units in Ontario: A Review of Current Inpatient Beds and Services. [Poster]. Proceedings of the 2015 Canadian Hospice Palliative Care Conference: New Challenges – New Horizons: Moving Forward. Ottawa, ON: October 29 - November 1, 2015.

13 Towns K, Dougherty E, Kevork N, Wiljer D, Seccareccia D, Rodin G, et al. Availability of Services in Ontario Hospices and Hospitals Providing Inpatient Palliative Care. Journal of Palliative Medicine. 2012 May;15(5):527–34.

14 Radbruch L, Payne S. White Paper on standards and norms for hospice and palliative care in Europe. European Association for Palliative Care. European Journal of Palliative Care. 2010; 17(1), 22–33.

15 von Gunten CF. Secondary and Tertiary Palliative Care in US Hospitals. JAMA. 2002 Feb 20;287(7):875.

16 Elsayem A, Swint K, Fisch MJ, Palmer JL, Reddy S, Walker P, et al. Palliative Care Inpatient Service in a Comprehensive Cancer Center: Clinical and Financial Outcomes. Journal of Clinical Oncology. 2004 May 15;22(10):2008–14.

17 Pereira J, Klinger C, Wentlandt K, Urowitz S, Walton T, Chahal M, et al. Palliative Care Units in Ontario: A Current State Assessment (A Report of a Provincial PCU Expert Panel). 2016, Nov. [Study Results and Report submitted to Cancer Care Ontario Palliative Care Program].

types of inpatient palliative care beds. However, if we take the total number of PCU and hospice beds combined across the province, the beds are still inadequate for population needs based on the conservative estimate of the Catalonia formula of 10 per 100,000. Futhermore, as some of these beds are designated and not guaranteed for palliative care use, the total numbers are likely an overestimate.

Hospices continue to play an important role in the provision of palliative care in the province. Often, they also serve as hubs to mobilize communities in the form of volunteers and compassionate community initiatives. They are also often the main resource for grief and bereavement services in their communities. Notwithstanding their key roles, the care and services they provide are only partly funded by public funding. While most hospice residences in the province are free-standing homelike facilities, examples of innovation to address the lack of economies of scales and population densities in rural regions were found. In some smaller communities, one or two hospice beds are housed in a local long-term care home or small community hospitals (but funded, staffed and operated as a hospice).

This Atlas study found that generally, across the province, there is a high presence of specialist-level palliative care services (clinicians and/or teams) in the community, especially in medium to large urban centres. Although access was present in some rural regions, and examples of excellence were found in some subregions, where regional consultation teams are organized to provide support in rural areas, a lack of 24/7 access still exists in many rural regions. Significant heterogeneity was found in terms of the models practiced by specialist palliative care teams. Some teams provide a *Consultation* support model (sometimes with *Shared Care*), while others predominantly apply a *Takeover* model where the palliative care clinicians or team provide all of the palliative care, primary level and specialist level alike, in the community and in outpatient clinics of ambulatory patients with palliative care needs. These models and their respective roles, strengths and limitations are described elsewhere.[18,19,20,21] *Consultation* and *Shared Care* models may better support and build primary and generalist palliative care than a *Takeover* model, but it requires ownership of palliative care by primary care professionals and services (as well as other specialty services). The impact of these different models warrants further exploration in future studies and the extent to which they are practiced across Ontario communities should be tracked and reported given their potential impact on the development of primary and generalist palliative care. This is particularly important given the current primary care workforce challenges being experienced in Ontario and across Canada. Strategies to build and support primary level palliative care should be sought, including greater roles for primary care clinic nurses.

There is significant variability across the province – across regions and subregions – in terms of the provision of primary palliative care by primary care clinics and services, but overall this is identified as a gap. In particular, there is a lack of provision for home palliative care visits and after hours on call coverage by primary care professionals across the province. In some communities and subregions, a high proportion of clinics provide a palliative care approach and there is evidence of upskilling on this approach by primary care professionals and clinics with the various continuing professional development programs available in the province, including the Pallium Canada's LEAP courses. In other communities and subregions, the provision of all palliative care, including primary palliative care, is delegated to palliative care teams and a few primary care professionals and clinics provide palliative care to their patients. In a 2019 study, while 83% of Ontario primary care patient enrollment-model clinics provided palliative care to ambulatory patients, only about a third provided on-call coverage for these patients themselves.[22] 56% of practices indicated that they had access to palliative care physicians who could take over the care of their patients with palliative care needs and for many, the local palliative care teams provided home visits to patients at the end-of-life. In another study, four major models of palliative care delivery to patients in their last year of life were identified: 53% of decedents received no physician-based palliative care; 21% received only generalist palliative care; 15% received consultation palliative care (i.e., care from both specialists and generalists); and 11% received only specialist palliative care.[9] There are examples in Ontario of successful initiatives to increase the integration of palliative care into primary care clinics.[23] Closer monitoring of the status of primary

18 Pereira J, Klinger C, Seow H, Marshall D, Herx L. Are We Consulting, Sharing Care, or Taking Over? A Conceptual Framework. Palliative medicine reports [Internet]. 2024 Feb 1 [cited 2024 May 19];5(1):104–15. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10898231/

19 Maybee A, Winemaker S, Howard M, Seow H, Farag A, Park HJ, et al. Palliative care physicians' motivations for models of practicing in the community: A qualitative descriptive study. Palliative Medicine. 2021 Dec 17;36(1):181–8.

20 Howard M, Shireen Fikree, Allice I, Farag A, Siu HYH, Baker A, et al. Family Physicians with Certificates of Added Competence in Palliative Care Contribute to Comprehensive Care in Their Communities: A Qualitative Descriptive Study. Palliative Medicine Reports. 2023 Feb 1;4(1):28–35

21 Brown CR, Hsu AT, Kendall C, Marshall D, Pereira J, Prentice M, et al. How are physicians delivering palliative care? A population-based retrospective cohort study describing the mix of generalist and specialist palliative care models in the last year of life. Palliative Medicine. 2018 Jun 11;32(8):1334–43.

22 Gagnon B, Buchman S, Khan AI, MacKinnon M, Urowitz S, Walton T, et al. Do family health clinics provide primary-level palliative care in Ontario and the eastern regions of Quebec? Canadian Family Physician. 2019 Feb;65(2):118-124.

23 Evans JM, Mackinnon M, Pereira J, Earle CC, Gagnon B, Arthurs E, et al. Building capacity for palliative care delivery in primary care settings: Mixed-methods evaluation of the INTEGRATE Project. Canadian Family Physician [Internet]. 2021 Apr;67(4):270–8. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8324144/pdf/0670270.pdf

palliative care, with renewed attention on how to build and support primary palliative care at a time of primary care workforce challenges, is needed going forward.[24,25]

In the long-term care (LTC) setting, there is also considerable variability across provincial regions and their subregions in terms of integration of palliative care. There is growing attention and what appears to be a growing number of initiatives across the province to improve palliative care in these facilities, largely driven by the experiences of the COVID-19 pandemic (high rates of mortality and morbidity in LTC homes) and government legislation that followed to address the palliative care needs in these facilities. However, widespread integration of palliative care is still missing. There are, however, examples in the province that serve as exemplars on how this can be done, which includes training LTC staff on the palliative care approach (with programs such as Pallium Canada's LEAP LTC course, and the SPA-LTC program), policies and procedures such as routine advance care planning and family conferences upon admission, and closer collaboration with local palliative care services.[26,27,28]

In the domain of education, palliative care training is reported in the curricula of most medical schools (undergraduate training), and some nursing schools. However, it was challenging to get an accurate impression of training in nursing schools, as response rates to requests to provide that information were low. In postgraduate training, compulsory palliative care training is often required in family medicine and oncology residency programs. There are examples of compulsory training in other residency programs, but again, information across all residency programs in the province was challenging to obtain. Palliative care training should be a priority across different specialty programs and across the health professions to equip physicians and other professionals entering practice with core palliative care skills to provide a palliative care approach. There are palliative care residency programs across the province to train specialist-level palliative care physicians. The number of palliative care residency spots seems to vary from year to year, but more spots are required to address growing demands for palliative care currently and into the future. More detailed curriculum mapping work is needed to better map the presence of palliative care training across medical specialty residencies and undergraduate training in nursing and the other health professions.

While there are some examples of exemplary pediatric palliative care programs in the province, including two hospices and some pediatric palliative care inpatient and outpatient services, access across the province to pediatric palliative care is still not widespread, and represents an area for improvement. The centres that exist provide support to children and their families within their communities, and sometimes also (usually virtually) to pediatric and primary care clinicians in other surrounding communities, but widespread coverage across the province is still lacking, and there is also a need for more pediatric services in many larger communities. There is growing attention and expertise in this patient population, including pediatric palliative care residency training. This can serve as a foundation for the province for further development in the province.

This Atlas sheds some light on the provision of palliative care to some populations that need special attention, as their palliative care needs often receive suboptimal attention. There are no specific province-wide strategic plans and initiatives to address the palliative care needs of populations such as 2SLGBTQI+ persons and their families and loved ones, homeless and vulnerably housed persons, incarcerated persons, and refugees and immigrants. There are, however, isolated examples of excellence in the provision of palliative care to homeless and vulnerably housed populations and refugee and immigrant communities. These should inspire spread across the province and to other special focus populations.

There is considerable community involvement across the province in all regions and many subregions. This is evidenced by many volunteer programs and Compassionate Communities initiatives. Hospice programs (residences and community programs) often serve as hubs for these activities.

24 Pereira J, Herx L, Simoni J, Klinger CA. Mapping primary and generalist palliative care: Taking a closer look at the base of the pyramid. Palliative Medicine. 2024 Sep;38(8):770-775

25 Malik S, Goldman R, Kevork N, Wentlandt K, Husain A, Merrow N, et al. Engagement of Primary Care Physicians in Home Palliative Care. Journal of Palliative Care. 2017 Jan;32(1):3–10.

26 Gill A, Meadows L, Ashbourne J, Kaasalainen S, Shamon S, Pereira J. "Confidence and fulfillment": a qualitative descriptive study exploring the impact of palliative care training for long-term care physicians and nurses. Palliative Care and Social Practice. 2024 Jan 1;18.

27 Shamon S, Gill A, Meadows LM, Kruizinga J, Kaasalainen S, Pereira J. Providing palliative and end-of-life care in long-term care during the COVID-19 pandemic: a qualitative study of clinicians' lived experiences. CMAJ open. 2023 Jul 1;11(4):E745–53.

28 Kaasalainen S, Sussman T, Thompson G, McCleary L, Hunter PV, Venturato L, et al. A pilot evaluation of the Strengthening a Palliative Approach in Long-Term Care (SPA-LTC) program. BMC Palliative Care. 2020 Jul 13;19(1).

Several limitations are identified in this study. These have already been described previously. It is important to note what an Atlas is and what it is not. Atlases provide overviews, often global impressions, of the status of palliative care in a jurisdiction across several domains and indicators. There is a fine balance in these palliative care atlases between excessive generalization and too much granularity. They are not designed (and do not have the resources) for detailed explorations, such as surveys of all services in a jurisdiction – such as primary care clinics, long-term care homes, and hospital units and services. They rely on input from key informants who may not necessarily have detailed knowledge across all care settings and subregions of a jurisdiction. The use of multiple sources of information and iterative processes is used to mitigate gaps and biases, and get an overall sense of the presence of services and integration across a jurisdiction. This Atlas for Ontario faced an additional challenge. Namely, it occurred during and soon after a major reorganization of the health care system in the province, which included a redesignation of regions (into much larger regions), the implementation of Ontario Health teams across regions, and the redevelopment of palliative care leadership structures in the new regions. Importantly, the Atlas is not designed to assess the quality of palliative care provided, whether by primary care or specialty services, or by specialist palliative care teams.

As highlighted in the Introduction section, the provision of palliative care to Indigenous populations – urban, rural or remote – was not studied. The goal is to undertake a distinct process, with humility and in the spirit of reconciliation, led and developed by Indigenous Peoples, to describe palliative care across Turtle Island provided by, with and for Indigenous peoples. Such mapping will adhere to the First Nations Principles of Ownership, Control, Access, and Possession (OCAP®).[29]

29 Welcome to The Fundamentals of OCAP® - The First Nations Information Governance Centre [Internet]. The First Nations Information Governance Centre. 2023 [cited 2024 Nov 30]. Available from: https://fnigc.ca/ocap-training/take-the-course/

Conclusion

This Canadian Atlas of Palliative Care: Ontario Edition explores the presence and access to palliative care services, resources and infrastructure across Ontario. It provides a cross-sectional snapshot across several domains and many indicators that serve to highlight many successes and examples of excellence across the province. Overall, there is a high and ever-growing presence of palliative care across many of the indicators. However, there is still considerable variability across many indicators and there are many opportunities for improvement across the domains.

Appendices

Appendix A: Domains and Indicators

DOMAINS			INDICATORS	FEDERAL	PROVINCIAL/ TERRITORIAL	REGIONAL
Demographics (D)	D1	D1.1	Total area (km2)	F	PT	R
		D1.2	Urban, rural, and remote geographic areas Population and age distribution Population density	F	PT	R
		D1.2	Model of organization of health services (e.g., health authorities and regions)	F	PT	
	D2		Number of deaths per year and causes of death	F	PT	
Policy (P)	P1		Designated office, secretariat, and/or program responsible for palliative care	F	PT	R
	P2		Existence of a current palliative care plan, policy, framework, and/or strategy	F	PT	R
	P3		Existence of a specific palliative care law to ensure palliative care (PC) access	F	PT	
	P4		Policies/law regarding ACP	F	PT	
	P5		Existence of standards and norms for palliative care	F	PT	R
	P6		Compassionate care benefits	F	PT	
	P7		Designated government funding for:			
		P7.1	Palliative care home care services	F	PT	R
		P7.2	Hospice residences	F	PT	
		P7.3	Community hospices	F	PT	
		P7.4	Palliative care medications and supplies/equipment:			
		P7.4.1	Medications: In-hospital care	F	PT	R
		P7.4.2	Medications: Out-of-hospital	F	PT	R
		P7.4.3	Supplies/Equipment: In-hospital	F	PT	R
		P7.4.4	Supplies/Equipment Out-of-hospital	F	PT	R
		P7.4.5	Education CPD (continuing professional development)	F	PT	R
	P8		Formal strategies in place to integrate palliative care into:			
		P8.1	Home and community care	F	PT	R
		P8.2	Inpatient and outpatient hospital services (including cancer and non-cancer illnesses)	F	PT	R
		P8.3	Long-term care facilities	F	PT	R
		P8.4	Rural and remote	F	PT	R
		P8.5	Paramedic and emergency services, etc.	F	PT	R
	P9		Designated palliative care leaders	F	PT	R

DOMAINS			INDICATORS	FEDERAL	PROVINCIAL/ TERRITORIAL	REGIONAL
Services (S)	S1		Acute care settings			
	S1.1		Palliative Care Units (PCUs)			
		S1.1.1	Number of PCUs and beds	F	PT	R
		S1.1.2	Location (geography and number of beds)			R
		S1.1.3	Describe the PCUs (e.g., type)			R
		S1.1.4	Adequacy of number of units and beds	F	PT	R
	S1.2		Specialist-level palliative care teams or access to such teams in hospitals (inpatient and outpatient)			
		S1.2.1	Extent of hospitals in region with access to specialist-level palliative care team	F	PT	R
		S1.2.2	Funding models for professions		PT	R
	S1.3		Integration of palliative care approach in hospital inpatient services (cardiology, ED, ICU, medicine, nephrology, neurology, oncology, respirology, etc.) services:			
		S1.3.1	Extent palliative care approach is integrated into acute care hospitals' services/units in region			R
		S1.3.2	Examples of excellence of integration in inpatient services			R
	S1.4		Integration of palliative care approach into outpatient clinics (cancer, heart, lung, renal, neuro, geriatrics, other)			
		S1.4.1	Extent palliative care approach is integrated in clinics across region			R
	S2		Community settings			
	S2.1		Specialist-level palliative care teams in the community			
		S2.1.1	Standards and/or indicators for access to community palliative care teams	F	PT	R
		S2.1.2	Access to community specialist palliative care teams	F	PT	R
		S2.1.3	Communities with 24/7 access		PT	R
		S2.1.4	Models of practice of specialist palliative care teams			R
	S2.2		Palliative home care services			
		S2.2.1	Access to palliative home care nursing	F	PT	R
		S2.2.2	Coverage 24/7 home care		PT	R
		S2.2.3	Eligibility criteria/Restrictions on coverage			R
		S2.2.4	Training of staff in palliative care approach			R
	S2.3		Primary-level palliative care (family physicians and primary care clinics providing primary palliative care)			

DOMAINS			INDICATORS	FEDERAL	PROVINCIAL/ TERRITORIAL	REGIONAL
		S2.3.1	Standards and/or indicators for providing primary palliative care	F	PT	R
		S2.3.2	Extent primary care clinics provide palliative care to ambulatory patients	F	PT	R
		S2.3.3	Extent primary care clinics provide palliative care home visits	F	PT	R
		S2.3.4	Extent primary care clinics provide 24/7 on-call palliative care coverage	F	PT	R
		S2.3.5	Training for primary care professionals on the palliative care approach	F	PT	R
	S2.4		Hospices and hospice beds			
		S2.4.1	Standards and/or indicators	F	PT	R
		S2.4.2	Number of hospices, location, and beds	F	PT	R
		S2.4.3	Model: Standalone, local facility (e.g., LTC, local hospital)	F	PT	R
		S2.4.4	Adequacy of number of hospice beds	F	PT	R
	S2.5		Community hospice services (e.g., day programs)	F		
		S2.5.1	Presence of community hospice programs	F	PT	R
		S2.5.2	Location and number of community hospice programs	F	PT	
		S2.5.3	Grief and bereavement services			R
	S2.6		Palliative care in long-term care (LTC) facilities			
		S2.6.1	Standards and/or indicators for palliative care in LTC	F	PT	R
		S2.6.2	Formal standards of training of staff in LTC on palliative care approach	F	PT	R
		S2.6.3	Formal strategy for Integration of palliative care in LTC	F	PT	R
		S2.6.4	Training programs for LTC staff on palliative care approach	F	PT	R
		S2.6.5	Access to specialist palliative care service in LTC facilities	F	PT	R
		S2.6.6	Extent LTC facilities have integrated palliative care approach	F	PT	R
		S2.6.7	Funding to provide palliative care education for LTC staff	F	PT	R
	S2.7		Provision of palliative care by paramedic emergency medical services			
		S2.7.1	Formal strategy	F	PT	R
		S2.7.2	Training of paramedics in palliative care approach	F	PT	R
	S3		Rural/remote			
			Provision of palliative care in rural and remote areas			
		S3.1	Standards or indicators	F	PT	R
		S3.2	Strategic plan	F	PT	R

DOMAINS			INDICATORS	FEDERAL	PROVINCIAL/ TERRITORIAL	REGIONAL
		S3.3	Access to specialist palliative care teams (%)	F	PT	R
		S3.4	Funding for education on the palliative care approach	F	PT	R
		S3.5	Training of family physicians and primary care professionals on palliative care approach	F	PT	R
	S4		Resources			
		S4.1	Palliative care competencies elaborated for different professions and different levels	F	PT	
		S4.2	Advance Care Planning resources	F	PT	R
System Performance (SP)	SP1		Elements and indicators (process, structure, outcome) for palliative care Identified for jurisdictions (Atlas will summarize elements and/ or indicators published by various organizations across Canada and summarize these in table format/ provide links → leverage partner organizations	F	PT	R
Education (E)	E1		Physicians			
		E1.1	Recognition of palliative care specialization or sub-specialization/ certification	F	PT	
		E1.2	Number of palliative care residency positions (province/territory-wide and by medical school)	F	PT	R
		E1.3	Mandatory vs. optional or absent palliative care education in medical school (undergraduate) training	F	PT	R
		E1.4	Physician residency training on palliative care approach (post-graduate): Anesthesia, cardiology, critical care, emergency medicine, family medicine, geriatrics, internal medicine, neurology, oncology, psychiatry, respirology, and surgery	F	PT	R
	E2		Nurses			
		E2.1	Recognition of nursing specialization/ certification in palliative care	F	PT	
		E2.2	Mandatory vs. optional or absent palliative care education in undergraduate nursing curriculum	F	PT	R
		E2.3	Mandatory vs. optional or absent palliative care education in graduate nursing curriculum	F	PT	R
Professional Activities (A)	A1		Existence of a palliative care association or organization	F	PT	
	A2		Existence of palliative care directory of services	F	PT	R

DOMAINS			INDICATORS	FEDERAL	PROVINCIAL/ TERRITORIAL	REGIONAL
	A3		Dedicated resources to organize palliative care CPD (continuing professional development)	F	PT	R
	A4	A4.1	Palliative care conference/symposia	F	PT	R
		A4.2	Evidence of palliative care research activities	F	PT	R
		A4.3	Evidence of palliative care quality improvement initiatives	F	PT	R
Focused populations (FP)	FP1		Pediatric palliative care			
		FP1.1	Formal strategy	F	PT	R
		FP1.2	Pediatric hospice residence(s)	F	PT	R
		FP1.3	Outpatient palliative care program(s) for pediatric populations	F	PT	R
		FP1.4	Respite pediatric palliative care (hospice or hospital setting)	F	PT	R
		FP1.5	Pediatric palliative care consultation team(s)	F	PT	R
		FP1.6	24/7 access to specialist pediatric palliative care consult team	F	PT	R
		FP1.7	Education program(s) for pediatric palliative care	F	PT	R
	FP2		Palliative care needs of 2SLGBTQI+ persons			
		FP2.1	Formal strategy	F	PT	R
		FP2.2	Programs and/or initiatives	F	PT	R
	FP3		Palliative care needs of homeless persons/the marginally housed:			
		FP3.1	Formal strategy	F	PT	R
		FP3.2	Programs and/or initiatives	F	PT	R
	FP4		Palliative care needs of persons in correctional facilities:			
		FP4.1	Formal strategy	F	PT	R
		FP4.2	Programs and/or initiatives	F	PT	R
	FP5		Palliative care needs of recent immigrants and refugees			
		FP5.1	Formal strategy	F	PT	R
		FP5.2	Programs and/or initiatives	F	PT	R
	FP6		Palliative care needs of informal caregivers			
		FP6.1	Formal strategy to support	F	PT	R
		FP6.2	Programs and/or initiatives	F	PT	R
		FP6.3	Education programs for informal caregivers	F	PT	R

DOMAINS			INDICATORS	FEDERAL	PROVINCIAL/ TERRITORIAL	REGIONAL
Community engagement (C)	C1		Volunteers			
		C1.1	Formal strategy	F	PT	R
		C1.2	Programs and/or initiatives.	F	PT	R
		C1.3	Training programs for volunteers	F	PT	R
	C2		Community engagement			
		C2.1	Compassionate Communities initiative underway	F	PT	R
		C2.2	Other community engagement activities/resources	F	PT	R
Other activities (O)	O1		Other resources and/or programs	F	PT	R

Appendix B: Method Details

Phase 1: Preparation

Identification of the domains and indicators: There are existing domains and indicators that are reported internationally in palliative care atlases. However, not all indicators are appropriate or relevant to the Canadian context. Therefore, the founding research group made modified the list of indicators for this atlas. For example, given the well-documented availability of opioids in Canada, the indicator on availability of opioids was modified to focus on public funding of palliative care medicines. Additional indicators have included exploration of access to palliative care for populations that are often disadvantaged, such as homeless and immigrant populations, in terms of accessing palliative care.

Establish collaboration with provincial and regional partners: In Canada, many of the provinces have provincial-level organizations (who receive funding or are entirely funded by the provincial governments). They may provide guidelines, oversight, education, and more specific for palliative care. The authors created partnerships and connections with these groups. These partners advocated for the Atlas and its importance, and provided connections with regional level health care leaders knowledgeable in palliative care.

Phase 2: Data Collection

Step 1: Search for publicly available data: Search for organizations or information in each domain. A guiding document was used for each province and sub-region to ensure consistency during searches.

Step 2: Surveys: There were three different types of surveys: provincial, regional, and education. A link to an electronic survey was sent by email to potential participants. For the provincial and regional surveys, links were sent to our established contacts (from Phase 1). For education surveys, they were sent to administrators in nursing and medical education at all universities and colleges known to have nursing and medicine education programs (the list was established through Phase 2, Step 1). The surveys were organized by the domains and indicators. Participants had the option to skip any questions they did not want to or were unable to answer and to upload relevant documentation, if desired. Follow-up emails were sent to non-responders. Purposeful sampling was used to send surveys to new participants when initial contacts did not respond.

Step 3: Interviews: Interviews were conducted with regional and provincial health care leaders and leaders of provincial organizations. The interviews were semi-structured, based on the domains and indicators and done using a video conference service. With permission, the interviews were audio recorded. The purpose of the interviews was to clarify information in the surveys and fill in any missing information. Interviews occurred with one person or more people depending on the participants' preferences. Snowball and purposeful sampling were used to try and connect with additional individuals if there was still missing data. Interview participants included health care leaders, administrators and health care professionals.

Step 4: Focus Groups: Focus groups were done only at a regional level. The focus groups were semi-structured, based on the domains and indicators and done using a video conference service. With permission, the focus groups were audio recorded. The purpose of the focus group was to verify the data collected to date and fill in any remaining gaps in the data. The moderator of the focus group presented the data on the region to participants and invited participants to provide feedback on the information. The focus groups included health care leaders, health care professionals, and others knowledgeable in palliative care in the specific region.

Step 5: Final Verification: Also known as member checking. A data summary was sent to interview or main regional contacts to provide comments, clarifications or provide any other information.

Appendix C: Data Dictionary, Glossary and Definitions

The following definitions, explanations and examples are the references being used in the Canadian Atlas of Palliative Care. The information provided here may differ from definitions used by others.

Acute care hospital: Facility that provides active, short-term treatment for severe injuries or episodes of illness, urgent medical conditions, or major surgeries. For the purposes of this Atlas, hospital size is categorized as follows:

- **Small hospital:** < 100 beds; often community hospitals offering secondary-level care.
- **Medium size hospital:** 100 to 200 beds; typically community or teaching hospitals providing secondary and some tertiary care, and may offer education in the health professions.
- **Large size hospital:** >200 beds; usually tertiary or quaternary care centres and often teaching hospitals for health profession learners.

Catalonia Formula for inpatient palliative care beds: A formula developed in Catalonia, Spain circa 2005 that helps plan and assess the number of beds for palliative care inpatient care needed in a region. This formula has been used successfully applied internationally, and found to be valid, in Canadian jurisdictions such as Alberta and British Columbia, when these regions were planning their palliative care services 10 to 15 years ago. It has also been applied by the Hospice Palliative Care Ontario association.

- For every 100 000 inhabitants, a region needs 10 palliative care inpatient beds. Of these, 2 to 3 should be acute palliative care, such as in a palliative care unit, and 7 to 8 should be hospice and/continuing care type beds. The original formula, in Spanish, spoke of the latter as "continuing care," but in essence, includes the type of care provided in hospices in jurisdictions such as Canada and the United Kingdom. For this Atlas we are using 3 palliative care beds and 7 hospice beds.[1]

Compassionate Communities: These are communities, and corresponding initiatives, that are compassionate in their support of people through the difficult times associated with serious illness, dying and bereavement. Compassionate community initiatives are varied and in addition to supporting care, they often also raise awareness of various aspects of palliative care and end of life care and bereavement.

Consultation, Shared Care, and Takeover Models[2]: Specialist palliative care teams, whether in hospitals, the community or long-term care facilities, use one of three models (or combinations) relative to the primary care professionals or other specialty professionals that refer to them:

- **Consultation model:** The palliative care clinician provides consultation support, usually in the form of recommendations or sometimes with direct orders, and follows the patient as needed until the situation has resolved, at which time the palliative care team withdraws. Throughout, the patient's attending clinician remains the most responsible physician or practitioner (MRP). The palliative care service leaves once the situation has resolved (but is available for future consultation requests).
- **Shared Care model:** The palliative care specialist is responsible for providing the palliative care aspects of care, while the patient's attending clinician (family physician, nurse practitioner or specialist in different fields) is responsible for all other aspects of care. In palliative care, given its holistic nature and approach, it is often difficult to separate the two and can cause confusion as to who is the most responsible clinician, increasing the risk of patients "falling through the cracks."
- **Takeover model:** The palliative care clinician assumes responsibility for all aspects of care and becomes the most responsible clinician. This is appropriate in the case of a patient with complex needs is admitted to a palliative care unit under the care of a palliative care clinician. It may also be appropriate in other settings if a patient's needs are complex and outside the expertise of their usual attending clinician.

Hospice: In the Canadian context, hospice care is a component of palliative care. It often, but not exclusively, provides palliative care support at the end of life (in the last days and weeks of life) in a community setting. Hospices can provide inpatient care, and/or day care and outpatient programs, and/or support in a patient's home. Hospice rvesidences aim to provide a home-like

1 Gómez-Batiste X, Porta J, Tuca A, Stjernswärd J. Organización de Servicios y Programas de Cuidados Paliativos. 1st ed. Madrid, Spain: Arán Ediciones, S.L.; 2005.

2 Pereira J, Klinger C, Seow H, Marshall D, Herx L. Are We Consulting, Sharing Care, or Taking Over? A Conceptual Framework. Palliative Medicine Reports [Internet]. 2024 Feb 1;5(1):104–15. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10898231/

environment to support patients and their loved ones. Some hospice organizations provide both residential care and outpatient programs, while others provide only outpatient or home-based support. Hospices are often a nucleus for community-based compassionate community programs and volunteer training.

Hospice beds: Hospice beds are found in hospice residences. They usually are for short-stay care for patients who cannot be cared for at home (by preference or by lack of resources at home) but who do not need acute-high intensity care and resources that are mainly found in acute care hospital settings. While these beds are usually found in free-standing hospices (small buildings that mimic a home), they can also be hosted in long-term care facilities or continuing care facilities, or sometimes even in a wing of a small community hospital. The care they provide, notwithstanding the site, should be aligned with best practices of hospice inpatient care, including an interprofessional team, hospice level staffing, and a home-like environment as best as possible.

Hospice societies or organizations: Not-for-profit community organizations that deliver hospice palliative care in the community or in a hospice residence, including bereavement services and programs. These organizations sometimes operate from a hospice residence.

Integration of palliative care in primary care: Refers to the extent to which primary care professionals such as family physicians, community nurses and primary care clinics provide a palliative care approach. It requires core palliative care skills. Primary palliative care includes providing a palliative care approach to ambulatory patients (who attend the primary care clinics) and availability to provide palliative care-related home visits and after-hours support, as well as timely referrals to specialist palliative care teams when patient needs warrant it. For the purposes of this Atlas, ***Full or High*** levels of integration means that the majority of primary care professionals and primary care clinics (70% or more) provide primary palliative care and are equipped with core palliative core competencies to provide a palliative care approach. ***Partial High*** levels of integration mean that a large number of family physicians and primary care clinics (50% to 70%) provide primary palliative care. ***Partial Low*** levels of integration means that 10% to 50% provide primary palliative care, while ***Minimal*** integration means that <10% of primary care professionals and primary care clinics in a region do this. The level of integration or provision of primary palliative care is closely linked to the model of practice of the specialist palliative care team in the region (if there is one). In the case of high levels of integration, the palliative care service tends to practice a consultation model (with occasional sharing care and taking over as MRP in only select cases), whereas in the case of low levels of integration, the palliative care team tends to take over the provision of all palliative care, including primary-level and specialist-level.

Integration of palliative care in hospitals: Refers to the extent to which physicians and other health care professionals in hospital-related inpatient and outpatient services, across the different specialty areas (e.g., oncology, internal medicine, cardiology, respirology and pediatrics), provide a palliative care approach to their own patients and refer to specialist palliative care teams when needed (e.g., when complex or to confirm care plans). This requires core palliative care competencies and includes identifying patients with palliative care needs early. Different models exist. Higher levels of integration typically mean palliative care clinicians are embedded in part of regular rounds in these services. Lower levels of integration typically involve referring to the specialist palliative care teams on an as-needed basis. Simply having an outpatient palliative care clinic does not represent an integration of the palliative care approach by these specialty clinics, especially if the specialist services do not provide a palliative care approach themselves.

Palliative care: Defined by the World Health Organization as "[A]n approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial, and spiritual."[3] Palliative care should be activated early in the illness and not only in the terminal phase of the illness, the last days or weeks of life. It is applicable for persons of all ages experiencing a serious progressive illness and those dying, whether from advanced cancer or non-cancer illnesses. It requires specialist-level as well as primary-level or generalist-level services as well as mobilizing of the community and other sectors (in addition to health care) such as social and education services.

Palliative care approach: Refers to core competencies (knowledge, attitudes and skills) that allow a health care professional to provide basic palliative care of a high quality, as opposed to specialist palliative care, which requires advanced competencies and experience in providing palliative care. The palliative care approach includes identifying patients with palliative care needs early on, undertaking advance care planning and other important conversations, such as goals of care discussions, identifying the needs of patients across different domains and initiating care plans to address these, connecting patients and families to resources, and engaging palliative care specialists when needed.

3 World Health Organisation. WHO | WHO Definition of Palliative Care. Whoint [Internet]. 2012 Jan 28; Available from: https://www.who.int/cancer/palliative/definition/en/

Primary palliative care: Palliative care (specifically a palliative care approach) provided by primary care professionals and emergency services when equipped with core competencies to provide a palliative care approach. The term in Canada has often been used to also refer to a palliative care approach provided by health care professionals in other specialty areas, such as oncology, cardiology, respirology, nephrology, geriatrics, neurology, pediatrics, critical care and emergency medicine, amongst others. However, there is an international movement to reserve the term "primary palliative care" to refer to palliative care provided only by primary care professionals. The term "generalist palliative care" is increasingly touted to be used to refer to the palliative care approach provided by other specialists and specialty areas. Competencies for primary/generalist level palliative care across disciplines are established in the Canadian Interdisciplinary Palliative Care Framework.[4]

Generalist palliative care: See "*Primary palliative care*" and the "*Palliative care approach*."

Specialist palliative care: Palliative care provided by health care professionals with advanced training, certification and experience in palliative care and who are able to provide advanced levels of palliative care for patients with the most complex needs. Specialists in palliative care have an important role in advancing the field through education, quality improvement, research and health services leadership. In Canada, specialist level competencies have been established for professionals in a variety of disciplines in the Canadian Interdisciplinary Palliative Care Competency Framework.[4] Specialist nursing certification in palliative care is available through the Canadian Nurses Association (CNA), and supported by the Canadian Palliative Care Nursing Association, as the CNA Hospice Palliative Care Nursing Certification with the designation "CHPC(N)." Specialist physician training and credentialing are available through two routes. The College of Family Physicians of Canada (CFPC) has a Certificate of Added Competence in Palliative Care and the Royal College of Physicians and Surgeons of Canada provides certification through the Subspecialty in Palliative Medicine, with designations "CAC-PC" and "FRCPC PM," respectively.

Palliative Care Unit (PCU): For the purposes of this Atlas, and in alignment with definitions provided in the literature and by the European Association for Palliative Care, "dedicated" refers to a unit with an interprofessional team that focuses entirely or predominantly on palliative care and is staffed by physicians and other professionals with advanced skills, experience and/or training in palliative care. This does not include "floating" or "designated" beds across the hospital that are occasionally or temporarily designated as "palliative," in other words, to care for someone with palliative care needs. In the case of "floating beds," a hospital may temporarily designate a bed in one or other unit as being specifically to care for a patient with palliative care needs. There are no specific beds in the hospital for this purpose, but they are designated as palliative care when the need arises and where there is space or a bed available. In the case of "designated beds," one or more beds can be allotted to patients with palliative care needs in a specific unit (e.g., internal medicine unit). The challenge with floating and designated beds is that the staff working on the unit or during the shift that these beds are identified temporarily for palliative care may not have the required skills and experience to care for patients with complex palliative care needs and their focus may be understandably on what they are most used to or experienced in (such as an acute internal medicine patient or surgical patient), and admissions for the purposes of providing palliative care need to be negotiated with the operations team responsible for those beds.

While PCUs are usually hosted in acute care hospitals, they can sometimes in Canada also be hosted in continuing care facilities.

Four distinct profiles of PCUs are recognized, based on patient complexity and acuity, length of stay, alive discharge rates, and access to sophisticated diagnostics (e.g., CT scans, MRIs), treatments and interventions (e.g., palliative care radiotherapy, chemotherapy, high flow oxygen, interventional radiology); and consultation support from various medical specialties.

Acute PCU: Characterized by high patient complexity and acuity, with a high alive discharge rate (>30%) and a short length of stay (mean about 7 to 10 days or less).

End-of-life PCU: Serves patients with mixed complexity, including low to medium complexity. These units have low alive discharge rates (<10-20%) and short lengths of stay (mean about 7 to 10 days or less).

Continuing care PCU: Cares for patients with mixed complexity, including low to medium complexity. These units have longer lengths of stay, with a median of 10 to 20 days, ranging from days to weeks and even months.

Mixed PCU: Includes a mixed profile of patients who meet the criteria for acute, end-of-life, and/or continuing care PCUs.

Rural area: Amn area with low population density (<400 persons per km2), typically consisting of farms, open land and/forests. Often contains small population centres.

Remote area: An area located far from population centres, characterized by small communities or holdings and composed mainly or entirely of natural landscapes, wilderness, fauna and flora. Residents typically receive most of their health care from a family physician or nurse practitioner.

4 Canadian Partnership Against Cancer & Health Canada. The Canadian Interdisciplinary Palliative Care Competency Framework. Toronto, ON: 2021. Available from: https://www.partnershipagainstcancer.ca/topics/palliative-care-competency-framework/