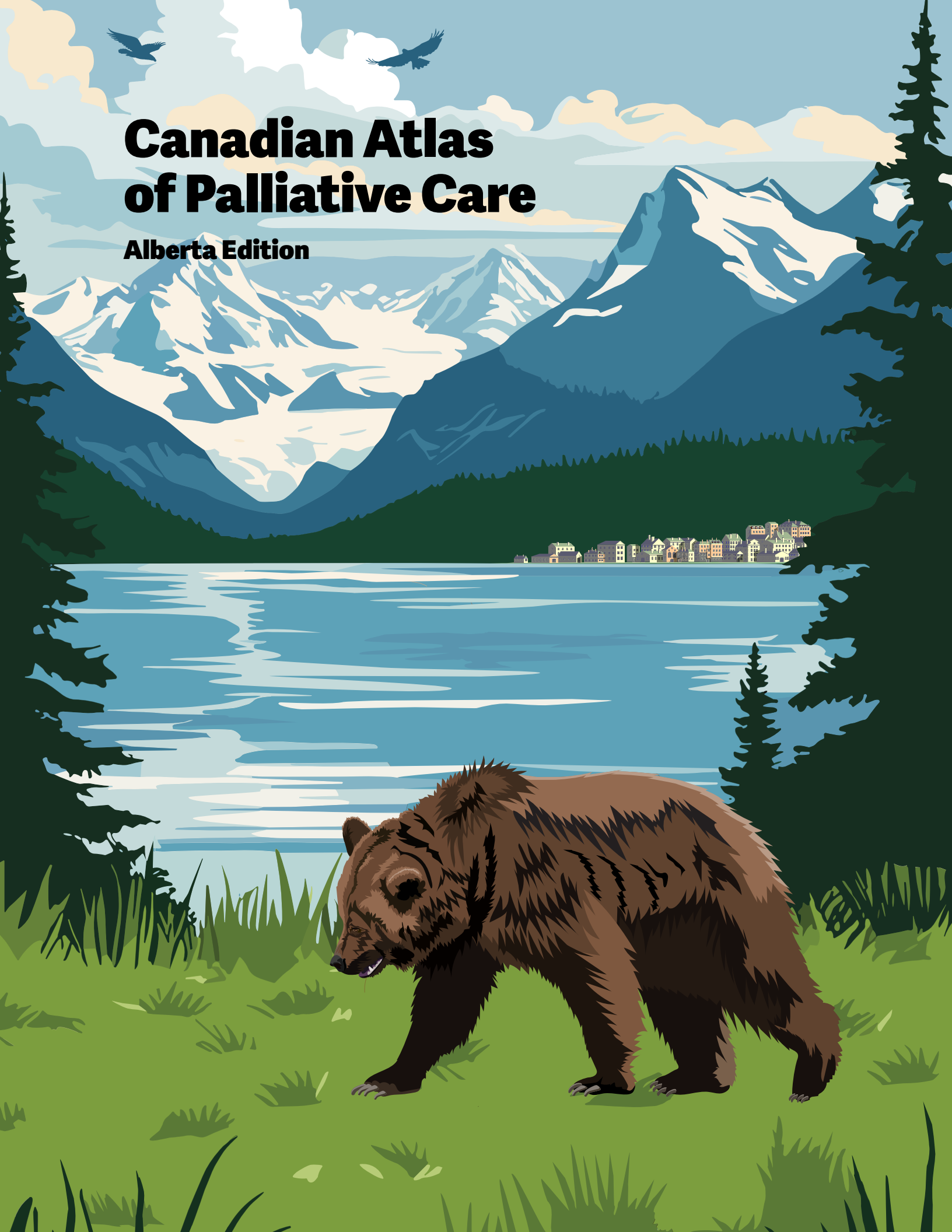
Canadian Atlas of Palliative Care

Alberta Edition



Canadian Atlas of Palliative Care: Alberta Edition

Jessica Simon

Leonie Herx

Avantika Vashisht

Altay Baykan

Rebecca Clark

Jeffrey Moat

José Pereira

March 2025

Canadian Atlas of Palliative Care: Alberta Edition

Authors: Jessica Simon, Leonie Herx, Avantika Vashisht, Altay Baykan, Rebecca Clark, Jeffrey Moat, and José Pereira

Cartography: Shuaib Hafid

Production: Casey Irvin, Advina Kamaric

Illustrations: More in Typo Ltd & Design, Georgina Dunn

ISBN: ISBN 978-1-0690375-2-7

This report should be cited as follows: Simon J., Herx L., Vashisht A., Baykan A., Clark R., Moat J., and Pereira J. The Canadian Atlas of Palliative Care: Alberta Edition. 2025. Pallium Canada, Canada.

Authors and Core Research Team

AUTHORS

TEAM MEMBERS	AFFILIATIONS
Dr. Jessica Simon	Project Lead, Alberta Edition Division of Palliative Medicine, Department of Oncology, University of Calgary, Canada
Dr. Leonie Herx	Project Co-lead and Co-Principal Investigator, Canadian Atlas of Palliative Care Division of Palliative Medicine, Department of Pediatrics, University of Calgary, Canada Pallium Canada, Canada
Avantika Vashisht	Research Coordinator, Alberta Edition Division of Palliative Medicine, Department of Oncology, University of Calgary, Canada
Altay Baykan	Research Coordinator, Alberta Edition Division of Palliative Medicine, Department of Oncology, University of Calgary, Canada
Rebecca Clark	Project Coordinator, Canadian Atlas of Palliative Care Division of Palliative Care, Department of Family Medicine, McMaster University, Canada
Jeffrey Moat	Project Co-lead, Canadian Atlas of Palliative Care Pallium Canada, Canada
Dr. José Pereira	Project Co-lead and Co-Principal Investigator, Canadian Atlas of Palliative Care Department of Family Medicine, McMaster University, Canada Institute for Culture and Society, University of Navarra, Spain Pallium Canada, Canada

RESEARCH SUPPORT TEAM

TEAM MEMBERS	AFFILIATIONS	CONTRIBUTIONS
Shuaib Hafid	McMaster University	Cartography
Casey Irvin	McMaster University	Report Production
Advina Kamaric	McMaster University	Report Production
Dr. Isabelle Couloigner	University of Calgary	Cartography – 2024 report to Alberta Health
Dr. Stefania Bertazzon	University of Calgary	Cartography – 2024 report to Alberta Health

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.

TEAM MEMBERS	AFFILIATIONS
Dr. José Pereira	Project Co-lead and Co-Principal Investigator of Palliative Care Department of Family Medicine, McMaster University, Canada Institute for Culture and Society, University of Navarra, Spain Pallium Canada, Canada
Jeffrey Moat, CM	Project Co-lead Pallium Canada, Canada
Christopher Klinger, PhD	Senior Researcher Division of Palliative Care, McMaster University and Pallium Canada, Canada University of Toronto, Canada
Brenda Gamble, PhD	School of Nursing, Ontario Tech University, Canada
Dr. David Henderson	Nova Scotia Health and Dalhousie University, Canada Canadian Society of Palliative Care Physicians, Canada
Michelle Howard, PhD	Department of Family Medicine, McMaster University, Canada
Dr. Dee Mangin	Department of Family Medicine, McMaster University, Canada
Dr. Denise Marshall	Division of Palliative Care, McMaster University, Canada
Dr. Edward Osborne	Lakeridge Health, Canada

PARTNERS

This Alberta edition of the Atlas was developed by the Division of Palliative Medicine, University of Calgary in collaboration with Pallium Canada and the Dr. Joshua Shadd Pallium Canada Research Hub. Pallium Canada commissioned, supported, and collaboratively led the development of the Canadian Atlas of Palliative Care, including this Alberta edition. Key provincial stakeholders included Alberta Health Services, Covenant Health Palliative Institute and the Alberta Hospice and Palliative Care Association.

Pallium Canada

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.

University of Calgary

The Division of Palliative Medicine is in the Department of Oncology, Cumming School of Medicine at the University of Calgary. Its mission is to support comprehensive, integrated, community-focused palliative care via research and educational excellence.

Dr. Joshua Shadd Pallium Canada Research Hub

The Dr. Joshua Shadd Pallium Canada 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.

FUNDING

The Canadian Atlas of Palliative Care: Alberta Edition was funded by a grant from the Government of Alberta.

Alberta

LAND ACKNOWLEDGEMENT

We respectfully acknowledge that Alberta, the province studied in this Atlas, is located across the ancestral and current lands of the First Nations of Treaty 6, Treaty 7 and Treaty 8. Namely the Blackfoot Confederacy – Kainai, Piikani, and Siksika, the Cree, Dene, Saulteaux, Nakota Sioux, Stoney Nakoda, and the Tsuut'ina Nation, and the Métis Peoples of Alberta. We acknowledge the many First Nations, Métis and Inuit have lived in and cared for these lands for generations. We also recognize the Indigenous Peoples who dwell in urban centres across this land. We are grateful for the traditional Knowledge Keepers and Elders who are with us today and those who have gone before us.

RESEARCH ETHICS BOARD REVIEW AND APPROVAL

The Alberta Edition of the Canadian Atlas of Palliative Care was reviewed and approved by the University of Calgary Conjoint Health Research Ethics Board in Calgary, Canada (REB22-1276).

CONTRIBUTORS: ALBERTA EDITION

The following individuals and organizations 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.

Albert Harmse
Amanda Lucas
Amy Regnier
Berva Kesler
Bev Berg
Catherine Janzen
Charlie Chen
Charlotte Pooler
Christopher Walker
Debbie McAllister
Denise Melenberg
Dionne Walsh
Dominika Barefoot
Elizabeth Van Den Kerkhof
Emma Buzath
Geertruida Wiegersma
Hayley Turnbull
Hollis Roth
Ingrid DeKock
Jennifer Furlong
Jennifer Hewson
Jennifer Lam
Josh Foley
Lawrence Lee
Leanne Grant
Louise Kashuba
Margot Sondermann
Marlee MacDonald
Mary Sabbe
Maureen McCall
Michael Wilson
Michelle Peterson Fraser
Michelle Podmore
Monique VanderVeen
Peter Choate
Rachelle Van Vliet
Russ Loftus
Samantha Lam
Sandra Davidson
Sandra Stover
Sarah Burton-Macleod
Serena Rix
Shannen Sinclair
Stacy Davis
Stephen Yam
Susan Hughes
Tara Wren
Theresa Aralwren
Theresa Bellows
Theresa Ynnemadsen
Tina-Marie Schwab
Yoko Tarumi

Contents

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, led by the World Health Collaboration Centre at the Atlantes Program at the University of Navarra in Spain. Domains, which have been established by international experts, 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, help guide policy development and planning, and facilitate the allocation of resources.

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

METHODS

The domains and indicators used internationally were adapted to the Canadian context and guided data collection and reporting. A mixed methods approach was used. Data collection was done in several sequential phases: 1) a search of public-facing information (such as web sites); 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 and provincial leaders for final vetting. 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 robust provincial level frameworks to support palliative care and advance care planning, including a unique Alberta Interprofessional Palliative Care Competency Framework. There are standardized provincial palliative care guidance documents, such as Hospice Admission Criteria and Care of the Imminently Dying Pathway. The province has a dedicated "Palliative Coverage Program" health benefit that provides medication coverage and ambulance services for people with a palliative diagnosis. Notably, hospice and home care supports do not require a user-pay component.

The Alberta government has made significant investments to improve quality palliative care over the past five years, including $20 million to support thirty projects aimed at improving earlier access to palliative care, education, research and innovation (including the creation of this Atlas).

Generally, across the province, there is a high level of access to specialist palliative care teams in hospitals, including in person consultation from in-hospital teams in most medium to large urban centres and from visiting consultants in rural hospitals when needed. Teams primarily provide a *Consultation* model of care, in close collaboration with other services. There is 24/7 specialist palliative care advice available to all physicians and paramedics across the province provided by regionally based consult teams accessed via the Referral, Access, Advice, Placement, Information & Destination (RAAPID) service. Integration of palliative care across various hospital inpatient and outpatient services is an overall partial low for non-cancer services and a partial high for cancer care. Cancer Care Alberta endorsed a provincial strategy for palliative care in December 2023 and has embedded specialist palliative care consultant support within the tertiary and most regional cancer centers. There are examples of excellence in some other specialty areas, such as neurology, respirology and liver disease, across the five different geographic Zones that can be spread more broadly.

Since 2017, Alberta Health Services has used an integrated approach to forecast capacity needs across three streams of care: palliative home care, hospice beds, and acute care palliative care beds. This approach allows for flexibility and accounts for the differing needs of local contexts and geographic realities. Using the Catalonia formula, the overall number of palliative care unit (PCU) beds for the province is inadequate for the population size. There are three PCUs— located in Edmonton, Central and Calgary Zones—along with additional acute care palliative care beds distributed across smaller hospitals in the North and Central Zones. In the North Zone, a dedicated PCU may be impractical for the populations served. The South Zone has neither a PCU nor acute palliative care beds. While the number of hospice beds in the province is overall adequate—within 10% of the minimum number recommended by

the Catalonia formula—the combined total of hospice and PCU beds across the province is inadequate. It is important to note that Alberta's population has grown substantially in recent years and now exceeds 4.9 million people (an increase of over 600,000 people). Since the 2021 Census data was used in this Atlas to determine beds needed for the population size, the number of recommended palliative care beds in this Atlas is an underestimate of the current need. In 2023–2024, the Alberta Government announced dedicated funding to improve access to palliative care in the community, including a $9 million investment to create twenty-five new hospice spaces.

Across Alberta, there is full access to daytime specialist-level palliative care services, provided by clinicians and/or teams. These teams primarily operate using a Consultative model that supports capacity building in primary palliative care. In rural and remote regions, access is more often delivered virtually, with initial consultations provided in person when possible. After-hours on-call support is typically virtual, especially the major urban centres. In addition, Alberta also has 24/7 support available for emergent symptom needs through the 'Emergency Medical Services Assess, Treat and Refer - Palliative and End of Life Care' program.

Palliative care consult teams in each of the Zones provide care in an integrated fashion, with coordination of care across hospital, home, and hospice. Some regions each have a dedicated palliative home care team with after-hours nursing supports. Home care in rural areas and smaller urban centres is provided through integrated home care with more limited after-hours support.

There is variability across the province in the provision of primary palliative care, which is overall low with limited provision of home visits and after-hours supports by primary care practitioners/teams for their patients with palliative care needs.

In long-term care (LTC), there is overall good integration of palliative care approaches, with specialist palliative care consult teams available to support when requested.

In the domain of education, palliative care training occurs at the undergraduate medical education level at the two medical schools: the University of Calgary and the University of Alberta. Both schools host dedicated postgraduate residency programs for specialist-level palliative care physicians through the College of Family Physician's Enhanced Skills program and the Royal College Subspecialty program for Adult Palliative Medicine. There are no training programs for pediatric palliative medicine.

Access to in-person specialist-level pediatric palliative care consultations is available in Edmonton and Calgary. Additionally, Calgary has the only pediatric hospice residence, which acts as a provincial resource for complex symptom management, end-of-life care and family supports, including respite. Provincial on-call support for pediatric palliative care advice is available 24/7 through either the Edmonton (northern zones) or Calgary (southern zones) pediatric palliative care programs, also accessible through the provincial RAAPID service.

There are no specific province-wide strategic plans to address the palliative care needs of populations, such as 2SLGBTQI+ persons, homeless and marginally housed persons, incarcerated persons, and refugees and immigrants. However, there are examples of excellence in the provision of palliative care to homeless and vulnerably housed populations in both Edmonton and Calgary.

There is very strong community involvement across the province in palliative care, evidenced by many volunteer programs and robust compassionate community initiatives and public education resources, such as Covenant Health Palliative Institute's Compassionate Alberta initiative.

This Atlas provides an in-depth examination of each of Alberta's five regional Zones across key domains and indicators. Each section includes maps and tables that illustrate the availability or absence of palliative care services. Readers are encouraged to read each regional section for more details.

In November 2023, the Government of Alberta announced plans to refocus the health care system. This Alberta Edition of the Canadian Atlas of Palliative Care, therefore, provides a comprehensive record of the organization of palliative care from January 2023 to March 2024. Structural changes are anticipated in future years.

CONCLUSIONS

The Canadian Atlas of Palliative Care: Alberta Edition outlines many examples of excellence across the province, driven by integrated policies and coordinated operations. It also identifies opportunities for improvement and gaps in service. Overall, there are high levels of access to specialist-level palliative care services in both hospital and community settings, with significant levels of integration across care settings. In rural and remote regions, access to specialist palliative care support is available both in person and virtually. There is variability with respect to hospice and acute care PCU beds across Zones. While the number of hospice beds is largely adequate, the number of PCU beds is inadequate, including one zone with no PCU beds. At the provincial level, the combined numbers of hospice and PCU beds are inadequate for population needs. The integration of palliative care across different specialty services, especially non-cancer, is variable in hospitals and outpatient clinics. Additionally, the overall provision of primary level palliative care is low. There is significant community-level engagement and important community-led initiatives.

Introduction

Background

WHAT ARE PALLIATIVE CARE ATLASES AND THEIR ROLE?

Palliative care atlases are resources that provide easy-to-read graphical and textual 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 (cross-sectional) at a given time, highlighting successes and excellence, identifying gaps, and informing planners and policymakers with the overall goal of 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 of Palliative Care), 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 of the Institute for Culture and Society (ICS) 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 around 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.

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 healthcare 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.

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. Recalibrating the "world map" of palliative care development. Wellcome Open Research. 2019 Aug 16;4:77.
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

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 others, increased preparedness of the workforce on the palliative care approach and improved data collection on palliative care across Canada. It also called for continuous 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 that also included consultations with key community organizations and institutions, the methodology and international domains and indicators were adopted and adapted where necessary and then tested in a pilot study involving two Ontario regions that included urban and rural geographies and demographics. The experiences and learnings from the pilot 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: Alberta Edition serves as a cross-sectional view of the status of palliative care in Alberta in 2023 and up to March 2024, providing a baseline going forward. Similar to other palliative care atlases, the goal is to update it every five years.

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]

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

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: Alberta Edition include raising awareness of the current state of palliative care in Alberta; 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 jurisdiction(s) across the province.

SPECIFIC OBJECTIVES

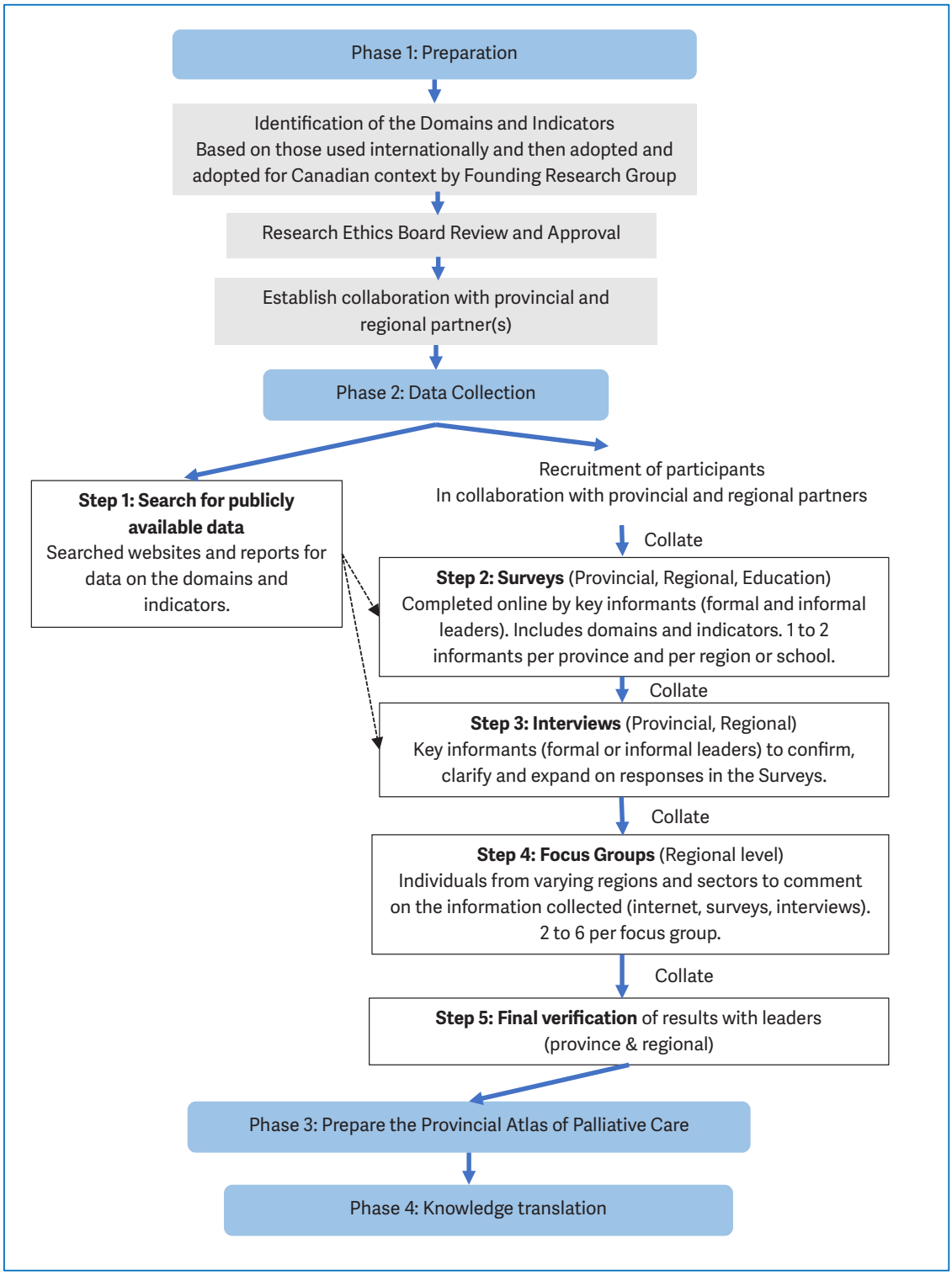
The Canadian Atlas of Palliative Care: Alberta Edition will:

- Describe the current state of palliative care across several domains and indicators in Alberta (provincial 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+ populations, 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-method 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.

FIGURE 1: METHODOLOGICAL FRAMEWORK FOR DEVELOPING THE PROVINCIAL ATLAS OF PALLIATIVE CARE



REPORTING OF DOMAINS AND INDICATORS

Overall, the reporting of results of the 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. In these instances, 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.

Alberta was the first provincial Atlas to be undertaken. The Alberta Palliative Care Atlas March 2024 report for Alberta Health mapped these global impressions in three categories of integration or service availability: "limited," "partial," or "full," represented by red, yellow and green map colours, respectively. These were the initial categories that Pallium had been working with; however, with further development of two other provincial atlases (Ontario and British Columbia), Pallium expanded global impressions to four categories of integration: "Minimal or Absent," "Partial Low," "Partial High," or "Full," depending on the analyses undertaken, to better represent the variability in service provision and colour mapping was changed to four different shades of blue to support accessibility. The research team updated the Alberta Atlas to this revised reporting scheme and included additional details from the revised questionnaires. The results reported therefore reflect the judgments of individuals who participated in data collection, as well as the research team's revised analysis and consensus. 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. In such cases, an approach commonly referred to as "The Catalonia formula"[14] has been applied. This formula calls for at least 10 beds for every 100,000 population, with three of these beds being allocated to palliative care units (PCU) and seven being hospice or palliative care continuing care type beds. Based on this formula, a region is rated as 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 three per 100,000 was used to determine adequacy for PCU beds and seven per 100,000 for hospice 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 study. 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.

We aimed to mitigate any biases or limitations of individual participants' knowledge and experience by developing consensus through multiple stakeholder iterative reviews, ensuring input from different perspectives, and multiple information 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.

14 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.

How is the Atlas organized?

The provincial edition of the Atlas is divided into two parts. Part A reports at a provincial level and Part B at a regional level. The latter is further divided into five sub-sections, each one corresponding to one of the five Health Zones comprising Alberta Health Services at the time of the data collection for this Atlas. The different domains and indicators are reported in both parts A and B to allow comparison across the regions and to provide more detail given the large and varied geographics and demographics that is Alberta.

HOW IS THE INFORMATION REPORTED AND DISPLAYED (CONVENTION)?

DATA DICTIONARY, GLOSSARY AND DEFINITIONS

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

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, or strategy in the region to improve palliative care delivery.				

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 in order 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 whether palliative care is funded and to what extent therefore varies from province to province and across the territories.

In Alberta, health care funding comes from both the provincial and federal governments, with the majority (about 80%) coming from the province. Alberta has a provincial health insurance program, the Alberta Health Care Insurance Plan (AHCIP) that covers medically required physician and midwife services, diagnostic services, hospital stays, and home care services.

Medications are covered in hospitals and long-term care facilities. There are additional benefit programs for certain populations that provide supplemental coverage (e.g., prescription medications, ambulance services, diabetes supplies), including for low-income families, seniors, persons with severe disabilities who are unable to work, and those with palliative care needs through a Palliative Coverage Program (PCP). In addition, the Alberta Aids to Daily Living program (AADL) provides funding for basic medical equipment, oxygen (for those who qualify), and some equipment and supplies for Albertans with long-term disabilities, chronic illnesses or terminal illnesses.

The PCP is administered by Alberta Blue Cross and covers most medications, including pre-filled syringes, ambulance services, and diabetic supplies for patients living at home or within the community (including hospice) diagnosed with being in the end-stage of a terminal illness or disease. Hospice care and community hospice supports are partially funded by Alberta Health. Hospices do not require a daily accommodation fee. Prescription medications needed in hospice care are covered through the PCP. Oxygen and other equipment and supplies may be covered through AADL.

ORGANIZATION OF HEALTH CARE AND PALLIATIVE CARE

In Alberta, health care is a shared responsibility between the Ministry of Health (Alberta Health) and various health care service delivery partners, including Alberta Health Services (AHS) and Covenant Health (CH).

In May 2024, the Government of Alberta enacted the Health Statutes Amendment Act to transform and refocus Alberta's health care system, transitioning from one regional health authority, Alberta Health Services (AHS), to an integrated system of four sector-based provincial health agencies, including primary care, acute care, continuing care and mental health and addiction.

At the time of data collection for this Atlas, Alberta had one regional health authority, AHS, responsible for a province-wide integrated health system that was divided into five Health Zones: North, Edmonton, Central, Calgary, and South. Mapping captured in this Atlas is therefore represented provincially and regionally across these five Zones.

Responsibility for palliative care, including legislation, policies and standards relating to palliative care services, was led by the Continuing Care Division of Alberta Health. In AHS, palliative care was under the direction of the Seniors, Palliative and Continuing Care portfolio. Alberta has benefited from an inclusive, multi-sector, multidisciplinary, Provincial Palliative and End-of-Life Care Innovation Steering Committee (PEOLC Innovation Steering Committee) that provides strategic guidance and includes representation from Alberta Health, adult and pediatric AHS Zone operational and medical leads, Covenant Health Palliative Institute, Canadian Hospice Palliative Care Association, Alberta Hospice Palliative Care Association, academia, public advisors, and others.

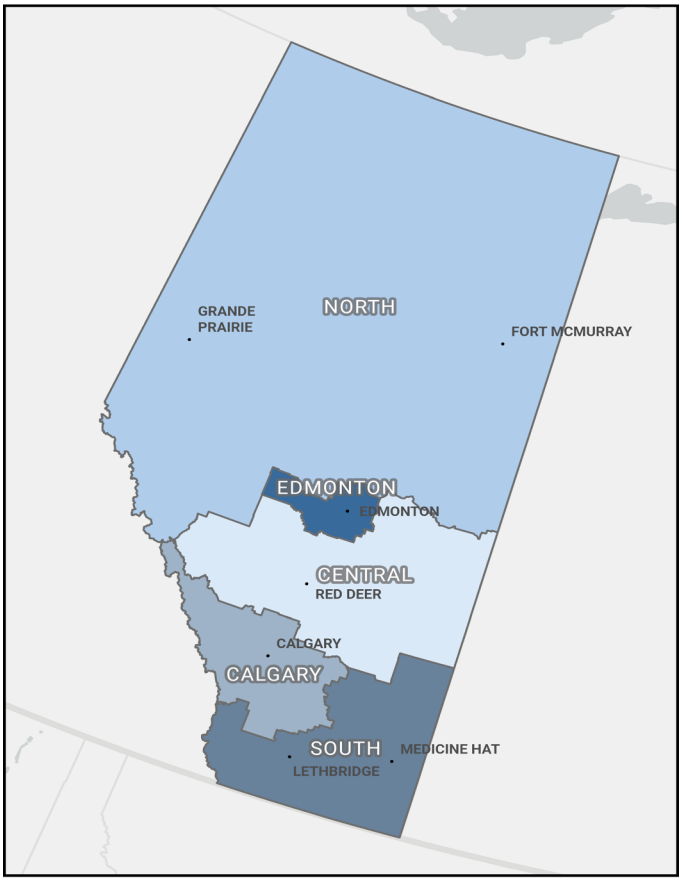
Responsibility for palliative care services has not yet been assigned to any of the newly established provincial health agencies

COMMUNITY ENGAGEMENT AND INVOLVEMENT

Community participation and volunteerism, as in the rest of Canada, play an important role in Alberta, 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 Alberta, like many other provinces, volunteerism has played a key role in establishing hospices and providing support in communities and hospice and palliative care services.

The Covenant Health Palliative Institute has been a leader in supporting the Compassionate Communities movement in Alberta, including developing and providing tools, education and training to community organizations through their Compassionate Alberta initiative. Compassionate Alberta aims to improve public understanding of, and community support for, palliative care and advance care planning.

Alberta Health Zones



Legend

- Major Cities

Alberta Health Zones

- Calgary
- Central
- Edmonton
- North
- South

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Facility labels report number of beds available.

PROVINCIAL POPULATION AND DEMOGRAPHICS

Population: 4,262,635
Population density: 6.7 people per sq km
Total provincial area: 661,848 km²
GDP for province: $344.1 billion
Life expectancy: Males: 78; Females: 83

AGE RANGE	POPULATION SIZE*	PERCENTAGE
0-19	1,059,410	25%
20-64	2,574,005	60%
65-74	381,160	9%
75+	248,055	6%

*Data taken from the 2021 Canadian Census

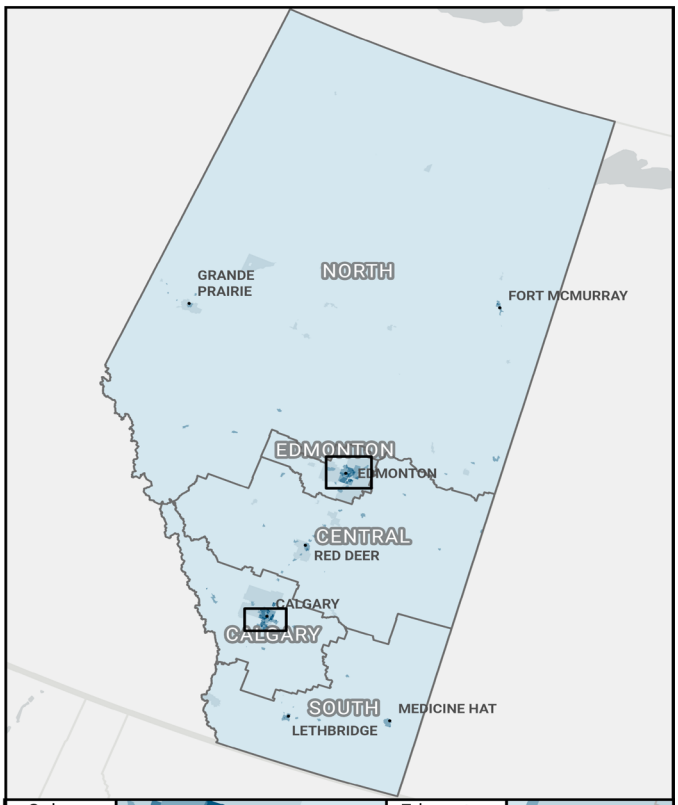
HEALTH ZONE	POPULATION SIZE*	POPULATION DENSITY PER KM²
North Zone	474,696	1
Edmonton Zone	1,451,927	120
Central Zone	476,092	5
Calgary Zone	1,727,705	43
South Zone	312,255	5

*Data taken from the 2021 Canadian Census

CAUSE OF DEATH	NUMBER OF DEATHS	PERCENTAGE
Accidents/ Unintentional Injuries	2,894	9
Cancer	7,078	23
Cardiovascular	6,060/100/253/148	21
Dementia/ Alzheimer's Disease	315	1
Lung and Respiratory Diseases	1,179	4
Other (including renal, neurological, etc.)	13,239	42

*Data taken from Statistics Canada Table 13-10-0801 for 2021

Population Density Across Alberta Health Zones



Legend

- Major Cities
- Alberta Health Zones

0.00 - 10.59

1,478.45 - 3,270.57

3,270.58 - 77,545.30

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Facility labels report number of beds available.

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	NO
Standards and norms for palliative care	YES[2]
Designated palliative care leads	YES
Law related to advanced care planning	YES[3]
Compassionate care benefits	YES[4]

FORMAL STRATEGIES	PRESENCE
Home and community care	YES
Inpatient and outpatient hospital services (cancer and non-cancer)	PARTIAL[5]
Long-term care facilities	YES[6]
Rural and remote	NO
Paramedic/emergency services	YES

GOVERNMENT FUNDING	PRESENCE
Palliative care home service	YES
Hospice residences	PARTIAL
Community hospice services	PARTIAL
Medications: In hospital	YES
Medications: Out of hospital	YES[6]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[7]
Continuing palliative care education in various settings	PARTIAL[8]

Context:

[1]Palliative and End of Life Care Alberta Provincial Framework (2014) and Addendum (2021), Alberta Palliative Care Competency Framework and the Continuing Care Act (2024), which provides regulatory oversight for publicly funded hospices.

[2]AHS PEOLC policies and guidelines operate provincially. Examples include Palliative Sedation; Expected Death in the Home; Care for the Imminently Dying Pathway; standardized Hospice Admission Criteria; a "White Rose Program," which allows staff to create a calm and quiet environment, ensuring respect for the dying person and their loved ones; and a provincial bereavement support package offered to all families.

[3]Provincial legislation (Personal Directives Act)

[4]Federal program (Compassionate Care Benefits)

[5]Cancer Care Alberta has a formal palliative care strategy. There is no formal strategy for non-cancer.

[6]Continuing Care Health Services Standards

[7]The Palliative Coverage Program covers some supplies, such as prefilled syringes for medications. Alberta Aids to Daily Living covers supplies, equipment and oxygen (according to specific criteria) for some eligible patients.

[8]Provincial funding for health care professionals to take part in training through Pallium Canada's Learning Essential Approaches to Palliative Care (LEAP) courses.

Highlight:

Since 2021, the government has prioritized palliative care, investing $20 million over five years in 30 projects related to community support and services, health care providers and caregiver education and training, earlier access to palliative care services, and research and innovation. This includes funding to support the creation of this Alberta Atlas and the provincial rollout of Pallium Canada's LEAP training initiative. Starting in 2023–2024, the government initiated "Continuing Care Transformational Funding" over three years to increase home care resources to improve palliative care in the home, along with an additional $9 million to support the operational funding of 25 new community-based hospice spaces to be in place by 2026.

SERVICES

PALLIATIVE CARE AND HOSPICE BEDS IN THE PROVINCE

	TYPES OF BEDS	NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative Care Units (PCUs)	3		
	Palliative Care Unit beds[1]	40	INADEQUATE	31.3%
	Other palliative care beds[2]	35		
	Hospice residences	19		
	Hospice beds in residences[3]	271	ADEQUATE[4]	93.8%
	Other hospice beds[3]	9		
	Total number of inpatient palliative care beds (PCU and hospice combined)	355	INADEQUATE	83.3%

*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]Alberta has three PCUs (Edmonton, Central and Calgary Zones), two of which are dedicated. One unit is for acute symptom management and two are mixed (acute and end-of-life). Two units (Central and Calgary Zones) are co-located within larger units shared with medicine and/or oncology. Only the dedicated beds for palliative care in these units are included.

[2]Across two of the Zones (North and Central), there are dedicated palliative care beds outside of a PCU setting that are integrated into acute care hospital settings. The South Zone has no dedicated acute care palliative care beds or units.

[3]Alberta has three types of dedicated hospice beds: "stand-alone" hospice residences, hospices that are embedded within other facilities, and "hospice beds" that are co-located within continuing care homes or community health centres. Hospices are contracted service providers of AHS and are operated by a variety of organizations, including charitable hospice societies. There is one pediatric hospice in the province. Other hospices do not admit pediatric patients.

[4]The 93.8% is within 10% of the target beds, which, for the purpose of this Atlas, is deemed Adequate. However, if the population is to increase and age, this would become Inadequate.

SETTING: ACUTE CARE

HOSPITALS

Access to specialist-level palliative care teams in hospitals	●●●○[1]
Funding models for palliative care physicians	FEE-FOR-SERVICE/ALTERNATIVE RELATIONSHIP PLAN[2]

Context:

[1]Specialist palliative care consult teams are available in hospitals in most medium to large centres. Smaller community hospitals and rural health centres have access to consultative support primarily through visiting providers or via phone and virtual visits. Specialist palliative care team composition varies between Zones and hospitals, and may include physicians, nurse practitioners, nurses, spiritual care and allied health providers. Tertiary hospitals tend to have a fulsome range of professions on site, while smaller community hospitals may be more limited for on-site providers. First consultations are provided in person wherever possible. All physicians across the province have 24/7 access to specialist palliative care physician consultation through the RAAPID (Referral, Access, Advice, Placement, Information & Destination) service. RAAPID helps primary providers manage symptoms and support patients in their own communities.

[2]The predominant model of specialist palliative physician support in Alberta is *Consultative*, with some *Shared Care*. *Takeover Care* occurs more rarely for patients who do not have a Most Responsible Healthcare Provider.

INPATIENT UNITS AND OUTPATIENT CLINICS

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

*Integration includes clinicians and staff with core palliative care competencies to provide a palliative care approach; early activation of a palliative care approach; timely referral to palliative care specialist teams when needed; and collaboration with specialist palliative care teams.

**Cardiology, respirology, nephrology, and neurology

Context:

The degree of integration in inpatient units and outpatient clinics across the Zones is highly variable, with overall greater integration in cancer care settings.

[1]Integration is championed in Alberta's two tertiary cancer centres and most of the regional cancer centres, with specialist palliative care clinics and inpatient consult services staffed by specialist palliative care providers. They provide specialist support for symptom management and care transitions provided by the primary oncology and family practice teams. Cancer Care Alberta endorsed its first strategy for palliative care integration in 2023, with a focus on building primary palliative care capacity amongst all staff and on early palliative care utilization.

[2]There is overall variable low palliative integration in non-cancer clinics. There are a few examples of excellence with fully integrated clinics.

SETTING: COMMUNITY

COMMUNITY

Access to community specialist care teams	●●●●[1]
Communities with 24/7 access to specialist palliative care teams	●●●○[2]

Context:

[1]All communities have access to specialist palliative care consult teams. The team composition varies between Zones.

[2]All physicians and EMS paramedics have 24/7 access to specialist palliative care physician consultations. This RAAPID (Referral, Access, Advice, Placement, Information & Destination) service helps primary providers manage symptoms and support patients in their own communities. However, other staff, patients, and families do not have direct, universal access to specialist palliative care consultants after-hours.

PALLIATIVE HOME CARE

Access to palliative home care services	●●●○[1]
Availability of 24/7 access	●●●○ V[2]

Context:

[1]There are specialized palliative home care teams in the larger urban centres. In smaller communities and rural/remote areas, general "integrated home care" provides in-home supports for palliative care. Many integrated home care case managers possess additional skills and experience in palliative care, and some case managers have a predominantly palliative caseload.

[2]After-hours access to palliative home care is an overall partial high with variability across regions. Some urban palliative home care services have 24/7 response teams and many integrated home care services have 24/7 phone access. However, some home care teams do not have after-hours availability. People living in specialized group homes and some other congregated living residences may have limited access to palliative home care services.

Highlight:

Two Zones (North and Edmonton) pioneered nurse practitioners serving as consultants for home care and/or as in-home care providers. In situations where patients do not have a family physician available to prescribe opioids, or the family physician is unable to provide palliative-focused care or home visits, these nurse practitioners may take over care for these patients.

PRIMARY CARE

Overall provision of primary palliative care	●●○○ V[1]
Providing palliative care to ambulatory patients	●●●○ V
Providing palliative care home visits	●●○○ V
Clinics providing 24/7 on-call coverage	●●○○ V
Standards/indicators for overall provision of primary palliative care	NO[2]
Training for primary care professionals on the palliative care approach available	YES

Context:

[1]The degree to which palliative care is integrated in family physicians and primary care practices is low overall, with variability across Zones. Family physicians in rural areas were perceived to be more independent and actively involved in providing palliative care compared to those in urban settings. They were also more likely to implement recommendations from specialist palliative care consultants themselves, rather than relying on consultants to take over prescribing.

[2]The Palliative and End of Life Care Alberta Provincial Framework provides definitions and quality statements for primary palliative care but not defined standards or indicators.

RURAL AND REMOTE AREAS

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

Context:

[1]Community specialist palliative care consult teams provide support to rural and remote regions, with variability on the staffing approach used in each Zone. Larger rural and remote areas rely on telephone and virtual care consultations, liaising with local nurses and physicians to support care. Many rural zones have invested in additional specialist palliative care nurses to support palliative home care patients and providers in their local communities. Consultative specialist palliative care physician phone support is available to physicians and EMS/paramedics province-wide through the RAAPID service. There are also palliative care beds in rural hospitals and continuing care facilities that enable some patients to receive care close to home. This is less available in remote areas.

[2]Although there is no separate rural and remote strategy in Alberta, the Alberta Provincial Palliative Care Framework is inclusive of rural and remote service needs and specific programs and funding exist for rural care, such as rural in-home funding.

Highlight:

The Provincial Rural Palliative Care In-Home Funding Program provides top up funding that can be accessed by rural palliative patients for end-of-life care when they require additional support to be able to live and die at home, avoiding admissions to distant facilities. Patients can select whom they want to hire for direct patient care. This includes paying neighbours, family and friends, as accessing formal caregivers can be a challenge in rural and remote areas.

HOSPICE SERVICES

Standards/indicators for hospice residences	YES[1]
Hospice residences	18
Community hospice organizations	39

Context:

[1]Hospice standards/indicators are regulated under the Continuing Care Act (effective April 1, 2024) for publicly funded hospices in Alberta, with standards and indicators due to be developed that are more tailored to hospice care. There are standardized provincial Hospice Admission Criteria and across the province, specialist palliative care consultants ensure that patients meet the criteria for hospice admission and support hospice staff and physicians with recommendations as needed.

LONG-TERM CARE (LTC)

Access to specialist palliative care services	●●●○ V[1]
Integration of palliative care approach	●●●○ V[2]
Standards/indicators for providing palliative care	YES
Formal standards of training on palliative care approach	YES
Training programs on the palliative care approach available	YES[3]
Funding for education on the palliative care approach	YES[4]

Context:

[1]All LTC homes have access to specialist palliative care consultation. Some have also embedded specialist palliative care nurses within their organizations.

[2]The degree to which a palliative approach to care is integrated within LTC homes is variable in all Zones.

[3]LTC staff orientation includes an introduction to palliative care principles as part of their continuing care training. Additionally, staff members are encouraged to participate in Pallium Canada's LEAP courses. Some health care aides are not remunerated for attending training programs, reducing accessibility and uptake.

[4]Provincial training initiative utilizing Pallium Canada's LEAP courses.

Highlight:

The Integrated Supportive and Facility Living (ISFL) – Palliative Care Community of Practice program empowers staff in ISFL facilities to enhance their capacity to provide a palliative approach to care through fostering a supportive learning environment. This includes peer exchange, education on different palliative care topics, and support for complex cases.

PARAMEDIC EMERGENCY SERVICES

Training paramedics in palliative care	YES

Highlight:

The Emergency Medical Services Palliative and End of Life Care Assess Treat and Refer Program (EMS PEOLC ATR Program) is an award winning, Alberta-wide program, developed to support both adult and pediatric patients, and their families, who have elected to receive palliative and end-of-life care at home. Frontline paramedics work in collaboration with home care clinicians and specialist palliative care consultants (in person or by phone) to determine how to treat emergent symptom needs and administer emergency medication, oxygen, and other required support. The EMS PEOLC ATR Program may be initiated by paramedics responding to a 911 call or by home care clinicians during a palliative care emergency. If a basic life support ambulance team is unable to meet the patient's needs, an Advanced Life Support ambulance may be dispatched.

PALLIATIVE CARE RESOURCES

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

Context:

[1]Alberta has established a comprehensive provincial approach to Advance Care Planning (ACP), supported by a dedicated ACP team, a community of practice, zonal educators and champions, an evaluation framework, and other quality improvement resources. Training opportunities include ACP fundamentals, communication (e.g., the Serious Illness Care Communication Guide), and standardized processes (e.g., documenting conversations on provincial Advance Care Planning and Goals of Care Tracking Record). Public-facing resources are available online, including guidebooks, workbooks, videos, and other resources.

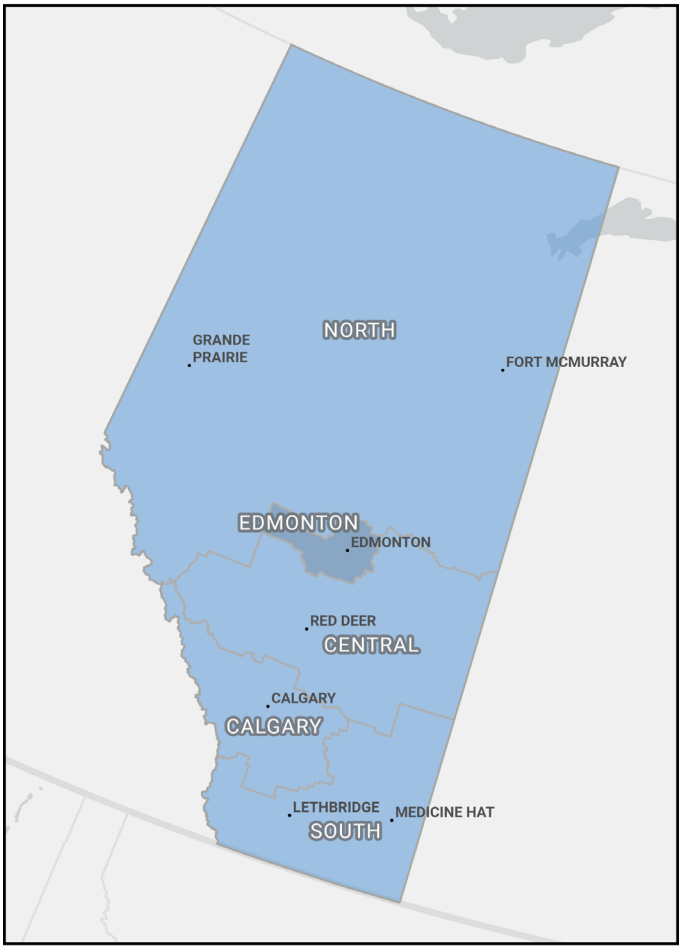
[2]Covenant Health Palliative Institute has developed the Alberta Interprofessional Palliative Care Competency Framework, as well as specific interprofessional education modules mapped to these competencies.

Highlight:

Alberta implemented the first province-wide policy and procedure for Advance Care Planning and Goals of Care Designations in 2014. This includes a medical order used to describe and communicate the general aim or focus of care, including the preferred location of that care, which is in use across every care setting and guides transitions of care.

MAPS

Access to Palliative Home Care Services

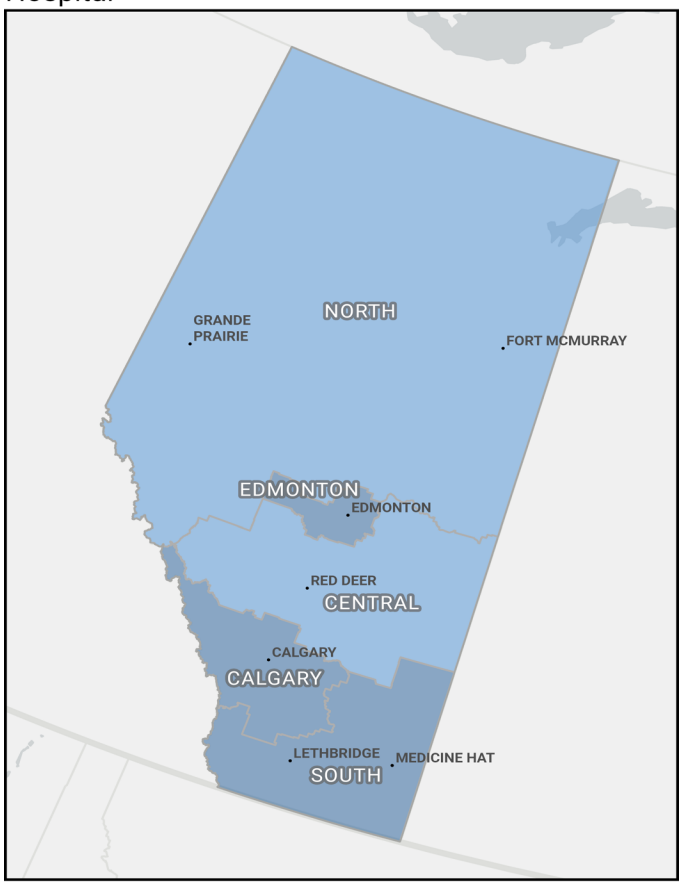


Legend

- Major Cities
- Full
- Partial High

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Access to Specialist Level Care Support Teams in Hospital

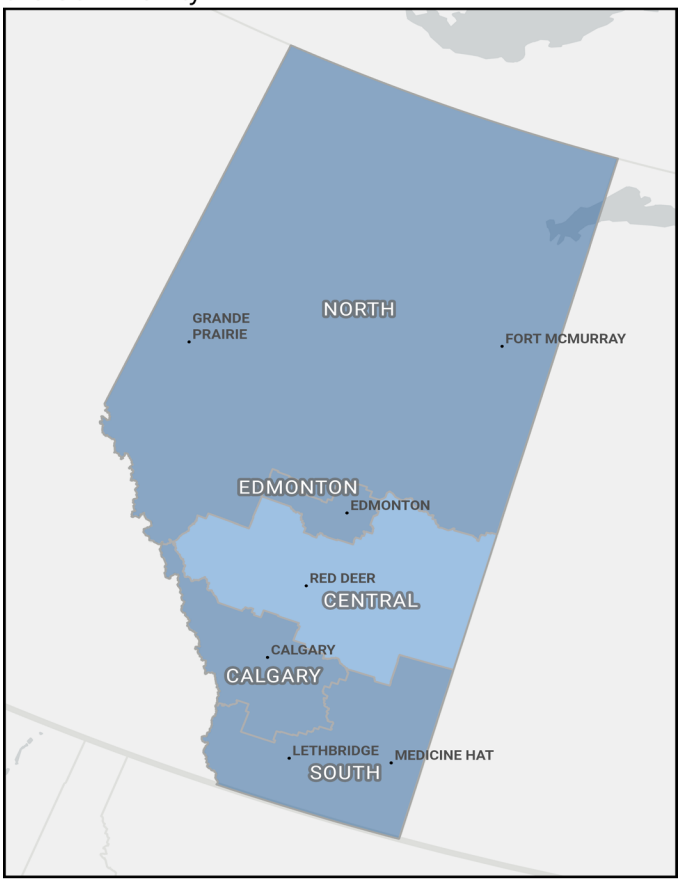


Legend

- Major Cities
- Full
- Partial High

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Access to Specialist Level Care Support Teams in the Community

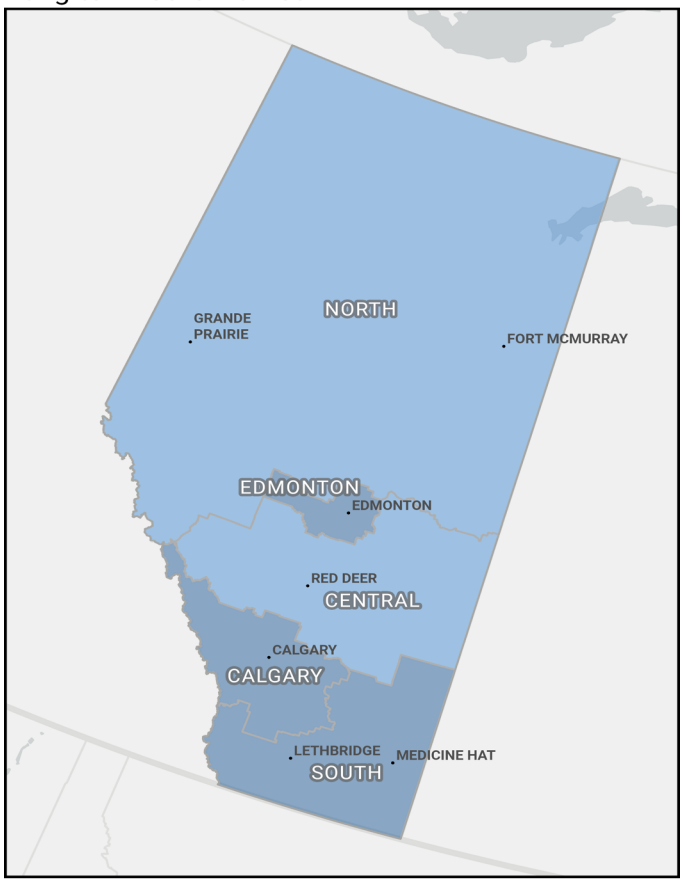


Legend

- Major Cities
- Full
- Partial High

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

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



Legend

- Major Cities
- Full
- Partial High

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

SYSTEM PERFORMANCE

Alberta has some established provincially agreed-upon indicators for tracking and improving palliative care delivery. AHS and Covenant Health monitor extensive, provincial system performance indicators, with integrated capacity planning, across a variety of domains, sectors, and services.

Alberta Health monitors certain standards and indicators, such as continuing care operator and provider compliance to the Continuing Care Health Service Standards and will continue to monitor compliance to the new Continuing Care Act and regulations. With a focus on patient and family experience, the Health Quality Council of Alberta commenced the development of a public-facing palliative care services dashboard in 2023.

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

All Zones contribute to system performance indicators, and the Calgary and Edmonton Zones have the most established Palliative and End-of Life-Care programs and corresponding metrics.

EDUCATION

MEDICAL AND NURSING SCHOOLS*	
Medical schools	2[1]
Nursing schools (RPN, RN, Graduate, Post-graduate programs)	17[2]
POSTGRADUATE EDUCATION AND CERTIFICATION	
Physician Education	
Palliative care residency programs:	
College of Family Physicians of Canada Certificate of Added Competence in Palliative Care and Residency program	YES
Royal College of Physicians and Surgeons of Canada Subspecialty in Palliative Medicine and Residency program	YES – ADULT
Nursing Education	
Nursing specialization or certification in palliative care**	YES

*See the Regional reports for the extent to which palliative care appears in undergraduate and post-graduate curricula.

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

Context:

[1]Alberta has two medical schools: the University of Alberta and the University of Calgary.

[2]Undergraduate nursing: The baccalaureate nursing programs in Alberta adhere to approved nursing education standards, ensuring that all graduates meet the competencies enabling them to provide nursing care for patients with palliative care needs, including at the end-of-life.

PROFESSIONAL ACTIVITIES

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

Context:

[1]The Covenant Health Palliative Institute aims to increase capacity for quality palliative care, address gaps in palliative care services within Alberta, and provide leadership and advocacy for a robust, national palliative care system. The Institute supports excellence in palliative care through clinical support, education, research, policy and community engagement. The Alberta Hospice Palliative Care Association is a charitable organization that advocates for hospice and palliative care in Alberta.

[2]Each Zone has dedicated palliative care educators who are responsible for organizing palliative care education, including pediatric palliative care in the Calgary and Edmonton Zones. The AHS PEOLC Steering Committee also has dedicated resources to coordinate a provincial program for LEAP training, funded through an Alberta Health grant in 2022–2026.

[3]There is significant palliative care scholarship undertaken by groups in Alberta. Research and quality improvement projects across the province are led by researchers at the University of Alberta, the University of Calgary, and the Palliative Institute, among others. Themes include Advance Care Planning and decision-making, public awareness, symptom classification and assessment, early integration of palliative care, compassion, and models of care and standards to improve access to quality palliative care. See sample publications below.

Sample Publications:

Belayneh M, Fainsinger R, Nekolaichuk C, Muller V, Bouchard S, Downar J, Galloway L, Ghosh S, Hawley P, Herx L, Kmet A, Lawlor P. Edmonton Classification System for Cancer Pain: Comparison of Pain Classification Features and Pain Intensity across Diverse Palliative Care Settings in Canada. J Palliat Med. 2023 Mar;26(3):366-375.

Kadakia KC, Hamilton-Reeves JM, Baracos VE. Current Therapeutic Targets in Cancer Cachexia: A Pathophysiologic Approach. Am Soc Clin Oncol Educ Book. 2023 Jun;43:e389942.

Pereira J, Klinger C, Seow H, Marshall D, Herx L. Are We Consulting, Sharing Care, or Taking Over? A Conceptual Framework. Palliat Med Rep. 2024 Feb 23;5(1):104-115.

Santos Salas A, Watanabe SM, Sinnarajah A, Bassah N, Huang F, Turner J, Alcalde Castro J, O'Rourke HM, Camargo-Plazas P, Salami B, Santana M, Campbell K, Abdel-Rahman O, Wildeman T, Vaughn L, Judge H, Ahmed S, Adewale B, Iyiola I; Patient Advisory Council. Increasing access to palliative care for patients with advanced cancer of African and Latin American descent: a patient-oriented community-based study protocol. BMC Palliat Care. 2023 Dec 20;22(1):204.

Robertson C, Watanabe SM, Sinnarajah A, Potapov A, Faily V, Tarumi Y, Baracos VE. Association between Consultation by a Comprehensive Integrated Palliative Care Program and Quality of End-of-Life Care in Patients with Advanced Cancer in Edmonton, Canada. Curr Oncol. 2023 Jan 9;30(1):897-907.

Fairchild A, Hill J, Alhumaid M, Rau A, Ghosh S, Le A, Watanabe SM. Palliative radiotherapy delivery by a dedicated multidisciplinary team facilitates early integration of palliative care: A secondary analysis of routinely collected health data. J Med Imaging Radiat Sci. 2022 Jun;53(2 Suppl):S51-S55. doi: 10.1016/j.jmir.2022.01.003. Epub 2022 Feb 21.

Ahmed S, Naqvi SF, Sinnarajah A, McGhan G, Simon J, Santana MJ. Patient & Caregiver Experiences: Qualitative Study Comparison Before and After Implementation of Early Palliative Care for Advanced Colorectal Cancer. Can J Nurs Res. 2023 Mar;55(1):110-125. doi: 10.1177/08445621221079534. Epub 2022 Mar 7.

Earp MA, Fassbender K, King S, Douglas M, Biondo P, Brisebois A, Davison SN, Sia W, Wasylenko E, Esau L, Simon J. Association between Goals of Care Designation orders and health care resource use among seriously ill older adults in acute care: a multicentre prospective cohort study. CMAJ Open. 2022 Nov 1;10(4):E945-E955.

Karim S, Levine O, Simon J. The Serious Illness Care Program in Oncology: Evidence, Real-World Implementation and Ongoing Barriers. Curr Oncol. 2022 Mar 2;29(3):1527-1536. doi: 10.3390/curroncol29030128.

Pesut B, Duggleby W, Warner G, Ghosh S, Bruce P, Dunlop R, Puurveen G. Scaling out a palliative compassionate community innovation: Nav-CARE. Palliat Care Soc Pract. 2022 May 13;16:263.

Sinclair S, Harris D, Kondejewski J, Roze des Ordons AL, Jaggi P, Hack TF. Program Leaders' and Educators' Perspectives on the Factors Impacting the Implementation and Sustainment of Compassion Training Programs: A Qualitative Study. Teach Learn Med. 2023 Jan-Mar;35(1):21-36.

Miyasaki JM, Lim SY, Chaudhuri KR, Antonini A, Piemonte M, Richfield E, Alburquerque Gonzalez D, Lorenzl S, Walker R, Bhidayasiri R, Bouca R, McConvey V; Task Force on Palliative Care of the International Parkinson and Movement Disorder Society. Access and Attitudes Toward Palliative Care Among Movement Disorders Clinicians. Mov Disord. 2022 Jan;37(1):182-189.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

Formal strategy for pediatric palliative care	NO
Pediatric hospice residence(s)	YES[1]
Outpatient palliative care programs for pediatric populations	YES[1,2]
Respite pediatric palliative care (hospice or hospital setting)	YES[1]
Pediatric palliative care consultation team(s)	YES[1,2]
24/7 access to specialist pediatric palliative care consult team(s)	YES[1,2,3]
Education program(s) for pediatric palliative care	YES[4]

Context:

[1]The Calgary Zone Children's Hospice and Palliative Care Services (CHAPS) provides 24/7 specialist pediatric palliative care consultation across southern Alberta, with in-person support across all settings in the Calgary Zone. CHAPS operates the only pediatric hospice in Alberta, the Rotary Flames House. It provides inpatient palliative care admissions for symptom management, end of life hospice care, and family support, including respite, as well as outpatient programming, including grief and bereavement.

[2]The AHS-Edmonton Zone Aid for Symptoms and Serious Illness Support Team (ASSIST) is based out of the Stollery Children's Hospital and provides 24/7 specialist pediatric palliative care consultative support in the northern half of the province, including in person consults to Edmonton inpatient, outpatient and community settings.

[3]Outside of the Calgary and Edmonton Zones, access to specialist pediatric palliative care is largely through virtual and phone advice (unless a family is travelling to receive care at the two children's hospitals). Physicians and EMS/paramedics across the province can access specialist pediatric palliative care support (CHAPS in the south zones and ASSIST in the north zones) 24/7 through the RAAPID service and EMS PEOLC ATR. Provincial palliative care programs and policies also serve pediatric patients and their families, including Rural Palliative In-Home funding and the ACP GCD policy.

[4]The CHAPS and ASSIST programs support pediatric palliative care education across the province, including facilitating Pallium Canada's LEAP Paediatric course through the provincial education initiative.

OTHER FOCUSED POPULATIONS

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

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex and additional people

Context:

[1]Both the Calgary and Edmonton Zones have specific programs to address the palliative care needs of people experiencing homelessness or vulnerably housed. The other Zones do not have formal programs but provide consults and services ad hoc for homeless and vulnerably housed people.

COMMUNITY ENGAGEMENT

VOLUNTEERS

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

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/ resources*	YES[2]
Grief and bereavement services	YES[3]
Formal strategy for support of informal caregivers	NO
Programs or initiatives for informal caregivers	YES[4]

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

Context:

[1]There are many initiatives and training programs for volunteers across the province, including through AHPCA, AHS, Covenant Health and individual hospices and community hospice societies. For example, in AHS facilities, volunteers provide the "No One Dies Alone" program and sit with dying patients.

[2]The Palliative Institute has developed community engagement and education resources, including supporting Compassionate Communities; Death Cafes; public education modules such as PalliLearn, a train-the-trainer program for community groups to support knowledge and confidence in offering palliative care supports, and the Compassionate Alberta initiative, which provides tools, education and training to improve public understanding of, and community support for, palliative care and ACP.

[3]Grief and bereavement services are available in all Zones, and specialized pediatric grief support is available through the CHAPs program in the Calgary Zone. The AHPCA has created the "You Are Not Alone," grief support program via telephone, which matches grieving adults with trained volunteers who have had similar grief experiences for up to one year.

[4]There are many programs to support informal caregivers provincially, including AHPCA Living Every Season, Wellspring Cancer Support Alberta, Caregiver Alberta, and pediatric-focused caregiver and sibling supports through the CHAPS Grief and Bereavement program.

Results Part B: Regions

North Zone

DEMOGRAPHICS

The North Zone is one of five geographic Zones under the regional health authority, Alberta Health Services. It is the largest geographically with extensive rural and remote areas, resulting in the lowest population density of all the Zones.

Area	448,500 KM²
Population	474,696
Population density/km²	1 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]
Law to ensure palliative care access	NO
Standards and norms for palliative care	YES[2]
Designated palliative care leads	YES
Law related to advanced care planning	YES[3]
Compassionate care benefits	YES[4]

FORMAL STRATEGIES	PRESENCE
Home and community care	YES
Inpatient and outpatient hospital services (cancer and non-cancer)	PARTIAL[5]
Long-term care facilities	YES[6]
Rural and remote	NO
Paramedic/emergency services	YES

GOVERNMENT FUNDING	PRESENCE
Palliative care home service	YES
Hospice residences	PARTIAL
Community hospice services	PARTIAL
Medications: In hospital	YES
Medications: Out of hospital	YES[6]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[7]
Continuing palliative care education in various settings	PARTIAL[8]

*See context box below.

Context:

[1]Palliative and End of Life Care Alberta Provincial Framework (2014) and Addendum (2021), Alberta Palliative Care Competency Framework and the Continuing Care Act (2024), which provides regulatory oversight for publicly funded hospices.

[2]AHS PEOLC policies and guidelines operate provincially. Examples include Palliative Sedation; Expected Death in the Home; Care for the Imminently Dying Pathway; standardized Hospice Admission Criteria; a "White Rose Program," which allows staff to create a calm and quiet environment, ensuring respect for the dying person and their loved ones; and a provincial bereavement support package offered to all families.

[3]Provincial legislation (Personal Directives Act)

[4]Federal program (Compassionate Care Benefits)

[5]Cancer Care Alberta has a formal palliative care strategy. There is no formal strategy for non-cancer.

[6]Continuing Care Health Services Standards

[7]The Palliative Coverage Program covers some supplies, such as prefilled syringes for medications. Alberta Aids to Daily Living covers supplies, equipment and oxygen (according to specific criteria) for some eligible patients.

[8]Provincial funding for health care professionals to take part in training through Pallium Canada's Learning Essential Approaches to Palliative Care (LEAP) courses.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●○ V[1]
Access to specialist-level palliative care support teams 24/7	●●○○ V[2]
Funding models for palliative care physicians	FEE-FOR-SERVICE[3]

Context:

[1]Palliative care resource nurses provide the majority of specialist palliative care support across all settings in the North Zone, including acute care. There are also two palliative care nurse practitioners but no specialist palliative care physicians. Consultant palliative physician advice is provided by telehealth from the Edmonton Zone.

[2]Access to after-hours support is provided virtually by the specialist palliative care physicians in the Edmonton Zone. Physicians and paramedics in the North Zone can use the RAAPID service to be quickly connected to the specialist palliative care physician on call 24/7.

[3]Generalist physicians provided primary palliative care to their patients on a fee-for-service basis. Certain communities utilize a salary model.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●●○ V
Integration* in outpatient clinics—Cancer	●●●○ V
Integration* in outpatient clinics—Other**	NO INFORMATION PROVIDED

*Integration includes clinicians and staff with core palliative care competencies to provide a palliative care approach; early activation of a palliative care approach; timely referral to palliative care specialist teams when needed; and collaboration with specialist palliative care teams.

**Cardiology, respirology, nephrology, and neurology

Context:

Primary palliative care is provided by the oncology teams at the three cancer centres in Grand Prairie, Peace River, and Fort McMurray. Specialist palliative care nursing support is integrated into the cancer centres.

Palliative Care Units (PCUs)

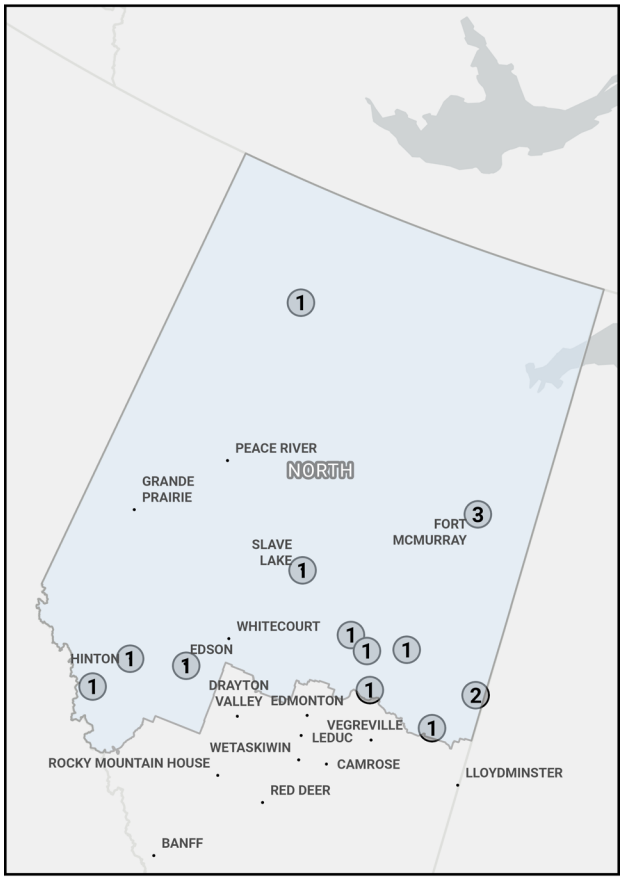
		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative care units (PCUs)	0		
	Palliative care unit beds	0		
	Other palliative care beds[1]	15		
	Total palliative care beds	15	ADEQUATE	

*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]There is no PCU but the Zone uses a distributed model of palliative care beds in local acute care facilities that allows patients with palliative needs to remain close to home. These palliative care beds are primarily used for end-of-life care.

Palliative Care Units in North Health Zone



Legend

- Major Cities
- Alberta Health Zones

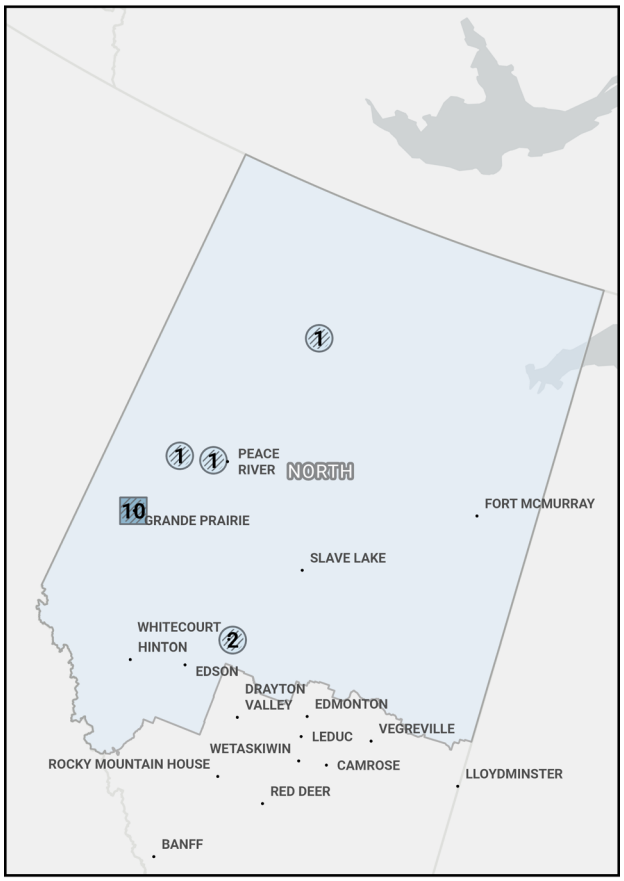
Facility, Type

- PCU, Acute
- PCU, Mixed
- Other Palliative Care Beds, NA

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Hospices in North Health Zone



Legend

- Major Cities
- Alberta Health Zones

Facility, Patients, Location-type

- Hospice Residence, Adult Cancer, Stand-alone
- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Embedded residence
- Hospice Residence,Pediatric, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	1		
	Hospice beds in residences	10		
	Other hospice beds	5[1]		
	Total hospice beds	15	INADEQUATE	45.1%
	Standards/indicators for hospice residences	YES[2]		
	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).

Context:

[1]There are ten hospice beds within a residence and five hospice beds distributed across four continuing care facilities that allow end-of-life care closer to home.

[2]Provincial standards.

Total Palliative Care Beds:

The total number of inpatient palliative care beds (PCU and hospice beds) for the North Zone is 30, which is Inadequate (66.7%) for the population when using a conservative estimate of 10 beds per 100,000 (Catalonia formula). Based on the population size, there should be at least 45 beds dedicated to palliative care.

COMMUNITY

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

Context:

[1]Specialist palliative care support in the community is provided by palliative care resource nurses and nurse practitioners. Specialist palliative physicians from the Edmonton Zone are available for community consults via telehealth.

[2]Physicians and EMS/paramedics in the North Zone have 24/7 access to specialist palliative care physician consultants from the Edmonton Zone, which can be accessed via the RAAPID service.

Palliative Home Care

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

Context:

[1]There is no dedicated palliative home care service. Home care is provided by the general integrated home care service. Many integrated home care case managers have received additional palliative care training (e.g., Pallium Canada's LEAP courses) and have experience in palliative care, sometimes operating with a predominantly palliative caseload.

[2]In many areas, after hours support is not available, or is only available by phone support.

Primary Care

Overall provision of primary palliative care	●●○○V[1]
Providing palliative care to ambulatory patients	●●●○V
Providing palliative care home visits	●○○○V[2]
Clinics providing 24/7 on-call palliative care coverage	●○○○V[2]
Standards/indicators for overall provision of primary palliative care	NO
Training for primary care professionals on the palliative care approach available	YES

Context:

[1]Integrated home care nurses provide much of the palliative approach to care in this Zone with support as needed from the regional palliative care nurse practitioners and palliative care resources nurses, and virtual consults from the Edmonton Zone specialist palliative care physicians. Regional palliative care nurse practitioners have increasingly become the most responsible providers at the end of life due to the overall lack of primary care physicians/teams.

[2]Very few family physicians provide in-home visits and after-hours support. This is variable across the region and limited by the large geographic distribution of the Zone. Patients with palliative care needs often have to rely on physicians in local emergency departments for after-hours supports.

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

Context:

[1]Specialist palliative care support is often provided virtually given the Zone's large geographic area. 24/7 consultative support is available for physicians and paramedics across the Zone through the RAAPID service, which quickly connects them to the on-call specialist palliative physician from the Edmonton Zone.

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	YES
Training programs for staff on palliative care approach available	YES
Funding to provide palliative care education for staff	YES

Paramedic Emergency Services

Training of paramedics in palliative care	YES

Advance Care Planning

Advance Care Planning resources	YES

Highlight:

Specialist palliative care nurses in the North Zone have been trained as trainers to provide serious illness conversation workshops to other health care providers across the Zone.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Alberta Health Services and Covenant Health, including reporting by Zones.

EDUCATION

MEDICAL SCHOOLS

None.

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
Keyano College	NO INFORMATION PROVIDED
Portage College	NO INFORMATION PROVIDED
Northern Lakes College	NO INFORMATION PROVIDED
Athabasca College	NO INFORMATION PROVIDED
Northwestern Polytechnic	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	YES
Palliative care conference/symposia regionally	NO
Active palliative care research	NO
Palliative care quality improvement initiatives	YES

Context:

There are two palliative care educators coordinating palliative care education for health care professionals across the Zone. In addition to the provincial initiative for Pallium Canada's LEAP training, Lunch and Learn "Palliative Pearls" education sessions are offered approximately twice a month for people to learn about specific palliative care topics.

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)	YES[1]
Education program(s) for pediatric palliative care	YES

Context:

[1]Specialist pediatric palliative care support is available for physicians and EMS/paramedics through the Edmonton Zone ASSIST team at the Stollery Children's Hospital, accessed via the RAAPID service and EMS PEOLC ATR services.

OTHER FOCUSED POPULATIONS

POPULATION	FORMAL STRATEGY	PROGRAMS AND/OR INITIATIVES
2SLGBTQI+*	NO	NO[1]
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, and additional populations.

Context:

[1]The North Zone has provided education for health care professionals to increase awareness of 2SLGBTQI+* needs.

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[1]
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:

[1]The North Zone has nine community hospice organizations which are active in providing community engagement activities, training for palliative care volunteers, and resources for caregivers, including grief and bereavement supports.

Edmonton Zone

DEMOGRAPHICS

The Edmonton Zone is one of five geographic zones under the regional health authority, Alberta Health Services. It is the smallest Zone geographically, serving the city of Edmonton and the capital region of the province. It is a mix of largely urban and metropolitan areas with the highest population density of all five Zones.

Area	11,800 KM²
Population	1,451,927
Population density/km²	120 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]
Law to ensure palliative care access	NO
Standards and norms for palliative care	YES[2]
Designated palliative care leads	YES
Law related to advanced care planning	YES[3]
Compassionate care benefits	YES[4]

FORMAL STRATEGIES	PRESENCE
Home and community care	YES
Inpatient and outpatient hospital services (cancer and non-cancer)	PARTIAL[5]
Long-term care facilities	YES[6]
Rural and remote	NO
Paramedic/emergency services	YES

GOVERNMENT FUNDING	PRESENCE
Palliative care home service	YES
Hospice residences	PARTIAL
Community hospice services	PARTIAL
Medications: In hospital	YES
Medications: Out of hospital	YES[6]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[7]
Continuing palliative care education in various settings	PARTIAL[8]

*See context box below.

Context:

[1]Palliative and End of Life Care Alberta Provincial Framework (2014) and Addendum (2021), the Alberta Palliative Care Competency Framework and the Continuing Care Act (2024), which provides regulatory oversight for publicly funded hospices.

[2]AHS PEOLC policies and guidelines operate provincially. Examples include Palliative Sedation; Expected Death in the Home; Care for the Imminently Dying Pathway; standardized Hospice Admission Criteria; a "White Rose Program," which allows staff to create a calm and quiet environment, ensuring respect for the dying person and their loved ones; and a provincial bereavement support package offered to all families.

[3]Provincial legislation (Personal Directives Act)

[4]Federal program (Compassionate Care Benefits)

[5]Cancer Care Alberta has a formal palliative care strategy. There is no formal strategy for non-cancer.

[6]Continuing Care Health Services Standards

[7]The Palliative Coverage Program covers some supplies, such as prefilled syringes for medications. Alberta Aids to Daily Living covers supplies, equipment and oxygen (according to specific criteria) for some eligible patients.

[8]Provincial funding for health care professionals to take part in training through Pallium Canada's Learning Essential Approaches to Palliative Care (LEAP) courses.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●●[1]
Access to specialist-level palliative care support teams 24/7	●●●●[1]
Funding models for palliative care physicians	FEE-FOR-SERVICE[2]

Context:

[1]The Edmonton Zone Palliative Care Consult Team provides specialist-level support at all acute care sites, with 24/7 physician on-call coverage.

[2]Most physicians are fee-for-service after the withdrawal of academic ARP funding in 2022. Many specialist palliative care physicians retain clinical appointments with the University of Alberta, but the withdrawal of academic funding has hindered physician engagement in palliative care education and research, leading to a shift towards clinical duties.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●○○ V[1]
Integration* in outpatient clinics—Cancer	●●●○ V[2]
Integration* in outpatient clinics—Other**	●●○○ V[3]

*Integration includes clinicians and staff with core palliative care competencies to provide a palliative care approach; early activation of a palliative care approach; timely referral to palliative care specialist teams when needed; and collaboration with specialist palliative care teams.

**Cardiology, respirology, nephrology, and neurology

Context:

[1]Integration of a palliative approach is an overall partial low with variability across inpatient settings. Some hospital teams in certain centres have received training through Pallium Canada's LEAP courses.

[2]Oncology providers at the Cross Cancer Institute have integrated some palliative care competencies in clinics and have on-site support from the specialist palliative care team.

[3]The Edmonton Zone has multiple palliative care champions within non-cancer specialty clinics, including cardiology, respirology, nephrology, neurology, hepatology, and ALS, that are achieving fully integrated primary palliative care in those clinics. However, practice is variable and limited across other outpatient clinics.

Palliative Care Units (PCUs)

		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative care units (PCUs)	1		
	Palliative care unit beds	20[1]	INADEQUATE[2]	45.9%
	Other palliative care beds	0		
	Total palliative care beds	20		

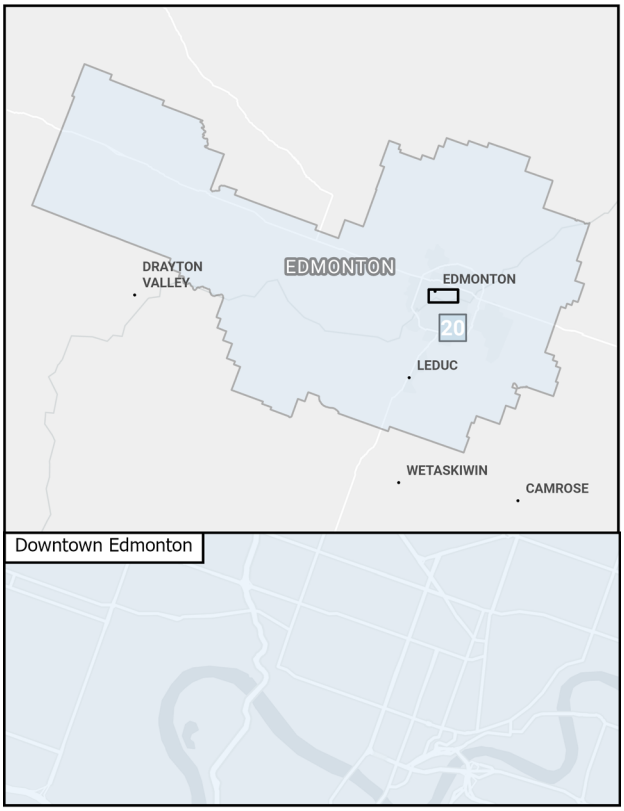
*Catalonia formula (10 beds per 100 000 population, of which 3 are PCU beds and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

[1]The PCU in the Grey Nuns Hospital, Edmonton, is a tertiary palliative care unit, accepting patients from across northern Alberta with complex palliative care needs. It is staffed by an interprofessional specialist palliative care team, including a spiritual care provider, a pharmacist, occupational therapists, a physiotherapist, a music therapist, a social worker, a psychologist, nurses and physicians. This unit provides a mix of symptom management and end-of-life care. There are no other PCU beds within the Edmonton Zone.

[2]Based on the population size of the Edmonton Zone, there should be at least 44 dedicated PCU beds.

Palliative Care Units in Edmonton Health Zone



Legend

- Major Cities
- Alberta Health Zones

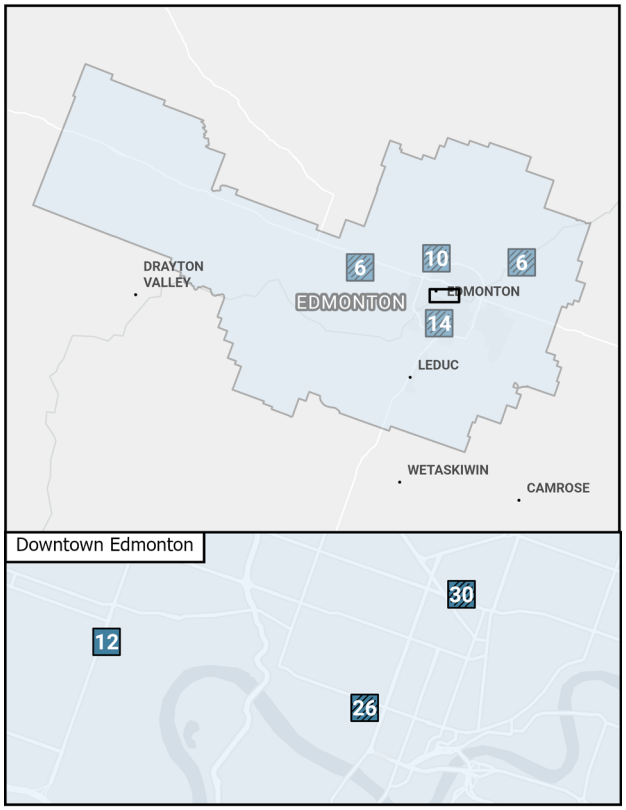
Facility, Type

- PCU, Acute
- PCU, Mixed
- Other Palliative Care Beds, NA

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Hospices in Edmonton Health Zone



Legend

- Major Cities
- Alberta Health Zones

Facility, Patients, Location-type

- Hospice Residence, Adult Cancer, Stand-alone
- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Embedded residence
- Hospice Residence,Pediatric, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	7[1]		
	Hospice beds in residences	104	ADEQUATE	
	Other hospice beds	0		
	Total hospice beds	104		
	Standards/indicators for hospice residences	YES[2]		
	Community hospice organizations	6		

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

Context:

[1]The Edmonton Zone has hospice residences embedded within other facilities and one free-standing hospice.

[2]Provincial standards.

Total Palliative Care Beds:

The total number of inpatient palliative care beds (PCU and hospice beds) for the Edmonton Zone is 124, which is Inadequate (85.5%) for the population when using a conservative estimate of 10 beds per 100,000 (Catalonia formula). Based on the population size, there should be at least 145 beds dedicated to palliative care.

Community

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

Context:

[1]The Edmonton Zone specialist palliative care team provides 24/7 consultative support to community providers across the Edmonton Zone, as well as 24/7 virtual support for physicians and EMS providers in the North Zone and half of the Central Zone via the RAAPID service.

Palliative Home Care

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

Context:

[1]There are dedicated palliative home care services in Edmonton and integrated home care in the other communities.

[2]After-hours palliative home care support, including pharmacy support, is available within Edmonton with more limited access to 24/7 pharmacy services or integrated home care services outside of Edmonton in some communities.

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	●●○○ V
Standards/indicators for overall provision of primary palliative care	NO
Training for primary care professionals on the palliative care approach available	YES

Context:

The majority of primary care providers have a variable practice with few providing after-hours coverage and very few providing home visits for their patients with palliative care needs. There are a small number of family physicians who provide a fully focused primary palliative care practice, including providing in-home visits and following the patient into hospice care.

Rural and Remote Areas

Access to specialist palliative care teams	N/A
Standards/indicators for access to primary palliative care	N/A
Funding for education on the palliative care approach	N/A
Training of physicians and primary care professionals on palliative care approach available	N/A

Context:

The Zone is largely an urban region.

Long-Term Care (LTC)

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

Context:

[1]A palliative approach to care is integrated in many LTC homes and there are active studies being done through the University of Alberta focused on improving palliative care in LTC in the Edmonton Zone. For example: Cummings GG, Tate K, Spiers J, El-Bialy R, McLane P, Park CS, Penconek T, Cummings G, Robinson CA, Reid RC, Estabrooks CA, Rowe BH, Anderson C. The development and validation of a conceptual definition of avoidable transitions from long-term care to the emergency department: A mixed methods study. Health Sci Rep. 2024 Jul 4;7(7):e2204.

Paramedic Emergency Services

Training of paramedics in palliative care	YES

Advance Care Planning

Advance Care Planning resources	YES[1]

Context:

[1]The Edmonton Zone has a multidisciplinary community of practice focused on Advance Care Planning quality improvement.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Alberta Health Services and Covenant Health, including reporting by Zones.

The Edmonton Zone Palliative and End-of-Life Care Program regularly shares these reports with service members and has a long history of corresponding system performance measurement and research.

EDUCATION

MEDICAL SCHOOLS

	UNIVERSITY OF ALBERTA
UNDERGRADUATE EDUCATION	
Inclusion of palliative care in undergraduate curriculum	MANDATORY: PRE-CLERKSHIP & CLERKSHIP CLASSROOM LEARNING OPTIONAL: CLERKSHIP CLINICAL ROTATION
POSTGRADUATE EDUCATION	
Palliative Care Residency Training Programs	
Royal College Subspecialty Certification in Palliative Medicine	YES – ADULT[1]
College of Family Physicians Certificate of Added Competence in Palliative Care	YES[1]
OTHER SPECIALTY RESIDENCY TRAINING PROGRAMS	**PALLIATIVE CARE EDUCATION/EXPERIENCES**
Anesthesia	OPTIONAL: CLINICAL ROTATION
Cardiology	OPTIONAL: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Critical care	OPTIONAL: CLINICAL ROTATION
Emergency medicine	OPTIONAL: CLINICAL ROTATION
Family medicine	MANDATORY: CLINICAL ROTATION & CLASSROOM LEARNING
Geriatrics	MANDATORY: CLINICAL ROTATION & CLASSROOM LEARNING
Internal medicine	OPTIONAL: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Neurology	MANDATORY: CLINICAL ROTATION
Radiation oncology	MANDATORY: CLINICAL ROTATION & CLASSROOM LEARNING
Medical oncology	MANDATORY CLINICAL ROTATION & CLASSROOM LEARNING
Psychiatry	OPTIONAL: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING
Respirology	OPTIONAL: CLINICAL ROTATION
Surgery	OPTIONAL: CLINICAL ROTATION MANDATORY CLASSROOM WORKSHOPS

Context:

[1]The number of residency spots varies yearly.

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
University of Alberta	NO MANDATORY CLASSROOM LEARNING
MacEwan University	MANDATORY: CLASSROOM LEARNING
NorQuest 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	YES
Palliative care conference/symposia regionally	YES[1]
Active palliative care research	YES[2]
Palliative care quality improvement initiatives	YES[2]

Context:

[1]The Covenant Health Palliative Institute, based in Edmonton, hosts an annual Palliative Care Education and Research Day. The University of Alberta Division of Palliative Medicine also hosts regular continuous professional development rounds.

[2]The University of Alberta Division of Palliative Care has a strong reputation in research, developing tools that are used internationally, such as the Edmonton Symptom and Assessment Scale and the Edmonton Classification System for Cancer Pain. The University maintains the only Palliative Care Chair position in the province, the Alberta Cancer Foundation Chair in Palliative Care. The Covenant Health Palliative Institute is also a centre of excellence for supporting research in palliative care and has led significant provincial and national work, including the development of the provincial Interprofessional Palliative Care Competency Framework and the national Palliative Care Matters study that helped inform the Framework for Palliative Care in Canada.

Highlight:

Postgraduate trainees from the University of Alberta Palliative Medicine Residency Program have won the Resident Research Award from the Canadian Society of Palliative Medicine for the past five years in a row.

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[1]
Respite pediatric palliative care (hospice or hospital setting)	NO[2]
24/7 access to specialist pediatric palliative care team(s)	YES[1]
Education program(s) for pediatric palliative care	YES

Context:

[1]The Edmonton Zone Aid for Symptoms and Serious Illness Support Team (ASSIST) based out of the Stollery Children's Hospital provides 24/7 specialist pediatric palliative care support across inpatient, outpatient and community settings. They also provide virtual consultative support for physicians and EMS paramedics for the North Zone and the Central Zone (areas north of Red Deer), which is accessible through the RAAPID and EMS PEOLC ATR services.

[2]There is no pediatric hospice or respite palliative care available. The Calgary Zone CHAPS program's Rotary Flames House hospice will admit children from across the province, but this requires families to travel many hours from home.

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	NO	NO

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and additional populations.

Context:

[1]There is a palliative care program to support unhoused or marginally housed persons, the Palliative Care Outreach and Advocacy Team (PCOAT). The Edmonton Zone also has George's House, a five-person residence for persons with palliative care needs who are experiencing homelessness. Both programs have been recognized by Healthcare Excellence Canada as a promising practice model.

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[1]

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/ resources*	YES[2]
Grief and bereavement services	YES
Formal strategy for support of informal caregivers	NO
Programs or initiatives for informal caregivers	YES[1,2]

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

Context:

[1]Research from Dr. Wendy Duggleby, Faculty of Nursing at the University of Alberta, together with Dr. Barb Pesut at the University of British Columbia – Okanagan, led the development of the Nav-CARE program, a free volunteer navigation program to assist individuals experiencing declining health in maintaining their independence and quality of life at home for as long as feasible. Trained volunteer navigators aid clients in accessing community resources and services, while offering companionship and emotional support. Many Alberta communities have since adopted Nav-CARE.

[2]The Covenant Health Palliative Institute, based in Edmonton, hosts an online hub of public-facing and community tools they developed to improve public awareness of palliative care and to engage communities. This includes the provincial palliative care competency framework, which the public and volunteers can use to improve their understanding of palliative care; an interactive education module "Understanding Palliative Care," Compassionate Alberta, which provides resources to support Compassionate Communities initiatives; and PalliLearn, a Compassionate Communities course that supports people experiencing serious illness, death, and grief.

Central Zone

DEMOGRAPHICS

The Central Zone is one of five geographic zones under the regional health authority, Alberta Health Services. It has the second largest geographic area with a mix of rural and urban areas. Its largest urban centre, Red Deer, is about equidistant from the two quaternary centres, Edmonton and Calgary. People living north of Red Deer typically access specialized services in Edmonton when they are not available in the Central Zone, and south of Red Deer, Calgary is the referral centre.

Area	95,500 KM²
Population	476,092
Population density/km²	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]
Law to ensure palliative care access	NO
Standards and norms for palliative care	YES[2]
Designated palliative care leads	YES
Law related to advanced care planning	YES[3]
Compassionate care benefits	YES[4]

FORMAL STRATEGIES	PRESENCE
Home and community care	YES
Inpatient and outpatient hospital services (cancer and non-cancer)	PARTIAL[5]
Long-term care facilities	YES[6]
Rural and remote	NO
Paramedic/emergency services	YES

GOVERNMENT FUNDING	PRESENCE
Palliative care home service	YES
Hospice residences	PARTIAL
Community hospice services	PARTIAL
Medications: In hospital	YES
Medications: Out of hospital	YES[6]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[7]
Continuing palliative care education in various settings	PARTIAL[8]

*See context box below.

Context:

[1]Palliative and End of Life Care Alberta Provincial Framework (2014) and Addendum (2021), Alberta Palliative Care Competency Framework and the Continuing Care Act (2024), which provides regulatory oversight for publicly funded hospices.

[2]AHS PEOLC policies and guidelines operate provincially. Examples include Palliative Sedation; Expected Death in the Home; Care for the Imminently Dying Pathway; standardized Hospice Admission Criteria; a "White Rose Program," which allows staff to create a calm and quiet environment, ensuring respect for the dying person and their loved ones; and a provincial bereavement support package offered to all families.

[3]Provincial legislation (Personal Directives Act)

[4]Federal program (Compassionate Care Benefits)

[5]Cancer Care Alberta has a formal palliative care strategy. There is no formal strategy for non-cancer.

[6]Continuing Care Health Services Standards

[7]The Palliative Coverage Program covers some supplies, such as prefilled syringes for medications. Alberta Aids to Daily Living covers supplies, equipment and oxygen (according to specific criteria) for some eligible patients.

[8]Provincial funding for health care professionals to take part in training through Pallium Canada's Learning Essential Approaches to Palliative Care (LEAP) courses.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●●[1]
Access to specialist-level palliative care support teams 24/7	●●●●[1]
Funding models for palliative care physicians	FEE-FOR-SERVICE

Context:

[1]Specialist palliative care is available as a 24/7 consult service across all acute care sites.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●○○ V[1]
Integration* in outpatient clinics—Cancer	●●●○ V[2]
Integration* in outpatient clinics—Other**	●●○○ V[3]

*Integration includes clinicians and staff with core palliative care competencies to provide a palliative care approach; early activation of a palliative care approach; timely referral to palliative care specialist teams when needed; and collaboration with specialist palliative care teams.

**Cardiology, respirology, nephrology, and neurology

Context:

[1]There is variability in the provision of a palliative approach to care across inpatient settings in the Zone. Some teams/units are taking up Pallium Canada's LEAP courses through the provincial initiative, but integration is overall low.

[2]Palliative care is relatively well integrated into oncology care in the Central Alberta Cancer Center with variability across other outpatient settings providing cancer care.

[3]There is overall low integration of a palliative approach to care in non-cancer outpatient settings, with some palliative care champions in cardiology, respirology, hepatology, and geriatrics clinics.

Palliative Care Units (PCUs)

		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative care units (PCUs)	1		
	Palliative care unit beds	0[1]		
	Other designated palliative care beds	18[2]		
	Other dedicated palliative care beds	20[2]		
	Total palliative care beds	20[3]	ADEQUATE	

*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.

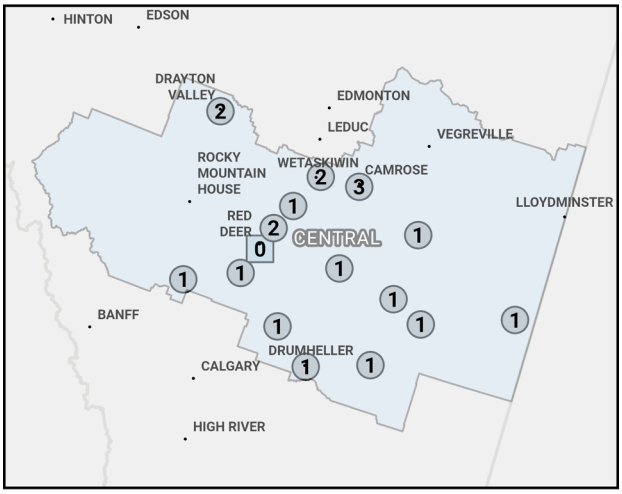
Context:

[1]The PCU based at Red Deer Regional Hospital Centre admits patients from across the Zone for symptom management and end-of-life care. The unit has a total of 36 beds, shared with medicine and oncology; however, only 18 of these are designated for palliative care. Designated beds may not be available when needed for palliative care admission. Prior to the COVID-19 pandemic, these 18 PCU beds were dedicated for palliative care and challenges have occurred with palliative care admissions since.

[2]All community acute care hospitals also operate dedicated palliative care beds (typically one to three, depending on the local size of the community) for end-of-life care closer to home.

[3]Only dedicated beds are included.

Palliative Care Units in Central Health Zone



Legend

- Major Cities
- Alberta Health Zones

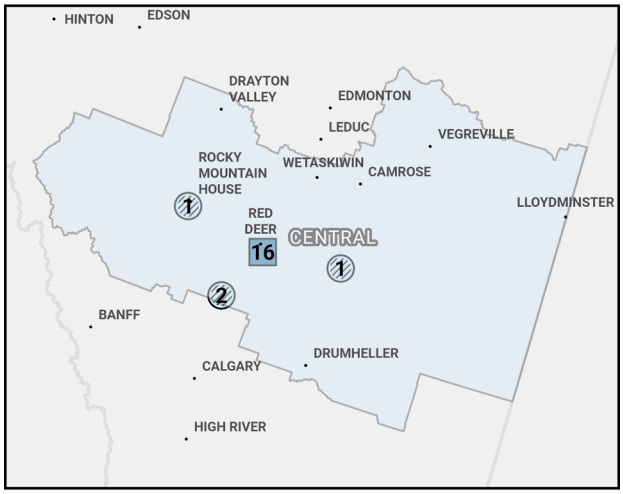
Facility, Type

- PCU, Acute
- PCU, Mixed
- Other Palliative Care Beds, NA

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Hospices in Central Health Zone



Legend

- Major Cities
- Alberta Health Zones

Facility, Patients, Location-type

- Hospice Residence, Adult Cancer, Stand-alone
- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Embedded residence
- Hospice Residence,Pediatric, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	1[1]		
	Hospice beds in residences	16		
	Other hospice beds	4[2]		
	Total hospice beds	20	INADEQUATE[3]	60%
	Standards/indicators for hospice residences	YES[4]		
	Community hospice organizations**	10		

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

Context:

[1]Nursing care at the free-standing hospice residence in Red Deer is uniquely provided by palliative home care nurses, unlike other hospices across the province.

[2]There are four hospice beds co-located within three continuing care facilities, which enable rural residents to receive end-of-life care closer to home.

[3]The Central Zone has a distributed model for palliative care beds across acute care hospitals and continuing care facilities. Most of the dedicated acute care palliative care beds are used for end-of-life care, essentially functioning to provide hospice care within a community hospital setting. Taken together, these beds would support the minimum recommended number of hospice beds for the population. If PCU beds were reverted back to "dedicated," the overall number of beds would become Adequate for the population.

[4]Provincial standards.

Total Palliative Care Beds:

The total number of dedicated inpatient palliative care beds (PCU and hospice) for the zone is 40 (84.0%), which is Inadequate for the region when using the Catalonia formula. Based on the population size, there should be at least 48 beds dedicated to palliative care.

Community

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

Context:

[1]The Central Zone's specialist palliative care team is comprised of palliative care resource nurses, a nurse practitioner, a continuing care counsellor and physicians with additional training in palliative care, who provide consultative support across community settings and act as a resource for any health care professional.

[2]The Central Zone palliative care physician team provides 24/7 consultative support to patients across the Zone, including in the community (acute care, long-term care, hospice, and community).

Palliative Home Care

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

Context:

[1]Palliative home care is available in the urban centre of Red Deer, with integrated home care providing the palliative in home care across the rest of the Zone. Each rural integrated home care team has an identified palliative lead with support from the Central Zone palliative care resource nurse, as well as the broader consult team.

[2]The palliative home care team provides after-hours support; however, there is variability in after-hours support available through the integrated home care teams, with some providing phone support and others with none.

Primary Care

Overall provision of primary palliative care	●●○○
Providing palliative care to ambulatory patients	●●●○ V
Providing palliative care home visits	●●○○ V
Clinics providing 24/7 on-call palliative care coverage	●●○○ V[1]
Standards/indicators for overall provision of primary palliative care	NO
Training for primary care professionals on the palliative care approach available	YES

Context:

[1]Overall, there is a high level of engagement of family physicians providing primary palliative care to their patients across settings in the Zone, including in the ambulatory care setting, at home, in LTC and in hospice with 24/7 support from the specialist palliative care team as needed.

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

Context:

[1]The specialist palliative care team provides support across rural areas of the Zone, with in-person consultation whenever possible. There is less access to one-on-one care and both specialized prescriptions and equipment in some rural areas, especially for those who reside further away from the primary highways.

Long-Term Care (LTC)

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

Context:

[1]The specialist palliative care teams provide 24/7 consultative support to LTC homes.

[2]Some LTC homes in the Zone also operate hospice beds to support local community residents to receive end-of-life care closer to home. Staff at these facilities have additional education and experience in palliative care that may support the integration of palliative approaches across the LTC facility.

Paramedic Emergency Services

Training of paramedics in palliative care	YES

Advance Care Planning

Advance Care Planning resources	YES

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Alberta Health Services and Covenant Health, including reporting by Zones.

EDUCATION

MEDICAL SCHOOLS

None[1]

Context:

[1]The Central Zone palliative care consult team offers a two-week elective to Rural Family Medicine residents (postgraduate trainees) from the University of Alberta, University of Calgary and other programs.

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/ DEGREE PROGRAMS*)
Red Deer Polytechnic	MANDATORY: CLASSROOM LEARNING[1]
Prairie College	NO INFORMATION PROVIDED

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

Context:

[1]The Red Deer Polytechnic (RDP) undergraduate nursing curriculum contains mandatory palliative care content in both their RN and RPN/ LPN programs.

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	NO
Active palliative care research	NO
Palliative care quality improvement initiatives	YES

Context:

[1]There are dedicated educators for organizing and providing palliative care education in the Zone.

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)	YES[1]
Education program(s) for pediatric palliative care	YES

Context:

[1]There is no specialized pediatric palliative care team in the Central Zone, but 24/7 consultative care is provided through the Calgary Zone CHAPS team (south of Red Deer) and the Edmonton Zone ASSIST team (north of Red Deer). Physicians and EMS/paramedics have access through the RAAPID and EMS PEOLC ATR services. The Calgary Zone CHAPS program offers pediatric hospice care, including respite, to eligible patients in the Central Zone; however, this requires significant travel for families and uptake is low. In addition, the Central Zone specialist palliative care team provides psychosocial support for pediatric patients and their families, including grief and bereavement support for antenatal losses.

OTHER FOCUSED POPULATIONS

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

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and additional populations.

Context:

[1]There is an education initiative to support nurses in the local penitentiaries on providing palliative care in prisons.

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[1]
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:

[1]The Lacombe Palliative Care Society and Mountain View Hospice Society provide annual palliative care meetings with an invited speaker that are open to the public. There are numerous Nav-CARE programs running in the Zone, including through the Mountain View Hospice Society, Wetaskiwin Family and Community Support Services, Camrose Family and Community Support Services, and the Stettler Hospice Society.

Calgary Zone

DEMOGRAPHICS

The Calgary Zone is one of five geographic Zones under the regional health authority, Alberta Health Services. It encompasses the city of Calgary and surrounding areas and has the largest population size of all Zones. The region includes a mix of urban and rural communities, with no designated remote areas.

Area	39,300 KM²
Population	1,727,705
Population density/km²	43 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]
Law to ensure palliative care access	NO
Standards and norms for palliative care	YES[2]
Designated palliative care leads	YES
Law related to advanced care planning	YES[3]
Compassionate care benefits	YES[4]
FORMAL STRATEGIES	**PRESENCE**
Home and community care	YES
Inpatient and outpatient hospital services (cancer and non-cancer)	PARTIAL[5]
Long-term care facilities	YES[6]
Rural and remote	NO
Paramedic/emergency services	YES
GOVERNMENT FUNDING	**PRESENCE**
Palliative care home service	YES
Hospice residences	PARTIAL
Community hospice services	PARTIAL
Medications: In hospital	YES
Medications: Out of hospital	YES[6]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[7]
Continuing palliative care education in various settings	PARTIAL[8]

*See context box below.

Context:

[1]Palliative and End of Life Care Alberta Provincial Framework (2014) and Addendum (2021), Alberta Palliative Care Competency Framework and the Continuing Care Act (2024), which provides regulatory oversight for publicly funded hospices.

[2]AHS PEOLC policies and guidelines operate provincially. Examples include Palliative Sedation; Expected Death in the Home; Care for the Imminently Dying Pathway; standardized Hospice Admission Criteria; a "White Rose Program," which allows staff to create a calm and quiet environment, ensuring respect for the dying person and their loved ones; and a provincial bereavement support package offered to all families. The Calgary Zone Palliative and End-of-Life Care program has some additional policies and guidelines that apply across the Zone, including Transitions Out of Hospice.

[3]Provincial legislation (Personal Directives Act)

[4]Federal program (Compassionate Care Benefits)

[5]Cancer Care Alberta has a formal palliative care strategy. There is no formal strategy for non-cancer.

[6]Continuing Care Health Services Standards

[7]The Palliative Coverage Program covers some supplies, such as prefilled syringes for medications. Alberta Aids to Daily Living covers supplies, equipment and oxygen (according to specific criteria) for some eligible patients.

[8]Provincial funding for health care professionals to take part in training through Pallium Canada's Learning Essential Approaches to Palliative Care (LEAP) courses.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●●[1]
Access to specialist-level palliative care support teams 24/7	●●●●[2]
Funding models for palliative care physicians	ALTERNATIVE RELATIONSHIP PLANS/ FEE-FOR-SERVICE[3]

Context:

[1]Urban acute care hospitals have in-house specialist palliative care teams comprised of physicians and nurse consultants, and variable allied health team members. Dedicated rural specialist palliative care teams provide consultative support to all rural hospitals through in-person and telehealth support.

[2]On-call support is provided 24/7 by consulting palliative care physicians to all hospitals in the Zone, in-person or via phone.

[3]Specialist palliative care physicians are part of a clinical alternative relationship plan (adult) or academic alternative relationship plan (pediatric). Hospice physicians are fee-for service remunerated.

Inpatient Units and Outpatient Clinics

Integration* in inpatient units	●●●○ V[1]
Integration* in outpatient clinics—Cancer	●●●○ V[2]
Integration* in outpatient clinics—Other**	●●●○ V[3]

*Integration includes clinicians and staff with core palliative care competencies to provide a palliative care approach; early activation of a palliative care approach; timely referral to palliative care specialist teams when needed; and collaboration with specialist palliative care teams.

**Cardiology, respirology, nephrology, and neurology

Context:

[1]A palliative approach to care is largely integrated across inpatient units in cancer and non-cancer contexts with some variability across sites.

[2]Oncology providers have integrated some palliative care competencies in clinics. In-person consultative support is available when needed from the specialist palliative care team. The Palliative Care Early and Systematic (PaCES) project implemented changes with colorectal cancer oncologists in 2019-2020 focusing on the earlier integration of palliative care in patient care and developing electronic health record cues for oncologists was part of ongoing research work in 2023.

[3]A specialist palliative care physician is embedded in a multidisciplinary ALS clinic and has been available to consult in a Complex Chronic Disease Management Clinic. Calgary also has strong champions of palliative care in non-cancer clinics in respirology, nephrology, neurology, hepatology, and gastroenterology, providing an integrated palliative approach to care.

Palliative Care Units (PCUs)

		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative care units (PCUs)	1		
	Palliative care unit beds	20[1]	INADEQUATE[2]	38.5%
	Other palliative care beds	0		
	Total palliative care beds	20		

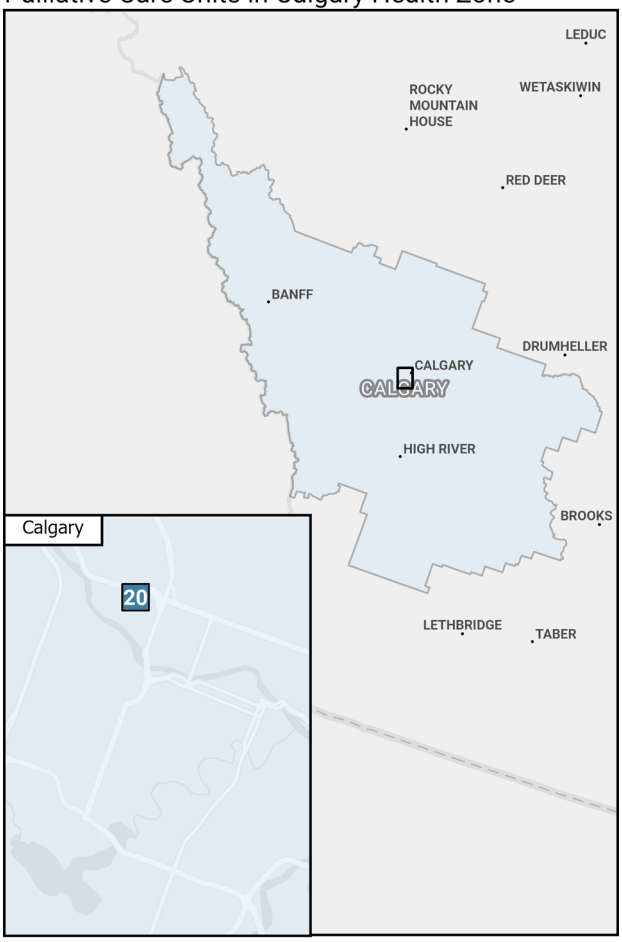
*Catalonia formula (10 beds per 100 000 population, of which 3 are PCU beds and 7 are hospice or continuing care type beds). Only dedicated beds are included.

Context:

[1]The Intensive Palliative Care Unit (IPCU) in Calgary has 20 beds, which are embedded within a larger 29-bed unit that is shared with oncology. The IPCU provides tertiary-level acute palliative care through an interprofessional specialist palliative care team, which includes a spiritual care provider, a recreation therapist, occupational and physical therapists, a social worker, nursing and physicians. Most admissions are short stays for complex symptom assessment and holistic management. There are no restrictions on the goal of care of the patient and admission criteria are based on symptom complexity.

[2]Based on the population size of the Calgary Zone, there should be at least 52 dedicated PCU beds.

Palliative Care Units in Calgary Health Zone



Legend

- Major Cities
- Alberta Health Zones

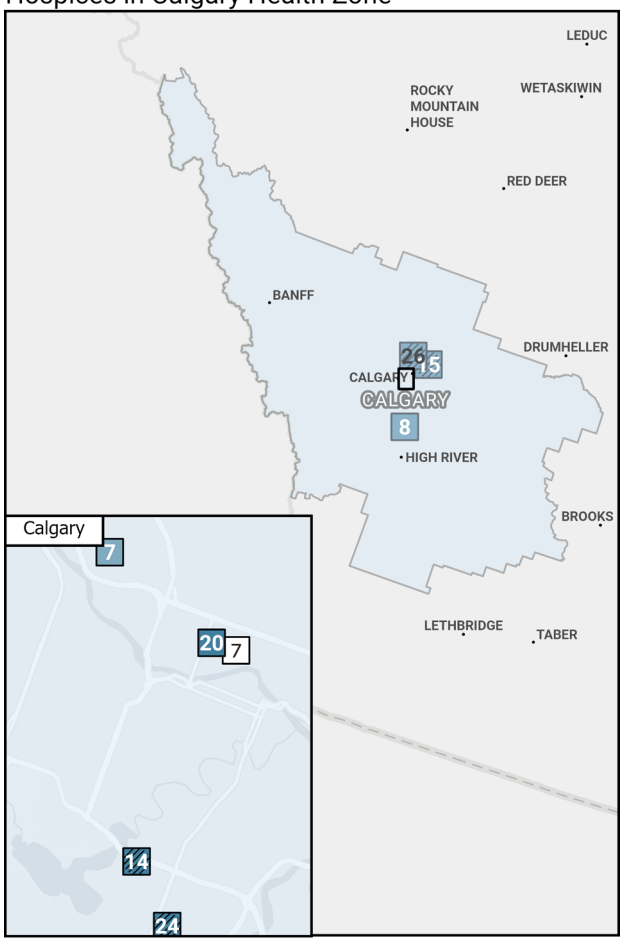
Facility, Type

- PCU, Acute
- PCU, Mixed
- Other Palliative Care Beds, NA

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Hospices in Calgary Health Zone



Legend

- Major Cities
- Alberta Health Zones

Facility, Patients, Location-type

- Hospice Residence, Adult Cancer, Stand-alone
- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Embedded residence
- Hospice Residence,Pediatric, Stand-alone
- Other Hospice Beds, Adult, Co-located

Facility labels report number of beds available.

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	8[1]		
	Hospice beds in residences	121		
	Other hospice beds	0		
	Total hospice beds	121	ADEQUATE	
	Standards/indicators for hospice residences	YES[2]		
	Community hospice organizations**	13		

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

Context:

[1]There are seven adult hospices and one pediatric hospice (Rotary Flames House) in the Calgary Zone. The Rotary Flames House is the only pediatric hospice in the province. A central access hub, unique to Calgary, is used to coordinate admissions to adult hospices and supports collaborative quality improvement, education and guideline creation across the hospices. The medical leads of all the adult hospices meet regularly as a committee.

[2]In addition to the provincial standards for hospices, Calgary has standardized zonal guidelines and policies, such as Transitions Out of Hospice and Care After Death.

Total Palliative Care Beds:

The total number of inpatient palliative care beds (PCU and hospice) for the zone is 141 (81.5%), which is is Inadequate for the region when using the Catalonia formula. Based on the population size, there should be at least 173 beds dedicated to palliative care.

Community

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

Context:

[1]Specialist palliative care teams provide consults across all care settings, including within the community, and in both rural and urban areas.

[2]Specialist palliative care physicians provide 24/7 on-call support to providers in the community across the Zone. Physicians and EMS/paramedics can access adult and pediatric on-call palliative care physicians via the RAAPID service.

Palliative Home Care

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

Context:

[1]Calgary and some surrounding towns have dedicated adult palliative home care, including access to a 24/7 nursing response team. Pediatric palliative home care is not available, and general pediatric home care is limited to weekday daytime hours. In rural areas, palliative home care for both adults and children is provided through integrated home care services.

[2]Palliative home care eligibility for adults requires an expected prognosis of 12 months or less.

Primary Care

Overall provision of primary palliative care	●●○○ V
Providing palliative care to ambulatory patients	●●●○ V
Providing palliative care home visits	●●○○ V
Clinics providing 24/7 on-call palliative care coverage	●○○○
Standards/indicators for overall provision of primary palliative care	NO
Training for primary care professionals on the palliative care approach available	YES

Context:

Overall, the provision of primary palliative care is variable across the Zone. Few physicians provide in-home visits, and on-call support is largely limited to evening after-hours clinics (available until 9 p.m.) through Primary Care Networks.

Primary care practitioners (including family physicians, pediatricians, and nurse practitioners) are supported in providing a palliative approach to their patients through the "Specialist Link" service, available on weekdays during daytime hours. Specialist Link provides real-time, physician-to-physician tele-advice, clinical care pathways, and additional resources for both adult and pediatric specialist palliative care.

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

Context:

[1]Specialist palliative care teams provide both in-person and virtual consultative support across the rural areas of the Calgary Zone, often working in close collaboration with community-based primary care practitioners. After-hours support is available virtually. Physicians and paramedics can access an on-call palliative care consultant physician 24/7 through the RAAPID service.

Highlight:

The Calgary Zone has dedicated palliative care leads for all rural integrated home care teams, supported by a rural palliative care consult team. The Zone actively collaborates with rural hospice societies and is working on expanding the number of hospice beds in rural areas.

Long-Term Care (LTC)

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

Context:

[1]Some LTC facilities in the Calgary Zone have dedicated palliative care nurses on staff. The community specialist palliative care team provides consults to all LTC facilities across the Zone, including after-hours support.

[2]The degree of primary palliative care integration varies across sites. Some LTC facilities that operate hospice residences often have greater access to on-site education, coaching and mentoring to support LTC staff in delivering a palliative care approach when caring for residents.

Paramedic Emergency Services

Training of paramedics in palliative care	YES

Highlight:

The 'Emergency Medical Services Assess, Treat and Refer - Palliative and End of Life Care' program was developed and piloted in the Calgary Zone before spreading across the province in 2015.

Advance Care Planning

Advance Care Planning resources	YES

Highlight:

The AHS Advance Care Planning and Goals of Care Designation (ACP GCD) policy and processes were originally developed and implemented in the Calgary Zone in 2008, before spreading across the province in 2014. The Calgary Zone Palliative and End-of-Life Care Program maintains a robust ACP GCD team, with two educators and a physician consultant who engage in quality improvement, education of the public and health care providers and resource development.

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Alberta Health Services and Covenant Health, including reporting by Zones.

The Calgary Zone has established integrated Palliative and End-of-Life Care programs, supported by a suite of corresponding metrics. Dedicated business analysts track this data over multiple years, using it to drive continuous quality improvement, new initiatives and workforce planning.

EDUCATION

MEDICAL SCHOOLS

	UNIVERSITY OF CALGARY
UNDERGRADUATE EDUCATION	
Inclusion of palliative care in undergraduate curriculum	MANDATORY: PRE-CLERKSHIP CLASSROOM LEARNING[1] OPTIONAL: CLERKSHIP CLINICAL ROTATION
POSTGRADUATE EDUCATION	
Palliative Care Residency Training Programs	
Royal College Subspecialty Certification in Palliative Medicine	YES – ADULT[2]
College of Family Physicians Certificate of Added Competence in Palliative Care	YES[2]
OTHER SPECIALTY RESIDENCY TRAINING PROGRAMS	**PALLIATIVE CARE EDUCATION/EXPERIENCES**
Anesthesia	OPTIONAL: CLINICAL ROTATION
Cardiology	OPTIONAL: CLINICAL ROTATION
Critical care	OPTIONAL: CLINICAL ROTATION
Emergency medicine	OPTIONAL: CLINICAL ROTATION
Family medicine	MANDATORY: CLINICAL ROTATION MANDATORY: CLASSROOM LEARNING[3]
Geriatrics	OPTIONAL: CLINICAL ROTATION
Internal medicine	OPTIONAL: CLINICAL ROTATION
Neurology	MANDATORY: CLINICAL ROTATION
Pediatrics	MANDATORY: CLASSROOM LEARNING MANDATORY: CLINICAL ROTATION
Radiation oncology	OPTIONAL: CLINICAL ROTATION
Medical oncology	OPTIONAL: CLINICAL ROTATION
Psychiatry	OPTIONAL: CLINICAL ROTATION
Respirology	OPTIONAL: CLINICAL ROTATION
Surgery	OPTIONAL: CLINICAL ROTATION

Context:

[1]The Cumming School of Medicine, University of Calgary, introduced a new curriculum in July 2023. The new "Re-Imagining Medical Education" (RIME) spiral curriculum incorporates an increased number of touch points on palliative care topics, emphasizing communication, patient-centred care, and end-of-life considerations. A student-led special interest group at the medical school provides annual, extracurricular exposure to palliative care topics.

[2]Number of residency spots will vary yearly.

[3]Rural Family Medicine residents participate in Pallium Canada's LEAP training.

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
University of Calgary[1]	MANDATORY: CLASSROOM LEARNING
Mount Royal University[2]	MANDATORY: CLASSROOM LEARNING OPTIONAL: CLINICAL EXPERIENCES
Bow Valley College	NO INFORMATION PROVIDED
Columbia College	NO INFORMATION PROVIDED

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

Context:

[1]The University of Calgary Faculty of Nursing offers a Graduate Certificate in palliative care.

[2]Mount Royal University (MRU) offers an elective palliative care course and opportunities to engage in preceptorship experiences within palliative care or hospice settings. Brief palliative care content is incorporated into one of its second- and third-year courses, as well as a simulation in palliative care practice. The School of Continuing Education at MRU also offers a two-year certificate program in Gerontology and/or Hospice and Palliative Care.

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[1]
Active palliative care research	YES[2]
Palliative care quality improvement initiatives	YES

Context:

[1]The Mary O'Connor Palliative and Hospice Care Conference runs annually. The University of Calgary Division of Palliative Medicine hosts weekly continuous professional development rounds (journal club, advance practice and educational case review rounds) as well as monthly grand rounds.

[2]Members of the University of Calgary Division of Palliative Medicine (adult and pediatric) are active in research, including in the areas of Advance Care Planning and communication, early integration of palliative care within cancer care, models of palliative care, and therapeutic interventions for complex symptom management, amongst others.

FOCUSED POPULATIONS

PEDIATRIC PALLIATIVE CARE

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

Context:

[1]The Rotary Flames House (RFH) is the only pediatric hospice in the province. It operates as part of the Children's Hospice and Palliative Care Services (CHAPS) program in the Calgary Zone and is staffed by an interprofessional team, including specialist palliative care physicians, nurses, child life and recreation therapists, a clinical pharmacist and social workers with expertise in grief and bereavement. Additional support is provided by spiritual care, teachers, occupational and physical therapists, and music and horticultural therapists. RFH provides inpatient admissions for symptom management, end-of-life care, and family support, including respite. It also provides day programming, such as grief and bereavement support groups, sibling therapy and more. While patients from across the province may access CHAPS services at RFH, families outside the Calgary Zone may face extensive travel requirements.

[2]The CHAPS on-call physicians are available 24/7 to provide consultative pediatric palliative care support, including to physicians and EMS paramedics across southern Alberta (south of Red Deer) through the RAAPID and EMS PEOLC ATR services.

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	NO	NO

*Refers to Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and additional populations.

Context:

[1]Calgary's "Community Allied Mobile Palliative Partnership" (CAMPP) program is administered as a collaboration between "CUPS" and AHS. Highlighted by Health Excellence Canada, CAMPP is an outreach initiative that helps clients experiencing structural vulnerabilities navigate the complex health care system and achieve equitable access to quality palliative care services.

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

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	NO
Programs or initiatives for informal caregivers	YES

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

Context:

[1]There are many volunteer opportunities available, both within AHS and through community organizations. Notable examples include the AHS's "No One Dies Alone," program, which offers companionship to individuals nearing the end of life who would otherwise be alone, and the Living with Advanced Illness Centre at Hospice Calgary, which provides volunteer companion programming, individual and family counselling and a day program for those living with advanced illness.

[2]Adult grief support services are integrated into the Palliative and End-of-Life Care portfolio in the Calgary Zone. These services are provided by the Bob Glasgow Grief Support Centre, while pediatric grief support for families of children who are seriously ill or have died is delivered through the CHAPS program. Both adult and pediatric services include individual and group counselling, as well as public (including schools) and provider education, such as the workshop "How to Care, What to Say," for providers. Hospice Calgary also provides unique outpatient grief and bereavement support for grieving children across southern Alberta through "The Children's Grief Centre." This service includes individual, family and peer group counselling, and resources for parents and teachers.

South Zone

DEMOGRAPHICS

The South Zone is one of five geographic Zones under the regional health authority, Alberta Health Services. It covers the areas south of Calgary and is the third-largest Zone geographically. The region comprises urban, rural and remote communities.

Area	66,500 KM²
Population	312,255
Population density/km²	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]
Law to ensure palliative care access	NO
Standards and norms for palliative care	YES[2]
Designated palliative care leads	YES
Law related to advanced care planning	YES[3]
Compassionate care benefits	YES[4]
FORMAL STRATEGIES	**PRESENCE**
Home and community care	YES
Inpatient and outpatient hospital services (cancer and non-cancer)	PARTIAL[5]
Long-term care facilities	YES[6]
Rural and remote	NO
Paramedic/emergency services	YES
GOVERNMENT FUNDING	**PRESENCE**
Palliative care home service	YES
Hospice residences	PARTIAL
Community hospice services	PARTIAL
Medications: In hospital	YES
Medications: Out of hospital	YES[6]
Supplies and equipment: In hospital	YES
Supplies and equipment: Out of hospital	PARTIAL[7]
Continuing palliative care education in various settings	PARTIAL[8]

*See context box below.

Context:

[1]Palliative and End of Life Care Alberta Provincial Framework (2014) and Addendum (2021), Alberta Palliative Care Competency Framework and the Continuing Care Act (2024), which provides regulatory oversight for publicly funded hospices.

[2]AHS PEOLC policies and guidelines operate provincially. Examples include Palliative Sedation; Expected Death in the Home; Care for the Imminently Dying Pathway; standardized Hospice Admission Criteria; a "White Rose Program," which allows staff to create a calm and quiet environment, ensuring respect for the dying person and their loved ones; and a provincial bereavement support package offered to all families.

[3]Provincial legislation (Personal Directives Act)

[4]Federal program (Compassionate Care Benefits)

[5]Cancer Care Alberta has a formal palliative care strategy. There is no formal strategy for non-cancer.

[6]Continuing Care Health Services Standards

[7]The Palliative Coverage Program covers some supplies, such as prefilled syringes for medications. Alberta Aids to Daily Living covers supplies, equipment and oxygen (according to specific criteria) for some eligible patients.

[8]Provincial funding for health care professionals to take part in training through Pallium Canada's Learning Essential Approaches to Palliative Care (LEAP) courses.

SERVICES

SETTING: ACUTE CARE

Hospitals

Access to specialist-level palliative care support teams	●●●●[1]
Access to specialist-level palliative care support teams 24/7	●●●●[2]
Funding models for palliative care physicians	FEE-FOR-SERVICE

Context:

[1]There are two specialist palliative care teams (East and West) who provide consultative support to all hospitals.

[2]The East and West specialist teams provide 24/7 on-call coverage to hospitals in their respective regions. Physicians and EMS/paramedics can be connected to the appropriate on call palliative consultant via the RAAPID service.

Inpatient Units and Outpatient Clinics

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

*Integration includes clinicians and staff with core palliative care competencies to provide a palliative care approach; early activation of a palliative care approach; timely referral to palliative care specialist teams when needed; and collaboration with specialist palliative care teams.

**Cardiology, respirology, nephrology, and neurology

Context:

[1]There are higher levels of integration of a palliative approach to care in cancer compared to non-cancer, including inpatient and outpatient settings. Primary-level palliative care is provided by many oncology teams, working together with specialist palliative care teams integrated in the two regional cancer centers.

[2]Overall, there is low integration of a palliative approach to care in non-cancer settings, with some examples of palliative care champions within hepatology and general gastroenterology, and a specialist palliative care provider embedded within a cardiology clinic.

Palliative Care Units (PCUs)

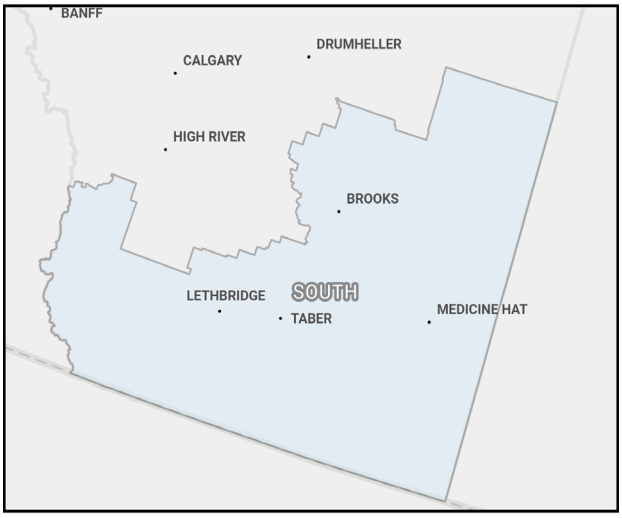
		NUMBER	ADEQUACY*	% OF TARGET BEDS
	Palliative care units (PCUs)	0		
	Palliative care unit beds	0		
	Other palliative care beds	0		
	Total palliative care beds	0	INADEQUATE	0%

*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:

There are no dedicated PCUs or PCU beds in the Zone—there are only hospice beds. Based on the population size of the Zone, there should be at least 9 dedicated PCU beds.

Palliative Care Units in South Health Zone



Legend

- Major Cities
- Alberta Health Zones

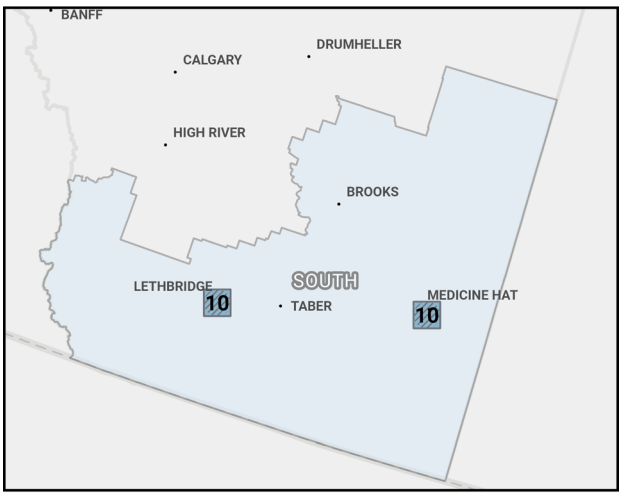
Facility, Type

- PCU, Acute
- PCU, Mixed
- Other Palliative Care Beds, NA

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Facility labels report number of beds available.

Hospices in South Health Zone



Legend

- Major Cities
- Alberta Health Zones

Facility, Patients, Location-type

- Hospice Residence, Adult Cancer, Stand-alone
- Hospice Residence, Adult, Stand-alone
- Hospice Residence, Adult, Embedded residence
- Hospice Residence,Pediatric, Stand-alone
- Other Hospice Beds, Adult, Co-located

References: 1) ESRI Light Gray Basemap (arcgis.com); 2) Alberta Health (Government of Alberta); Major Cities (The Atlas of Canada Base Maps of BC).

Facility labels report number of beds available.

SETTING: COMMUNITY

Hospice Residences and Services

		RESPONSES	ADEQUACY*	% OF TARGET BEDS
	Hospice residences	2[1]		
	Hospice beds in residences	20		
	Other hospice beds	0		
	Total hospice beds	20	ADEQUATE[2]	91.5%
	Standards/indicators for hospice residences	YES[3]		
	Community hospice organizations	1		

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

Context:

[1]There are two hospice residences, with 10 beds each, that are embedded within continuing care facilities in the largest urban centres in the South Zone—Lethbridge and Medicine Hat.

[2]The number of beds is technically below the 7 beds per 100,000, but we have considered it Adequate for our study purposes, as falling within 10% of the target.

[3]Provincial standards.

Total Palliative Care Beds:

The total number of palliative care beds (PCU and hospice) for the Zone is 20, which is Inadequate (64%) for the region when using the Catalonia formula. Based on the population of the South Zone, there should be at least 31 beds dedicated to palliative care.

Community

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

Context:

[1]The two specialist palliative care teams, East and West, provide consultative support to patients across hospitals, hospices and community settings, including an outpatient palliative care clinic for ambulatory patients in the community. Teams are comprised of palliative care physicians, nurses and variable allied health. The West team has a novel role of a Child Life Specialist who supports children and grandchildren of palliative care patients being seen by the consult team, particularly in the home setting. The Child Life Specialist helps with transitions, anticipatory grief, creating legacy projects, and with grief after death.

[2]The specialist palliative care team is available 24/7 for community consults. Physicians and EMS/paramedics across the Zone can access the on-call physician via the RAAPID service.

Highlight:

A unique "Continuing Care Clinic" integrates the specialist palliative care team physicians and home care nurses who provide joint clinic visits to assess and coordinate care for ambulatory patients in the community.

Palliative Home Care

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

Context:

[1]Palliative home care is provided by integrated home care across the Zone. Each rural integrated home care team has an identified palliative lead and the support of the broader specialist palliative care consult team.

[2]After-hours care is largely provided via phone support.

Primary Care

Overall provision of primary palliative care	●●○○V
Providing palliative care to ambulatory patients	●●●○V
Providing palliative care home visits	●●○○V
Clinics providing 24/7 on-call palliative care coverage	●●○○V
Standards/indicators for overall provision of primary palliative care	NO
Training for primary care professionals on the palliative care approach available	YES

*Indicator not collected for this atlas

Context:

The overall provision of primary palliative care is variable, with less provision of in-home palliative care visits and after-hours coverage compared to care in the ambulatory clinic setting.

Rural and Remote Areas

Access to specialist palliative care teams	●●●○V[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

Context:

[1]Specialist palliative care consultation is available throughout the Zone, but is largely provided virtually or by phone in more rural areas.

Long-Term Care (LTC)

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

Context:

[1]Specialist palliative care consultation is available 24/7 to practitioners providing care to residents in LTC homes.

[2]The degree to which palliative care approaches are integrated into LTC was difficult to ascertain but overall has low integration.

Paramedic Emergency Services

Training of paramedics in palliative care	YES

Advance Care Planning

Advance Care Planning resources	YES

SYSTEM PERFORMANCE

Provincial system performance indicators are collected and reported through Alberta Health Services and Covenant Health, including reporting by Zones.

EDUCATION

MEDICAL SCHOOLS

None.

NURSING SCHOOLS

SCHOOLS	INCLUSION OF PALLIATIVE CARE IN UNDERGRADUATE PROGRAM (DIPLOMA/DEGREE PROGRAMS*)
Medicine Hat College	NO INFORMATION PROVIDED
Lethbridge College	NO INFORMATION PROVIDED
University of Lethbridge	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	YES[1]
Palliative care conference/symposia regionally	NO
Active palliative care research	NO
Palliative care quality improvement initiatives	YES

Context:

[1]Dedicated palliative care educators support the coordination and delivery of palliative care education for health care providers across care settings.

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)	YES[1]
Education program(s) for pediatric palliative care	YES

Context:

[1]The Calgary Zone CHAPS team provides 24/7 specialist pediatric palliative care consultative support to physicians and EMS/paramedics across the South Zone, accessible through the RAAPID and EMS PEOLC ATR services.

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, and additional populations.

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[1]

COMMUNITY RESOURCES

Compassionate Community activities and other community engagement activities/resources*	YES[1]
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:

[1]The Prairie Rose Hospice Palliative Care Society runs many community engagement activities, public education seminars on palliative care topics, and volunteer training.

Discussion and Conclusion

Discussion

Overall, palliative care is well established across Alberta with a significant level of integration of specialist palliative care teams across settings of care. The province has a long and active history of palliative care development and innovation, with the Edmonton area — followed soon after by the Calgary area— home to one of the first regional palliative care programs in the country. As in many parts of Canada, access to various specialized supports needed for palliative care is more challenging for rural and remote communities, and access to primary palliative care in these communities has decreased since the COVID-19 pandemic. Ongoing strains within the primary care sector have led to additional challenges. Variability is noted across the Zones across several indicators. There are many examples of excellence across the province, across the domains and indicators.

In the policy domain, there are robust provincial-level frameworks that guide the standards and ongoing development of palliative care, including the prioritization of public funding to address gaps. The recent Rural Palliative Care In-Home Funding Program, for example, addresses the unique challenges of rural and remote areas in accessing formal caregivers. There is specific provincial legislation that regulates and sets standards for hospices. A unique Alberta Provincial Palliative and End-of-Life (PEOLC) Innovations Steering Committee for palliative care brings together the operational and medical zone palliative care leads, with partners, for strategic planning and the development of province-wide standards for palliative care, including policies and clinical practice guidelines. This committee has been pivotal in enabling an integrated and coordinated approach to quality palliative care service delivery across the province. The Covenant Health Palliative Institute is a centre of excellence for advancing palliative care research, education, advocacy, policy, and clinical standards across the province and nationally, including developing the Alberta Palliative Care Competency Framework and the Palliative Care Matters initiative, which informed the development of the Framework for Palliative Care in Canada.

Generally, across the province, there is a high level of access to in-person specialist palliative care teams providing palliative care consultative support in hospitals, especially in medium to large urban areas. Smaller community hospitals in more rural and remote areas are largely supported virtually with in-person visits when needed. All hospitals have access to 24/7 specialist palliative care physician advice through the RAAPID (Referral, Access, Advice, Placement, Information & Destination) service that supports primary providers to manage symptoms and to provide palliative care to patients in their own communities.

There is variable integration across the province of palliative care across various hospital inpatient and outpatient services, with higher levels in cancer compared to non-cancer services. Cancer Care Alberta has endorsed a new palliative strategy and a dedicated program lead for implementation. There are some examples of excellence in the integration of palliative care within non-cancer clinics, particularly in Edmonton and Calgary, including ALS, neurology, respirology, cardiac and renal. It is recognized that the concept of "integration" is a complex construct with varying understandings and definitions. For the purposes of this study and report, optimal "integration" 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.[15] [16] [17] [18] [19] [20] [21]

15 Brazil K. A Call for Integrated and Coordinated Palliative Care. Journal of Palliative Medicine. 2018 Jan;21(S1):S-27-S-29.
16 Hui D, Bruera E. Integrating palliative care into the trajectory of cancer care. Nat Rev Clin Oncol. 2016 Mar;13(2):159-71.
17 Maciver J, Ross HJ. A palliative approach for heart failure end-of-life care. Current Opinion in Cardiology. 2018 Mar;33(2):202–7.
18 Pereira J, Chasen MR. Early palliative care: taking ownership and creating the conditions. Current Oncology. 2016 Dec 22;23(6):367.
19 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).
20 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):144–81.
21 Touzel M, Shadd J. Content Validity of a Conceptual Model of a Palliative Approach. Journal of Palliative Medicine. 2018 Nov;21(11):1627–35.

Overall, the number of palliative care unit (PCU) beds in the province is inadequate as per a conservative estimate of the minimum number of inpatient beds needed for the population, per the "Catalonia Formula" proposed by Xavier Gomez-Batiste et al.[22] Only about one third of the needed beds are in place. There are three PCUs; two of which are in Calgary and Edmonton and are highly specialized tertiary-level units that support the most complex symptom management needs and are staffed by comprehensive interprofessional specialist palliative care teams (hence the "tertiary" designation). In the Central Zone, the PCU was previously a dedicated 18-bed unit – for the exclusive use of patients with palliative care needs – but this became a designated unit during the COVID-19 pandemic and continues to be used as such. There are also dedicated palliative care inpatient beds across the North and Central Zones of the province, located in smaller acute care hospitals (typically one to two beds) that are primarily used for end-of-life care (last days and weeks) closer to home. These are designed to support an integrated model of palliative care delivery when the population size of a region does not have the economy of scale to justify a larger PCU. Notably, there are no PCU beds in the South Zone.

The provincial PEOLC Innovations Steering Committee has a clear operational definition for dedicated PEOLC beds and receives regular reporting on palliative care beds in the province. However, they do not have operational oversight on acute care beds across Zones and competing local demands for inpatient hospital beds may impact their use and availability for palliative care, as has been the case in the Central Zone PCU in Red Deer.

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.[23] [24] [25] 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. Palliative care inpatient beds co-located within an acute care facility that are dedicated to palliative care use, in keeping with the Alberta PEOLC bed definition, meet the criteria for "Other" PCU beds in this Atlas. "Floating" beds, where any bed in the hospital or in pre-assigned units can be designated as "palliative" if occupied by a patient with predominantly palliative care needs, are not included in the definition. From access and quality of care perspectives, the limitations of these floating beds, an issue that also sometimes includes designated beds in mixed units (not only solely dedicated for palliative care patients), is that they may not necessarily be available when patients with palliative care needs require inpatient admission to them. Moreover, the staff often have no or minimal palliative care training (or palliative care focus) to care for these patients, especially those with complex needs. In addition, their focus of care is often more acute and may not align with the palliative and end-of-life needs of patients.

The overall number of hospice beds in the province is deemed adequate by this study, but barely at just under 10% below the conservative target of 7 hospice beds per 100,000 population. This means that growth in the population and further aging of the population may render this number as inadequate.

Collectively, the total number of PCU and hospice beds for the population is not adequate, at approximately 83% of the target number for the province. There is variability across Zones, with lower numbers of dedicated beds in the North (67%) and South (64%) Zones and higher numbers in the Edmonton (85.5%) Central (84%), and Calgary (81.5%) Zones. Central Zone's total bed needs could be met by changing the PCU back to a dedicated unit.

Hospices in Alberta are a mix of free-standing residences and dedicated units embedded within continuing care centres. This model of being embedded in continuing care facilities but still staffed at hospice levels and providing a hospice approach to care, has the advantage of not requiring large capital funding to build free-standing hospices and reducing facility operational costs associated with free-standing hospices. Hospices play an important role in palliative care across the province, serving as hubs to mobilize communities in the form of volunteer and compassionate community initiatives, as well as for grief and bereavement services.

Access to specialist palliative care teams in the community is consistently very high across the province, with in-person visits prioritized for initial consults. Some rural and remote areas, as in many parts of Canada, are primarily supported virtually. All physicians have access to 24/7 specialist palliative care physicians, easily accessible across the province through the RAAPID service. The predominant practice model of community palliative care teams is *Consultation* and, to a lesser extent, *Shared Care*. The models and their respective

22 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.

23 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.

24 von Gunten CF. Secondary and Tertiary Palliative Care in US Hospitals. JAMA. 2002 Feb 20;287(7):875-81.

25 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.

roles, strengths and limitations are described elsewhere.[26] [27] [28] [29] *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.

Palliative home care is provided by specialized palliative home care teams in urban centres and through general "integrated home care" services in other parts of the province. Access to after-hours palliative home care is varied. Specialized palliative home care teams generally provide an after-hours response team, while many integrated home care services often provide after-hours phone support, though some teams have no after-hours availability.

Overall, there are variable levels of primary palliative care being provided by family physicians and primary care teams across the province. There are higher levels provided by primary care clinicians to their ambulatory patients and few providing home visits or after-hours on- call support for patients with palliative care needs. In Alberta, many family physicians are part of team-based, multiprofessional Primary Care Network groups who may provide evening support through an after-hours clinic setting (typically open until 9:00 p.m.), but these require patients to travel to an ambulatory clinic setting to be seen in person. There is an opportunity to build primary palliative care and explore ways in which to better support primary care teams to provide primary palliative care to their own patients as part of comprehensive and continuity of care provided by these services.

There is a well-established, award-winning, provincial Emergency Medical Services (EMS) Palliative and End-of-Life Care Assess Treat and Respond (EMS PEOLC ATR) Program that supports adult and pediatric patients who have elected to receive palliative care at home. Paramedics administer emergency medication, in accordance with palliative care guidelines, and work in collaboration with home care and specialist palliative care consultants to determine the potential course of treatment, which may include direct admission to a hospice or a palliative care inpatient bed if care cannot be managed in the home.

In the long-term care (LTC) setting, specialist palliative care teams provide a high level of access to consultative support (available 24/7 through RAAPID), as well as coaching and mentoring to support the integration of a palliative care approach. There is variability of the integration of a palliative approach, and LTCs with embedded hospice residences may have more integrated models.

In the domain of education, there are two medical schools that report including palliative care training in their undergraduate curricula. At the postgraduate medical education level, compulsory palliative care clinical training is required at the University of Alberta within family medicine, geriatrics and oncology residency programs, and at the University of Calgary, in family medicine, neurology and pediatrics. There are several programs that have compulsory classroom education in palliative care. There are also dedicated palliative care residency programs at both universities to train specialist-level palliative care physicians for adult populations, but there is not yet a program in pediatrics. Information on nursing schools was challenging to obtain. However, there are some examples of schools with integrated palliative care education at the undergraduate nursing level and two schools that offer postgraduate certificate programs in palliative care.

There are two specialist pediatric palliative care programs based in Edmonton (ASSIST) and Calgary (CHAPS) that provide 24/7 consultative support across the province. The CHAPS program also provides specialized inpatient pediatric palliative care in the only pediatric hospice in the province, the Rotary Flames House (RFH). While RFH operates as a provincial resource, families are required to travel long distances to access it. Improving dedicated beds for pediatric palliative care across the province is an area for improvement.

With respect to other focused populations, there are no provincial strategies or initiatives to address the palliative care needs of homeless or marginally housed persons, incarcerated persons, 2SLGBTQI+ persons, or recent immigrants and refugees. There are, however, examples of excellence in the provision of palliative care to homeless and marginally housed populations in Calgary and Edmonton.

There are significant community engagement and initiatives across the province with extensive resources developed by the Palliative Institute to support public awareness and education on palliative care and advance care planning, as well as compassionate communities. Many programs are in place to support volunteers and informal caregivers.

26 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.

27 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.

28 Howard M, Fikree S, 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.

29 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.

Several limitations are identified in this study. These have been described in the Methods section 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 – for example of 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 to get an overall sense of the presence of services and integration across a jurisdiction.

As highlighted in the Introduction section, the provision of palliative care to Indigenous populations was not studied in this Atlas. 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®).

Conclusion

This Canadian Atlas of Palliative Care: Alberta Edition explores the presence and access to palliative care services, resources and infrastructure across the province of Alberta. It provides a cross-sectional snapshot across standardized domains and indicators that highlight many successes and examples of excellence across the province. There are strengths in palliative care across many of the indicators, especially with respect to the provincial policies and frameworks to support quality palliative care. There have also been substantial investments made by the Government of Alberta to improve palliative care services in the community (including home and hospice), to fund research, standards and education of both the public and health care professionals on palliative care. Overall, Alberta has a high level of integration of palliative care services across settings, specialist palliative care teams in most hospitals and communities, and widespread community engagement initiatives in palliative care. There is variability across Zones for a number of indicators, including the numbers of hospice and palliative care unit beds, which are significantly lower in two Zones (North and South), integration into non-cancer care, and the provision of primary level palliative care, which is low overall. There are opportunities for improvement across several 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 overall provision of primary palliative care)			

DOMAINS			INDICATORS	FEDERAL	PROVINCIAL/ TERRITORIAL	REGIONAL
		S2.3.1	Standards and/or indicators for overall provision of 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
Community engagement (C)	C1		Volunteers			

DOMAINS			INDICATORS	FEDERAL	PROVINCIAL/ TERRITORIAL	REGIONAL
		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 on 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 funding (public) of palliative care medicines. Additional indicators have included an exploration of access to palliative care for populations that are often disadvantaged (e.g., 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 domains and indicators. Participants had the option to skip any questions they did not want to or were unable to answer and 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 interviewees or main regional contacts to provide comments, clarifications or 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 residences 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 mean 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 mean that 10% to 50% provide primary palliative care, while ***Minimal*** integration mean 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 the 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 credentialling 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, in Canada, they can sometimes 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: An 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/