Paramedics and Palliative Care

Bringing Vital Services to Canadians

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Change Package Contents

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Introduction

In this section

Acknowledgements

Healthcare Excellence Canada (HEC) and the Canadian Partnership Against Cancer (the Partnership) partner with diverse stakeholders to co-design programs, and as such acknowledge the value and importance of external resources, including Pallium Canada's Learning Essential Approaches to Palliative Care (LEAP) Paramedic course, Canadian Virtual Hospice's MyGriefToolbox, and the local palliative care, home care, emergency health and paramedic services who continue to work to provide the best care for individuals, families and caregivers.

The *Paramedics and Palliative Care: Bringing Vital Services to Canadians collaborative* was supported by several Faculty Coaches, HEC and the Partnership. Faculty Coaches were from the original innovator sites (Nova Scotia, Prince Edward Island and Alberta) and had extensive experience of the new model of care as well as implementation strategies. Coaches were paramedics; leaders; as well as physicians working in the emergency medical services. Coaches also brought their experience and expertise from nursing, home care and long-term care backgrounds, as well as education and research.

We would like to thank our Patient Partner Coaches, who shared their lived experience, challenged our thinking, supported planning and development, and were a crucial part of the team at HEC and the Partnership. Many thanks to Ron Beleno and Diane Edlund who supported the collaborative as advisors.

We recognize the essential contribution that people with lived experience have brought to this work and thank all patients, families, and caregivers who shared their experiences to support individual jurisdictions and acted in an advisory capacity to HEC and the Partnership. Individual project teams leveraged the expertise and experience of their Patient/Family/Caregiver Advisors in planning, implementation, and evaluation of this change in practice for paramedics.

A special and sincere thanks must go to Anya Humphrey (1947–2020), our Patient and Family Advisor, who was part of this work at its conception and who guided the project, helped us to understand what matters to people living with life limiting conditions and their families, and to ground us in the work. Sadly, Anya died in the third year of the collaborative, but the team continue to draw on her ideas, insights, and wisdom.

A Note About this Document

This document synthesizes the experiences and learnings from jurisdictions that participated in the *Paramedics and Palliative Care: Bringing Vital Services to Canadians collaborative* (from 2018 to the date of its publication) and previous experience from Nova Scotia, Prince Edward Island and Alberta.

Innovation in the delivery of community-based care with a focus on treatment in place (versus transport to hospital) is a rapidly evolving space in paramedicine. Jurisdictions looking to implement paramedic palliative care programs are encouraged to use this document with the awareness that it is not inclusive of the experiences and learnings from other services in Canada (or jurisdictions around that world) that were not involved in the collaborative.

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For more information, contact info@hec-ecs.ca

Executive Summary

It is not uncommon for individuals and families receiving palliative care to experience sudden changes in condition or gaps in access to resources in the community, and as a result, call on paramedic services for support. Historical emergency medical service response is based on principles of assessing, treating, and transporting patients to the emergency department. The result of calling 911 may be a rapid response, but one that is received through a system that was not designed to meet the needs and wishes of individuals requiring a palliative approach to care.

Palliative and end of life care is a priority for most healthcare systems across Canada (and the world).[1] To better support people with palliative/end of life care needs, Nova Scotia, Prince Edward Island and Alberta were early innovators who developed and implemented new programs to align paramedic protocols and palliative goals of care. They recognized that paramedics need training, information, and support to be able to manage the distressing symptoms at end of life, uphold individuals' wishes and have the confidence to provide for the emotional needs of families and caregivers. Their programs were developed by interprofessional teams including paramedics, physicians and nurses who identified what information and resources were needed to better serve individuals in the community. Patient and Family/Caregiver Advisors were critical partners to creating system change in implementing this new approach to palliative care. Placing their needs and psychosocial experiences at the center of this work effectively supported culture change and provided new insight that better matched the needs of those individuals who would benefit from a palliative approach to care.

This *Paramedics and Palliative Care: Bringing Vital Services to Canadians* "change package" synthesizes the core principles and elements required to successfully develop and implement a palliative approach to care for paramedic services, bringing together the experiences and learnings from 10 teams across nine provinces who have successfully implemented this approach to care.

This change package includes over 130 tangible and specific strategies that can be adapted to create a paramedic palliative program, including:

- Implementation examples from each jurisdiction
- Expert tips from coaches and project team members
- Person/Family/Caregiver Engagement recommendations from Patient Partners and project team members

In 2018, Healthcare Excellence Canada (HEC) and the Canadian Partnership Against Cancer (the Partnership) partnered to support the development, implementation and spread of a palliative approach to care for paramedic services through the *Paramedics and Palliative Care: Bringing Services to Canadians* spread collaborative.

Core principles and essential elements from programs in Nova Scotia, Prince Edward Island and Alberta were identified and shared to support the spread and scale to Newfoundland and Labrador, New Brunswick, Ontario, Manitoba, Saskatchewan and British Columbia.

Through this four-year $6.5 million collaboration, more than 6,000 paramedics across six provinces were trained to provide patients with in-home support when they have a palliative emergency, require symptom management, and/or have an unexpected health event.

The combined resources and varying perspectives from the Partnership and HEC brought a unique level of support to the collaborative teams and helped them to address challenges effectively. Combining specialist knowledge with quality improvement (QI) expertise provided teams with increased access to a wide range of support and resources to facilitate their work in bringing palliative care approaches closer to home.

Stakeholders were heavily involved throughout the collaborative in education, training, advocacy, evaluation, strategic planning, and goal setting. Meaningful inclusion of First Nations, Inuit and Métis perspectives helped to establish relationships for future collaboration.

> *New models of care that align with patient preferences to access palliative care at home and avoid unnecessary trips to the emergency department are key to making the most of health-care resources across Canada and supporting pandemic recovery. We are pleased to collaborate with HEC to support paramedics to provide palliative care at home and help people live comfortably throughout their cancer journey.*
>
> Dr. Craig Earle,
> CEO of the Partnership

> *We know that most Canadians want access to palliative and end-of-life care in their homes. We are pleased to work together with the Partnership and the participating jurisdictions to bring palliative and end-of-life care closer to home, responding to the preferences of patients and families and making better use of healthcare resources.*
>
> Jennifer Zelmer,
> President and CEO, HEC

Major Findings

Preliminary findings from jurisdictions participating in the collaborative are aligned with previous findings from Nova Scotia, Prince Edward Island and Alberta, including:

Family Satisfaction

The majority of those surveyed reported that they were satisfied with the way paramedics collaborated with individuals, families and caregivers; their involvement in making decisions during the event; and the high level of professionalism, compassion, and courtesy that was displayed by responding paramedics. A common theme was the comfort they felt knowing that the paramedic program was available to them 24/7, in the event of an acute palliative crisis.

Symptoms Managed in the Home

At a system level, the program enabled a decrease in transports to hospital in both urban and rural areas. People received an increased number of treatments to achieve better symptom control and quality of life at home.

Paramedic Time Savings

When individuals are treated at home, preliminary data demonstrates that despite longer on-scene times, the overall time of the call is shorter, especially in environments where there are long delays in emergency department transfer of care.

Paramedic Comfort and Confidence

Paramedic comfort and confidence with palliative and end of life care improved significantly. Paramedics are more confident they have the tools to provide care to people with palliative care needs (including those actively dying), with and without transport.

Data collection continues (into 2023 for some teams) and evaluation activities are ongoing. Final evaluation results will be available in the future.

How to Navigate this Change Package

- This *Paramedics and Palliative Care: Bringing Vital Services to Canadians* "change package" synthesizes the core principles and elements required to successfully develop and implement a palliative approach to care for paramedic services.
- This Change Package brings together the experiences and learnings from 10 teams across nine provinces who have successfully implemented this approach to care, including the original innovators, and those who participated in the collaborative.
- This interactive document will help you effortlessly navigate to areas of interest, and between sections of content.
- You are encouraged to explore the change package at your own pace and follow your own interests to create your own path.
- Seven main sections, each with a table of contents to help you navigate to specific content easily and rapidly.
- 130 tangible and specific strategies, labelled throughout as:

Implementation examples from each jurisdiction.

Expert tips from coaches and project team members.

Person/Family/Caregiver Engagement recommendations from Patient Partners and project team members.

Relevant supporting information and links to external resources.

You will also find:

- A comprehensive list of acronyms.
- Cross-navigation to relevant supporting resources.
- Links to relevant external resources, including a comprehensive online repository of helpful documents from participating jurisdictions, coaches, HEC and the Partnership.
- A summary of each jurisdiction's program design and education strategy.
- A high level synopsis of program model components by jurisdiction. This section identifies the key components of a palliative approach to care for paramedic services, and lists which components were implemented by each jurisdiction.
- The jurisdictional context table highlights the "lay of the land" and provides additional context around how and why programs were developed in the way they were. Because healthcare delivery is a provincial responsibility in Canada, there are significant differences in legislation, regulation, system resourcing, and service delivery models (for both palliative care and paramedic services) between participating jurisdictions. If you are looking to implement a paramedic palliative care program, the jurisdictional context table will help you get started. By comparing your local context, you can easily identify implementation solutions that worked for others, that could also work for you.

A Note About Language

Palliative care is the care of a person whose life-limiting serious illness or disease cannot be cured. It is an approach to care that may encompass the span of time from diagnosis of a life life-limiting illness through end of life. Palliative care is not just about dying, it is also about optimizing the quality of life for both the person and their family and caregivers, focusing on comfort, dignity, function and relief of suffering. It also includes advance care planning (identifying goals, wishes and preferred place for care and end of life). Comprehensive and coordinated palliative care is provided by both frontline care providers and palliative care specialist teams and is delivered across programs and settings of care.

This palliative approach to care supports patients with a life limiting illness and results in a better patient and family experience. Evidence shows that access to palliative care, both early in the illness experience and at end of life, improves outcomes including improved quality of life, better symptom management and decreased depression.

The term “palliative” is in reference to the type of care or approach provided (i.e.: individual receiving palliative care, implementing a palliative care approach), and not in reference to individuals (i.e.: “palliative patient,” “they are now palliative” etc.). In addition, patients would like to be considered holistically, having their beliefs, values, and wishes considered throughout their care journey. It is important for care providers and teams to acknowledge that their ‘patients’ are more than just their life-limiting conditions – they are people first. Person, family, and caregiver partners have suggested a need to shift the needle on the use of the word ‘patient’ in healthcare, instead using the word ‘person’ which acknowledges the whole person concept.

This shift in language is slowly occurring across healthcare providers and across health sectors. Please recognize that this is a change from providers’ usual professional vernacular and may be new for many in paramedicine.

Throughout this document, every effort was made to use the most current terms and definitions, however it should be noted that wording is continually evolving.

Key Terms

- **Person** – the individual who is involved in an interaction or relationship about their health or quality of life. A person may also be called a patient, client, consumer, resident, or participant.
- **Family** – an individual or group of individuals who are related in any way – biologically, legally or emotionally. The *person* defines the make-up of their family and has a right to include/exclude individuals of their choice.
- **Caregiver** – an individual who provides care and support to a family member or friend living with disease. The role of caregiver is mutually determined by the person providing care and support and the person receiving it.
- **Palliative** – Alleviating the symptoms of a disease or disorder, especially one that is life limiting when a cure is not available.
- **Palliative Care** – Palliative care is the approach to care of a person whose life-limiting serious illness or disease cannot be cured. It may encompass the span of time from diagnosis of a life-limiting condition through end of life. The goal of palliative care is to provide comfort and dignity for the person living with the illness, as well as the best quality of life for both this person and their family.
- **Palliative Approach** – an approach to care associated with life-limiting illness intended to improve the quality of life of a *person* (patient), their family, and caregivers through the prevention and relief of suffering. It includes early identification and impeccable assessment and treatment of physical symptoms, and psychosocial and spiritual concerns, in collaboration with advance care planning to promote meeting the person's identified goals and wishes for care.

Acronyms

24/7 / 24/7/365	24 Hours a Day / 7 Days a Week / 365 Days a Year
ACP	Advance Care Plan
ACP	Advance Care Paramedic – a practitioner registration level within paramedicine (higher scope of practice than a Primary Care Paramedic or Emergency Medical Responder)
ANB/EM	Ambulance New Brunswick/Extra Mural Program, New Brunswick
ARECCI	A pRoject Ethics Community Consensus Initiative spearheaded by Alberta Innovates
ASTaR	Assess, See, Treat, and Refer (BCEHS program component)
ATR	Assess, Treat, Refer
BCEHS	British Columbia Emergency Health Services, British Columbia
CACC	Central Ambulance Communications Centers
CAD	Computer Aided Dispatch
CE	Continuing Education
CHFI	Canadian Foundation for Healthcare Improvement (now Healthcare Excellence Canada)
CPC-HSN	Centre for Prehospital Care Health Sciences North (Ontario)
CPER	Center for Paramedic Education and Research (Ontario)
CPG	Clinical Practice Guideline or protocol
CQI	Continuous Quality Improvement
DNR	Do Not Resuscitate
ED	Emergency Department
EDITH / EDAH	Expected Death in The Home / Expected Death at Home – a process/procedure, and often the name of a specific form that may be populated and available in the home or in patient records
EH	Eastern Health, Newfoundland and Labrador

EHS	Emergency Health Services
EMR	Emergency Medical Responder – a practitioner registration level within paramedicine (smaller scope of practice than a Primary or Advanced Care Paramedic)
EMS	Emergency Medical Services
EMS PEOLC ATR	Emergency Medical Services Palliative and End of Life Care Assess, Treat and Refer Program (Alberta)
EOL	End of Life
ePCR	Electronic Patient Care Report – electronic patient charting system in paramedicine
ESAS-r	Edmonton Symptom Assessment System Revised
FNHA	First Nations Health Authority
GOC	Goals of Care
HEC	Health Excellence Canada
IAP2	International Association of Public Participation
ID	Identification
IERHA	Interlake Eastern Regional Health Authority, Manitoba
LEAP	Learning Essential Approaches to Palliative Care – courseware/curriculum for healthcare providers developed by Pallium Canada
MAiD	Medical Assistance in Dying
MDS	Minimum Data Set
MOH	Ministry of Health
MOST	Medical Order for Scope of Treatment
MPDS	Medical Priority Dispatch System
NOCP	National Occupational Competency Profile
OHRI	Ontario Hospital Research Institute
OLMC	Online Medical Consultation – this is usually in reference to a specific physician resource available to paramedics

P/F/C	Persons/Families/Caregivers (language shifting from Patients/Families/Caregivers)
PAC	Paramedic Association of Canada
PCP	Primary Care Paramedic – a practitioner registration level within paramedicine (larger scope of practice than an Emergency Medical Responder, but smaller than an Advanced Care Paramedic)
PCR	Patient Care Record
P-IPCP	Provincial Integrated Palliative Care program (Prince Edward Island)
PDSA	Plan-Do-Act-Study
PHIA	Personal Health Information Act
PPE	Personal protective equipment
PPS	Palliative Performance Scale
QA	Quality Assurance
QI	Quality Improvement
RN	Registered Nurse
RPPEO	Regional Paramedic Program for Eastern Ontario
SHA	Saskatchewan Health Authority (Regina Region), Saskatchewan
SPP	Special Patient Program
The Partnership	Canadian Partnership Against Cancer
TRC	Truth and Reconciliation Commission
YRPS	York Region Paramedic Service, Ontario

The Story of Paramedics and Palliative Care

In this section

Background and Context

Paramedics are often seen as providers tasked with saving lives. Yet, paramedics are called to provide comfort and symptom relief within the context of palliative care.[2] Palliative crises/emergencies can occur for physical (e.g., pain, dyspnea, delirium, etc.), emotional, and/or existential reasons, and often involve both the patient and their family/caregiver(s).[3] There are numerous challenges with access to acute healthcare such as emergency department (ED) overcrowding, long waits or lack of a family physician, and ED closures due to lack of physician coverage.[4] Further, even when supports are in place, they may not be quickly accessible or available 24 hours a day/seven days a week (24/7). Patients/families are left with few options and call 911 to initiate an ambulance response by paramedics (Emergency Medical Services (EMS) or paramedic services). This is particularly common when there is a sudden increase in need (e.g., the patient unexpectedly worsens) and/or the usual care team is unavailable.[5, 6]

Patients requiring palliative care support are well known to have complex health services needs and to be high health system users in the last months of life. Past work has shown that referral to specialized palliative services, and the application of a palliative approach by primary care services even when still receiving curative treatments, can lead to a reduction in aggressive intervention at the end of life, reduced emergency room visits and hospitalizations, thereby increasing quality of life.[7, 8, 9, 10, 11, 12, 13, 14]

The goals of palliative care are to provide comfort and symptom relief when faced with a life-threatening or life-limiting illness. Primary care clinicians are well placed to identify and work with those who may need palliative care, and many regions have palliative home care community programs to support palliative patients and their caregivers. However, both primary and palliative care community programs are often unable to provide urgent care 24/7 and do not have immediate access to resources such as medications. Expansion of the primary health care team to include service providers outside clinical settings and structured hours of care, with the goal of improving access to palliative care services, is needed.

> *I still remember when [the paramedics] came through the door... the amount of compassion, and they seemed so completely understanding about where I was. It made the difference between him dying in hospital and dying at home ... You'll get, as I did, an amazing sense of comfort to know they are really fighting for you, to make your wish come true, to keep you at home.*
>
> Family member, Alberta

> *To keep people out of emergency and to keep them at home is amazing... this program has been the link that has been a gap in our service.*
>
> Community Palliative Care Team, Newfoundland and Labrador

Program Innovation in Delivering Palliative Care — Nova Scotia, Prince Edward Island and Alberta

To address the gap in meeting the needs of people with palliative/end of life care needs, Nova Scotia, Prince Edward Island and Alberta developed and implemented new and innovative provincial programs to adjust paramedic protocols to align with palliative goals of care. The programs were developed by interprofessional teams including paramedics, physicians and nurses who identified what information and resources were needed to better serve patients in the community.

1. In Nova Scotia and Prince Edward Island, the development of the *Paramedics Providing Palliative Care at Home Program*™ was based on consensus recommendations of paramedics, palliative care experts and emergency department nurses and physicians on what information and resources they needed to better support patients with palliative care needs. It was enabled by Nova Scotia's extensive history of pioneering the growing field of community paramedicine and expanded scope for paramedics.
2. The *Alberta Provincial EMS Palliative and End of Life Care Assess, Treat and Refer Program*, launched in 2015, was built upon learnings and experience within the Edmonton Zone and Calgary Metro service areas. Paramedics there collaborated with supportive living and home care teams since 2012, to assist in unexpected symptom crisis events for palliative patients in the community.[15]

Although a small number of specific paramedic protocols may have allowed treatment without transport or "treat and release" (like corrected hypoglycaemia), guidelines and protocols for palliation in the home without transport, and collaboration with other healthcare providers in the community setting ("treat and refer"), did not exist prior to these innovations within most Canadian paramedic systems.

> *Patients often express their wish to have end of life care at home. They want to die peacefully in their own home surrounded by their loved ones. However, if they experience acute symptoms such as shortness of breath or delirium, their caregivers may panic and call 911. In the past, this has led to patients being transferred to the emergency room sometimes in the final hours or days of life. The paramedics and palliative care program allow paramedics to treat those acute symptom needs, avoid transfer to the hospital and ensure continuity of care with the community team. It is an example of interprofessional collaboration where the patient's needs are at the center. It allows the patient to get the right care, in the right place at the right time. Ultimately, it honours the patient's wishes for a peaceful death at home*
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Collaborative Summary

From 2012 to 2017, the Canadian Partnership Against Cancer supported implementation of the *Paramedics Providing Palliative Care at Home Program* in Nova Scotia and Prince Edward Island. The initiative demonstrated success in enabling patients to receive palliative care at home, avoiding unnecessary hospital admissions and supporting the family through the experience.

In February 2017, the Canadian Foundation for Healthcare Improvement (CFHI) identified 26 innovations from their Call for Innovations in Palliative and End of Life Care. Eight of the innovations identified were selected by an external expert merit review panel to present at the 2017 CEO Forum and to receive a CFHI Innovation Award including the *Paramedics Providing Care at Home Program* (Nova Scotia and Prince Edward Island) and the *Alberta Health Services Emergency Medical Services Palliative and End of Life Care Assess, Treat and Refer Program* (EMS PEOLC ATR).

These programs put the need for a palliative care approach at the center of the care journey. They were instrumental in shifting the culture in paramedicine from a transport-only system to a model of care which gave paramedics the tools and skills to treat people at home and refer to other appropriate services.

In January 2018, CFHI and the Partnership collaborated to support the spread of the innovation delivered in Nova Scotia, Prince Edward Island and Alberta by launching the *Paramedics and Palliative Care: Bringing Vital Services to Canadians* spread collaborative. Core principles and elements from program development and implementation were identified and shared to support the spread and scale of the innovation to Newfoundland and Labrador, New Brunswick, Ontario, Manitoba, Saskatchewan and British Columbia.

Since 2018, the Partnership and CFHI, now Healthcare Excellence Canada (HEC) have worked closely together to support the training of nearly 6,000 paramedics and other health professionals.

The four main components of spread include:

1. Knowledge and skill development in palliative care.
2. Supporting and leveraging the use of a centralized database for communication and identification of patients with palliative care needs.
3. Enabling a palliative approach through a clinical practice guideline, protocol and/or online consultation support.
4. Building relationships and pathways for collaborative and interprofessional care between paramedics, palliative care clinicians (e.g., palliative care nurse or physician), and home care organizations and providers.

Since 2018, the Partnership and CFHI (HEC since its amalgamation with the Canadian Patient Safety Institute in Spring 2021), have worked closely together to support the training of nearly 6,000 paramedics and other health professionals and the implementation of programs to support people with palliative care needs in the community.

Making Change Happen

Innovations don't spread themselves. Making change happen takes leadership buy-in, time, capacity, and support. HEC and the Partnership jointly invested almost $6.5 million to provide jurisdictional and program support, and seed funding, that would facilitate the spread and scale of the *Paramedics and Palliative Care: Bringing Vital Services to Canadians* program across Canada.

HEC and the Partnership delivered an initial workshop to launch this program for teams, project managers, executive sponsors, and patient and family advisors. The workshop was designed to support funded teams in understanding implementation science[16] and quality improvement principles. Further workshops addressed team-specific needs and identified priorities for quality improvement support moving forward.

HEC led the design of curricula based on the needs identified by teams at various knowledge exchange events. This included webinars and coaching calls which enabled teams to share in-depth knowledge of barriers and enablers to success when implementing this model of care. Bringing teams together for events also contributed to implementation success by fostering cohesiveness and facilitating knowledge sharing and learning from one another.

HEC provided all teams with access to frequent and on-demand coaching support from subject matter experts with specialist knowledge of community services. Coaches were available to teams to share their own experiences, provide expertise, support problem solving, and to facilitate networking between teams. Coaches were also active participants in knowledge exchange activities, such as webinars, themed coaching calls, workshops, and evaluation groups. The expertise, knowledge, and experience of coaches was a significant contribution to the planning and success of this collaborative.

The Partnership provided teams with expertise and connections with the cancer and palliative care community at provincial and federal levels. The Partnership worked with implementation teams to uphold the Calls to Action from the Truth and Reconciliation Commission Report and supported jurisdictions in achieving meaningful inclusion of First Nations, Inuit and Métis perspectives in their work and to build relationships with Indigenous Peoples in Canada.

HEC and the Partnership jointly invested almost $6.5 million to provide jurisdictional and program support, and seed funding, that would facilitate the spread and scale of the *Paramedics and Palliative Care: Bringing Vital Services to Canadians* program across Canada.

The Partnership supported teams by providing strong leadership and direction; led six-week project status check-in meetings; and supported project and financial management. In collaboration with HEC, the Partnership coordinated a pan-Canadian evaluation plan that included impact/health economic, outcome and implementation evaluation, which is ongoing.

Collaboratively, HEC and the Partnership delivered knowledge exchange activities and worked to equip the teams to build capacity for their work. Both organizations assisted in the application of quality improvement methods; supported teams to engage with patients, families, and communities; and helped to capture new learning that refined and shaped the model as it spreads further. To facilitate this, both pan-Canadian Health Organizations worked together to support the creation of a range of activities, which included the development of a robust knowledge translation plan, annual site visits to teams, and participation in curriculum-based offerings.

Promoting stakeholder engagement was a priority for HEC and the Partnership in this collaboration. Stakeholders were heavily involved throughout the collaborative in education, training, advocacy, evaluation, strategic planning, and goal setting. Patient and Family/Caregiver Advisors were identified as critical partners for creating system change in implementing this new approach to palliative care. Placing patient needs and their psychosocial experience at the center of this work has effectively supported culture change and has helped to gain new insights that better match the needs of those individuals who would benefit from a palliative approach to care.

The alliance between the Canadian Partnership Against Cancer and Healthcare Excellence Canada contributed significantly to the success of this collaborative. The combined resources and varying perspectives of the Partnership and HEC helped address challenges effectively. Combining the specialist knowledge with quality improvement expertise provided teams with increased access to a wider range of support and resources to facilitate their work in bringing palliative care approaches closer to home.

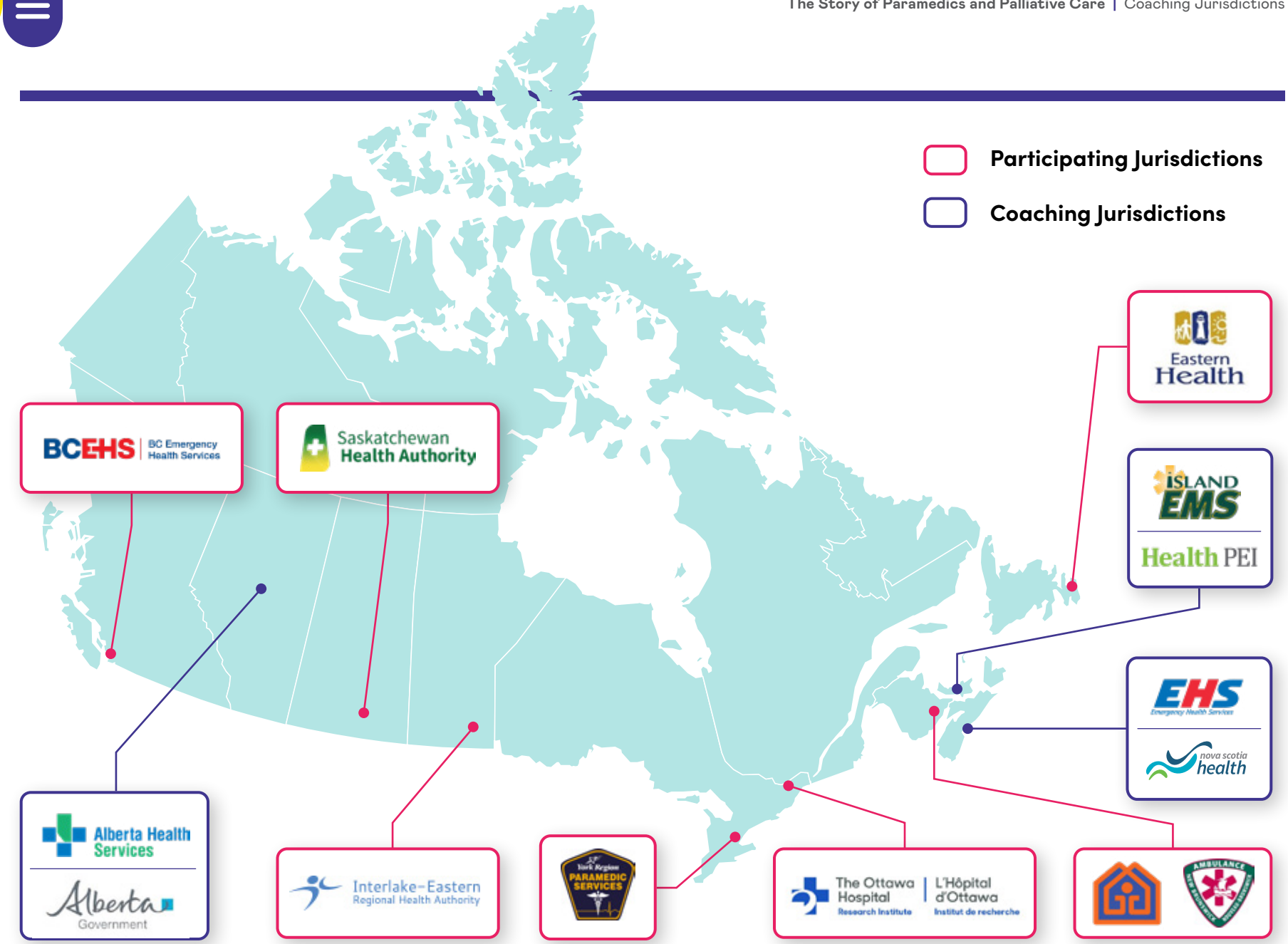
Promoting stakeholder engagement was a priority for HEC and the Partnership in this collaboration.

Participating Jurisdictions

- Eastern Health (EH), Newfoundland and Labrador
- Ambulance New Brunswick/Extra Mural Program (ANB/EM), New Brunswick
- York Region Paramedic Services (YRPS), Ontario
- Ottawa Hospital Research Institute (OHRI), Ontario
  - Regional Paramedic Program for Eastern Ontario (RPPEO)
    - » Ottawa Paramedic Service
    - » Hastings Quinte Paramedic Service
    - » Lennox and Addington Ambulance Service
    - » Frontenac Paramedic Services
    - » Leeds Grenville Paramedic Service
    - » Cornwall SDG Paramedic Services
    - » Prescott Russell Paramedic Service
    - » County of Renfrew Paramedic Service
    - » Lanark County Paramedic Service
  - Centre for Prehospital Care Health Sciences North (CPC-HSN)
    - » Greater Sudbury Paramedic Services
    - » Cochrane District Social Services Administration Board Emergency Medical Services
    - » Weeneebayco Area Health Authority Paramedic Service
    - » Manitoulin-Sudbury District Services Board Paramedic Service
    - » Algoma District Paramedic Services
    - » Nipissing Ambulance Service Providers and Paramedics
    - » Parry Sound District Emergency Medical Services
    - » District of Timiskaming Emergency Medical Services
    - » Sault Ste. Marie Paramedic Services
  - Center for Paramedic Education and Research (CPER)
    - » Hamilton Paramedic Service
    - » Brant-Brantford Paramedic Service
    - » Guelph-Wellington Paramedic Service
    - » Haldimand County Paramedic Services
    - » Norfolk County Paramedic Services
    - » Six Nations Paramedic Service
    - » Region of Waterloo Paramedic Services
- Interlake-Eastern Regional Health Authority (IERHA), Manitoba
- Saskatchewan Health Authority, Regina Area (SHA), Saskatchewan
- British Columbia Emergency Health Services (BCEHS), British Columbia

Coaching Jurisdictions

- Nova Scotia Emergency Health Services (EHS) and Nova Scotia Health, Nova Scotia
- Island Emergency Medical Services and Health PEI, Prince Edward Island
- Alberta Health Services Emergency Medical Services (AHS EMS) and Alberta Health, Alberta


Participating Jurisdictions
Coaching Jurisdictions
BCEHS
BC Emergency Health Services
Saskatchewan Health Authority
Eastern Health
ISLAND EMS
Health PEI
EHS
Emergency Health Services
nova scotia health
Alberta Health Services
Alberta Government
Interlake-Eastern Regional Health Authority
PARAMEDIC SERVICES
The Ottawa Hospital Research Institute
L'Hôpital d'Ottawa Institut de recherche
AMBULANCE

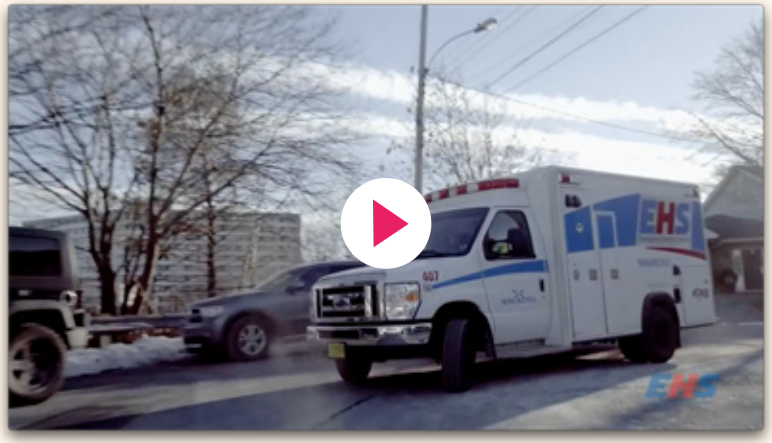
The Innovation

Purpose/Program Goals

- Enhance the care provided by paramedics for individuals receiving palliative care including providing urgent care and treatment in the home (without requirement to transport).
- Improve access to palliative care supports at home regardless of location or time of day.
- Enhance the palliative and end of life experience for individuals, their families and caregivers by "bridging" palliative care supports until the usual care team can take over.
- Encourage interdisciplinary collaboration and increase communication between healthcare providers in the community providing palliative and end of life care.
- Avoid/reduce emergency department visits for people receiving palliative care when aligned with their wishes for care.
- Improve paramedic knowledge, comfort and confidence in the provision of palliative care supports for individuals with life limiting illness, their families and caregivers.
- Determine frequent causes and outcomes when individuals with palliative conditions or families/caregivers require paramedic services.

SUPPORTING RESOURCES

Paramedics Providing Palliative Care at Home™ program video



Paramedic Practice: BCEHS Palliative Care program video

Essential Elements

Core principles and essential elements from program development and implementation in Nova Scotia, Prince Edward Island and Alberta were identified and shared to support the spread and scale of the provision of palliative care by paramedics to Newfoundland and Labrador, New Brunswick, Ontario, Manitoba, Saskatchewan and British Columbia under the *Paramedics and Palliative Care: Bringing Vital Services to Canadians* collaborative.

Each of these elements were further enhanced to synthesize and include the experiences and learnings from all jurisdictions involved in the collaborative to date.

In this section

Leadership Commitment and Clear Governance Structure

The development and implementation of a palliative approach to care represents a large system and culture change across multiple professions, operational areas and processes within both paramedic services and other areas of the healthcare system (primary care, continuing care, home care, community palliative care, etc.).

A significant leadership commitment for the program is imperative, including:

- Active and visible senior and operational leadership support (from both paramedic services and palliative care).
- Leadership support and protection of time for project managers, working group/committee members and other human resources to participate.
- Endorsement/approval structure where affected/involved groups are represented (paramedic services, palliative care, primary care, people living with life limiting illness, family and caregiver partners).

IMPLEMENTATION EXAMPLE

Bring Out the Big Guns

The *EMS Palliative and End of Life Care Assess, Treat and Refer Program* in Alberta was supported by sponsors from paramedic and continuing care leadership and operations, senior's health and the cancer care strategic network, as well as executive level sponsorship (Vice President and Chief Medical Officer at Alberta Health Services). The program was embedded in both Alberta Health Services' (responsible for health services delivery) and the Government of Alberta's Ministry of Health (Alberta Health) operational and strategic plans as a significant deliverable. The success of the working group and project team were empowered by a strong leadership commitment at the highest levels of Alberta Health Services and Alberta Health, as well as a robust governance structure that broke down silos between paramedics, primary care and continuing care.

EXPERT TIP

Secure Sponsorship

Secure sponsorship from senior leadership within both paramedic services and palliative care (health region, seniors health, community services, etc. depending on organizational structure).

Tell a Compelling Story

Often it is a person/family/caregiver story that impacts leadership commitment, ministries, and funders. Stories will provide the traction to get Ministry attention and fund this program due to demonstrated need. Engage with those who have experienced care that can be improved through the innovation or project. For more information, see The Power of Story section.

Jurisdictions looking to implement paramedic palliative care programs are encouraged to investigate larger health system enablers in their province, and look for opportunities to leverage any work in the palliative/end of life care space that may already have leadership commitment, which is currently embedded in operational strategic plans.

Stakeholder Engagement/Participation

Across Canada, paramedic services (emergency response/911 operations) are in varying stages of a journey, towards integration into the healthcare system and the continuum of patient care, as a key stakeholder. However, in many jurisdictions, information does not freely flow between paramedics and other care providers, paramedic patient care records (PCR) do not become part of the patient's health record, paramedics are not involved in multidisciplinary care teams, and paramedic services and operators are not a standard partner at the table in the development of other community health initiatives.

For many jurisdictions, this project brought together stakeholders and partners that had not previously worked together, and started to identify major system issues that will need to be addressed to support the integration of paramedics into the health system (such as the need for an electronic single patient record, billing challenges, policy and legislation changes related to transport destinations, treat and release, or consultation with other healthcare providers).

P/F/C ENGAGEMENT

Budget For P/F/C Participation

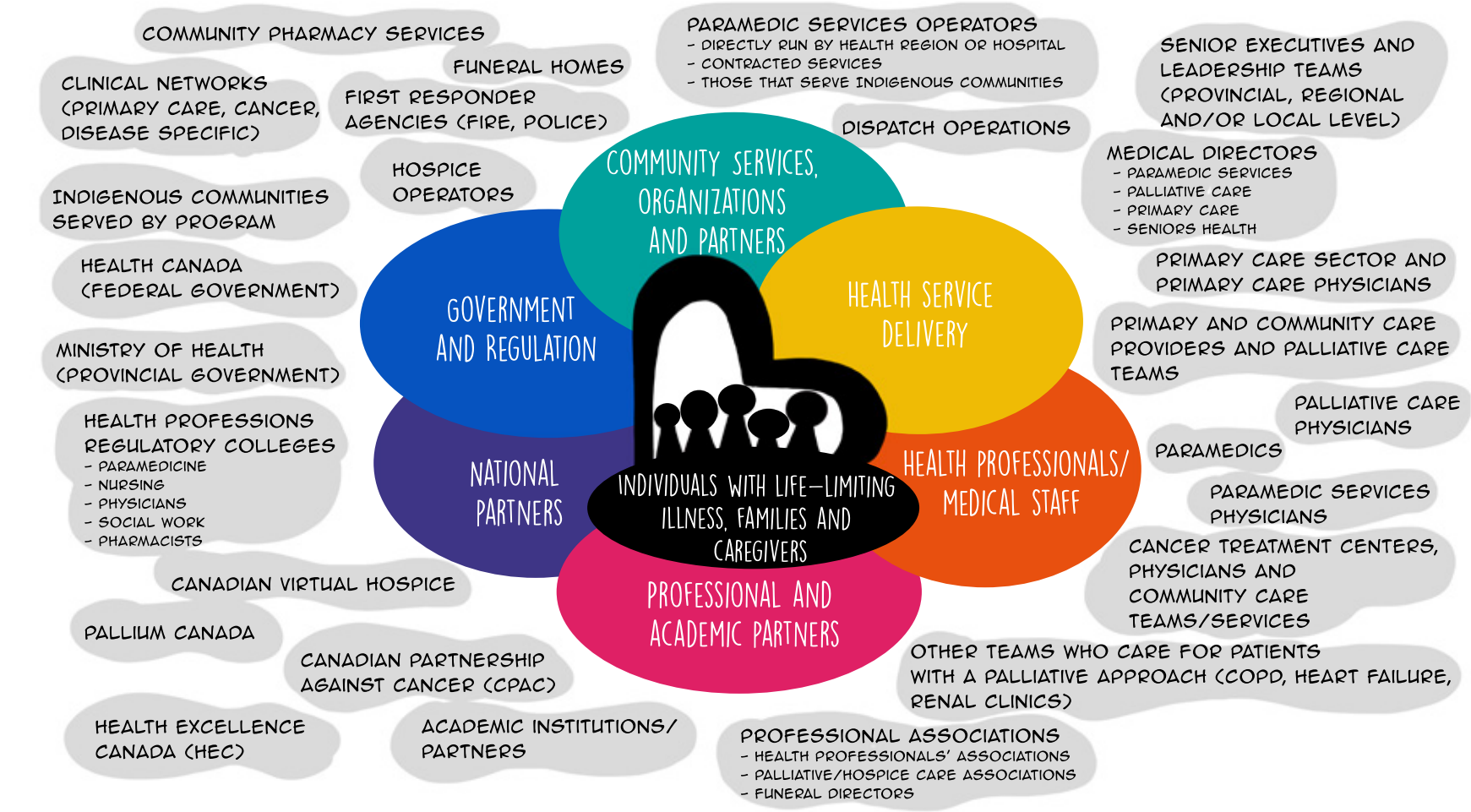
Meaningful engagement of individuals with palliative care needs and their families and caregivers takes intentional forethought and planning from the onset of the project. Ensure time and budget are included for recruitment, onboarding and ongoing communications with these essential partners. Adopt tailored P/F/C engagement strategies and develop mechanisms to include the perspectives of P/F/C in the design of the project from start to finish, co-designing the program and its elements (not just approving developed processes, communication products, etc.).

EXPERT TIP

Identify Silos

Identify silos in service delivery and highlight areas of potential conflict, role overlap and gaps in continuity of care early in the project. Ensure the experiences of individuals, families and caregivers who have received palliative care services in the community and who have used paramedic services are brought into the project early, as they are the best positioned to identify gaps in continuity of care and inconsistencies between services. Consider gathering a repository of stories that represent current state to be used for demonstrative/ educational purposes and centering the work.

The following graphic highlights the breadth and scope of stakeholders that need to be engaged.



STAKEHOLDER ENGAGEMENT MODEL

EXPERT TIPS

Develop Partnerships Within and Outside of Your Organization

Strengthen community partnerships to meet the needs and enhance the strengths of your target population. This requires partnerships between paramedic services, palliative care, primary care, home care/nursing; and as needed, with police and funeral homes. Who are your key stakeholders and what permissions are needed? Cultivate a healthy team in your enhanced care design and hold regular meetings of advisory team of key stakeholders.

Recruit Program Champions

Robust stakeholder engagement, including frontline paramedic Robust stakeholder engagement, including frontline paramedic participation, is integral to the success of this project. Frontline participation and the development of early peer champions is key in shifting the culture towards more collaborative actions between paramedic and palliative care services. Champions in strategic positions within the organization as well as frontline peer champions are integral to supporting the culture shift needed for program success. Seek out frontline champions early and identify ways to connect them to the project during development and implementation phases.

First Nations/Inuit/ Métis Engagement

This engagement can be complex, and you need to do it well. It is important to engage a partner who is experienced in working with Indigenous populations. Look for someone who is local that can make introductions and provide some guidance on how to best engage. This might be the local health directors, a researcher, local health advocate or healthcare practitioner with strong relationships and ties to the community. Note that institutions may not always be the best connector. For more guidance on engagement and examples from the collaborative, refer to the First Nations/Inuit/Métis Engagement section of this document.

IMPLEMENTATION EXAMPLES

Diverse Representation on Project Team and Steering Committee/ Advisory Group

In Nova Scotia and Prince Edward Island, work on the program was facilitated by a small inter-provincial project team composed of paramedics, emergency and palliative care physicians, palliative care nurses, medical communications, etc., who have met monthly since early 2014. The project was also guided by a larger, inter-provincial Advisory Group with two patient/family representatives and diverse representation from emergency medicine (e.g., physicians, paramedics, senior leadership, medical communications, etc.), palliative care (e.g., physicians, nurses, etc.), home care organizations/providers (e.g., VON, Continuing Care, etc.) and other organizations (e.g., government privacy office, etc.).

Continued Collaboration and Engagement

In Alberta, there were increased invitations for paramedic participation working groups (such as zone primary care networks, medical assistance in dying policy/procedure work, and conservative kidney management pathway work) because of the relationships built during the project. A provincial Community of Practice continues to meet for ongoing collaboration and sustainability of the EMS PEOLC ATR program. Membership includes paramedics, physicians, and nurses, both practitioners and leaders from across the province.

Person/Family/Caregiver Engagement

Like all healthcare services, the services paramedics provide impact persons, families, and caregivers (P/F/C) significantly. It is imperative to partner with those who will *feel the impacts* when changes are made to the way services are delivered. Person/family/caregiver advisers use the phrase "Nothing about me without me" to demonstrate when they should be involved in strategic decision-making. New standards for people-centred care, including co-design of services with both healthcare providers and clients, were developed by Accreditation Canada in 2015 and were slowly integrated into the assessment standards.[18] Historically, it has become standard practice to involve all healthcare provider stakeholders; however, engaging P/F/Cs at the strategic level in program development and collaborating with them on health system change may be new or foreign to healthcare providers and program administrators. As broader P/F/C engagement takes place, more strategies have evolved that can provide guidance on how best to communicate and collaborate effectively.

What is Engagement?

When people and organizations that are impacted by a decision participate in the process of making that decision, it is said they are "engaged" with one another

British Columbia Ministry of Health, 2018[17]

Levels of Engagement

The first thing a project team or healthcare partner needs to do in planning for engagement is to articulate the anticipated activities and select the level of participation expected from their person/family/caregiver partners. This helps both partners understand their roles in the work ahead.

The International Association for Public Participation (IAP2) created a model that describes the continuum of participation from "inform to empower" based on the impact a public partner would have on decision-making.

EXPERT TIP

Close the Loop

Don't forget to close the loop by sharing how P/F/C partners made a difference throughout the project and how they impacted project outcomes. Be sure to acknowledge person/family/caregiver efforts as the project draws to a close.

You may choose to engage different P/F/C partners, each with different skillsets, depending on the purpose for which you are engaging them. Regardless of the level of decision-making involved, all P/F/C engagement needs to be valued and honoured equally, which is why some organizations choose to depict IAP2 participation as equal pieces of the engagement pie.

Empower person/family/caregivers to tell their stories in a way that works for them, at a time when they are comfortable. Do not ask for people to tell their stories upfront to be at the table – expect that they will unfold and emerge through their participation as they will for all participants. If person/family/caregivers have a passion for a certain part of the project and the skillsets to accomplish results, trust and empower them to lead the way, providing support as required. Allow the P/F/C partners to set direction where feasible.

Collaborate with person/family/caregivers to redesign processes and procedures to maintain a person- and family/caregiver- centred focus, particularly when those processes and procedures affect the public. Identify alternatives and preferred solutions together. Everyone at the table has an equal voice regardless of their role. Experiential expertise is as relevant as clinical expertise. Practice shared decision-making.

Involve persons/families/caregivers on steering committees and governance boards providing them with an equal voice at the table.

Involve persons/families/caregivers in the co-design of everything including, but not limited to, agendas, terms of reference, process redesign, survey creation, evaluation requirements, website development and all public-facing communication materials. Time spent up front will save you an enormous amount of effort later to make things more 'user friendly'.

Involve persons/families/caregivers as iterative changes are being implemented. Solicit continuous feedback and input providing both synchronous and asynchronous opportunities for communication (email, meetings, one-on-one phone calls, questions and answer surveys). Ensure person/family/caregiver input and ideas are reflected in the outcomes. This level of engagement is ideal for creating communication materials where healthcare partners do heavy lifting between encounters, revealing incremental changes each time they get together with person/family/caregiver partners.

> *The ability to collaborate was largely due to the healthcare partners willingness to lean in and listen to us, joining forces on the co-design of these tools. They did not create **FOR** patients and THEN ASK for feedback — I felt we created these tools **WITH** each other.*
>
> Family/caregiver partner

Consult with persons/families/caregivers in multiple settings. Engage in meaningful discussion while truly listening to what is important to persons, families and caregivers. Listen with curiosity and an intent to understand and incorporate P/F/C perspectives. Gather as much information as possible to understand current state and where gaps may exist. Focus groups, surveys and structured interviews leading to qualitative research and objective environmental scans are valuable tools at this level.

Inform the person/family/caregiver public clearly about changes made to the healthcare system, processes and procedural changes, setting realistic expectations for encounters with service providers.

Tokenism vs. Meaningful Engagement

Tokenistic engagement happens when:

- Decisions have already been made prior to engagement and a group is only seeking approval/support from P/F/C partners;
- A P/F/C partner is invited to become a committee member (i.e., Steering committee, project development/ implementation committee, etc.) but is never asked their opinion or for their input and rarely has the opportunity to speak in a meeting; and/or
- There is a pattern of single word responses to questions or a pattern of agreement for every request for an opinion.

Meaningful engagement requires:

- Relationship building and an inclusive and curious attitude; and
- Intentional preparation for engagement and solicitation of meaningful discussions.

IMPLEMENTATION EXAMPLE

Co-creation of Evaluation Tools

In York, evaluation instruments, specifically the Patient/Family Satisfaction Survey for the program, were co-created with patient partners. A patient partner contributed to the structure of the survey questions that would make it easier for individuals to use. Appropriate language was considered, such as using the word permission instead of consent, so that individuals from various background would be able to comprehend the questions. Another important consideration was letting the individuals know that they have an option to change their mind when contacted for the survey. Lastly, a patient partner provided context that individuals have different experiences of grief. Therefore, meeting them where they are, with empathy, is more important than getting the feedback. The result was a collaboratively created survey.

EXPERT TIP

What is Meaningful Collaboration?

Meaningful collaboration and involvement are characterized by intentional facilitation to ensure person/family/caregiver partners are comfortable in voicing opinions, providing valuable input, answering questions, and making recommendations — particularly when in an environment that may have perceived power imbalances.

Recruiting Person/Family/Caregiver Partners

Consider the following when recruiting person/family/caregiver partners.

Lead Time – Likely you have gathered a team of stakeholders or have a good of idea of who will participate in your project from the outset. Recruiting, onboarding, orienting and preparing for person/family/caregiver partners will take some time. It is imperative to ensure your P/F/C partners have an equal understanding of the project, project goals and anticipated outcomes as other stakeholders. It may take time to ensure background material can be presented to these partners in a way that is comfortable for them. You will have to have conversations with P/F/C partners to initiate the building of relationship, where this may not be required for other stakeholders.

Budget – Decide how P/F/C partners will be remunerated for their participation and input. Ensuring there is a specific budget line item for P/F/C partner related work will create accountability requirements that the work is deliberately performed, and the appropriate time is taken with these partners throughout the project.

Diversity – More often than not, recruiters of person/family/caregivers are attracted to others who are like them and tend to engage accordingly. This leads to a team where everyone has similar patterns of communication. Differing perspectives such as big picture thinkers and detail focused experiential thinkers from different races, ethnicities, and cultures allows you to fill in the gaps, see things from all perspectives, assess risks more accurately and move forward in a way that is more impactful for the populations served.

Project teams should endeavor to achieve diversity in their P/F/G partners and engage partners who are representative of the geographic population where the program will be implemented. Consider inclusion of a diversity of education, socioeconomic status, urban/rural, population representative cultures including but not limited to Indigenous Peoples.

Vetted and unvetted partners

There are two schools of thought around recruiting vetted P/F/C partners and frequent users of the system known to the stakeholders on the project team.

1. Recruiting partners who have recent experiential knowledge can provide rich data and rewarding feedback from those who know best. Gathering P/F/C stories from these partners can have significant impact on the direction of the work taken and significant impact on grounding the work in purpose. Be aware that these unvetted P/F/C partners may not have done any kind of orientation or training on how to partner on health system projects. They may have a specific agenda that they wish to bring to the table, which may/may not align with the project goals or may be more suited to formal established complaints processes.

2. Vetted P/F/C partners are usually oriented/trained in how to partner on health system projects. They are comfortable with big picture thinking, participating to provide a voice of person/family/caregiver perspectives. They are not advocating for resolution to specific events; rather on future quality improvement focused on collaboration. The association/organization providing orientation/training also helps to screen partner applicants to ensure appropriateness in matching people with projects. For example, family/caregiver partners with recent loss may have already been given the opportunity to explore how participation might bring up traumatic or highly emotional events before presenting to the healthcare partner as a potential participant.

Setting The Tone

Language is important. As you work with person/family/caregiver partners, intentional use of specific language can promote understanding and shift underlying assumptions.

SHIFT FROM	SHIFT TO	RATIONALE
Patient	Person	• Shifts focus to a more person-centred holistic approach; persons are more than just patients.
Palliative Patient	Person with a Palliative Condition or Concern	• A more palatable label. Shifts the focus upstream toward diagnosis rather than downstream toward palliating at end of life
Family	Family/Caregiver/Carer	• Shifts the focus to acknowledge the fact that family/caregivers provide ~80 per cent of the care to persons with palliative conditions. • Acknowledges that caregivers may be family by choice
Patient Advisor	Person/family/caregiver Partner	• Acknowledges engagement in a collaborative partnership rather than advising, which implies that one can take the advice or not. • Shift in focus to break down continued division/power imbalance between person/family/caregiver and service provider.
Patient-centred	Person- and Family/ Caregiver- Centred	• Shifts the focus to recognize that the 'care unit' in Palliative Care must always include at least one family/caregiver who also has needs.
TO Patients FOR Patients	WITH Persons and Families/Caregivers	• There is an implied power differential when doing things TO or FOR patients rather than WITH persons and families/caregivers which implies shared-decision-making and an inclusive mindset.
Terminal or Life-threatening	Life-limiting	• A more palatable label. Shifts the focus from dying to living with hope for quality of life and dignity until the end

Ethics Review

While a formal ethics review to undertake your project may or may not be required in your jurisdiction, take the time to consider **Risk of Harm** when working together with P/F/C partners. Palliative care may be a particularly sensitive subject matter for many, especially those who have palliative conditions or have suffered loss of people who were significant in their lives.

Risk Mitigation

1. Include regular check-ins – both scheduled and unscheduled. For example, if during a meeting/discussion the conversation becomes difficult or emotional, pause, take breaks, or change tactics as is necessary.
2. During one-to-one check-ins, ask partners how they are feeling and how they are perceiving their participation.
3. Consider having two person/family/caregivers participate together which may help them to feel more comfortable and less intimidated in an unfamiliar professional environment.
4. Consider establishing a process, prior to engagement, for person/family/caregiver partners to opt-out, temporarily or completely, at any time.
5. Carefully consider the inclusion of any person/family/caregiver partner who may have established relationships with other stakeholders on the team. Patient/service provider relationships, former employees, others with history may not be ideal candidates for participation.

IMPLEMENTATION EXAMPLE

Identifying Ethical Concerns in Quality Improvement

The Alberta Innovates *A pRoject Ethics Community Consensus Initiative* (ARECCI) Screening Tool was used in Alberta to help identify potential areas for risk and draft a plan to mitigate those risks.

SUPPORTING RESOURCES

ARECCI Screening Tool

Updated in 2017, the ARECCI Screening Tool and companion Ethics Guideline Tool can be used for many quality improvement projects or collaborative work with person/family/caregiver partners.

The Power of Story

How will you work to assist P/F/C partners to not only tell their stories in your jurisdiction but to use them to secure leadership and government commitment, co-design your program and affect change?

SUPPORTING RESOURCES

Patient Engagement Resource Hub

The [Patient Engagement Resource Hub (cfhi-fcass.ca)] is a collection of resources curated by Health Excellence Canada to support appropriate patient and family engagement. Additional resources can be found in the supplemental resources section at the end of this document.

IMPLEMENTATION EXAMPLE

The Power of Story-writing

This is a [one-page story] written by a family/caregiver who has an impactful message. It is written in a way that depicts gaps in the system and how they were managed at the time.

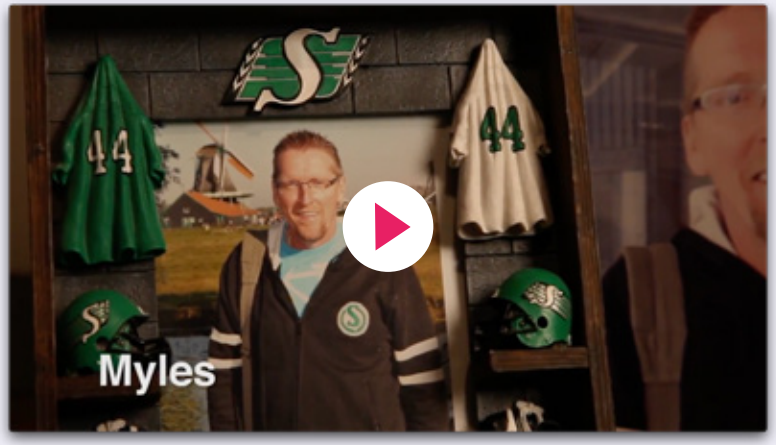
> *My wife was in a lot of pain and her organs were failing. They made my wife comfortable and pain free until her last breath the next day. Everything was done perfectly. The support and medical advice that the paramedics gave was comforting and hard at the same time.*
>
> Family member, British Columbia

> *I'm so happy to be able to spread the word about this service — Paramedics deserve so much praise. It's amazing what they did for us on multiple occasions. I felt so thankful to have people in my corner. It's so nice to have people on your side willing to help. It was a difficult time, but I was happy knowing the paramedics could help me. I want to tell them thank you for all they did for me and my husband.*
>
> Family member, Nova Scotia

IMPLEMENTATION EXAMPLES

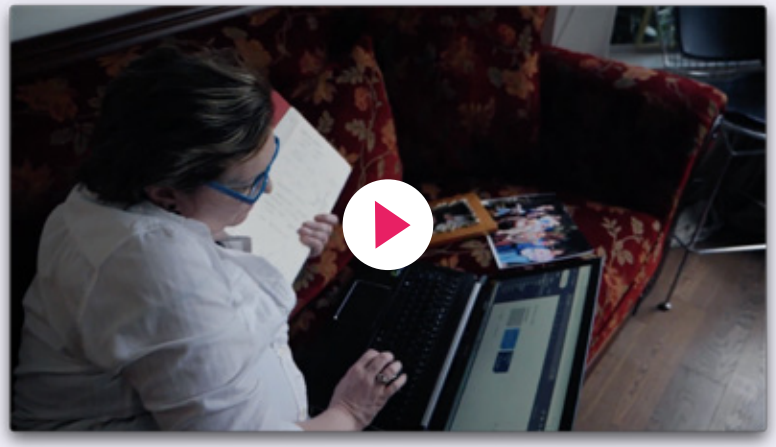
Family Experience Video

In Alberta, a **family video** was created to share the experience of a family who used the *EMS Palliative and End of Life Care Assess, Treat and Refer Program*. This video was used at the start of presentations, face-to-face training, online training, in communications and awareness activities and shared on the public-facing program website and social media.



Patient Story: Palliative Care by BCEHS

In British Columbia, a patient story video was created to share the experience of a family who was supported with the Assess, See, Treat and Refer (ASTaR) Palliative Clinical Pathway. It tells the story of a Victoria family who required immediate help with a pain crisis, and the care that was provided to help honor the patient's wishes to be at home.



Identify the Patient Population

It is important to consider criteria for the target population for the program, how that population will be identified and included, and what populations are potentially excluded from the program. Questions to consider include:

- Who can access the service?
- How will individuals be identified?
    - Any person with palliative goals of care/advanced care plans indicating comfort measures?
    - Anyone diagnosed with life limiting illness and/or chronic conditions?
    - Self-determined/identified?
    - Keyword identification?
    - Real-time identification by paramedics on scene?
- Will people be pre-enrolled? Will a registry be created and maintained?
- Any age restrictions (will children be included; frail, elderly included)?
- How is the family/caregiver included? Is at least one family/caregiver considered part of the care unit?

Choose the macro population and learn its segments

1. Choose your population
    - Individuals with palliative care needs and their families and caregivers:
        - Clear inclusion and exclusion criteria for who is eligible.
        - Do they need to be on a registry or in a specific program?
    - Providers:
        - What capacity does your service have to take this work on without adding a new resource?
        - What is the best added resource to meet the (low) demand? (A specialist team may make sense in a high-density area, but not a rural area where demand is low.)
        - What is the existing level of comfort with treat and release?

> *We attended to the same patient a few times in his last months, and he was really happy to be able to remain home with his entire family by his side which would not have been possible in hospital due to the pandemic. He was able to hold their hands while we made him comfortable and conversed with the palliative care team to provide the most appropriate care.*
>
> Paramedic, Saskatchewan

2. Learn the needs and assets of the population through an in-depth root cause analysis:
   - What services already exist? How will your paramedics interface with these others? What is the value-add of paramedics and how are you avoiding overlap/duplication of roles? What education/preparation will your online medical support need? Others who intersect with provision of care (e.g., medical communications centre, first responders)?
3. Segment the population
   - Do you want to address only certain sub-populations, for example adults only, in formal palliative care only?

EXPERT TIP

Trace the Patient Journey and Plan for "Scope Creep"

Try to explore all the steps of the process and the various other agencies, groups, services that may be involved, and investigate impacts to the patient journey and experience. Try to anticipate "scope creep" and other elements that may need to be developed to support the system change. Individuals with life limiting illness, family, and caregiver partners/collaborators and those with lived experience receiving palliative care at home will be valuable stakeholders in this process. New collaborations that did not previously exist (i.e.: law enforcement, funeral homes) may be helpful.

IMPLEMENTATION EXAMPLE

Scope Creep

Other elements (outside of the original project plan) that required addressing were identified during development and implementation of the program, such as:

- Education/awareness for law enforcement around expected death in the home (Alberta, Ontario).
- Education/awareness for Medical First Responders (e.g., fire departments) around expected death in the home (Alberta, Ontario).
- Issues uncovered with expected death in the home (EDATH/EDITH) and 911 calls that resulted in police/medical examiner arriving at home (Nova Scotia).
- Policy/procedure development for death in transit (Alberta).
- Policy for transport to hospice from community (British Columbia).
- Education for ED staff on best practices in symptom management in palliative care and new paramedic treatment protocols to ensure awareness and consistency in approach when transferring care to ED staff (Ontario).

Recruit into care

Will you start with just those who are already attached to formal palliative care programs? How will you reach primary care? Will you reach out to other specialties (e.g., heart failure, Chronic obstructive pulmonary disease [COPD], frail, elderly)? Will it be possible for paramedics to identify new candidates in real time?

Identify those who are ideal candidates for care and develop processes to recruit individuals into the program. Consider mechanisms that allow for real-time identification of patients (by paramedics on the scene) and the ability for them to be enrolled/referred into the program at the time of the call.

What about pediatrics?

Consider if pediatrics will be eligible for the program. Pediatrics are one group that different regions have included in their programs at different times. For example, pediatric groups were included in the original program launch in Nova Scotia, Prince Edward Island, New Brunswick, Manitoba, Saskatchewan, and British Columbia. In Alberta, expansion to pediatrics occurred in Phase III of the program implementation (approximately two years after the provincial program launch). Other jurisdictions will phase in pediatrics in later program development. In most jurisdictions, pediatric palliative care services are separate from adult palliative care services, so different stakeholders and key relationships will need to be identified and included.

First Nations/Inuit/Métis

Consider how the needs of First Nations, Inuit and Métis will be incorporated. Healthcare services on-reserve and self-governed First Nation communities are federally funded and operated. This can result in geographical differences in where and how services like home care are available. Provincially funded and operated home care and palliative care services may not be available, and services (if available) are run by different agencies. In some regions, paramedics may be one of the few health care services that provide home supports. Appropriate stakeholders will need to be identified and engaged, and key relationships will need to be developed.

SUPPORTING RESOURCES

For more guidance on engagement and examples from the collaborative, refer to the First Nations/Inuit/Métis Engagement section of this document.

Specific examples of population identification including inclusion and exclusion criteria are provided by each jurisdiction's program summary. See the Supplemental Resources section.

Inclusion Criteria and Program Registration

Consider if a registration or rostering system is needed to support identification and segmentation of the population that will be served by the program. Some jurisdictions opted to create a registry or database and others did not. In some of those that did, individuals could only access the program (eligible for treat and refer, and access the associated supports from paramedics) if they were pre-registered. In others, individuals with palliative care needs were eligible under the palliative clinical practice guideline/ protocol (CPG) regardless of their registration status, but healthcare providers were encouraged to enroll individuals with palliative care needs to ensure care delivered aligned with their wishes.

For those jurisdictions where pre-registration or listing on a registry was not required, patients with a life-limiting illness and goals of care that align with receiving a palliative approach to care were eligible for the program. Inclusion criteria for treatment in place included identifiers, such as:

- The individual was diagnosed with a life-limiting illness;
- The individual is receiving a palliative approach to care with their physician/ nurse-practitioner, care team, etc.;
- The individual has goals of care consistent with treatment in place of choice, comfort and symptom management;
- The individual with illness, their family and/or caregiver agree to treatment in the home;
- The presenting symptoms are considered related to the individual's palliative condition; and/or
- Follow up can be arranged to support the individual, the family and their caregivers after the event.

Specific examples of population identification including inclusion and exclusion criteria, and if and how a registry was used, are provided in each jurisdiction's project summary. See the Supplemental Resources section.

> *Having services in place meant that she could get home quickly, which was important when the trajectory of the illness was unknown.*
>
> Family Member, Newfoundland and Labrador

P/F/C ENGAGEMENT

Comfort of Prior Knowledge

According to individuals and families in Nova Scotia, a benefit of being enrolled in the Special Patient Program (SPP) was having paramedics know about them, their situation and care plan in advance of an emergency call. Families also commonly described the "peace of mind" they felt just simply being enrolled in the program.

EXPERT TIP

Consider Sustainability

Consider ensuring sustainability of any registries or processes created. (Who will maintain the registry when program development and implementation is over? How will it continue to be updated?)

The benefits of a registry include ensuring care provided by paramedics aligns with the individual's wishes and values, and that their goals of care are clear and expressed in a way that is compatible with paramedic practice (including documentation that may be required). This may increase the ability for the individual to remain at home if this is desired. However, if pre-registration is required, it may limit paramedics from providing treatment in place, even if appropriate, for individuals with palliative care needs who have not been previously identified.

The table that follows summarizes some of the advantages and disadvantages of each approach. Note that in some jurisdictions, the registry/roster is considered helpful but is not a requirement. It is not a question of having or not having a registry necessarily, but whether paramedic palliative support will exclusively be provided to those in the registry.

IMPLEMENTATION EXAMPLE

Special Patient Program

In Nova Scotia, the SPP is an existing program of NS Emergency Health Services (EHS) and houses individual-specific care instructions that differ from standard EHS protocol and makes them known and accessible to paramedics at the time of a call to 911. The SPP was expanded to include individuals receiving palliative care. It is not a requirement that patients be in the SPP to receive palliative care at home by paramedics, although it is felt to be helpful, and transport is less in the group registered in SPP. Since the launch of the program in June 2015, close to 3,500 people with palliative conditions were enrolled in the program and demand remains steady at about 20 to 30 enrollment applications received by EHS per week. In Prince Edward Island, an SPP was newly implemented into the provincial system, linking with the Provincial Integrated Palliative Care program (P-IPCP). Registration in the P-IPCP is a requirement for eligibility for this care pathway by paramedics.

Approach

Rostering/Program Registration

Advantages

- Ensures care provided by paramedics aligns with the individual's wishes and values.
- Ensures that wishes and values are clear, in standardized documentation.
- Ensures care plan/expectation is compatible with what can be provided by paramedics.
- Opportunity (depending on how designed) for paramedics to have awareness of the individual, goals and potential needs while enroute to the event.
- Easily identified population for follow up, quality assurance/ quality improvement (QA/QI) and evaluation.
- Opportunity to disseminate information on the program before it is used or needed to the target population.
- Reduces uncertainty around who is eligible for a paramedic palliative approach to care.
- May increase leadership level of comfort with novel treat and release/ refer approach, particularly in systems with culture of "always transport".

Disadvantages

- Restricting care to those registered may exclude individuals who are appropriate for treatment in place, referral and/or a palliative approach that have not been formally registered
- Requires resources to build, maintain and keep current.
- As paramedic capacity to identify those that would benefit from a palliative care approach increases, a requirement to be pre-registered may become increasingly problematic.

Approach

No Rostering or Pre-Registration Required

Advantages

- Opportunity to support wishes and goals of care to a broader group of people who may be followed by a variety of services providing palliative care, who may have differing approaches on who/ when to enroll patients in a registry.
- Opportunity to meet the needs of more individuals requiring a palliative approach regardless of registration status.
- Opportunity to empower paramedics to participate in the identification of those who may benefit from a referral to palliative care programs and services.
- Potentially less clear for paramedics and community clinicians as to whom meets inclusion criteria (potential for not offering service to someone who is appropriate, potential for scope creep beyond intent of program).

Disadvantages

- Potentially less clear for paramedics and community clinicians as to whom meets inclusion criteria (potential for not offering service to someone who is appropriate, potential for scope creep beyond intent of program).
- Requires education for paramedics and clinicians on who meets criteria.
- Potentially less clear for individuals, their families and caregivers on what to expect from the program and paramedic services.

IMPLEMENTATION EXAMPLES

Identification and Referral of Patients from 911 Events

In York, individuals with palliative care needs are registered on-site with York Region Paramedic Services (YRPS) when they call 911. Paramedics verify that the individual is receiving care from the Home and Community Palliative Care Team by reviewing the home care binder and confirm that they have a valid Ministry of Health Do Not Resuscitate (MOH DNR) form. If≈these documents are not available or are incomplete, or if the presenting conditions are not within the scope of the Special Project Palliative Care Medical Directives, the paramedics will proceed with the usual directives for treatment and transport. They may be referred to Home and Community Care through the YRPS Paramedic Referral Program.

Non-Registry Enrollment

In Saskatchewan, Alberta and British Columbia patients meeting the inclusion criteria are eligible for the program and there is no pre-registration process.

SUPPORTING RESOURCES

Specific examples of population identification including inclusion and exclusion criteria, and if and how a registry was used, are provided in each jurisdiction's project summary. See the Supplemental Resources section.

Program Model Development and Design

Clinical Practice Guideline/Protocol

A clinical practice guideline or protocol is needed to direct provision of care and support treatment without transport. Without a CPG or protocol, the care delivered would not be standardized across the system and paramedics may feel like they do not have permission (not within their scope of practice/service delivery options) to apply a palliative approach. In addition, some key clinical interventions in palliative care (such as the use of opioids in breathlessness) may be contraindicated by current paramedic protocols/guidelines.

Participating jurisdictions developed clinical practice guidelines or protocols to support their model design and:

1. Provide direction on clinical care for supporting people with palliative and end of life conditions;
2. Addressing the most common symptoms, and
3. Provide operational guidance.

Clinical practice guidelines or protocols included:

- Expectations for collaborative practice and shared decision-making (with other service providers, and individuals, families and caregivers).
- Processes for consult with experts or other providers (palliative care physician, paramedic service medical director/consult physician, paramedic specialist, community paramedic, etc.).
- Guidance for new equipment or assessment components (Palliative Performance Scale [PPS], Edmonton Symptom Assessment System Revised [ESAS-r], etc.).
- Guidance on the use of new medications or new uses of medications in the palliative population.
- Program specific documentation expectations and referral/call closure activities.
- Changes in disposition or transport destination (treatment in place, direct transport to hospice≈or tertiary palliative care unit instead of ED).

EXPERT TIP

Develop a Care Model to Fit the Needs and Strengths of the Target Population

Co-create individualized care plans to learn about and prepare for care redesign. Care plans should be developed with the individual, their family and caregivers, and combine best practice in palliative care with realistic scope of practice of paramedics.

EXPERT TIP

Plan to Test and Adjust

Develop the new care pathway through iterative testing and ensure ongoing advisory engagement and review. Identify how continuous quality improvement will continue, and adjustments made to the program as new needs are identified. Develop iterative cycles of Plan, Do, Study, Act (PDSA cycles) with all stakeholders involved will result in the best possible outcomes.

New Medications

Although paramedics provide symptom relief using medications for several conditions and symptoms, providing symptom management under a palliative approach to care had some significant differences. For example, a palliative approach to care emphasises the use of opioids for pain and breathlessness; however, paramedics historically were discouraged to administer opioids in patients with shortness of breath. Hydromorphone is the drug of choice in many cases and not routinely carried by most paramedic services. Metoclopramide is primarily used for nausea and vomiting in palliative care (versus dimenhydrinate) and scopolamine or glycopyrrolate may be given for end of life secretions. Although haloperidol is used in some paramedic services across Canada as a sedative, it has not usually been used as a first-line agent, or in low doses for delirium as in palliative care.

As a result, in some jurisdictions, new medications were added to the paramedic toolkit to support patients receiving treatment in the home under a palliative approach. In others, no additional medications were needed (already carried as part of the standard formulary for emergency uses) and/or substitutions were agreed upon with palliative care partners.

SUPPORTING RESOURCES

Links to CPGs/protocols implemented in various jurisdictions to support the provision of a palliative care approach by paramedics can be found in the online repository.

Yes, we responded to this call for an Extra-Mural palliative patient; the family was concerned about their loved one who was having difficulty breathing. We were able to provide the patient some comfort with supplemental oxygen decreasing his accessory muscle use. It was nice as we were able to reassure the family, provide some help during this difficult time by answering some questions they had and also prepare them for some difficult decisions that they possibly may have to make.

Paramedic, New Brunswick

The following summarizes the medication changes that were made by some jurisdictions:

- Hydromorphone – new medication and new protocol for use in management of pain and/or dyspnea in palliative care (Advanced Care Paramedic [ACP] level).
- Metoclopramide, dimenhydrinate and/or ondansetron – new medication and/or new protocol for use in nausea/vomiting in palliative care (ACP and/or Primary Care Paramedic [PCP] level).
- Scopolamine or glycopyrrolate – new medication and new protocol to manage end of life secretions in palliative care (PCP and/or ACP level).
- Haloperidol – new medication and/or new protocol/dosage/indications for management of delirium and/or nausea/vomiting in palliative care (PCP and/or ACP level).
- Atropine – new protocol/dosage/indications for use to manage end of life secretions in palliative care (PCP and/or ACP level).
- Ketamine – new medication and new protocol for use in palliative care (PCP level).
- Entonox – new medication and new protocol for use in palliative care (PCP level).
- Ketorolac – new medication and new protocol for use in palliative care (PCP level)
- Morphine – previously in scope but only indicated for pain; indications expanded to include dyspnea (ACP level).

EXPERT TIP

Engage Palliative Care Specialists Early

Although there are some specific medications that are preferred in palliative care, there may be logistical and financial barriers to adding new medications to every ambulance across the system. In addition, there may be opportunities to use a substitute medication rather than stocking a different/new drug (e.g., atropine for end of life secretions). Engage with local palliative care specialists and pharmacists early in the development of CPG/protocols to discuss which medications are the most impactful and important to include, and which may be substituted or not added (based on anticipated use in the patient population).

> *Overnight, she needed two extra doses of Scopolamine to get her through to morning. Without the [paramedics] program we might have panicked, but we knew we could call 911 for access.*
>
> Family Member, Newfoundland and Labrador

IMPLEMENTATION EXAMPLES

Additional Medications Added for PCPs and ACPs

In Newfoundland, metoclopramide and diphenhydramine were added to the approved medications for Primary Care Paramedics (PCPs) across the province. Morphine, haloperidol, and scopolamine were added to the approved medications for Advanced Care Paramedics (ACPs) in the metro areas for use during palliative care encounters. A federal exemption was also received for ACPs to administer hydromorphone to those enrolled in the program.

Schedule II License Endorsement

In British Columbia, additional online training and a license endorsement was implemented for ACPs to administer medications that were prescribed but would were out of scope previously.

EXPERT TIP

Identify New Medications Early

Logistics, education and training, and regulatory work will be required to add additional medications to the paramedic toolbox. Ensure any new medication needs are identified early, especially if adding new controlled substances, where federal and/or provincial regulatory work will be required and can take substantial time (license endorsements, narcotics exemptions, etc.). Any jurisdiction that added hydromorphone, for example, required approval from Health Canada which took a long time to achieve (over a year in some cases).

Dispatch Protocol

Early work in Nova Scotia and Alberta identified a non-lights and sirens response to be a key component of satisfaction (or previous dissatisfaction) with paramedic response to those in the community with palliative and end of life concerns. In addition, the ability for paramedics to know that they were responding for a potential end of life event or to provide a palliative approach to care instead of responding in an emergent fashion was helpful for paramedics on the frontline. Multiple changes were required in dispatch to:

1. Facilitate a non-lights and sirens response to known requests for palliative and end of life support
2. Provide paramedics with a "heads up" that they were potentially responding to an encounter with an individual requiring a palliative approach to care and potential treatment in place (versus an emergency response and transport event);
3. Provide paramedics with specific information, including individual's wishes or goals of care, while enroute to the event; and/or
4. Limit the additional response of first responders (fire services) and/or police.

Multiple approaches were used by various jurisdictions to fit within their context and dispatch system including one or more of the following strategies:

1. Flagging patient addresses or flagging patients by registry identification number within the computer-aided dispatch (cad) system based on prior registration in the program;
2. Adding a new dispatch pathway/algorithm that allowed for a non-lights and sirens response based on information provided by the caller (individual's identification (id) associated with the program, key words/scripted language, self-identifying as an individual with a palliative condition/concern, confirmation of event as for treatment in place under palliative care approach, etc.);
3. Enabling/adapting an existing dispatch pathway/algorithm (medical priority dispatch system (mpds) protocol card 33 - transfer) based on key words provided by the caller as above in #2;
4. Development of new dispatch processes including secondary clinical triage to gather more specific information and better identify the caller's needs while the paramedics were enroute; and/or
5. Educating community healthcare providers and the public to provide specific information to dispatch when calling 911.

> *My father-in-law was in bed; he would have been afraid if he had woken to lights and sirens. They respected this, and didn't use them.*
>
> Family Member,
> Newfoundland and Labrador

IMPLEMENTATION EXAMPLES

Special Patient Program

Qualifying Nova Scotians can be enrolled in the SPP. This program was originally put in place for people with rare conditions or unique care needs and was expanded to include patients with palliative goals of care. The SPP provides attending paramedics with quick access to patient specific information. Once registered for the SPP, each patient is assigned a unique number. When calling 911 the caller (individuals with illness, family or caregivers) provides the unique identifying number to the Emergency Medical Dispatcher who then attaches this record to the emergency call, providing the responding paramedics access to view the record while responding to and during the emergency.

Leveraging Existing Regional Registry

In Manitoba, the project leveraged an existing electronic regional palliative care registry and modified it to include a unique identifier called a SPP number. The SPP number is used by individuals/families/care givers calling 911 for emergency palliative care services to self-identify to the dispatch center that the call is for someone registered with the palliative care program. All registrants to the regional (IERHA) palliative care program are made aware of the process to call for emergency care when their normal care team is not available.

911 Call Intake and CliniCall Desk Activation

British Columbia developed a new dispatch procedure that includes a systemic way to identify and appropriately flag incoming 911 calls for individuals with palliative/end of life (EOL) concerns for secondary triage assistance. Paramedic specialists who have received additional training in palliative care are embedded within dispatch and assigned to the "CliniCall Desk" to support the screening of 911 calls, conduct secondary triage and gather additional information from the caller on identified palliative care events, and support the arriving crew with guidance in line with a palliative care approach.

Access to Advance Care Plans/Wishes

Goals of care, advance care plans, and end of life care wishes are not always readily and clearly accessible to paramedics, who are often treating individuals in a crisis with whom they have no prior care relationship, and no pre-existing knowledge of the person's wishes or values. One of the key system changes needed to support paramedics in providing a palliative approach to care is ensuring paramedics have access to current care plan information and any documented patient wishes or goals of care documentation.

- Easy access to consolidated and reconciled goals of care plans ensures everyone is on the same page.
- Paramedics indicate the importance of clearly articulated care plans and goals of care: "No grey areas". Consistent with paramedic practice and regulatory requirements.

One of the system responses uncovered by this project in multiple jurisdictions was the triggering of a police response and the involvement of the medical examiner when families called 911 for a death at home. This was quite opposed to the goal of a dignified quiet at-home death that programs were trying to enable, and as such program teams convened stakeholders including police, funeral homes, chief medical examiner, paramedic services in ad hoc work to develop a broadly supported the EDAH process.

> *There was a can-do attitude by all concerned. The paramedics were not rushing; they were present and connected and asked about her needs. They even asked about anything else the family might need.*
>
> Family Member, Newfoundland and Labrador

IMPLEMENTATION EXAMPLE

Provincial Implementation of In Home Documentation of Advance Care Plans

Prior to this project, Nova Scotia did not have a consistent approach for accessibility of end of life documents in the community or an Expected Death at Home (EDAH) process. This project supported parallel work harmonizing charting/documentation for palliative care home teams across the province, which resulted in the adoption of the green sleeve (used in Alberta). In Nova Scotia, the green sleeve is used to store advance care plans, the completed SPP registration, funeral home arrangements, etc. This led to the creation of a provincial Goals of Care form through Nova Scotia Health, which was modelled after the SPP registration goals of care section.

IMPLEMENTATION EXAMPLES

Integration of SPP with Dispatch and ePCR

In Newfoundland and Labrador (like Nova Scotia and Prince Edward Island), the SPP was developed within the CAD system. This way when an individual, family member or caregiver calls in to access the program, the CAD event is linked to their information. The Medical Communications Officer can then send the information directly to the electronic patient care records (ePCR) tablet located in the ambulance for the paramedics traveling to the scene.

Leveraging Existing Processes for Advance Care Plans

In Alberta, a significant amount of work had already been undertaken to implement a provincial advance care planning policy and associated processes. This included the implementation of green sleeve folders which hold personal directives, documents of ACP conversations, and Goals of Care Designations orders. At the time of the EMS PEOLC ATR program implementation, paramedics had already been introduced and were using information found in green sleeves. The Expected Death in the Home (EDITH) forms were added to green sleeves during implementation of the project. Provincial work continues on the robust rollout, sustainability and public awareness of the provincial advance care planning processes.

Clinical Consultation/Expert Support

Legislation in most provinces provides a framework for who can provide direction to paramedics. In most provinces, EMS/paramedic services medical directors, emergency physicians or a group of identified on-call physicians are responsible for providing consultation or direction. Access to other physician specialities for consultation (cardiology, neurology, etc.) is often limited to within specific pathways and programs, such as ST-elevation myocardial infarction (STEMI) or stroke bypass/early intervention pathways.

Since the provision of palliative care represents a new skill set and new processes for paramedics, several changes may be necessary to support appropriate clinical consultation and expert support depending on how support is provided. Changes may include:

- New processes for clinical guidance/consultation (i.e.: access to a palliative care resource on call, palliative care physician or paramedic specialist trained in palliative care).
- Legislative changes (to allow for physicians "outside" the paramedic services system to provide medical direction and/or consult).
- Training of EMS/paramedic services online physicians in palliative care and treat and refer processes.

> *Both Ambulance NB (ANB) paramedics were amazing that night. I really don't know how we could have met the patient and family's needs without their tremendous support. It was the most collaborative experience I have had since starting with the Extra-Mural Program two years ago. A true team effort with ANB, the palliative physician on call, Hospice House, and EMP. The paramedic team truly went above and beyond by staying with the patient as long as they did while I coordinated getting the medications and providing physical and emotional support in the patient's last hours. This was certainly one of the most unforgettable nights of my career!*
>
> Extra Mural Program RN, New Brunswick

EXPERT TIP

Identify Who Will Provide Real Time Support

Identify who will provide real time support for paramedics on scene with individuals with palliative care needs. Not all events will require additional consultation for treatment, but may require additional logistical or communication support (coordinating follow up). Ensure those that will fill this role have appropriate training (clinical, operational, awareness of community services and referral processes, etc.).

IMPLEMENTATION EXAMPLES

Access Community Palliative Care Programs

In Alberta, the program was developed as a collaborative model between paramedics and continuing care clinicians, and many calls are for palliative patients in specialty programs with palliative care services. Paramedics and clinicians are encouraged to collaborate in the call, whether the paramedic or the clinician activate the EMS PEOLC ATR program. Each partner is recognized as bringing unique and necessary skills, knowledge, and resources to support the patient and family caregiver.

Paramedic Specialist Support

In British Columbia, LEAP-trained Paramedic Specialists are embedded within dispatch to support the screening of 911 calls (to isolate incoming 911 events that are for individuals receiving palliative care), conduct secondary triage, gather additional information from the caller, provide immediate clinical support to the patient or caregivers while awaiting the arrival of paramedics and support the arriving crew with guidance in line with a palliative care approach.

Palliative Care Education and Support for On Call Physicians

In Nova Scotia, all ER physicians were offered the LEAP core program. In parts of the province that have palliative care on call physicians, ER physicians were also encouraged to call the palliative care physician to consult on any calls they were uncertain about, to better support care to EMS patients in the field.

Access to Palliative Care Physicians

In Alberta, EMS online medical consultation physicians are available 24/7 to take calls from paramedics and they support paramedics with palliative care calls as part of their routine work. Palliative physicians are on-call for support 24/7 and EMS physicians may request that a palliative physician be added to the call if specialist palliative care support is needed or requested by the paramedics. In some areas of the province, paramedics can also consult directly with regional on-call palliative physicians who provide support for patients in the community (attached to community palliative care programs, palliative home care, etc.).

Leveraging and Enhancing a Current Resource (EMS Online Medical Consult Physicians)

In Newfoundland and Labrador, EMS online medical consultation physicians were trained in palliative care are now providing support for paramedics on calls with individuals with palliative care needs. Due to demand, an additional dedicated online medical consultation (OLMC) physician was added for 12-hours a day to support the increased need for palliative care consultations. Physician consultation was a key component of the program support, especially in rural areas.

Continuity of Care, Expectation for Collaborative Care and Communication Between Providers

The provision of palliative care by paramedics introduced several new expectations and processes related to continuity of care, communication between providers, and expectation for collaborative care including:

- Treatment in the community and referral to other providers who are not present for a transfer of care (versus transport to an ED and handover to ED staff face-to-face).
- Awareness of broader care plans (for paramedics) and awareness that paramedics are called to address acute and incidental symptom events (for community care teams).
- New expectations for collaboration with other providers (either in-home, on phone, follow up or referral).
- New expectations for collaborative decision-making with other providers (in-home, or on the phone).
- Referral/follow up process (i.e.: continuity of care, notifying primary care providers, leaving paperwork in-home for other providers, phone call, etc.).
- Sharing of information between paramedic services and palliative care providers and services.

Prior to the implementation of these programs, paramedics and EMS online physicians had a limited understanding of the palliative care approach. Paramedics and community clinicians worked in silos, rarely encountered one another and rarely crossed paths during any kind of education or training sessions.

The expectation for collaborative decision-making and collaborative care was new for paramedics. Paramedic decision-making is historically independent, guided by CPGs or protocols and supported with online consultation in some cases. Paramedics were largely unaware of broader care plans that may be in place to support patients in the community. Although interprofessional collaboration and care plans are the model of care for clinicians in the community, paramedics were unfamiliar partners.

> *I've had a lot of experiences and I think it is a great program. In the beginning I thought, well what are they are going to do that we are not going to do. But the after-hour coverage (when community health nursing is not available) is amazing and so are the standing orders. If we have a client deteriorate quickly or if something is left off an order like nausea — we can get it covered.*
>
> Community Palliative Care Team, Newfoundland and Labrador

> *Overall, we feel the call went great! There was excellent collaboration and communication between all parties involved. It was a pleasure to work with the EMP RN as she truly went above and beyond for this family*
>
> Paramedic, New Brunswick

In addition, there was a lack of information sharing between paramedics and clinicians in the community, even when they were both providing care to the same individuals. Home care staff and primary care physicians would have no awareness that their patient had called 911 and been transported to the ED until they were discharged from hospital; and paramedics would be called to the home by patients, family, or neighbours, and have no idea that they were supported in the community by home care or a palliative care team.

When determining how your program will be designed to ensure continuity of care and collaboration between care teams, questions to consider include:

- Will there be an expectation and plan for the community care team to be contacted?
- Will the community care team activate and contact paramedics?
- How will paramedic interventions and treatments be communicated to the usual community care team?
- Will the program be automated in some way?
- Will a copy of the paramedic PCR be left in the home or sent to the usual care team in some way?
- How will the usual care team know that someone on their caseload was seen by paramedics and may require follow up for them to remain at home?

EXPERT TIP

Think IT Early

Interface with your information technology (IT) partners early in the process to find out what can be done in-house, what will need to go to outside vendor, if work will go to tender or a request for proposal (RFP) is required. Vender selection can take considerable time, so ensure to build this process into timelines and plans.

EXPERT TIP

Engage Key Individuals in the Care Pathway

Identify the necessary levels of engagement (when and who) to coordinate the interaction of individuals in the patient's care journey. Identify the roles of peer champions (paramedics, palliative care, home care, nursing, physicians) and ensure both upper management and ground level support for the processes developed.

IMPLEMENTATION EXAMPLE

In-home Tools and Materials

In Newfoundland and Labrador, a home chart was created to facilitate inter-disciplinary communication within the home. The home chart contains information about the program and a place for paramedics, nurses, and physicians to document care that occurs in the home. The home chart is mailed out to all patients accepted into the program. In Manitoba, all clients are provided with a decal to be adhered to their fridge that includes their name and patient number, instructions to self-identify to dispatch when calling for emergency palliative care, and the location of their in-home documentation. They are also provided a wallet card to be used when not at home.

IMPLEMENTATION EXAMPLES

BCEHS Palliative Patient Portal

The Electronic Patient Care Reports (ePCRs) from Assess, See, Treat, and Refer (ASTaR) Palliative Clinical Pathway events are routed through a new process (BCEHS internal portal) that facilities timely follow up for those patients that are treated and not transported. An automatic notification is generated for health authority partners or BCEHS Rural Advanced Care Community Paramedics (dependent on local resourcing), for patient follow up (virtual health visit) within 24 to 48 hours.

Monitoring Interdisciplinary Collaboration and Communication

In New Brunswick, the project team monitors their "conference rate" (communication and collaboration between paramedics and the patient's community palliative care team). If communication on events starts to dwindle, follow up occurs with paramedics to remind them of the importance of engaging with the patient's community team. This effort is helping to ensure continuity of care and support the shift in practice for increased collaboration and communication between paramedics and community palliative care providers.

Information Sharing

In Manitoba, paramedics attending calls for confirmed clients will leave a copy of the paper PCR with the in-home chart to ensure that other in-home care team members are aware of the event and the care provided. Following the call, PCRs are faxed to the palliative care program manager for follow up as required. Collaboration between programs will increase as information sharing will be two-way and multimodal using progress notes in the in-home client file, client updates via telephone to case coordinators (if paramedics identify that the client requires increased home care supports or additional equipment to maintain safety in the home), and palliative care staff and via fax to share the PCR.

Automatic Email When CAD Event Created

In Newfoundland and Labrador, with creation of a CAD event, an automated email is sent to the patients' health care team (as noted in the referral) listing the special patient number of the patient asking for follow up.

Several process changes were also required to support collaborative practice, information sharing and program awareness on the home care and palliative care side.

IMPLEMENTATION EXAMPLES

Changes to Home Care Workflows

In Manitoba, members of the care team working in the home including palliative care and home care staff were trained to inform clients of the program and participate in charting any in-home care in the new in-home documentation folder.

Getting the Word Out

In Nova Scotia, multiple knowledge translation and sharing sessions were held with Nova Scotia Continuing Care and VON who provide home nursing services. Palliative care staff and care coordinators now discuss the benefits of enrolling in the SPP, and all were educated on the use of the green sleeve and ensuring any documentation related to end of life care is housed there. Green sleeves are also now provided to any continuing care clients that are receiving a palliative approach to care.

Embed Program Awareness into Current Onboarding Practices

In Ottawa, program awareness and registration are included in the home care onboarding processes.

Learning More About Each Other

Alberta took advantage of the opportunity of the collaboration to increase understanding of the staff and resources of each of the teams. A registered nurse (RN) and paramedic collaborated in the roll out education to home care and supportive living, with education to front line staff, educators, and managers. Paramedics gained understanding of the diversity of staff and roles across continuing care sites; clinicians gained insight into medications and resources available.

Implementation Methodology

Programs utilized different launch and implementation strategies to introduce the program to their region/service area. For example, in Prince Edward Island, the program originally focused on providing support for patients during overnight hours when the province's palliative care consult teams were not available. Other jurisdictions, such as Alberta, used a phased implementation approach, starting with geographic inclusion criteria and expanding in subsequent phases (pediatrics were added in the final phase). Some jurisdictions, such as British Columbia, implemented the program in an initial pilot area (delivering the new service in a select geographical area and then expanding the service area), while others used a single full provincial launch date (full provincial implementation at the same time, like what was done in Nova Scotia).

SUPPORTING RESOURCES

Specific examples of how these essential program elements were implemented are provided in each region's Program Summary. To compare model components between jurisdictions, see the Summary of Program Model Compenents by Jurisdiction table on the following page.

IMPLEMENTATION EXAMPLE

Pilot Site Per Health Authority and Provincial Spread and Scale

In June 2020, BCEHS launched one pilot community per health authority with the intention of gathering lessons learned, leveraging key successes, and utilizing regional palliative leads as champions to scale the program across the province by March 31, 2022. Due to the COVID-19 pandemic, the ASTaR Palliative Clinical Pathway was made available to all Critical Care, Advanced Care and Primary Care paramedics in BCEHS with virtual visit follow up support provided by rural ACPs in regions where local health authority partnerships and champions had not yet been identified.

EXPERT TIP

Think About Sustainability and Scaling Up Early

Should this start with a key sub-population or geographic region and be scaled up later after proof of concept or pilot? Should the program be developed and implemented using a phased approach or continuous improvement development cycle? How will this be funded over five to 10 years? What things will need maintenance, replication, or replacement? Think not just about initial implementation, roll out strategy and return on investment, but also about the long-term sustainability of the new practice.

Summary of Program Model Components by Jurisdiction

Program Model Summaries

Program Feature	NL	NS	PE	NB	ON (OHRI)	ON (York)	MB	SK	AB	BC
Treatment in place for individuals with palliative care needs, 24/7/365	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Program uses existing paramedic teams (911 response) = palliative care is integrated into existing practices with existing resources	✔ (+specialist paramedic)	✔	✔	✔	✔	✔	✔	✔	✔	✔
Non-lights and sirens response facilitated	✔	✔	✔	In progress	–	–	–	✔	✔	✔
Care aligned with the individual's wishes/ goals of care	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Palliative care delivered by all levels of paramedic practice (excluding EMR)	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔ (including EMR fall 2021)
No user fee if care provided in-home	✔	✔	✔	✔	–	✔	–	✔	✔	–
Access across province, regardless of how rural or remote	Service region	✔	✔	✔	Service region	Service region	Service region	Service region	✔	✔
Program/response may be activated by healthcare providers	✔	✔	✔	✔	–	✔	✔	✔	✔	✔
Available to pediatrics with palliative care needs	–	✔	✔	✔	–	–	✔	✔	✔	✔
Goals of care determined prior to the event	✔	✔	✔	✔	✔	–	✔	–	–	–
Pre-registration is required/mandatory	✔	–	✔	–	✔	✔	✔	–	–	–
Ability to be pre-registered/utilizes registry (i.e.: Special Patient Program with paramedic services operator, registry maintained with palliative home care)	✔	✔	✔	✔	✔	✔	✔	–	–	–
Additional medications or expanded uses for symptom management in palliative care for PCPs and/or ACPs	✔ ACPs	✔ ACPs	✔ ACPs	✔ ACPs &PCPs	✔ ACPs &PCPs	✔ ACPs	✔ ACPs	✔ ACPs	–	✔ ACPs &PCPs
Training in palliative care provided to paramedics	✔	✔	✔	✔	✔	✔	✔	✔	Ongoing	Ongoing

Go back to How to Navigate This Change Package

Go back to Implementation Methodology

Legislative/Regulatory Implications

The provision of palliative care represents a significant practice and culture change for both paramedics and the delivery of emergency medical services. Most provincial legislation that applies to those that provide emergency medical services (ambulance operators and health authorities) was not developed to support paramedics providing care other than in a truly transport based context (pre-hospital or between facilities). There may be significant legislative or regulatory barriers (local, provincial and federal policy or legalisation) that will impact the development and scope of the project.

The following list identifies potential regulatory or legislative "pinch points":

- Empowering non-transport/treat and refer pathways/protocols (rather than "refusal of service" or "refusal of transport").
- Transport to more appropriate/alterative care destinations (hospice, palliative care in-patient unit, transports between community locations (i.e.: moving patients to family members' homes for care)) rather than only to the emergency department.
- Empowering a non-lights and sirens response.
- Adding new medications to the paramedic toolbox, some of which require expanding or adding narcotic exemptions (federal legislation under Health Canada) to add new controlled substances (such as hydromorphone).
- Expanding practitioner scopes of practice, such as who can administer certain drugs (i.e.: Primary Care Paramedic administration of medications for nausea and pain).
- Collaboration/consultation with other healthcare providers (i.e.: who can paramedics take direction from, only paramedic service physicians?) and person-centric shared decision-making with other healthcare providers (versus protocol driven decision-making).
- Supporting information and data sharing between paramedics and other members of the healthcare team and within the circle of care.

EXPERT TIP

Engage Legislative and Regulatory Stakeholders Early

It is important to engage provincial Ministries of Health, related community health service delivery programs (palliative care, continuing care, home care, etc.) and the various regulatory bodies (for all involved health professions – paramedics, physicians, nursing, etc.) early in project development to identify any current legislative or regulatory implications and barriers. Ministerial orders and changes to federal narcotic exemptions take time and can hold up the launch of the program.

Legislative and regulatory framework varies from province to province. A summary of each jurisdiction's health system context, paramedic service model, community palliative care service model and regulatory framework can be found in the **jurisdictional context table.**

It's important to note, that although each jurisdiction may have different regulatory or legislative "pinch points," the program was implemented across various contexts and provinces successfully.

The implementation of this program has highlighted the need for adjustments to the current legislative and regulatory framework for both paramedics as a profession and the delivery of emergency medical services in every province. Adjustments made to legislation, standards of practice, and policy supporting the provision of palliative care by paramedics has removed barriers for other populations and models of care delivery.

P/F/C ENGAGEMENT

Impact of "Standard" Practices

Signing "refusal of care" or "refusal of transport" documentation can make individuals, caregivers, and families feel as if they are doing something wrong when accepting appropriate treatment in the home setting without transport. Consider the impact of any standard call closure activities that may be mis-aligned with the goals of providing palliative care under the program, engaging person/family/caregiver partners and stakeholders in crafting meaningful solutions

IMPLEMENTATION EXAMPLES

Legislative Changes to Empower Practice

In British Columbia, Ministerial Orders 146 and 147 allowed for the expansion of paramedic scope to treat patients on scene without transport to emergency department. The order also requires that BCEHS follow up on all patients who are not conveyed to the emergency department. In addition, a schedule II license endorsement with the Emergency Medical Assistants Licensing Board was required for ACPs to administer medications that were prescribed to the patient but would were out of scope.

Treat and Refer Versus Refusal of Transport

In Alberta, a separate legal waiver was created for patients and families accepting treatment in place under the palliative care program, which did not include legal liability language related to refusing transport or care under the recommendations of the paramedic crew.

Financial Considerations and Implications

Emergency medical services and ambulance transportation is a non-insured health service in many jurisdictions across Canada, meaning people receive a bill for the use of paramedic services. Many ambulance services rely on call revenue for operations, and employer benefit packages may only cover ambulance service that results in transport. There may be unanticipated resistance to the program or adverse patient and family experiences if patients are billed for treatment in their home (especially if they would not have received a bill if transported to a facility). Additionally, the experience of receiving a bill after a loved one has died can be a significantly negative experience when one is recently bereaved and grieving. For many jurisdictions, it was imperative that patients were not billed for paramedic services if user fees were standard in their system.

It is important to understand how this program will relate to local billing practices for paramedic services (ie: non-transports), online physician support (EMS physicians, palliative care physicians, primary care physicians), home care/community supports, and any other on-call service.

In most jurisdictions, the program will be assumed under the usual paramedic services operational budget and in kind support will continue from various partners (primary care, continuing care, home care, palliative care) by way of time towards presentations, etc.

P/F/C ENGAGEMENT

Explore Financial Impacts with End Users

Consider the involvement of family/caregiver partners/collaborators (with previous experiences with paramedic and community palliative care services) to explore financial implications that impact the patient and family experience.

EXPERT TIP

Engage Government

Ensure stakeholders such as the Ministry of Health (MOH) are involved in program design/development to inform on opportunities, enablers or barriers related to financial considerations.

IMPLEMENTATION EXAMPLE

Policy Changes

In Alberta, several policy changes were required to support the program and ensure that patients did not receive a bill for paramedic services (although EMS is highly subsidized by the province, EMS is fee-for-service with set user rates for response and transport):

- Amendments were made to the Alberta Blue Cross agreement (government program for palliative/end of life care patients) to broaden coverage to include non-transport events (as coverage was previously tied to transport to acute care setting).
- Changes were made to broaden the definition of approved facilities (to support direct transport to hospice) and extensive communication and awareness activities occurred with palliative care providers about importance of enrolling patients in the government program (Palliative Blue Cross) so paramedic services would be covered.

Logistics

As in any large system change, there will be significant logistical, operational and structural elements that will need to be considered, including (but not limited to):

- Procurement of new drugs;
- Storage and transport of new medications (especially relevant if any new medications are controlled substances), including any changes that are needed to current kits, lockboxes, etc.;
- Interaction of various IT elements such as CAD, tablets, ePCR, the SPP registry, etc.;
- Delivery of training to the full workforce and when to "go live" on the new processes, CPG/protocols, etc.;
- Development, testing and implementation of any new technology (e.g., SPP, registry, auto notification of events to community partners);
- Process changes in dispatch; and/or
- Any approvals required for these changes.

EXPERT TIP

Ensure Operations is at the Table

Ensure paramedic services operations, fleet and logistics departments are engaged. Frontline, clinical working paramedics need to be heavily involved in planning, development and implementation of logistical and structural elements.

It was the best we could have done. There was comfort in it. We did it together because we had what we needed to be successful. Meds, equipment, middle of the night call. With the community behind us we were able to be successful.

Family Member,
Newfoundland and Labrador

I was asked to assist an EMS crew at a private residence with a patient. This man was in his final stage of life and was expected to die at any point. The crew did a great job in comforting the family and treating the patient. However, the patient needed to be suctioned frequently to assist in clearing his airway of excessive secretions. We left a portable battery powered suction unit with an extra battery. Prior to leaving, we gave a quick lesson on how it works and made sure that the family would be comfortable using it without EMS there. The next day, we returned to retrieve the suction unit as the patient died during the night. The family was very grateful for our extended time and effort in dealing with their husband and father in his final hours.

Paramedic, Saskatchewan

Education and Awareness

Responding to patients receiving palliative care is not new for paramedics, however the focus and scope of the care provided is. Paramedics will be required to be competent in providing this new breadth of care. Education is an essential element of any significant system change. The provision of palliative care by paramedics not only represents a change in clinical treatments, but also represents a significant operational change/shift in the way paramedic services do business. Education on both clinical aspects and operational practices and procedures will be required to support the provision of palliative care by paramedics.

Questions to consider include:

- Who will be trained?
  - All staff? Only ACPs? Paramedic online consult physicians? Dispatch? Practice leaders/ paramedic consultants?
  - What training is needed for each group?
- How will education be developed?
  - Will a curriculum that already exists be adopted or adapted? (a commercial product such as LEAP Paramedic is good for credibility with the palliative care community who may be familiar with or adopted the LEAP curriculum already)
  - Will education be developed in-house?
  - If education is developed in-house, how will palliative care expertise be engaged in the development?
  - How will P/F/C advisors be engaged in education development?

> *I believe this program has provided the community with a positive avenue for end of life and comfort care. In allowing individuals and families 24-hour access to paramedics who are well trained in providing care/interventions for those experiencing crisis related to their disease, I believe we have saved our health care system, time, money, and resources by assisting these families within their homes. Allowing those who are ill autonomy in their treatment plans, who may otherwise feel they have lost control over their lives.*
>
> Paramedic, Newfoundland and Labrador

EXPERT TIP

Education for All

Paramedics are not the only population that require education or program awareness. Ensure that tailored education is created for each audience that intersects with the care that will be provided under the program (dispatch and communications officers, community palliative care providers and teams, physicians (paramedic services physicians, palliative care physicians, primary care physicians), first responders, police, ED staff that may receive patients from paramedics who have initiated a palliative approach to care, etc.).

- How will education be delivered?
  - Online (asynchronously, synchronously or a blend of both)?
    Face-to-face? Using simulation?
- Who will deliver the education?
  - In-house staff? Paramedic services staff? Palliative care staff/physicians or experts? Will P/F/C advisors have a role?
  - Will a train the trainer model be used?
- When will various groups be trained (in relation to program development/launch)?
  - Before launch, throughout launch, just-in-time, and any ongoing training (simulation, refresher?)
  - All staff at once? Rolling implementation?
    Across how long?
- Are there any cost considerations? Union requirements for mandatory training or replacement wage costs? Facilitator training costs? Facilitator credential costs?
- What will be required for ongoing/refresher training?
  - Continuing education is critical, but the required update interval is not yet known.
  - Will there be any regulatory requirements for continuing education requirements related to the new practice of providing a palliative care approach?

The following pages in this section will identify several components related to the development and delivery of initial education, followed by considerations for ongoing education and sustainability. Specific examples from jurisdictions are also provided.

EXPERT TIP

Recruit and Develop Program Champions Through Train-the-Trainer Model

If additional facilitator capacity is needed to provide education for frontline staff, consider recruiting new facilitators from frontline operations. Developing facilitators who are embedded as peers in frontline operations has multiple benefits including providing career development opportunities for frontline staff, and creating frontline champions for program implementation.

IMPLEMENTATION EXAMPLE

Train the Trainer and Build Regional Champions

LEAP Paramedic facilitators were recruited from frontline operations across the province (within urban and rural service areas, from AHS EMS and contracted paramedic service operators) to build capacity to deliver LEAP Paramedic courses and embed program champions throughout the province.

SUPPORTING RESOURCES

To see a full synopsis of how each jurisdiction developed and delivered education to various audiences within their program, see the jurisdictional Education Summaries in the Supplemental Resources section.

National Occupational Competency Profile

The National Occupational Competency Profile (NOCP)[19] for paramedics defines the competencies of paramedics (Primary, Advanced, and Critical Care) and emergency medical responders (EMR) within Canada. The NOCP (first developed by the Paramedic Association of Canada (PAC) in 2001 and updated in 2011)[20] was created for three main purposes:

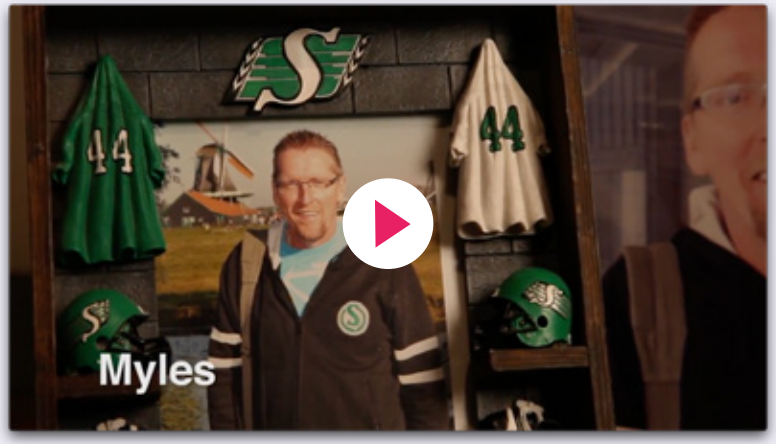
1. To define the paramedic profession;
2. To promote national consistency in paramedic training/ practice; and
3. To facilitate job mobility for paramedics (adopted as a foundation document for the paramedic national examination).

In some provinces, the NOCP is a significant driver of the core curriculum in schools and requirements for ongoing competency maintenance and professional development. Although the current NOCP includes palliative care competencies in section 6.1.m (provide care to a palliative patient), the profile is not comprehensive of the knowledge, attitudes, skills and behaviours required to provide an appropriate palliative care approach. The profile is outdated in its use of terminology; the term palliative should be used in relation to the care provided, not as a descriptor of the individual. It lacks distinction between providing a palliative care approach and providing end of life care, and there is no focus on providing care in line with goals of care or the wishes of individuals and their families and caregivers. There is also an assumption that individuals with palliative care needs will be transported to hospital and there is no provision for treatment in place or treat and refer (Cameron et al, 2016).

IMPLEMENTATION EXAMPLE

Embedding the Family's Voice

In Alberta, a family experience video was created in collaboration with a family member who used the program. This video was embedded into the education materials for paramedics, used at the start of all LEAP Paramedic training sessions, and used in awareness presentations with paramedics, home care, palliative care physicians and other program stakeholders.



Since the last publication of the NOCPs, palliative care competencies for paramedics were developed in Nova Scotia, Ontario, Alberta and British Columbia. In some provinces, this work was undertaken through the development of provincial interdisciplinary palliative care competency frameworks (in which paramedics were included). Provincial competency frameworks in place include:

- The Nova Scotia Palliative Care Competency Framework (includes paramedics)
- The Ontario Palliative Care Competency Framework (includes paramedics)
- The Paramedic Association of New Brunswick is in the process of developing a competency profile for paramedic palliative education which will become a requirement of accreditation for all New Brunswick accredited paramedic programs.
- Alberta Emergency Medical Responders' and Paramedics' Palliative Care Competency Framework
- BCEHS Paramedic Competency Framework – Paramedic Approaches to Palliative Care

The NOCPs are scheduled for update starting in 2022 and appropriate competencies related to paramedics providing palliative care will be addressed in the update.

P/F/C ENGAGEMENT

Include P/F/C Partners in Education

Engage P/F/C partners in the development of education materials to ensure their perspectives and voice is heard. Ensure education not only identifies the needs of individuals with life-limiting illness and how to support them, but also awareness of the needs of family and caregivers. Consider including P/F/C advisors or participants in the delivery of training sessions for the purposes of grounding the work in purpose, providing experiential expertise and "real-life" context for the training. At a minimum, consider including video messaging from P/F/Cs describing the impact of person- and family-caregiver focused care.

SUPPORTING RESOURCES

Additional resources, including the BCEHS Paramedic Competency Framework are available in the online repository.

Clinical and Operational Education

The provision of palliative care represents a new clinical skill set for paramedics. Additional training is required in several areas to support the integration of a palliative care approach such as:

- Identification of palliative patients.
- A palliative approach to care.
- Advance care planning and goals of care.
- Assessment in palliative care.
- Shared decision-making with individuals with palliative care needs, their families and caregivers.
- Management of common symptoms including dyspnea, pain, nausea/vomiting, and delirium.
- Management of palliative care emergencies (seizures, terminal hemorrhage, bowel obstruction, and spinal cord compression).
- Psychosocial support and communication skills (navigating difficult conversations, providing grief and bereavement support).
- Cultural competence and sensitivity.
- Additional skills training (such as subcutaneous medication administration).
- Training on new medications, or new uses for medications already carried.

EXPERT TIP

Significant Shift in Paradigm and Redefining Success

The provision of palliative care represents a significant shift in how many paramedics view their role and challenges their understanding and perception of a successful call outcome. Training will need to be structured to also support the change in perspective from “fix, fix, fix” and “lifesaving” to providing optimal symptom support and defining what success looks like given each individual situation.

Training on new policies, procedures and ways of doing work (operational training) will also be necessary and may include:

- Processes for follow up and call closure.
- Documentation standards for palliative care events and treatment without transport (versus transport or refusal of service).
- Processes for referral to other community providers.
- Changes in dispatch processes or 911 call taker assessment.
- Processes and expectations for collaborative decision-making or collaborative care
- Changes in online medical consultation (calling different providers, linking to palliative care physicians).

From developing their own in-house training, to using commercial and free training products, jurisdictions employed different strategies in developing and delivering education to support the program.

SUPPORTING RESOURCES

For additional information on each jurisdiction's training strategy, refer to the **Education Summaries** in the Supplementary Resources section.

IMPLEMENTATION EXAMPLE

Regional Specific In-house Training Developed

In Ontario, a four-hour education package aligned with the Ontario Palliative Care Competency Framework was developed in-house to support the program. It was developed in collaboration between paramedics, medical direction, and palliative care physicians and healthcare professionals.

IMPLEMENTATION EXAMPLE

Practice How You Practice

In Saskatchewan, paramedics and palliative care teams are participating in inter-disciplinary scenario-based learning to facilitate a collaborative approach to care and communication.

Learning Essential Approaches to Palliative Care (LEAP) Paramedic – Pallium Canada

LEAP Paramedic is a learning course for paramedics that teaches the essential practical knowledge, attitudes, and skills to provide a palliative care approach on-site.

In the Fall 2014, Nova Scotia's team engaged Pallium Canada to develop palliative care education specifically for paramedics. Pallium Canada is a nationally recognized organization which develops and disseminates peer-reviewed palliative education. A one day "LEAP Mini for Paramedics" course was specifically designed to meet the needs of this new area of care for paramedics. It involved the identification of paramedic competencies and the modification of the interprofessional LEAP curriculum to focus on the paramedic context. In 2016, the course was re-designed to create a blended online/face-to-face format.

The course includes online modules, with cases studies and discussions co-facilitated by palliative care experts and paramedic facilitators face-to-face or over zoom. Topics covered include:

- Taking ownership;
- Decision-making and advance care planning;
- Pain;
- Dyspnea;
- Nausea, vomiting, and hydration;
- Palliative emergencies;
- Psychosocial distress;
- Shifting paradigms;
- Clinical scenarios and decision-making;
- Delirium;
- Pain and gastrointestinal symptoms;
- Essential conversations; and
- Respiratory and last days.

IMPLEMENTATION EXAMPLE

Training EMS Online Medical Consult Physicians

In Newfoundland and Labrador, all EMS online medical consultation physicians participated in LEAP training to support them in their role providing palliative care consultations for paramedics in the community.

SUPPORTING RESOURCES

To learn more about LEAP Paramedic, visit www.pallium.ca/course/leap-paramedic/

IMPLEMENTATION EXAMPLES

Regional Adaptation of LEAP Paramedic

BCEHS and Pallium Canada collaborated to create a British Columbia specific LEAP Paramedic for online delivery across the workforce. The course was tailored include:

- BCEHS specific response considerations, such as geography, local resources and provincial PCP and ACP scope of practice.
- BCEHS Palliative Clinical Practice Guidelines within case studies to allow learners an opportunity to work through treatment plans that are BCEHS specific.
- Local information on advance care planning as well as documentation specific to British Columbia such as EDITH and MOST (Medical Order for Scope of Treatment) forms.
- Separate PCP and ACP versions designed to ensure content was within scope of practice and clinically relevant.

Initial Paramedic Training Through LEAP Paramedic

All paramedics in Nova Scotia and Prince Edward Island received the LEAP Paramedic training to support the implementation of the *Paramedics Providing Palliative Care at Home Program*. Approximately 950 paramedics were trained using over 70 full-day LEAP Paramedic training sessions in 2015, prior to the launch of the program. ER physicians who provide online consultation to paramedics in the field were also offered the LEAP Core course to enhance their understanding and knowledge of palliative care.

Learning Together Enriches Relationships

In Alberta, all LEAP Paramedic sessions were co-facilitated with a palliative care nurse (and/or a palliative care physician) from the regional palliative care program. LEAP Paramedic courses were also marketed to home care providers, and most courses had attendance from both EMS and home care. Some courses had family physicians and pharmacists attend. This format presented additional opportunities for providers to meet one another and learn more about each others' roles, resources, and limitations within their specific geography. It also helped to break down silos between paramedics and community providers to brainstorm solutions and trouble shoot local case scenarios throughout the course.

MyGriefToolbox for Paramedics – Canadian Virtual Hospice

MyGriefToolbox is a free, online resource that was developed by paramedics and grief specialists working in collaboration with Canadian Virtual Hospice to support paramedics providing palliative care and short-term grief and bereavement support. The self-paced, self-directed learning modules include a toolbox of strategies, skills, tips, techniques, and best practices to guide paramedics through the psychosocial aspects, the "core clinical skills," of events where a palliative care approach is being employed. The modules address the grief families experience when someone they care about is living with advanced illness or dying and provide paramedics with various tools to support the patient and the family. A module to support paramedics with work related stress and grief, and a module specifically for friends and family of paramedics are also included.

The modules were developed in collaboration with paramedics working in the field and are based on the latest research and clinical best practices. They include:

- Tactics to support patients and families in acute grief before, during and after a death;
- Strategies to intervene sensitively; and
- Guidance to constructively manage work-related grief and the other stresses of working with palliative care needs.

MyGriefToolbox was originally developed in 2018, in collaboration with the Alberta and Nova Scotia paramedic/palliative care project teams to support the provision of palliative care and augment education and training that had been delivered to date. It was developed in French in collaboration with paramedics from New Brunswick and Ontario, and is used by multiple jurisdictions to augment local training.

SUPPORTING RESOURCES

To learn more about MyGriefToolbox for Paramedics, visit www.grieftoolbox.ca / www.mesoutilsdeuil.ca

IMPLEMENTATION EXAMPLES

Training Aid and Support Tool for Paramedics

In York, MyGriefToolbox was used as an educational support for paramedic champion groups that support peers after a palliative care calls. MyGriefToolbox was also used as a resource during paramedic training in the project, for the Peer Support team, and was added to York's PeerConnect App.

Paramedic Support and Self Care

In Manitoba, beyond learning how to support individuals, families and caregivers, paramedics have also been trained in techniques to support one another after a difficult encounter. Paramedics were provided information from MyGriefToolbox and encouraged to work through the content to support their practice.

Embedded as Continuing Professional Development Opportunity

MyGriefToolbox was approved as a free continuing education and professional development resource for paramedics across Canada to meet their annual continuing education credit requirements. Some paramedic services have also included it in their internal learning systems and report cards for staff continuing education.

Sustainability

It is important to consider the sustainability of any education strategy. There may be staff who are on extended leave during the initial training roll out or who are hired after training is complete. Paramedic colleges and educational institutions should:

- Consider if any refresher training or ongoing review opportunities are needed for paramedics to maintain competency and confidence in providing a palliative care approach.
- Embed palliative care content into clinical case rounds, simulation training, education days or other committed education time for paramedics.
- Embed the clinical and operational training that was developed into re-orientation and new hire orientation processes that are already in place.
- Work with paramedic colleges and educational institutions to include comprehensive education related to palliative care.

EXPERT TIP

Develop a Learning System

How will this low volume, high impact skill be maintained? Will continuing competency and education be internal or external to the paramedic service (i.e.: embedded in recurring annual training, part of professional continuing education and regulatory/licensure requirements, etc.)? Are there opportunities to embed these new skills/competencies into the initial education of new paramedics (with institutions rather than the paramedic service)? Think about sustainability related to competency of currently practicing paramedics and where the new skill set will be taught to new paramedics entering the service or profession in general).

IMPLEMENTATION EXAMPLES

Embedding Palliative Care Education into Paramedic Schools

Advanced Care Paramedic programs in both Alberta and Saskatchewan have embedded the LEAP Paramedic course into their curriculum to prepare new graduates with palliative care education.

Evolution of Training Delivery to Meet Ongoing Needs

Several jurisdictions are currently developing in-house online palliative care training that will be used for new recruits and ongoing refresher training to meet ongoing and future training demands within the paramedic service's annual operating budget.

SUPPORTING RESOURCES

To explore how specific jurisdictions developed and delivered education to various audiences, please view the jurisdictional Education Summaries in the Supplementary Resources section.

IMPLEMENTATION EXAMPLES

Approved for Continuing Education with Provincial Regulators

LEAP Paramedic and MyGriefToolbox were approved for continuing education credits with multiple provincial colleges and regulatory bodies which can be used to meet credit expectations for annual re-licensure.

Ongoing and Additional Training

Based on comfort and confidence feedback from paramedics, Eastern Health in Newfoundland and Labrador is continuing to collaborate with the palliative care team and the Office of the Provincial Medical Director to develop and deliver supplemental education to cover additional topics in palliative care. Plans are in place to offer an elective annual palliative care education day which will be redesigned each year based on paramedic feedback and led by one of the palliative care physicians.

Embedded in New Employee Orientation

In Alberta, continuing care and paramedic staff receive information about the program during orientation.

Bridging Program for Sustainability

New Brunswick developed a "bridging" program for all paramedics who were not part of the initial cohort that received the LEAP Paramedic program training. An in-house program was developed to "bridge" the gap to practice until such time as graduates of paramedic educational programs have attained these competencies at entry to practice. Any new hires or paramedics returning from leave are participating in the "bridging" program to ensure that all paramedics are provided palliative care training to support their practice.

Swap to Online Delivery Serves Dual Purpose

For OHRI, in-house education was originally developed to be delivered face-to-face but was adjusted to online delivery due to COVID-19. The online version of the palliative care education will serve as a key component of the sustainability strategy for the program. The training is stored and available for download for ongoing viewing by paramedics already trained and for future distribution to other regions and base hospitals in Ontario that have not yet implemented the program. Discussions have begun at the provincial level to determine the minimum standard for palliative care training in Ontario to ensure a standard approach across the province.

Program Awareness, Communications and Public Engagement

A broad and thorough communication plan, for both internal and external communications, is key. When developing your communications strategy, consider the following questions:

1. Who are the audiences (primary, secondary, etc.) that need to know about the program?
2. What information (content) are you trying to communicate (objectives of your communications plan)?
3. What are your key messages about the program/service?
4. What information is the most relevant to each audience?
5. What are the best ways to reach each audience? How do they prefer to receive information?
6. Are there any barriers for certain individuals or groups that may impact the success of your communications tactics and strategies (lack of access to the internet)?
7. How will you measure or evaluate the success of your communications plan?

> *At first, I didn't know what the program was, and I wanted nothing to do with it. When the Paramedics came to my house, one went into the room with my husband and explained everything that was going on. The other Paramedic took me aside in the hallway and explained how the program works. After I calmed down and realized why they were there, I was shocked to see how good they were, the treatment my loved one received, and the compassion they showed towards my family. I was on my own up until that point, but after I didn't feel alone anymore. I tell everyone how great the program is, and I've recommended it to everyone.*
>
> Family member, Newfoundland and Labrador

Consider Who Needs to Know

Communications will need to be developed for multiple audiences, including:

- The public (persons living with illness, family and caregivers);
- Referring providers;
- Paramedics;
- Primary care, home care and palliative care teams in the community;
- Patient navigators and volunteers who may support patients, families and caregivers in accessing relevant services in the community;
- Other community agencies (fire and police);
- Emergency department staff;
- Operational and education leadership; and/or
- Primary care providers (physicians, nurse practitioners, specialists).

Communication methods and tactics

Depending on the content and audience, different communication methods and tactics will be more suitable than others. Some examples of external communications that may be developed include:

- Person and family/caregiver program brochures.
- Newsletters and media articles.
- Public-facing website (healthcare provider and person/family/caregiver information).
- Social media campaign.
- Public education on new models of paramedic care.
- Family experience or program videos (YouTube, public channels housed on public-facing website, etc.).
- Media releases (local and health authority news sources).
- Posters, letters or FAQs.
- Messaging to unions, primary and continuing care, paramedic services.
- Updates for external stakeholders (regulators, MOH, insurers providing palliative care services, etc.).

P/F/C ENGAGEMENT

Person/Family/Caregiver Focused Resources

It will be imperative to collaborate with person/family/caregiver partners as you develop all communications materials, especially those intended for their consumption. Discuss the use of sensitive and appropriate levels of language across all media with your person/family/caregiver partners.

IMPLEMENTATION EXAMPLES

Awareness for ED Staff About Palliative Care Approach

Although most patients were treated at home, on occasion, patients would require or request transport to the emergency department. In Ottawa, ED staff were not only updated about the new program, but also about best practices in symptom management in palliative care, the principles of a palliative care approach and new paramedic treatment protocols to ensure awareness and consistency in care provided when transferring patients to ED staff.

Public-Facing Website

In multiple jurisdictions, information about the program is available on a public-facing website, curated specifically for patients, family caregivers and clinicians.

A robust communications plan should also consider what additional internal communications may be needed to support the implementation and sustainability of the new program. Ongoing communications, updates and engagement of key stakeholders (frontline paramedics, palliative care teams, home care teams, physicians, etc.) is imperative to supporting the change in practice after initial onboarding education activities were completed.

SUPPORTING RESOURCES

Samples of communications materials developed by various jurisdictions are available in the online repository.

First Nations/Inuit/Métis Engagement

There was a commitment from teams from the outset of this project to work collaboratively with First Nations, Inuit, and Métis Peoples to develop services. First Nations, Inuit and Métis communities have distinctive histories, cultures, and traditions.

Approaches to engagement tended to fall into three main groups:

1. First, engaging communities in development of the model of care and governance. Examples included working with British Columbia's First Nations Health Authority (FNHA) in developing, reviewing and editing new Clinical Practice Guidelines and Paramedic Competencies relating to palliative approaches to; and involving communities in the development of sustainability plans; culture change and operational support.
2. Second, most teams had representatives from First Nations, Inuit, and Métis communities on their project level advisory groups, which meant they heard perspectives relating to the needs of people living with palliative care needs in their jurisdictions. Advisors were not always able to attend but were involved in the decision-making process.
3. Third and finally, teams were able to access specialist teams and advisors from HEC and the Partnership to support them in engagement; and depending on the education approaches chosen, some teams were able to link with education providers to ensure resources were culturally safe and met the needs for delivering palliative approaches to care for First Nations, Inuit, and Métis communities.

Teams have agreed that engagement with First Nations, Inuit, and Métis communities may need to be different from engagement approaches with non-indigenous populations.

Relationships and Reciprocity

Meaningful engagement acknowledges and respects Indigenous knowledge and perspectives of health and wellness structures, and ensures that the many and distinct perspectives of First Nations, Inuit and Métis Peoples are represented in planning and decision-making, from the earliest stages of projects. Engagements are likely to be based on face-to-face encounters resting with a range of people in each community, including, but not limited to, knowledge keepers designated by custom, confederacy councils or an Elders' circle. Engagement should respect all sacred knowledge that might be shared within a trusting relationship; and it needs to be afforded time to build relationships and respect cultures and traditions.

This collaborative acknowledges that developing reciprocal and trusting relationships using a distinction-based approach (which acknowledges the three federally recognized Indigenous groupings in Canada: First Nations, Métis, and Inuit) requires extensive time and resources, which may not have been fully appreciated at the outset.

Successes or Examples of Successful Engagement or Partnerships

Some teams shared examples of progress they made in engagement and collaboration to develop services for First Nations, communities. One of the innovations sites for this project had First Nations representation on their advisory group who were able to share examples of experiences and situations around First Nations, end of life care and ceremony in training delivered to paramedics.

In general, teams shared those connections were made through groups, stakeholders, and people who they already knew through their networks and associations, demonstrating the value of investing in thoughtful relationships.

IMPLEMENTATION EXAMPLES

New Brunswick

New Brunswick worked with a First Nations nurse with a teaching background to build First Nations cultural competency training. Staff champions participated in Kairos blanket training which was delivered by First Nations people. The engagement in training has resulted in the project team being invited to an upcoming Pow Wow, demonstrating the willingness to teach and share their culture with the team.

Saskatchewan

The Saskatchewan team worked with Indigenous advisors and made plans to develop educational material collaboratively. They worked to understand and address challenges around funding where crews were able to provide a palliative approach to care in visits on-reserve, but where funding structures meant non-transport to hospital resulted in a cost to the patient and the family. Teams are developing demonstration projects which will address the challenges in non-insured health benefits which is a barrier in offering palliative care approaches to First Nations, Inuit, and Métis communities in their home.

Challenges

One challenge to meaningful engagement with First Nations, Inuit and Métis communities was the global pandemic which posed a grave threat to Indigenous populations, some of whom already experience health inequalities. While teams tried to maintain their commitment to the provision of services to First Nations, Inuit, and Métis communities by improving awareness, education, and starting or encouraging preliminary discussions, it should be recognized that best practices in developing reciprocal and thoughtful relationships was seriously impeded by the pandemic. Teams had restricted access to Indigenous communities due to the fear of spreading the virus into those communities; but also, because First Nations, Inuit, and Métis partners were engaged in pandemic-related priorities in strategic planning as well as meeting the clinical needs of the communities.

Next Steps

The aim of the collaborative was not to address cultural competency for paramedics in general, given the commitment to equity, diversity and inclusion across health and social care services. However, that said, the equitable access to approaches where paramedics can provide palliative care to First Nations, Inuit and Métis Peoples remains a work in progress. The progress that was made so far is only the beginning of a reciprocal dialogue between services and communities.

Future work will be focused on thoughtful and respectful conversations, acknowledging this takes considerable time and effort. Moving forward teams will continue to explore opportunities to develop meaningful engagement with First Nations, Inuit, and Métis communities to provide appropriate services which meet the needs of the distinct populations in Canada.

Change Concepts and Ideas

About this section

Throughout the collaborative, teams were supported in change management techniques focusing on

1. Content (the planned change);
2. People (those impacted); and
3. Process (the design of the change).

An expanded "toolbox" of resources was developed to support adopting new ways of working for those impacted by the project, focusing on stakeholders, communication, skills, change readiness and change adoption.

Teams came together frequently during the collaborative to share their experiences planning, developing and implementing significant process and culture change within their organizations. These learnings and selections from the "toolbox" of resources are provided in the section that follows.

In this section

The Project Manager: An Agent of Change

Teams in this collaborative recognized the importance and value of dedicated project manager time to support the project effectively, manage relationships, plan and oversee activities, identify and mitigate risks, and coordinate the team and enable them to focus on priorities.

Project managers in each jurisdiction also considered who should be included in their project management team, recognizing that every team is different and there is no ideal skill mix, with each team member adding something of value to the table. The size of a project team had impact on how it functioned.

Smaller teams

- Experienced effective communication and relationship building
- Experienced less bureaucracy in decision-making
- Had the potential for increased

Larger teams

- Had more diverse experiences and perspectives
- Could share out workload and tasks
- Were better resourced for large scale projects
- Had widespread project knowledge

EXPERT TIP

Avoid "Off the Side of the Desk"

Secure dedicated human resources to support the project (at least a full-time project manager/ project lead) and act as change agents and champions.

Tips for success were identified by teams and project managers, including:

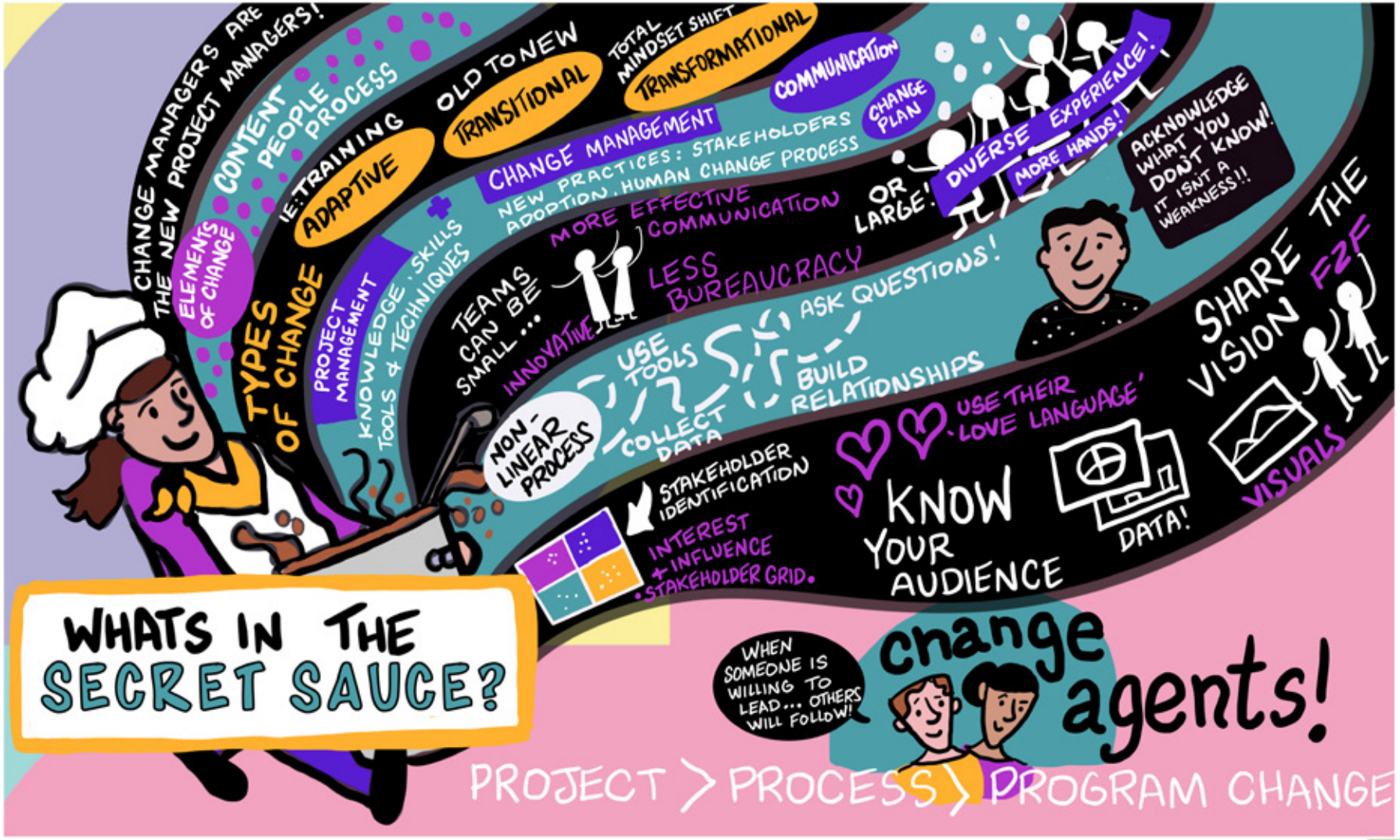
- Identify and use project tools;
- Work out which tools are best suited to your own jurisdiction;
- Collect and use data to revise and adapt work;
- Build new relationships and invest in existing relationships;
- Continue to learn;
- Embrace new challenges; and
- Grow as a team.

Although project management tasks and activities were integral to the success of developing, much of the work of the project manager role on each team in the collaborative was based around the management of change, leading change, and identifying change agents to support successful implementation and culture shift. Key learnings include:

- Know your audience and tailor your message.
- Recognize cultures in organizations.
- Be visible and accessible.
- Share a clear vision of the change.
- Map and share the current and future state of the proposed change.
- Continually invest time and effort in engagement and communication with stakeholders.
- Look for champions to support the movement.
- Be flexible and adapt to ongoing changes in goals.

The following two graphic recordings summarize the learnings and strategies used by project managers (agents of change) during the collaborative to effectively implement the program in their jurisdictions, including the importance of tapping into the hearts and minds of those affected by the change to support adoption and culture change.

Project Manager: Change Agent



Healthcare Excellence Canada | Excellence en santé Canada

Think Link

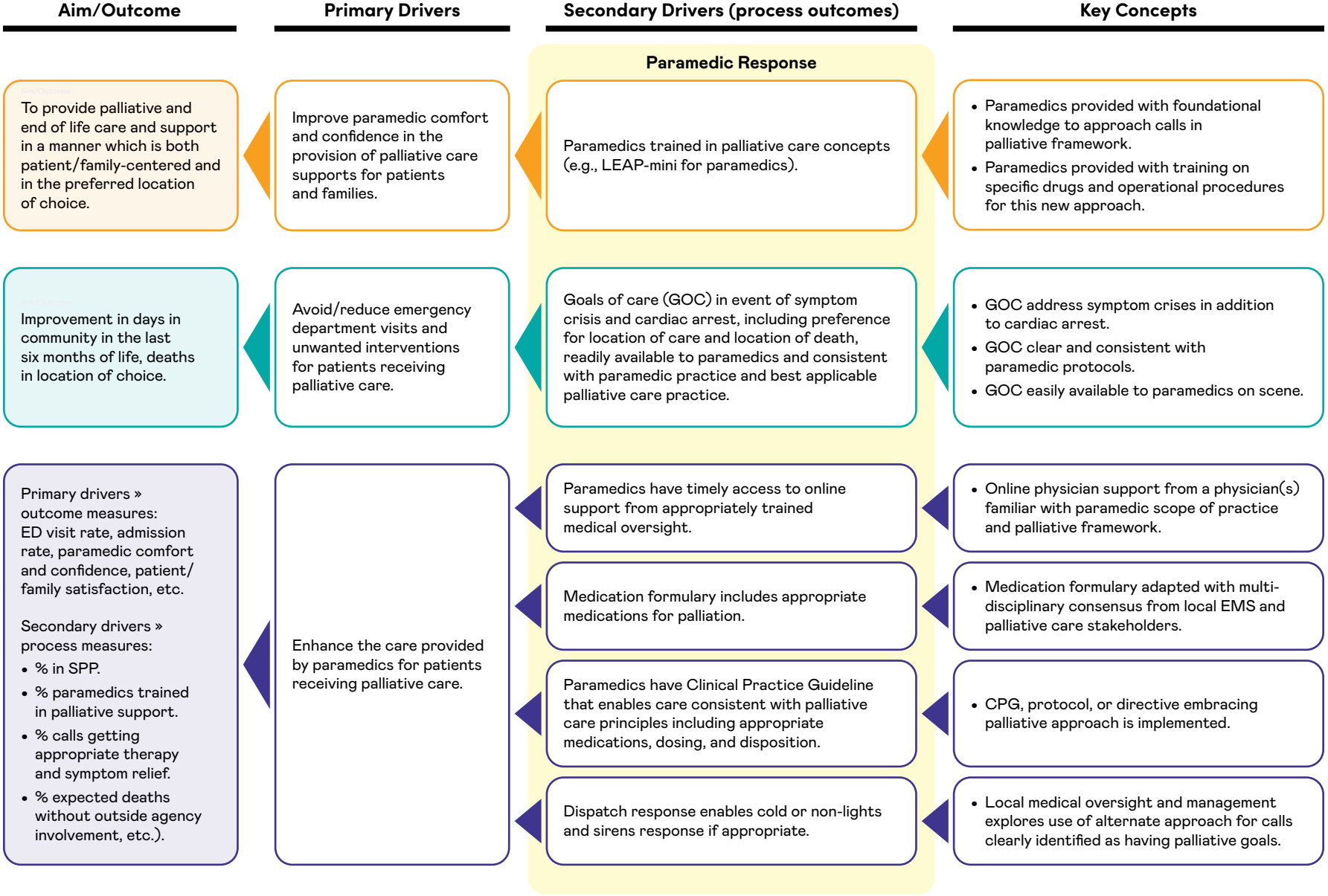
Inked by Dina Kouka

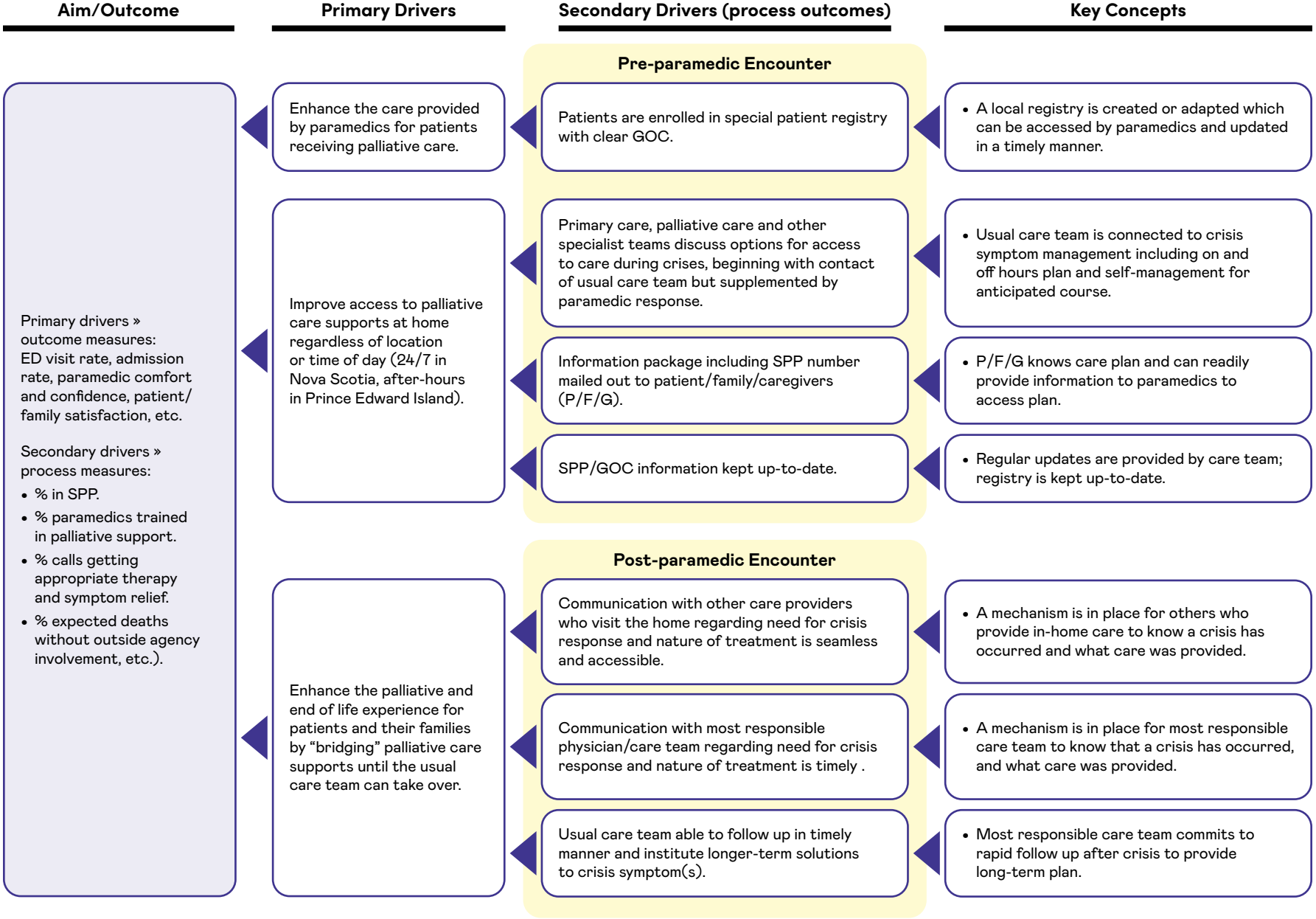
Reaching Hearts and Minds: Key to Culture Change

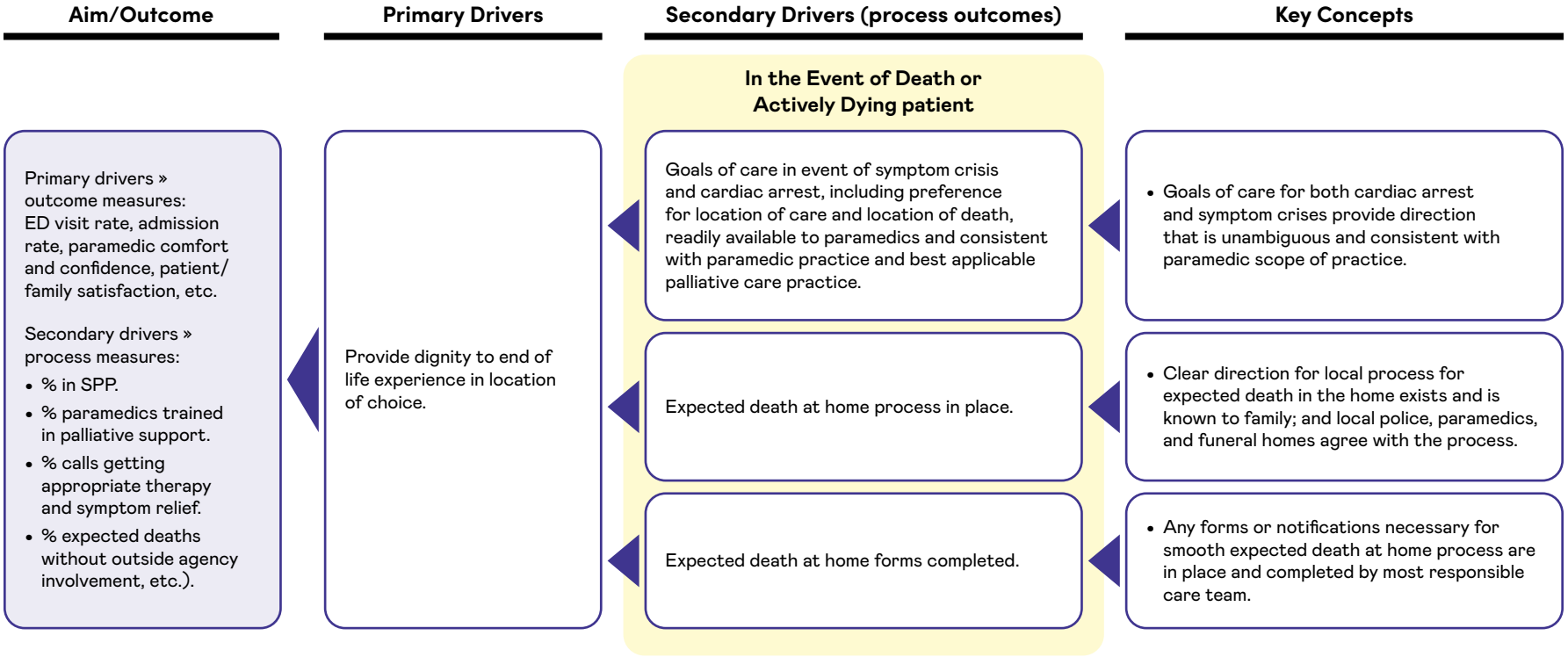
Mapping Out the Change

Teams adopted various tools to support change. A driver diagram is a visual representation that can be used to see how change ideas and activities link into the overall improvement aim. High level factors (called “primary drivers”) that need to be addressed to achieve the overall aim or outcome, and the specific projects and activities that need to occur (“secondary drivers” or process outcomes) are clearly identified in a logical sequence. Driver diagrams that clearly show how the factors are connected can be a strong communication tool to explain how the change will occur, and can serve as the basis from which to form an evaluation framework.

The following is an example driver diagram from the *Paramedics Providing Palliative Care at Home Program* in Nova Scotia and Prince Edward Island.


Aim/Outcome
Primary Drivers
Secondary Drivers (process outcomes)
Key Concepts
Paramedic Response
To provide palliative and end of life care and support in a manner which is both patient/family-centered and in the preferred location of choice.
Improve paramedic comfort and confidence in the provision of palliative care supports for patients and families.
Paramedics trained in palliative care concepts (e.g., LEAP-mini for paramedics).
• Paramedics provided with foundational knowledge to approach calls in palliative framework.
• Paramedics provided with training on specific drugs and operational procedures for this new approach.
Improvement in days in community in the last six months of life, deaths in location of choice.
Avoid/reduce emergency department visits and unwanted interventions for patients receiving palliative care.
Goals of care (GOC) in event of symptom crisis and cardiac arrest, including preference for location of care and location of death, readily available to paramedics and consistent with paramedic practice and best applicable palliative care practice.
• GOC address symptom crises in addition to cardiac arrest.
• GOC clear and consistent with paramedic protocols.
• GOC easily available to paramedics on scene.
Primary drivers » outcome measures: ED visit rate, admission rate, paramedic comfort and confidence, patient/family satisfaction, etc.
Secondary drivers » process measures:
• % in SPP.
• % paramedics trained in palliative support.
• % calls getting appropriate therapy and symptom relief.
• % expected deaths without outside agency involvement, etc.).
Enhance the care provided by paramedics for patients receiving palliative care.
Paramedics have timely access to online support from appropriately trained medical oversight.
• Online physician support from a physician(s) familiar with paramedic scope of practice and palliative framework.
Medication formulary includes appropriate medications for palliation.
• Medication formulary adapted with multi-disciplinary consensus from local EMS and palliative care stakeholders.
Paramedics have Clinical Practice Guideline that enables care consistent with palliative care principles including appropriate medications, dosing, and disposition.
• CPG, protocol, or directive embracing palliative approach is implemented.
Dispatch response enables cold or non-lights and sirens response if appropriate.
• Local medical oversight and management explores use of alternate approach for calls clearly identified as having palliative goals.


Aim/Outcome
Primary Drivers
Secondary Drivers (process outcomes)
Key Concepts
Pre-paramedic Encounter
Post-paramedic Encounter
Primary drivers » outcome measures: ED visit rate, admission rate, paramedic comfort and confidence, patient/family satisfaction, etc.
Secondary drivers » process measures:
• % in SPP.
• % paramedics trained in palliative support.
• % calls getting appropriate therapy and symptom relief.
• % expected deaths without outside agency involvement, etc.).
Enhance the care provided by paramedics for patients receiving palliative care.
Improve access to palliative care supports at home regardless of location or time of day (24/7 in Nova Scotia, after-hours in Prince Edward Island).
Enhance the palliative and end of life experience for patients and their families by "bridging" palliative care supports until the usual care team can take over.
Patients are enrolled in special patient registry with clear GOC.
Primary care, palliative care and other specialist teams discuss options for access to care during crises, beginning with contact of usual care team but supplemented by paramedic response.
Information package including SPP number mailed out to patient/family/caregivers (P/F/G).
SPP/GOC information kept up-to-date.
Communication with other care providers who visit the home regarding need for crisis response and nature of treatment is seamless and accessible.
Communication with most responsible physician/care team regarding need for crisis response and nature of treatment is timely .
Usual care team able to follow up in timely manner and institute longer-term solutions to crisis symptom(s).
• A local registry is created or adapted which can be accessed by paramedics and updated in a timely manner.
• Usual care team is connected to crisis symptom management including on and off hours plan and self-management for anticipated course.
• P/F/G knows care plan and can readily provide information to paramedics to access plan.
• Regular updates are provided by care team; registry is kept up-to-date.
• A mechanism is in place for others who provide in-home care to know a crisis has occurred and what care was provided.
• A mechanism is in place for most responsible care team to know that a crisis has occurred, and what care was provided.
• Most responsible care team commits to rapid follow up after crisis to provide long-term plan.


Aim/Outcome
Primary Drivers
Secondary Drivers (process outcomes)
Key Concepts
In the Event of Death or Actively Dying patient
Primary drivers » outcome measures: ED visit rate, admission rate, paramedic comfort and confidence, patient/ family satisfaction, etc.
Secondary drivers » process measures:
• % in SPP.
• % paramedics trained in palliative support.
• % calls getting appropriate therapy and symptom relief.
• % expected deaths without outside agency involvement, etc.).
Provide dignity to end of life experience in location of choice.
Goals of care in event of symptom crisis and cardiac arrest, including preference for location of care and location of death, readily available to paramedics and consistent with paramedic practice and best applicable palliative care practice.
Expected death at home process in place.
Expected death at home forms completed.
• Goals of care for both cardiac arrest and symptom crises provide direction that is unambiguous and consistent with paramedic scope of practice.
• Clear direction for local process for expected death in the home exists and is known to family; and local police, paramedics, and funeral homes agree with the process.
• Any forms or notifications necessary for smooth expected death at home process are in place and completed by most responsible care team.

Key Tools and Resources to Support Change

Teams in the collaborative used a variety of tools and resources to support change management strategies and their healthcare improvement journey. This following collection of free local, provincial and territorial, national, and international innovation tools and resources was curated by HEC and are relevant for anyone involved in improving healthcare.

Institute for Healthcare Improvement. Science of Improvement.
www.ihi.org/about/Pages/ScienceofImprovement.aspx

Institute for Health Improvement. How to Improve.
How to Improve | IHI - Institute for Healthcare Improvement

International Association for Public Participation (2018).
IAP2 Spectrum of Public Participation.
cdn.ymaws.com/www.iap2.org/resource/resmgr/pillars/Spectrum_8.5x11_Print.pdf

Kotter, J. The 4 Change Principles.
www.kotterinc.com/4-change-principles/

Kotter, J. The 8-step Process for Leading Change.
www.kotterinc.com/8-step-process-for-leading-change/

Policy Readiness Tool.
policyreadinesstool.com/en/

CFHI Quality Improvement Primer: Partnering with Patients, Families & Caregivers in Co-designing Care.
www.cfhi-fcass.ca/docs/default-source/itr/tools-and-resources/qi-primer-series-patient-engagement-e.pdf

CFHI Readiness to Receive Assessment Tool.
www.cfhi-fcass.ca/docs/default-source/itr/tools-and-resources/cfhi-readiness-to-receive-assessment-tool-e

CFHI Readiness to Spread Assessment Tool.
www.cfhi-fcass.ca/docs/default-source/itr/tools-and-resources/cfhi-readiness-to-spread-assessment-tool-e

NHS Stakeholder Analysis Tool.
www.england.nhs.uk/wp-content/uploads/2022/02/qsir-stakeholder-analysis.pdf

Enablers and Barriers

About this section

This section details the enablers and barriers that were both anticipated and experienced by the jurisdictions in the collaborative when developing and implementing a palliative approach to care for paramedics in their services. The impact, as well as solutions and specific examples from each jurisdiction on how the enabler was leveraged, or the barrier was overcome, area also included. A consolidated listing of assumption, barriers and constraints related to the program development and implementation is also provided.

In this section

Enablers

Other jurisdictions are encouraged to investigate larger health system enablers in their province, as palliative and end of life care is a current priority for most healthcare systems across Canada (and the world). Likely, there are opportunities to leverage other work in the palliative/end of life care space that may already have leadership commitment and are embedded in operational strategic plans.

Enabler

Larger healthcare system focus on/shift to person/family/caregiver-centred care.

Impact

- Program aligns care provided with the wishes and expectations of individuals, families and caregivers, which is in alignment with larger goals of healthcare systems across Canada.
- Aligns with greater health system plans to shift care from facility and acute care to community where possible.

Specific Regional Examples

IMPLEMENTATION EXAMPLE

Saskatchewan

The program aligns with Saskatchewan College of Physicians and Surgeon's work to improve palliative and end of life care, as well as the Saskatchewan Health Authority's commitment to improve frontline patient care and improve coordination of health services across the province.

IMPLEMENTATION EXAMPLE

Alberta

Specific recommendation in Health Quality Council of Alberta (2012) report to support patients and families during symptom crisis in preferred location of care.[21] Significant MOH and provincial health authority commitment to palliative and end of life care work in general, strong governance framework to support the project as one of 36 other initiatives under Provincial palliative Care Framework. Other initiatives like the creation of a provincial palliative care website ("one stop shop"), Expected Death in the Home Policy/Procedure work, development of a 24/7 on call palliative care physician resource complemented the development of the ATR program.

Specific Regional Examples (continued)

IMPLEMENTATION EXAMPLE

Ontario

This project aligns with the new patient care models for select 911 medical emergency patients as supported by the updated regulatory and legislative changes proclaimed on November 1, 2019 by the MOH. This project also aligns with key policy and foundational documents including:

- *Declaration of Partnership and Commitment to Action* (December 2011), which is a collaborative, stakeholder-driven, multi-year framework for improving hospice palliative care in Ontario.
- The *2014 Annual Report of the Office of the Auditor General of Ontario*, which called attention to the need for an integrated, coordinated system to deliver hospice palliative care in Ontario.
- The MOH and Long-Term Care's *Patients First: A Roadmap to Strengthen Home and Community Care* (May 2015), which highlights a commitment to improved access and equity in hospice palliative care at home and in the community.
- *Palliative and End-Of-Life Care Provincial Roundtable Report* (March 2016), which explores the important steps to achieve the goals set in Patients First.
- Health Quality of Ontario's *Palliative Care Standards*, which informs clinicians and organizations about what high-quality health care looks like for adults with progressive, life-limiting illness, and for their family and caregivers.

Enabler

Local focus on palliative care in other practice settings.

Impact

- Opportunity to collaborate and learn from each other's experience and work already done.
- Many jurisdictions have already developed or are in the process of developing work that can be leveraged to support the paramedic/palliative care work (i.e.: documenting care and end of life wishes/advance care planning/goals of care, expected death in the home policies/procedures, interprofessional palliative care competency framework development).

Specific Regional Examples

IMPLEMENTATION EXAMPLE

Saskatchewan

Mandatory advanced care planning/goals of care education and directive for healthcare providers is currently being implemented and some community paramedic teams were already collaborating with community providers to support patients receiving palliative care at home.

Enabler

Similar work ongoing in other jurisdictions and interest from other provinces, government and senior health leadership.

Impact

- Concurrent work in other jurisdictions helped to support leadership commitment.
- New jurisdictions who are considering development and implementation have three provinces with three plus years of data (Nova Scotia, Prince Edward Island and Alberta), including provider and patient/family/caregiver experience to support that this is the right thing to do. At least seven other jurisdictions are currently developing and implementing programs across Canada.
- The innovation can be adapted to local contexts. Examples from across Canada support that concepts and key elements can be implemented in different jurisdictions (service models, size, etc.).
- A large body of media and success stories have been curated to date.
- Providing a palliative approach to care is also being embedded into practice in other countries (United Kingdom, Australia), and the body of knowledge and recognition that this is an important and needed expansion of practice for paramedics is increasing.

Specific Regional Examples

IMPLEMENTATION EXAMPLE

Nova Scotia

Former federal Minister of Health, Honourable Jane Philpott, expressed support for the spread of this innovative program during a 2016 visit to Halifax. A plenary session on end of life issues affecting paramedic services in North America was presented at the National Association of EMS Physicians annual meeting, during which the Nova Scotia/Prince Edward Island Program was highlighted.

Enabler

Paramedics are already responding to palliative/end of life care events, and providing appropriate care is identified as part of paramedic skill set/responsibility in the NOCP.

Impact

- Evidence that paramedics were already responding to these events, and there is a mismatch between paramedic protocols and practice (embedded in transport) and expectations of individuals, families and caregivers.
- Paramedics are expected to possess palliative competencies (National Occupational Competency Profile, 6.1.m).
- Many clinical skills required to manage acute palliative crises are within the paramedic skill set (e.g., paramedics already use opioids in their practice for acute pain, manage acute seizures, etc.).

Enabler

Identified and supported additional provincial work related to palliative/end of life population and paramedic/first responder interaction and standardization of processes.

Specific Regional Examples

IMPLEMENTATION EXAMPLE

Nova Scotia

This project uncovered issues related to the lack of a provincial health record, accessibility of end of life documents, Expected Death at Home process, and worked on provincial solutions that were not initially part of the project scope.

IMPLEMENTATION EXAMPLE

Ontario

Ontario's new patient care models for select 911 medical emergency patients as supported by the updated regulatory and legislative changes proclaimed on November 1, 2019 by the MOH.

IMPLEMENTATION EXAMPLE

Alberta

This project identified other areas that required additional work to better support palliative patients and families including Goals of Care Designations education for Medical First Responders (fire), paramedic involvement in expected death in the home concurrent policy/procedure development, EMS death in transit policy/procedure development, paramedic involvement in provincial Medical Assistance in Dying (MAiD) framework, development of EMS policy/procedure for MAiD (including registration of community MAiD events with dispatch), and adjustments to how police co-respond to cardiac arrest and obvious deaths.

Enabler

National support for scale and spread.

Impact

- Support from the Partnership and CFHI (now known as HEC) to scale and spread this work through this spread collaborative (2018-2022)
- Jurisdictions that initially implemented the program continue conducting evaluation and work around paramedics and palliative care.
- Some jurisdictions that were not selected for formal participation in the collaborative continue to develop and implement programs for paramedics to deliver a palliative approach to care.

Enabler

COVID pandemic (March 2020 to present).

Impact

- Strong health system focus on non-transport and treatment at home if appropriate to limit impact on emergency departments and acute care services.
- In many jurisdictions, COVID accelerated the implementation of the palliative approach to care and other treat and refer pathways for paramedics.
- Exacerbated system inequities for vulnerable patients, highlighting populations (isolated, frail, elderly, long-term care residents) that could benefit from both a palliative approach to care and treatment in place.
- New and refresher training shifted to online delivery throughout system to communicate extensive updates in clinical procedures/protocols, infection control and personal protective equipment (PPE) procedures, and transport/non-transport guidelines. Some jurisdictions also shifted their palliative care training to an online modality during this time.

Specific Regional Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

Additional stressors of COVID on the EMS system and a desire for new and innovative approaches to care sparked the creation of the ACP-C specialist model (single advanced care paramedic who responds as primary resource to most palliative events and supports PCP crews).

IMPLEMENTATION EXAMPLE

Ontario

As a result of COVID-19, all education was translated into online modules to maintain capacity for training current and new staff. It will also be used as refresher training going forward.

IMPLEMENTATION EXAMPLE

Saskatchewan

As a result of COVID-19, requests for palliative care support at home, without transport, significantly increased.

IMPLEMENTATION EXAMPLE

British Columbia

COVID-19 accelerated the implementation of the ASTaR pathway across the province.

Barriers

Several barriers were anticipated and encountered during the development and implementation of the project. These barriers are identified in the pages that follow as well as a summary of the solutions, or "work arounds," and specific examples from jurisdictions where the barrier was relevant

Barrier

Population level/administrative data – data lag with Vital Statistics (difficult to answer questions around location of care and location of death).

Solution

- May require significant administrative time or "side-process" to manually collect data (consider use of "light duty" staff to assist in administrative tasks).
- May be out of scope of initial project evaluation (due to data lag). Opportunities to investigate further support/research funding as separate component of the project.
- Investigate opportunities to partner with academia as a specific evaluation/research project between paramedic services and palliative care.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

Program staff utilized light-duty paramedics (temporary limitation, unable to work in frontline patient care capacity) to assist with the heavy administrative burden of confirming patient date of death.

IMPLEMENTATION EXAMPLE

Nova Scotia

The team has since received a Canadian Institutes of Health Research (CIHR) grant to explore this topic over the next two years (initially not possible within the timing of original project).

IMPLEMENTATION EXAMPLE

Alberta

Significant administrative time and collaboration with continuing care zone reps to backfill location of care (home living, supportive living or facility living client), date of death and location of death data for evaluation. This was done manually, with zone reps and the program lead reviewing home care charts/notes, EMS patient care records and emergency department records (NETCARE) of known patients/events in the program (revisited data quarterly to backfill date and location of death, patients still alive rolled forward to next quarter).

Barrier

Cost of education/training.

Solution

- An educational intervention for paramedics in palliative care did not exist prior to this program (in entry to practice education or in continuing education).
- Education is essential to culture shift among paramedics, and key to allowing paramedics to fill this role as a truly integrated health care provider.
- This is a significant factor in obtaining buy-in from the palliative care community.
- Suggestion to get buy-in for staff education early (including commitment of funding) and try to roll out education with or before program launch.
- Consider phased implementation of education (across budget years) and partnerships with education institutions and regulators to embed education into continuing education frameworks and education program standards.
- Consider embedding education into new employee training.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

Fifty per cent of the workforce received clinical palliative care education prior to the program launch and these staff were prioritized to known palliative care events while the remaining workforce was trained. The Regional Heath Authority plans to pay the cost of training for staff employed by private ambulance operators as an incentive to support the provincial expansion and uptake of the program.

IMPLEMENTATION EXAMPLE

Ontario

An in-house one day face-to-face program was initially developed, with more than 750 paramedics receiving the training. An additional 1,000 paramedics were trained using an online version of the same training program, and follow up face-to-face discussions are planned to confirm their knowledge from the training. The online education package was shared with college program administrators for integration into paramedic programs in the future.

IMPLEMENTATION EXAMPLE

Saskatchewan

Saskatchewan-specific education that can be delivered online and in-house was developed and is available to all provider levels at no cost. This course will also be integrated into the mandatory onboarding for new staff. LEAP Paramedic was added to the ACP curriculum at Saskatchewan Polytechnic beginning September 2021, ensuring subsequent graduates entering the workforce were trained in palliative care approaches.

Barrier

Replacement providers/services.

Solution

- Initially some concern from other home care providers that this was a replacement of other services.
- Program was built with heavy engagement from home/ continuing care on working groups and committees.
- Conducted extensive in person and online knowledge transfer and exchange and engaged peer champions within the services (primarily home nursing).
- Close connections were made between program staff (project lead, community health partners and palliative care partners), who often met weekly to address any specific concerns.
- In implemented jurisdictions, program is currently seen as highly beneficial and collaborative, bridging patient care during symptom crisis. The prevailing feedback from these services has shifted to quite a positive tone of collaboration.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

Focus groups were held with community nursing as a part of a continuous quality improvement initiative, and information collected through semi-structured group interviews informed changes made to program design. In addition, a nurse on the paramedicine palliative care team facilitated conversations with other nurses in the area. Nurses reported feeling safe in sharing concerns with a nurse champion, and felt having a nurse (who understands scope of nursing practice in community) discuss how paramedic scope/skills could complement their practice was key in buy-in.

IMPLEMENTATION EXAMPLE

Alberta

Early in the stakeholder engagement process, EMS data was matched to palliative care caseload data to build case that paramedics were already seeing these patients during symptom crisis, often transporting to ED when they could be managed at home with access to urgent medications (via paramedics) and follow up/collaboration with primary and continuing care providers. Time on task was demonstrated to be less when treated at home than when transferred to hospital.

Barrier

Comfort with treat and release.

Solution

- The treat and release approach is relatively new to paramedicine, and there is variability in the level of comfort and experience with the practice across jurisdictions. Therefore, it would be anticipated that there could be varying levels of comfort with this practice, amongst paramedics, leadership and other health care providers.
- Paramedic desire for alternative pathways (other than transport to ED) continues to increase.
- Health system comfort with paramedic treat and release, community paramedicine and collaborations between paramedic services and community/primary care across Canada continue to support the mindset that paramedics have a significant role in supporting treatment in the community (rather than default transport to emergency department).
- Initial successes were leveraged from pilot sites, in programs that used a phased development and implementation approach.
- Sharing of patient and family experiences has proven beneficial, highlighting the impact paramedics have when providing this type of care.
- Highlighting non-pharmacological supports is important to supporting primary care paramedics who have a more limited scope and cannot administer all available medications for symptom relief.
- Active engagement with paramedic regulators and the development and approval of palliative treat and refer protocols helped with acceptance from frontline paramedics.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

Based on paramedic feedback, education days are designed in consultation with the palliative care team to address areas of continuing discomfort (e.g., palliative emergencies, and medication administration).

IMPLEMENTATION EXAMPLE

Alberta

Previous ATR pathways already in existence (resolved hypoglycemia and resolved supraventricular tachycardia) and a provincial non-transport rate of approximately 30 per cent through refusals of care helped to debunk thoughts around current state that all 911 calls end in transport to the emergency department. Close review and follow up of each call for one year in the first phase demonstrated safety, satisfaction, and effectiveness.

Barrier

Fit of palliative care with paramedic identity.

Solution

- Most paramedics have identified they were already providing care to this patient population but were transporting instead of providing support in-home.
- A minority of paramedics responded that this was not what they had pictured for their professional identity; as the culture of paramedicine shifts and peers are champions, this will become less and less prevalent, and the vast majority speak of tremendous satisfaction with this role.
- Leverage paramedics willing to talk about their positive experience in providing palliative and end of life care to influence peers (presentations in-services/rounds, conference events, featured in online promotional content, etc.).
- Expansion of community paramedicine and mobile integrated health work continues to assist with shift towards treatment in place.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

Specific effort was made to connect frontline paramedics with members of the other healthcare teams and giving them the tools to arrange/coordinate follow up care. As a result, paramedics have also been pulled into the community interdisciplinary team, breaking down the silos that they once felt.

IMPLEMENTATION EXAMPLE

Nova Scotia

The Nova Scotia team is exploring the fit with professional identify in upcoming research work.

Barrier

Mostly primary care paramedic workforce.

Solution

- Many calls are for psychosocial support, system navigation and connection back to community resources which do not require an advanced scope of practice (this was a consistent finding from the initial jurisdictions (Nova Scotia, Prince Edward Island and Alberta) and continues to hold true at the program has expanded).
- There is variation in treatments and services available across all populations and presentations based on geography and health services delivery in Canada; palliative care is no different.
- Care providers at all levels (from volunteers to palliative care specialists), can support individuals, families and their caregivers with a palliative care approach. Prior to this initiative, paramedics were not providing an appropriate palliative care approach (regardless of scope of practice).

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

A pilot model, designed for scale- up and spread, utilized a single advanced care paramedic in a non-emergency vehicle to provide care to patients in the program during daytime hours. Emergency ambulances are still used to provide care during the day in situations that require emergency response, instances where multiple palliative calls occur at once, and during nighttime hours. This model complements areas with a predominately primary care paramedic workforce.

IMPLEMENTATION EXAMPLE

New Brunswick

Ondansetron and ketorolac were added to the scope of practice for Primary CareParamedics in New Brunswick for use within the program.

IMPLEMENTATION EXAMPLE

British Columbia

A concurrent pain management trial (Entonox or Ketamine administration) for primary care paramedics who are unable to administer opioids is underway.

Assumptions, Constraints and Dependencies

Regardless of the implementation model, a number of assumptions, constraints and dependencies existed.

Assumptions

- Individuals, families and caregivers choose to utilize program through receiving care while staying in community.
- Those that require transport to the emergency department will continue to be transported.
- An overall decrease in acute healthcare utilization through a decrease in the number of emergency visits.
- Potential reduction of burden on secondary healthcare settings.
- Increased paramedic unit availability hours due to reduced time spent in acute-care/hospital.
- Ongoing funding will be available to support program.
- Organizational acceptance and participation in this initiative/program.
- Community palliative care providers access the program.
- Care provided meets the patient's needs.
- Established identification criteria will result in earlier identification of clients that would benefit from a palliative approach to care, improve quality of life and access to services.

Constraints

- Challenge to implement in sparsely populated rural areas where coverage is an issue due to limited numbers of paramedics and community-based providers.
- Home care capacities vary between palliative specific and generalist nurses potentially limiting implementation.
- Paramedic services capacities vary between Basic Life Support and Advanced Life Support.
- 24/7 pharmacy coverage not available throughout the province.
- Financial impacts associated with dispensing pharmaceuticals directly to the patient.
- EMS online physician and/or palliative physician's workload will increase.
- Limited community clinician on-call coverage for some rural areas during evening hours and nighttime hours.
- Physician consult or access to online medical consultation not consistently available throughout province.

Dependencies

Successful design and implementation is dependent upon:

- Engaged person/family/caregiver partners interested in improving the palliative care and paramedic experience for others.
- Operational management support (paramedic services and community palliative care partners). implementation and sustainability efforts of the project.
- Sponsorship and continued support from senior management/leadership.
- Human resource availability to perform work.
- Paramedic knowledge and confidence to perform work and change culture.
- Champions to promote program and shift emergency response and transport only culture.
- Appropriate budget (including drug funding issues), resource allocation, and timely implementation of change management strategies.
- Ongoing technical support.
- Appropriate workforce in place to perform necessary work.
- Physician support (primary care/family physicians, paramedic services physicians/medical direction, palliative physicians).

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- Appropriate workforce in place to perform necessary work.
- Physician support (primary care/family physicians, paramedic services physicians/medical direction, palliative physicians).

Evaluation and Sustainability

About this section

This section includes information about the evaluation of the program as well as planning and activities related to sustainability. The evaluation section includes considerations for evaluating a new program, data collection for ongoing quality assurance and improvement activities, and the opportunity for research and publication. This section also briefly describes considerations for knowledge translation and presents some high-level interim findings from the program implementation.

Note: Due to differences in implementation timelines for participating jurisdictions and the timeline of the publication of this document, only interim high-level findings are included here. Data collection continues for several teams within the collaborative (into 2023) and evaluation activities are ongoing. Final evaluation results will be available in the future.

The sustainability section summarizes things to consider and provides specific examples of activities from the participating jurisdictions that will support sustainability of the program after the collaborative is over. At the end of this section, three graphic recordings summarize the learnings and strategies used by teams in relation to sustainability planning for the program.

In this section

Data Collection and Evaluation

The concept of data collection and evaluation is very broad; this section will focus on describing three primary ways in which data was and/or could be collected about the Paramedics Providing Palliative Care program:

1. Evaluation of a new program.
2. Data collection for ongoing quality assurance/improvement.
3. Additional data collection for possible publication.

The rules around data access for evaluation and publication will also be discussed.

Evaluation of a New Program

Both the innovation sites and the collaborative teams conducted evaluation of their newly launched programs. General principles of program implementation would say that conducting a short-term (e.g., year one) evaluation on some key outcomes is in keeping with best practice. This will be important to feed back to external stakeholders/funders/sponsors as well as to your own internal stakeholders (e.g., the paramedics and palliative care teams), to ensure the program has launched as designed, and make any necessary course corrections. Best practice would also be to:

1. Plan this data collection ahead of time as part of your implementation design, such that data collection is possible and/or to set up processes for collection; and
2. Collect baseline (pre-launch) data for comparison purposes.

Some of the data collection tools, or elements selected for evaluation, may be labour intensive in this phase. Examples include interviews or surveys of patients and families, full review of every case file, direct follow up with paramedics involved in cases, linkage with other databases such as vital statistics to determine utilization of the service, and number of days at home or the hospital in the last months of life. These data points are key to understanding the first phase of your program and can be lessened in later phases to support long-term quality assurance.

P/F/C ENGAGEMENT

Privacy and Security of Data is Key

P/F/Cs are usually quite open to sharing data for program and quality improvement, especially if sharing is done respectfully and will improve quality of life for others. What is important to P/F/Cs is knowing that their personal health information is secure and protected. Ensure you know about privacy legislation in your jurisdiction as well as research consent requirements when asking people permission to use their information or data related to their care experiences. Summary or aggregate statistics such as the number of calls can often be shared more widely without consent, providing the information cannot be linked back to individuals.

The ability to conduct various aspects of this data collection and evaluation will depend on several things in your local system, such as the type of data warehouse you have — electronic vs paper, single system versus multiple providers, etc. This will determine data availability, how to access it, and can influence the scope of your evaluation. Data collection and evaluation will also depend on your in-house capacity to do this type of work — statistics/methodology/interviews/data analysis of quantitative and qualitative data. For some, it may be better to outsource some of the work to ensure it is done well.

Data can help make the case for the program and to paint the picture showing the impact. Collecting similar data elements to other sites will allow a broader understanding of how this program looks in a variety of settings. This can be important to decision makers looking at the value of spread and scale, and key to informing your local practice.

For the evaluation of the initial project or implementation phase, data collection focused on three levels:

1. Paramedics;
2. The emergency health system; and
3. Patients/families.

A minimum data set (MDS) including eight key performance indicators were established at the onset of the collaborative.

Due to differences in implementation timelines for the participating jurisdictions, indicators were collected during multiple data collections cycles, starting in 2020. Data collection continues for several teams within the collaborative (into 2023) and evaluation activities are ongoing.

Palliative Care Training and Healthcare Provider Expereince

1. Knowledge of paramedics to deliver palliative care.
2. Training participation.
3. Paramedic satisfaction and experience providing palliative care.

Emergency Health System (911 calls)

4. Palliative care calls:
    a) Among registered patients.
    b) Among non-registered patients.
5. Transports to hospital.
6. Total time committed to calls among calls that:
    a) Resulted in transport.
    b) Did not result in transport.

Patient and Family Experience

7. Improved presenting complaint.
8. Patient/family satisfaction.

The following table shows how various data elements were collected by the participating jurisdictions. How data was collected was highly influenced by current state system factors, like the presence or absence of an electronic patient care record, the presence or absence of data warehouses and local human resources capacity to mine data.

Province	Patient/family experience	Paramedic experience	Call indicators (time on task, transport Y/N)
Newfoundland and Labrador	Telephone survey	Surveys	Electronic query
Nova Scotia	Interviews and surveys	Surveys	Electronic query
Prince Edward Island	Interviews and surveys	Surveys	Manual abstraction
New Brunswick	Survey	Surveys	Manual abstraction
OHRI, Ontario	Survey	Surveys	Electronic query
York, Ontario	Survey	Surveys	Electronic query
Manitoba	Interviews and surveys	Surveys	Electronic query
Saskatchewan	Survey	Surveys	Manual abstraction
Alberta	Surveys (Phase 1), Telephone survey and interviews (Phase 2)	Surveys	Electronic query
British Columbia	Survey	Surveys	Electronic query

SUPPORTING RESOURCES

Samples of evaluation frameworks and tools that can be shared publicly are housed in the online repository. Additional documents may be provided upon request (through direct inquiries to participating jurisdictions).

EXPERT TIP

Consider Resources Needed

Be sure to consider the human resources burden of data collection. Although there may be resources (funds and human resources) for data collection during initial program development, implementation, and initial evaluation phases, it may not be feasible to continue collecting the same data on an ongoing basis. In most jurisdictions, a significant amount of data collection and quality assurance was done manually (including individual review of all confirmed and possible palliative care events).

Data Collection for Ongoing Quality Assurance/Improvement

Part of the implementation plan should also include building a template and infrastructure for continuous quality improvement (CQI) that will continue after the "project" phase has ended and the program becomes part of normal operations. It is critical to differentiate (and develop) a sustainable quality framework of data elements that will continuously be measured and reported. As noted previously, it may not be feasible to continue collecting all the same data as in your initial evaluation. However, there will be key performance indicators that will be valuable to leadership, such as rates of transport and time on task. Senior leadership or key stakeholders such as Ministry/Department of Health, health authority, medical directors as well as the palliative care teams will need assurance that no harm/near miss/negative outcomes are occurring, and that concerns are being followed up and resolved. If you anticipate any specific concerns may come from this group, you can collect appropriate data to address them proactively.

The program leadership will also need data to continue to tweak and improve the program. This phase of data collection and evaluation needs to be sustainable – it is likely that any initial enhanced team for implementation will be dissolved by this phase, so internal CQI resources to be able to take this on. It may be beneficial to involve your local CQI team in this plan as they can inform what data is available and the labour/burden of accessing it; ultimately it is likely that they will take over the process at some point. They may also be helpful in building your evaluation plan, as they have the best familiarity with the data available. This will depend on your data warehouse (electronic vs paper) and whether it is all connected or there are multiple systems/services. It would also be helpful to produce standing or ad hoc reports on statistics such as how many patients were seen, or the proportion of non-transports, at regular intervals after your initial evaluation report is complete.

You should also anticipate that there will be ad hoc inquiries by individuals, families and caregivers and by other service providers e.g., referring services. These may be about specific instances of care, or about overall performance. Common inquiries include:

- How well is the program working?
- What percentage of calls result in non-transport?

While initially you may want to handle these inquiries within the project team of people who are most familiar with the workings of the program, eventually these will need to become part of the usual process through which service inquires are managed. Transitioning this will involve:

a) Ensuring that person/group knows the program well enough to respond to a question/inquiry and speak to whether care was appropriate. This process may involve a member of your team being part of the process or an advisor to the process as it transitions; and

b) That the referring services have the appropriate contact, and you are not left in the middle of a (potentially conflict-based) communication that you can't resolve. Ideally you will help build a process that is timely and has closed-loop communication.

Since this program was built on a collaborative model of practice that relies on shared expertise across disciplines, it is imperative a process is in place that will endure beyond your project advisory team and allow for evolving best practice to continue to inform the program design. It will be important to make the governance of this continued "advisory council" or "integrated/multi-disciplinary quality council" very clear, otherwise the members will disengage as they discover the same issues and action items on every agenda if there is no clear path to resolution.

SUPPORTING RESOURCES

To see a sample of Nova Scotia's ongoing audit tool, visit the online repository.

Ongoing Programs of Research

There may be valuable data that you can't collect in the allotted time frame for your program launch and evaluation. For example, if you want to collect data on whether you have increased the proportion of people who are able to die at home, you won't be able to access that data for potentially several years. You may get hints from your initial evaluation that there are specific regions or populations where things are working a bit differently. You may launch in a narrow focus and expand – for example adults only, cancer diagnosis only, then add other groups later. In Nova Scotia in particular, there is ongoing research diving deeper into several aspects of the impact and utilization of the program, and this may be something you would want to consider as well.

Sharing Your Findings – Knowledge Translation

Sharing your findings is important in several ways. In part, sharing allows the idea to spread and take hold, allowing other systems to benefit from your experience, including things you learned or wish you had done differently.

Sharing your findings can take place in many ways. In fact, your strategy should select the right message and medium for each audience you want to reach. This can include:

- Peer reviewed publications;
- Trade magazines;
- Posters;
- Presentations at rounds or lunch and learns, webinars; and/or
- Submitting abstracts and presenting at conferences.

You might choose different members of your team to lead different sessions, depending on the audience. You might choose to highlight different aspects of the work.

Sharing findings can provide evidence of the success of your program which is valuable to decision-makers and stakeholders. In peer reviewed publications, this also provides the added layer of the scrutiny of review by a group of peers before publication. Different stakeholders will look for their "evidence' in different formats, and the medical leadership will value peer reviewed publications/journals. Note that this is also one of the considerations in ARECCI of whether this crosses from QI to research. Most health-related peer reviewed journals will require research ethics review, or evidence that a research ethics board granted a waiver of the requirement to review, before accepting a paper for publication.

This concept of sharing your findings via multiple formats and to various audiences is encompassed under the concept of Knowledge Translation – particularly as it relates to taking your findings and generating action and change. It is important to plan your knowledge translation strategy up front, although it should be open to new opportunities and new audiences as your project progresses. A well-thought-out communication strategy should start with how to communicate your program launch and its scope, how to access it, and follow through to the point in time when you can finally share your findings.

EXPERT TIP

Share Findings with the Frontline

It's important to share the findings with the people who put in the work daily, the paramedics, to show them their effort is making a difference. This is especially important in culture shift. It also is a way of saying thank you if you have asked them to do any extra work for your data collection — such as filling out extra forms or doing interviews, etc.

Accessing Data and Sharing Your Findings — for Program Planning and Evaluation Versus Research

There are important laws and policies that govern how and when an individual's personal health information can be viewed, collected, used, shared and stored; this applies to any access to health data we are making as program leaders. Examples include the Personal Health Information Act (PHIA) and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, both of which have training modules available. Familiarity with these laws, as well as any additional provincial laws and policies, is integral for accessing and using personal health information as well as dissemination of findings.

Accessing data and sharing your findings can be divided into two main purposes (with some overlap). Broadly speaking there is:

1. Data for planning and management of the healthcare system – including evaluation and quality improvement; and
2. Data for research –generalizable knowledge beyond your own program, for the purpose of sharing or publishing, which wouldn't be done as part of planning and management.

Some of the differences between program evaluation/QI work and research are highlighted below.

Program Evaluation/ Quality Improvement

- Data is used to improve your own program as an internal process.
- Activities and processes are governed by quality improvement regulations.
- Data is accessible by appropriate people without consent.

Research

- Data is used to produce evidence and generalizable knowledge.
- Activities are over and above routine operations (would not be happening as part of planning and management).
- Requires consent or an exception to consent.

SUPPORTING RESOURCES

www.colleaga.org/article/healthcare-privacy-legislation-canada

EXPERT TIP

Evaluation/QI or Research?

The A pRoject Ethics Community Consensus Initiative (ARECCI, formerly The Alberta Research Ethics Community Consensus Initiative, found at albertainnovates.ca/programs/arecci/)) has a screening tool and guideline that can help you identify if what you are doing with the data falls under "planning and management" or whether you are in fact doing some research that may require additional ethics review. In many provinces, the health sector has adopted ARECCI.

Up to this point in the Evaluation section we have talked about the data you are collecting as part of developing and launching a new program on behalf of a recognized healthcare agency – your ability to access patient data is covered under the concept of "planning and management of the healthcare system," and you are able to do this without the patient's express consent. This is covered under the PHIA (the name varies slightly from province to province). However, as soon as you move beyond using the data to plan and improve your own program, a new set of rules begins to apply as you shift toward away from evaluation/QI and towards "research".

An important note: projects that don't require research ethics approval still involve people and their personal, private information. Program evaluations, quality improvement, health innovations and knowledge translation can often have similar ethical risks as research studies. While innovation is good, and evaluation is an important piece of new programs, it is critical to design your evaluation strategy with intention and in consideration of any potential risk to the people at the core of the data. Many jurisdictions will still require a review for data access for evaluation and/or quality assurance, just through a different pathway than research ethics.

Major Findings

Evaluation is ongoing in the jurisdictions under the spread collaborative, however preliminary findings are aligning with previous findings from Nova Scotia, Prince Edward Island and Alberta.

Family Satisfaction

The majority of those surveyed reported that they were satisfied with:

1. The way paramedics collaborated with individuals, families and caregivers;
2. Their involvement in making decisions during the event; and
3. The high level of professionalism, compassion, and courtesy that was displayed by responding paramedics.

> *The (paramedic) crew that showed up to provide attention to my wife was in all ways outstanding. The delicacy and compassion all three showed at the moment was comforting for my wife, before she passed, and all the family that was there. We could not have asked for better.*
>
> Family member, British Columbia

> *When you become a caregiver for a loved one at home in palliative care, you find yourself learning on the job. Caregivers hold their breath and hope an unexpected crisis won't occur. But it does and it usually happens after hours on a weekend, or on a holiday. This is precisely when help is not easily accessible, but our experience tells us that if you call the Paramedics, they will come. You aren't waiting for a callback on the phone. Paramedics offer much needed reassurance and expertise in the face of an urgent situation.*
>
> Patient and Family Advisor, Ontario

A common theme was the comfort they felt knowing that the paramedic program was available to them 24/7, in the event of an acute palliative crises.

Symptoms Managed in the Home

At a system level, the program has enabled a decrease in transports to hospital in both urban and rural areas. People are also receiving an increased number of treatments to achieve better symptom control and quality of life.

Paramedics provided compassionate and effective palliative care

89.1% of calls improved the presenting complaint

Patients received the care they wanted, where they wanted it

2,358 calls for palliative care

68.5% of calls enabled patients to receive care while remaining in their homes

> *Before I was enrolled in this program, I spent four years going back and forth between the hospitals when I was having pain. I think this program is really wonderful because I am able to call 911 and they came and gave me something for pain — which was all I really needed.*
>
> Individual who used the program, Newfoundland and Labrador

> *I am very impressed with the program and the Paramedics. I did not feel I needed to go to the emergency department and was so happy to receive care at home.*
>
> Individual who used the program, Newfoundland and Labrador

Paramedic Time Savings

Despite longer on-scene times for paramedics during an event, the overall time that paramedics are tasked is shorter when facilitating treatment and referral than transporting and transferring care to the emergency department. In Alberta, the mean and median total time on task for an event was shorter than the provincial average total time on task for transported events. In Nova Scotia, the maximum duration of calls for transported patients is nearly double the maximum for non-transports. Preliminary findings from other jurisdictions across Canada continue to show overall time savings for paramedic resources when individuals are treated at home, rather than transported to hospital, especially in environments of increasing emergency department offload delays.

22–32 minutes were saved on average when compared with transporting to the hospital in 2020

17–61 minutes were saved in 2021 by treating in the home

Paramedic Comfort and Confidence

Paramedic comfort and confidence with palliative and end of life care improved significantly post-program. Of note, paramedics are more confident they have the tools to provide care to palliative and actively dying patients, with and without transport.[22]

> *This program was well received by the public and the positive impact it has on patients and families is profound. I have never experienced similar gratitude displayed by patients and families as much as I have when supporting this population. It has really changed my mind and opened my eyes to the difference paramedics providing palliative care can make.*
>
> Paramedic, Newfoundland and Labrador

> *It left me with a good feeling being able to respect this patient's wishes to be left at home and yet still be able to provide some care to keep her comfortable in her time of need. For myself, I felt connected to the patient and her family even having just met them. I left there feeling comforted by the fact that I was able to make a difference in this patient's life.*
>
> Paramedic, Alberta

Sustainability

Eventually the "project" needs to shift into a long-term "program" that is embedded into routine business operations and practices. Many of the required elements to implement the project are a one-time capital investment and should be embedded into the health system to sustain the project. These include public and healthcare provider program awareness and materials (e.g., brochures, videos, etc.), the creation of the clinical practice guideline/protocol, additions of new medications to the formulary, the ongoing and refresher training for paramedics, and the development of a patient registry (i.e.: Special Patient Program). The Program should also be incorporated into the routine audit and continuous quality assurance structure of the organization. It is important to consider how these "new" components will be maintained, for instance how will the next batch of brochures be produced, and who will mail them out? How will administrative support be provided? How will the IT infrastructure be maintained?

The following section highlights the essential elements for sustainability. A summary of strategies, as well as jurisdictional specific examples, are provided to describe how sustainability is being considered and implemented. The content is organized in alignment with the Program Sustainability Assessment Tool (version 2, Washington University), which is being used as a tool in Nova Scotia and Prince Edward Island. This tool was tested and noted as having excellent internal consistency and reliability.[23]

Element

Environmental Support: Having a supportive internal and external climate for your program.

Components

1. Champions exist who strongly support the program.
2. The program has strong champions with the ability to garner resources.
3. The program has leadership support from within the larger organization.
4. The program has leadership support from outside of the organization.
5. The program has strong public support.

Implementation Strategies

- The program is nested in significant stakeholder consultation which sought paramedic and healthcare provider opinions early on (prior to development of the program), thus ensuring the program served an identified need by key stakeholders.
- A priority planned system-wide complex change approach was employed with known internal and external stakeholders.
- The program was strategically embedded in all major stakeholders' business plans (Ministry, paramedic service provider, health authority, etc.).

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

The program has strong support from individuals receiving care and their families and caregivers. Paramedics are eager to embrace new models of delivering service that support treatment in place.

IMPLEMENTATION EXAMPLE

Ottawa

A partnership was formed with the provincial administrators of the Client and Health Related Information System (CHRIS), a system that tracks all home and community care visits in the province of Ontario, a subset of which is the palliative patients. They committed to build an extract of their database to communicate with the Central Ambulance Communications Centers (CACC) daily. Likewise, the CACC have committed to build a system to pick-up the file and present a warning flag in the address of the palliative patient. This partnership should produce a fully automated, fully updated registration system for palliative patients and will report on patients for all of Ontario.

IMPLEMENTATION EXAMPLE

Alberta

The EMS Palliative/End of Life Care ATR program was embedded in the Provincial Palliative Care Framework as one of 36 initiatives to improve palliative care services in Alberta. The Provincial Palliative Care Framework and its initiatives were significant deliverables in both Alberta Health and Alberta Health Services business plans and the paramedic project was highlighted annually in both organization's annual reports.[24] An ongoing interprofessional provincial Community of Practice continues to meet quarterly to address issues, identify improvements, make recommendations and conduct research.

Element

Funding Stability: Establishing a consistent financial base for your program.

Components

1. The program exists in a supportive state economic climate.
2. The program implements policies to help ensure sustained funding.
3. The program is funded through a variety of sources.
4. The program has a combination of stable and flexible funding.
5. The program has sustained funding.

Implementation Strategies

- The program will be assumed under the usual paramedic services operational budget.
- In kind support will continue from various partners (primary care, continuing care, home care, palliative care) by way of time towards presentations, etc.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Saskatchewan

A proposal was submitted to the MOH to have paramedic care at home covered within palliative care coverage plans to provide compensation and incentive for contracted operators to support the program (service providers whose funding is largely predicated on user fees related to transport). The proposal is currently pending approval.

Element

Partnerships: Cultivating connections between your program and its stakeholders.

Components

1. Diverse community organizations are invested in the success of the program.
2. The program communicates with community leaders.
3. Community leaders are involved with the program.
4. Community members are passionately committed to the program.
5. The community is engaged in the development of program goals.

Implementation Strategies

- New relationships and partnerships have increased the organization's capacity to respond to additional service delivery needs and unexpected stakeholder issues identified throughout the project (death in transit, EDITH, etc.).
- Excellent support and collaboration by all program providers and stakeholders including emergency department physicians and medical directors in both paramedic and palliative care services.
- Palliative/continuing care staff engagement/participation leveraged to other working groups and projects (such as community paramedicine and mobile integrated health).

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Nova Scotia

Program has created strong partnerships as illustrated by its ability to respond to ad hoc and unexpected stakeholder issues such as expected death at home in Nova Scotia. Addressing this issue required the program to engage senior leadership early on, as well as pull together new stakeholder groups not previously engaged such as funeral homes, RCMP, Chiefs of Police. This process has paved a path for open communication and collaboration should any other unexpected issues arise.

IMPLEMENTATION EXAMPLE

Prince Edward Island

The program is co-owned and managed by Island EMS and Home Care (P-IPCP), the two key champions of the program, which created a new permanent relationship and structure that will support sustainability and future collaborative work.

IMPLEMENTATION EXAMPLE

Alberta

Project governance and assess, treat and refer model may be leveraged for future interprofessional collaborative work (between paramedic services, continuing care and primary care) in expansion to other patient presentations in the future.

Element

Organizational Capacity: Having the internal support and resources needed to effectively manage your program and its activities.

Components

1. The program is well integrated into the operations of the organization.
2. Organizational systems are in place to support the various program needs.
3. Leadership effectively articulates the vision of the program to external partners.
4. Leadership efficiently manages staff and other resources.
5. The program has adequate staff to complete the program's goals.

Implementation Strategies

- The program supported the initial development and implementation of palliative care education for paramedics. The curriculum will continue to be offered to new hires. Facilitators were trained to support ongoing delivery of the curriculum.
- Staffing resources were allocated to coordinate and maintain any patient registry (i.e.: SPP).
- All paramedics have access to an online medical consult physician and/or palliative care physician to support building of a care plan if needed.
- Automatic referral processes to paramedic palliative care project when individuals are enrolled with community palliative care services.
- Integration of patient registry/SPP and dispatch system (CAD) to identify patients and provide paramedics with relevant information enroute to the event.
- Standard clinical practice guidelines/protocols for ACP and PCP scope of practice to support a palliative care approach and treatment in place.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE
Nova Scotia

Palliative care is now part of regular in-service training for paramedics. A refresher course was developed and implemented since the original LEAP Paramedic training was rolled out.

IMPLEMENTATION EXAMPLE
Prince Edward Island

All new paramedics employed at Island EMS receive the LEAP training as part of their orientation.

IMPLEMENTATION EXAMPLE
York

Specific processes were created to provide paramedics with palliative care physician access while on palliative events.

IMPLEMENTATION EXAMPLE
York

As a result of COVID-19, all education was translated into online modules to maintain capacity for training current and new staff. The education will also be used for refresher training.

IMPLEMENTATION EXAMPLE
Alberta

LEAP Paramedic was approved for continuing education credits with the Alberta College of Paramedics and embedded into one Advanced Care Paramedic program to date. Fifteen LEAP Paramedic facilitators were trained and added to the LEAP facilitator pool (in addition to those already embedded within palliative care services).

IMPLEMENTATION EXAMPLE
Alberta

Paramedics and online medical consult physicians have access to a palliative care physician (via provincial 24/7 Palliative Physician On-Call service, separate initiative developed under Provincial Palliative Care Framework).

Element

Program Evaluation: Assessing your program to inform planning and document results.

Components

1. The program has the capacity for quality program evaluation.
2. The program reports short term and intermediate outcomes.
3. Evaluation results inform program planning and implementation.
4. Program evaluation results are used to demonstrate successes to funders and other key stakeholders.
5. The program provides strong evidence to the public that the program works.

Implementation Strategies

- A regular audit process was developed for palliative care events and use of the clinical practice guideline/protocol.
- Monitoring mechanisms were put in place including regular reporting processes and data collection for all calls associated with the program.
- ePCR software was updated to include palliative call data fields.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Nova Scotia

Ongoing research is planned to evaluate additional areas of the program. Nova Scotia continues to conduct extensive work in the paramedic provision of palliative care.

IMPLEMENTATION EXAMPLE

Prince Edward Island

The Palliative Care Accreditation Team has embraced the project as an ongoing program of Health PEI.

IMPLEMENTATION EXAMPLE

Ottawa

A partnership was formed with the provincial Medical Advisory Committee for paramedics to form a subcommittee that will be responsible to take in all paramedic palliative care calls and perform quality assurance. They will also transfer all data to the Ministry of Health Ontario for ongoing monitoring of individuals with palliative conditions. This will last well beyond the life span of this project.

Element

Program Adaptation: Taking actions that adapt your program to ensure its ongoing effectiveness.

Components

1. The program periodically reviews the evidence base.
2. The program adapts strategies as needed.
3. The program adapts to new science.
4. The program proactively adapts to changes in the environment.
5. The program makes decisions about which components are ineffective and should not continue.

Implementation Strategies

- Program specific clinical practice guidelines, protocols, policies and procedures are integrated into larger organizational framework and aligned with established ongoing review cycles.
- Any new policies or procedures developed are adopted and are now part of the usual policies/procedures of the organizations (becomes routine business operations).
- Event follow up on user concerns and any operational issues (previously managed by the program development and implementation team) are transitioned to the organization's routine businesses processes for sustainability.

Jurisdiction Specific Examples

IMPLEMENTATION EXAMPLE

Newfoundland and Labrador

The quality improvement approach used in this program (feeding data and the experience of paramedics, individuals, families and caregivers using the service back into prompt continuous program improvement) is working well and meeting the needs of all involved.

IMPLEMENTATION EXAMPLE

Nova Scotia

The palliative CPG is based on evidence and will be reviewed and updated by the Canadian Prehospital Evidence Based Practice Project. Palliative care was added to the EHS CQI process. Auditing and associated criteria for palliative calls are part of the normal CQI process.

Element

Communications: Strategic communication with stakeholders and the public about your program.

Components

1. The program has communication strategies to secure and maintain public support.
2. Program staff communicate the need for the program to the public.
3. The program is marketed in a way that generates interest.
4. The program increases community awareness of the issue.
5. The program demonstrates its value to the public.

Implementation Strategies

- Individuals with life limiting illness, their families and caregivers take part in the development of messaging to the public and strategies for dissemination of information
- Gathering of impactful stories for the purposes of communications are ongoing and can be directed to public or providers depending on content.
- The program has a communication strategy for various stakeholder groups (public/individuals with illness/families/caregivers, health care providers and paramedics).
- Communications (previously managed by program development and implementation team) is transitioned to the organization's routine businesses processes for sustainability.
- In kind support will continue from various partners (primary care, continuing care, home care, palliative care) for ongoing presentations, etc.
- Ongoing communication to paramedics leverages key stakeholders (regulator, associations, advocacy groups) in addition to internal messaging via employer.

Element

Strategic Planning: Using processes that guide your program's direction, goals, and strategies.

Components

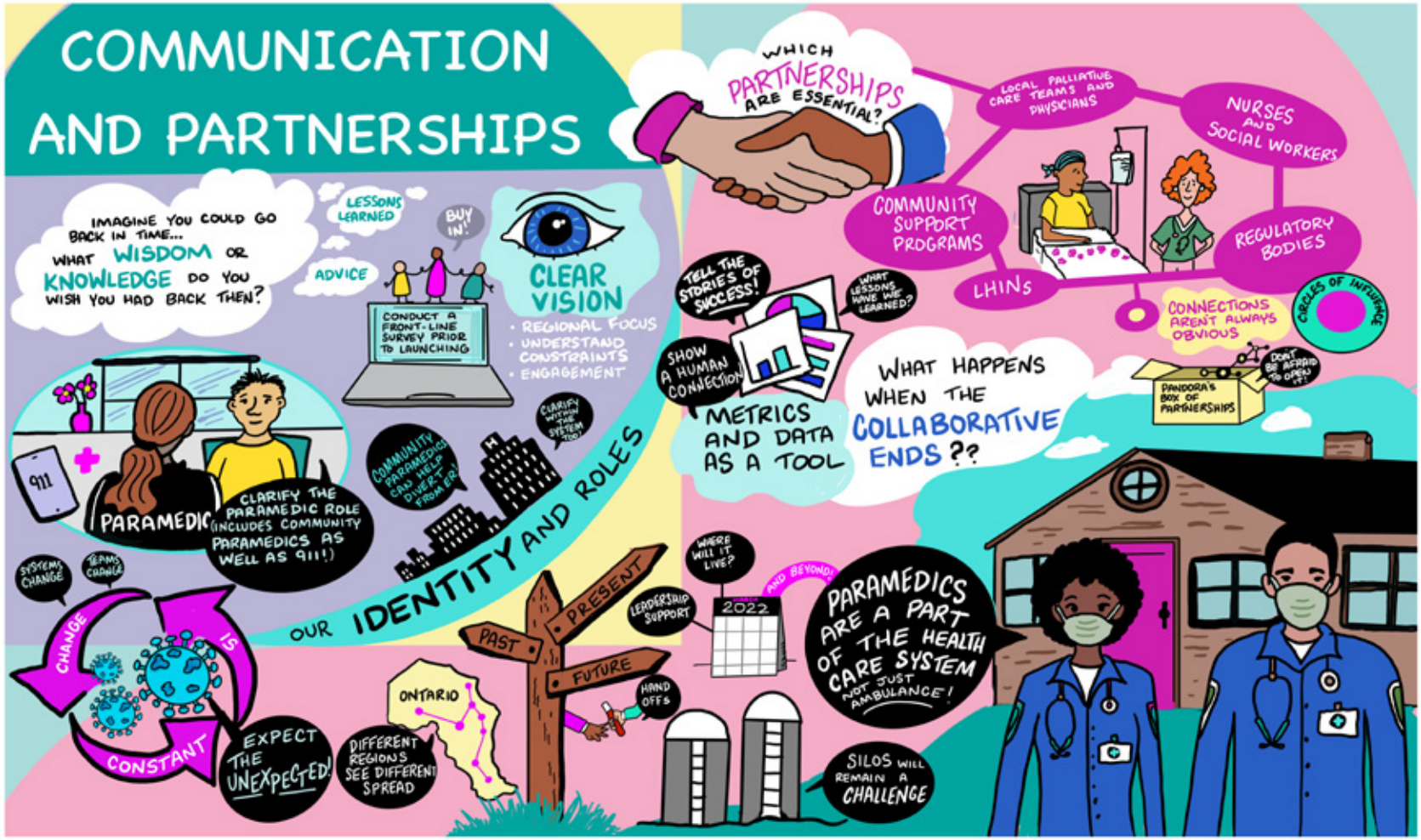
1. The program plans for future resource needs.
2. The program has a long-term financial plan.
3. The program has a sustainability plan.
4. All stakeholders understand the program's goals.
5. The program clearly outlines roles and responsibilities for all stakeholders.

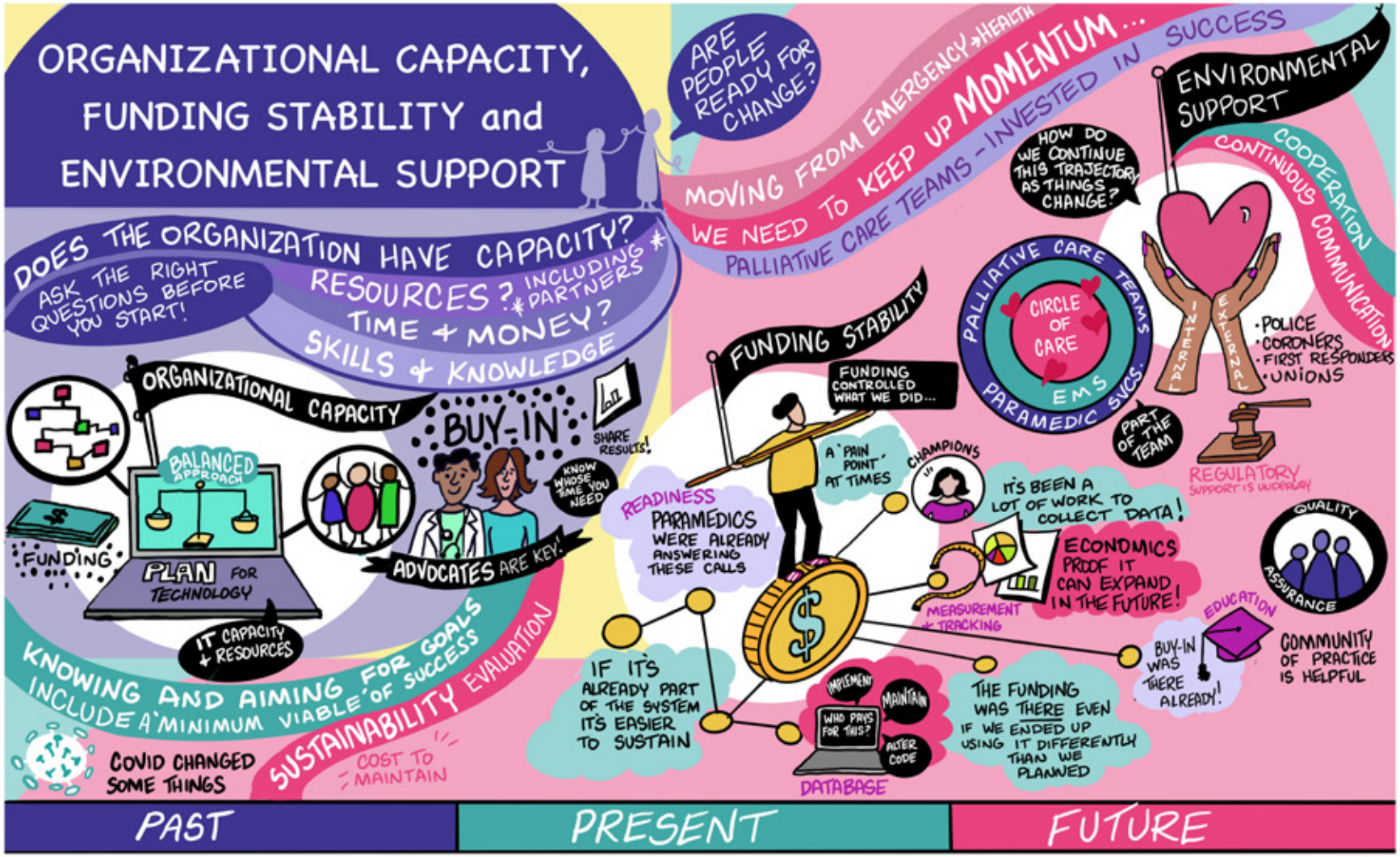
Implementation Strategies

- The project was transitioned over to become a regular program within the service delivery of paramedic services.
- Planned scale and spread to full provincial implementation (for those jurisdictions that launched with a pilot site or geography).

Looking Back and Planning for the Future

What would you tell your past self if you were just starting down this improvement journey now? That is the question that was asked of the jurisdictional teams in the closing months of the spread collaborative. The following three graphic recordings summarize the learnings and strategies used by teams in relation to sustainability planning for the program.





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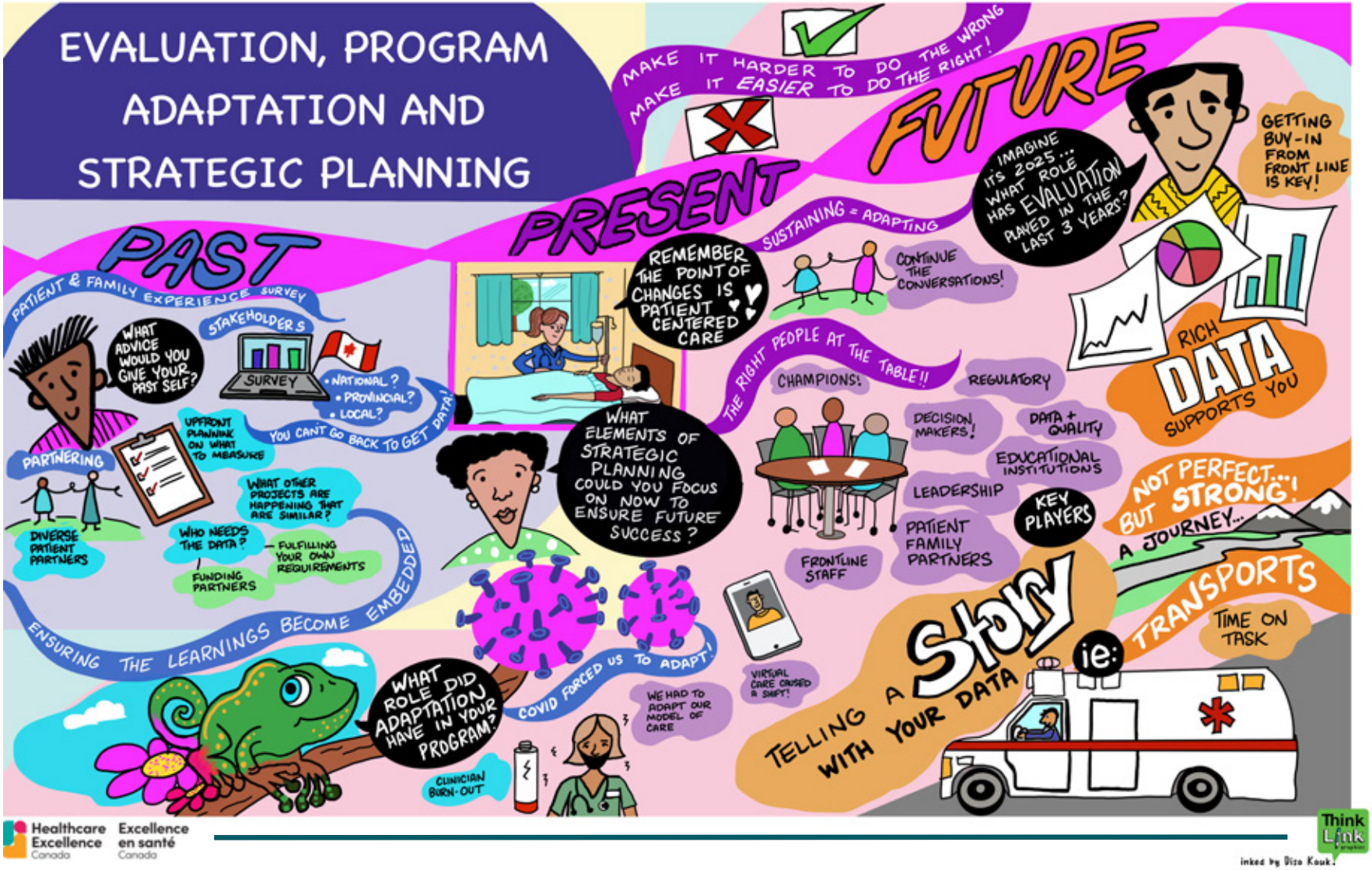
Think Link

inked by Dina Kouk


EVALUATION, PROGRAM ADAPTATION AND STRATEGIC PLANNING
PAST
PRESENT
FUTURE
MAKE IT HARDER TO DO THE WRONG
MAKE IT EASIER TO DO THE RIGHT!
PATIENT & FAMILY EXPERIENCE SURVEY
STAKEHOLDERS
SURVEY
• NATIONAL?
• PROVINCIAL?
• LOCAL?
WHAT ADVICE WOULD YOU GIVE YOUR PAST SELF?
YOU CAN'T GO BACK TO GET DATA!
UPFRONT PLANNING ON WHAT TO MEASURE
PARTNERING
DIVERSE PATIENT PARTNERS
WHO NEEDS THE DATA?
FUNDING PARTNERS
FULFILLING YOUR OWN REQUIREMENTS
WHAT OTHER PROJECTS ARE HAPPENING THAT ARE SIMILAR?
ENSURING THE LEARNINGS BECOME EMBEDDED
REMEMBER THE POINT OF CHANGES IS PATIENT CENTERED CARE
WHAT ELEMENTS OF STRATEGIC PLANNING COULD YOU FOCUS ON NOW TO ENSURE FUTURE SUCCESS?
SUSTAINING = ADAPTING
CONTINUE THE CONVERSATIONS!
IMAGINE IT'S 2025... WHAT ROLE HAS EVALUATION PLAYED IN THE LAST 3 YEARS?
GETTING BUY-IN FROM FRONT LINE IS KEY!
RICH DATA SUPPORTS YOU
THE RIGHT PEOPLE AT THE TABLE!!
CHAMPIONS!
REGULATORY
DECISION MAKERS!
DATA + QUALITY
EDUCATIONAL INSTITUTIONS
LEADERSHIP
KEY PLAYERS
PATIENT FAMILY PARTNERS
FRONTLINE STAFF
NOT PERFECT... BUT STRONG! A JOURNEY...
TRANSPORTS
TIME ON TASK
TELLING A Story WITH YOUR DATA
ie:
WHAT ROLE DID ADAPTATION HAVE IN YOUR PROGRAM?
COVID FORCED US TO ADAPT!
WE HAD TO ADAPT OUR MODEL OF CARE
VIRTUAL CARE CAUSED A SHIFT!
CLINICIAN BURN-OUT
Healthcare Excellence Canada
Excellence en santé Canada
Think Link
inked by Diza Kouk!

Supplemental Resources

Additional resources can be found in the **online repository**.

In this section

Jurisdictional Context Table

Go back to **How to Navigate This Change Package**

Go back to **Legislative/ Regulatory Implications**

The jurisdictional context table highlights the "lay of the land" and provides additional context around how and why programs were developed in the way they were. Because healthcare delivery is a provincial responsibility in Canada, there are significant differences in legislation, regulation, system resourcing, and service delivery models (for both palliative care and paramedic services) between participating jurisdictions.

If you are looking to implement a paramedic palliative care program, this table will help you get started. By comparing your local context to that of the collaborative jurisdictions, you can easily identify implementation solutions that worked for others, that could also work for you.

- Eastern Health (EH), Newfoundland and Labrador
- Nova Scotia Emergency Health Services (NS EHS), Nova Scotia
- Ambulance New Brunswick/Extra Mural Program (ANB/EM), New Brunswick
- York Region Paramedic Services (YRPS), Ontario
- Ottawa Hospital Research Institute (OHRI), Ontario
  - Regional Paramedic Program for Eastern Ontario (RPPEO)
  - Centre for Prehospital Care Health Sciences North (CPC-HSN)
  - Center for Paramedic Education and Research (CPER)
- Interlake-Eastern Regional Health Authority (IERHA), Manitoba
- Saskatchewan Health Authority, Regina Area (SHA), Saskatchewan
- Alberta Health Services Emergency Medical Services (AHSEMS), Alberta
- British Columbia Emergency Health Services (BCEHS), British Columbia

Eastern Health (EH), Newfoundland and Labrador

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Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
Program initially launched in the St. Johns Metro region of NL. Population of the Metro = 205,000. Call volume for the Metro an average of 28,000 per year, with 78% of calls being true 911 emergencies. Eastern Health employs approximately 130 paramedics who provide care in the Metro area. Provincially, there are approximately 640 registered paramedics.	EMS services provincially consist of a mix of community, private, and Regional Health Authority (RHA) operators. The Department of Health and Community Services (DHCS) is responsible for policies, procedures, standards, and negotiations with the private and community operators. The four Regional Health Authorities assist with monitoring and managing the day-to-day operational issues related to the road ambulance program. The St. Johns Metro has its own Paramedicine Department which employees PCPs and ACPs. 911 and routine calls are dispatched for the Metro from a Medical Communications Centre.	There is a flat rate patient fee for ambulance services provincially at a cost of $115.00. The rate is set for transport and non-transport events (outside of palliative calls). Contracts with private and community operator's outline and additional fee that can be charged to DHCS for transport based on paramedic training level and KMs traveled. The RHAs receive annual funding from DHCS to cover operations. Patients in the palliative program and residents of Personal Care Homes (PCH) are not billed for calls that result in treat in home.	Palliative care delivery differs across NL, as each RHA has its own program that operatesxindependently. The St. John's metro region has a large dedicated Palliative Care Consult Service. • Patients can meet with the team in the outpatient clinic, or in their home (virtual and telephone as well) from 0900–1600, Monday to Friday. • Nurse Navigator is also available for patients to contact with questions. • Team can admit patients to the Palliative Care Unit (PCU) for symptom management or end of life care. • Telephone advice for MDs, NPs, Community Health, and other health care providers via telephone on evenings and weekends (through PCU). • There are dedicated palliative care beds available in EH facilities throughout the region. The Community Supports Palliative End of Life Program (PEOL) serves all RHAs. • Nurses in the community provide care and follow up to patients enrolled in the program (Monday – Friday, 0800 – 1700 and on-call for phone consultation 2200 – 0800). • Services include access to medical supplies, equipment, oxygen, short term home supports, home visits by community health nursing, medications, grief counselling, ambulance coverage, pronouncement/certification of expected death in the home.	All NL registered paramedics are regulated under the Provincial Medical Oversight office. Scope designated through NOCP guidelines. Medical certification that authorizes practitioners to provide care in privately funded services is separate and goes through the Office of Provincial Medical Director. Undergoing transition to a framework that is compliant with newly enacted legislation – regulatory landscape similar but slightly changing in next year.	CAD system had the ability to have integrated Special Patient Program designed within, that allows for patient information to be sent in real time to paramedics on the scene and that allows for custom CAD reports to be generated. Also allowed for creation of automated email notification to primary care team for follow up. Palliative Care Consult service consists of nurse navigators, physicians, and administrative staff who were able to provide an expert opinion on program development and connect patients to the program. Provincial Community Health Palliative End of Life program already in place. Partnership increased uptake and allowed access to other front line care providers to assist in day to day patient needs.	Limited ACPs outside of Metro, with high ACP utilization in metro area. Use of Emergency Medical Responders outside of metro area. No provincial dispatch system. Limited access to Palliative Care specialists outside of metro area.

Nova Scotia Emergency Health Services (NS EHS), Nova Scotia

Go back to list

Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
Population of 1,000,000 with a mix of urban, suburban, and rural communities, and First Nations spanning 155,000 km^2. 160,000 service requests annually with 1000 Advanced Care and Primary Care Paramedics. ALS and BLS service dependent on geography (some rural areas with only BLS) supported by MFR which can be volunteer, often associated with volunteer or career fire services.	Emergency Health Services Nova Scotia (EHS NS, a branch of the Department of Health and Wellness) provides provincial EMS through a long term performance based contract with Emergency Medical Care Inc (EMC) for 911 and non-emergency, ground/ air/ interfacilty transfers and medical communications.	Performance-based contract; contract amount based on large number of factors, call volume contributes but in "bands" not a direct one-for-one payment; opportunity for innovation and bonus funding, also opportunity for penalty. Ambulance user fees are charged for transports; fee depends on whether resident in NS or non-resident, income-tested waiver of fee possible. Any non-transport, including non-transported palliative care calls, are not billed. Transported palliative care calls are billed the usual fee. Revenue from fees does not return to EMC or EHS NS directly but supports general government revenues.	In Nova Scotia we have a provincial palliative care network that supports strategy, planning and evaluation while service delivery is the responsibility of local teams/programs. Palliative Care in NS is provided in partnership with primary health care providers and others including home care co-ordinators, nurses, pharmacists, social workers, and spiritual care providers. Patients and health care providers can access support from a palliative care team, providers who specialize in complex care planning and symptom management. Services are provided at home, in outpatient clinics, in free standing hospices (Halifax, Sydney (opening September 2021, and Kentville) and inpatient units. We have dedicated palliative care units in Halifax and Sydney (where Cancer Centres are also located) and several other hospitals throughout the province. Community services include access to medical supplies, equipment, medication coverage, oxygen, short term home supports, home visits by palliative care nurse/physician/social worker who provide consultative support and shared care depending on the needs.	Clinical practice guideline basis for medical protocols under direction of provincial medical director. Scope designated by NOCP. Professional regulation by College of Paramedics. Medical oversight and certification through Provincial Medical Director.	Electronic patient care record and electronic CAD. Pre-existing Special Patient Program (needed transition to electronic format). Pre-existing culture of potential to treat in place or offer alternate destinations. Evidence-based system willing to change to meet needs. Culture of innovation. System leadership willing to "think outside the box" – and embark on new partnerships – from the EHS and palliative care side. Foundational research project that paved the way to implement based on consensus recommendations derived from our own system. Prior connection between CPAC and Cancer Care increased confidence/willingness to seek seed funding.	Not unique to NS – siloed nature of record keeping, including the paramedic record but also the goals of care documents. Never resolved – lack of mechanism to share information back to care team after a paramedic call. Fragmented provincial palliative care delivery including lack of common call schedules or even someone on call, differences in what is kept in the home, confusing to paramedics in terms of confirming eligibility and clear plan. DHW resistance to invest direct dollars – e.g. support ongoing maintenance of SPP – reliance on external funds. Inconsistency among online physicians (not unique to this program). Long and winding path to privacy approvals necessary for electronic database. Delay in Health Canada approval for hydromorphone. Limited traction for ongoing multi-disciplinary advisory input and ultimately action on improvements/adjustments (due to competing priorities).

Ambulance New Brunswick/Extra Mural Program (ANB/EM), New Brunswick

Program Model Summary | Education Summary | Go back to list

Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
Population of 783,257 with a mix of urban, suburban, rural and First Nations communities spanning 72,908 square kilometers. Total call volume (land ambulance) was 111,734 for the 2019-20 fiscal year, which is approximately 80% 911 calls and 20% transfers. Air ambulance call volume was 459, with 55% urgent/ critical and 45% non-urgent. ANB staffing includes 54 Emergency Medical Dispatchers / Critical Care Transport Coordinators, 1,007 Primary Care Paramedics, 17 Advanced Care Paramedics, and 19 Flight Nurses. PCPs practice to full scope, including advanced airway management, intravenous therapy, and medication administration. ACPs in a single provider unit respond alongside PCPs to our highest acuity calls in Moncton, Fredericton, Saint John, and Bathurst with response to surrounding areas as needed. As of August 2021, any qualified ACP working for ANB can practice to their full scope, regardless of their location.	Government of NB provides provincial EMS and home health-care services through a long term performance based contract with Medavie Health Services NB to manage EM/ANB. This includes the Extra-Mural Program (EMP), known as the "hospital without walls" home healthcare delivery and Ambulance New Brunswick (ANB) which provides land and air emergency medical services (911 and inter-facility transfers). Centralized provincial EMS dispatch / Medical Communications Management Centre (MCMC). Provincial EMS protocols Provincial medical direction and 24/7 online medical consultation (OLMC) provided by small group of ED physicians.	New Brunswick Department of Health is responsible for health service delivery across the province, with 7 operational Health Zones and two Regional Health Authorities in addition to EM/ANB. Flat rate billing for EMS service to assist in off-setting the cost of ambulance service. Non-residents pay a higher fee. No patient cost for non-transport or for inter-facility transfers. Billing exemptions are applied for patients who meet specified criteria.	New Brunswick Department of Health is responsible for health service delivery across the province, with 7 operational Health Zones and two Regional Health Authorities in addition to EM/ANB. Flat rate billing for EMS service to assist in off-setting the cost of ambulance service. Non-residents pay a higher fee. No patient cost for non-transport or for inter-facility transfers. Billing exemptions are applied for patients who meet specified criteria.	Paramedic practitioners in NB are regulated under the Paramedic Association of New Brunswick (Paramedic Act). Delivery of EMS is regulated under the Ambulance Services Act (NB Department of Health, Health Emergency Management Services).	Provincial Palliative Care Framework launched in 2018. Integration of the Extra-Mural Program (EMP) and Ambulance New Brunswick ANB) as a single entity, (EM/ANB), with the mandate to plan and organize the delivery of seamless healthcare in the community (home care and emergency services). Increased access to Hospice / Palliative Care throughout NB. Referrals for Specialist consultation are made through the Primary Care team.	New Brunswick is currently working on an electronic health record (EHR); once this system is fully in place, it will facilitate patient centric seamless care across all Health Care Providers. ANB paramedics do not currently use an electronic patient care report (ePCR). PCRs are currently handwritten by paramedics and then entered in a database. Having access to a central electronic healthcare database would facilitate real-time monitoring and reporting of system status. This data infrastructure is key to making informed decisions re healthcare system improvements

York Region Paramedic Services (YRPS), Ontario

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Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
Approximately there are 900 patients that could be eligible for this program in York Region.	Paramedic Service is provided by the Regional Municipality of York.	Province is moving from the Local Health Integration Networks (LHINs) which plan, integrate, and fund local health care to introducing Ontario Health Teams which provide a new way of organizing and delivering care that is more connected to patients in their local communities. Under Ontario Health Teams, health care providers (including hospitals, doctors and home and community care providers) work as one coordinated team - no matter where they provide care.	Under the LHINs system York Region is part of the Central LHIN, which has a robust palliative care system in which the circle of care for the patient and family may include Physicians, Care Coordinators, Pain and Symptom Management Consultants, Advanced Practice Nurses (Clinical Nurse Specialists, Community Nurses, and other community health-care providers), and others within the patient's existing support network.	Currently, most paramedics work for one or more of the 51 municipal paramedic services regulated under the *Ambulance Act (1990)* and *Regulations*. Ontario has two regulatory bodies: The Emergency Health Services Branch (EHSB) of the Ministry of Health (MOH) and eight Base Hospital Programs (which are funded by and accountable to the MOH). Even though Ontario has two regulatory bodies, not all paramedics are regulated.	• *Declaration of Partnership and Commitment to Action* (December 2011), which is a collaborative, stakeholder-driven, multi-year framework for improving hospice palliative care in Ontario; • The *2014 Annual Report of the Office of the Auditor General of Ontario*, which called attention to the need for an integrated, coordinated system to deliver hospice palliative care in Ontario; • The Ministry of Health and Long-Term Care's *Patients First: A Roadmap to Strengthen Home and Community Care* (May 2015), which highlights a commitment to improved access and equity in hospice palliative care at home and in the community; • *Palliative and End-Of-Life Care Provincial Roundtable Report* (March 2016), which explores the important steps to achieve the goals set in Patients First; and • Health Quality of Ontario's *Palliative Care Standards*, which informs clinicians and organizations about what high-quality health care looks like for adults with progressive, life-limiting illness, and for their family and caregivers.	No single electronic health record, (paramedics do not have access to patient care records).

Ottawa Hospital Research Institute (OHRI), Ontario

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Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
Ottawa Population of 1,100,000 in an urban and suburban setting. Area spans 2,800 square kilometers. 147,000 calls annually served by ALS and BLS paramedics. **Regional Paramedic Program of Eastern Ontario (RPPEO)** Population of 800,000 throughout the surrounding area of the Ottawa. Most regions are largely rural with each having an urban/suburban center. Area spans 31,000 sq km's. 134,000 calls annually spread across the 8 paramedic services in the region. Most services have ALS and BLS support, although just a few do not. **Center for Paramedic Education and Research (CPER)** Population of 2,146,000 in Hamilton/Niagara. Most regions (6 services) have cities of urban and suburban settings, but some 3 service areas are rural. Area spans 12,000 sq km's. 290,000 calls annually spread across the 9 paramedic services. Most services have ALS and BLS support. (2 services have currently opted out of the project, preferring to remain in another palliative care trial, we hope they will join in later). **Health Sciences North Centre (HSN)** Population of 550,000 in Northeast Ontario (surrounding Sudbury). Some smaller urban settings, but largely rural. Total area spans 295,000 sq km's. 114,000 calls annually spread across the 9 paramedic services. Most services are BLS support only, although some urban centers have ALS support as well.	Paramedic services are funded 50% by the municipality and 50% by the Ontario Ministry of Health. Services must follow protocols set out by the province and must report QA results regularly. **Ottawa** The paramedic dispatch is managed by the Ottawa Central Ambulance Communications Centre (CACC). Medical direction is provided 24/7 by the base hospital which manages education, QA, physicians. The base hospital is RPPEO. Community paramedics are funded 100% by the municipality and have their own physicians for medical advice. **RPPEO** The RPPEO region is served by the Ottawa CACC and by the Renfrew CACC. All CACC's are controlled by the province. **CPER** The CPER region is served by the Hamilton CACC and by the Cambridge CACC. **HSN** The HSN region is served by CACC's in five cities – North Bay, Parry Sound, Sudbury, Sault Ste. Marie, and Timmins.	Hospitals and other medical providers are funded by and accountable to the province of Ontario. We have 13 regional Local Health Integration Networks (LHIN's). That said, the province announced in 2019 that they will change to 5 regional organizations soon. Ambulance services fees are billed by the hospital. Palliative patients, if they are registered, will not be billed as they are covered by the province for medical care.	Palliative care, for a registered patient, is funded by the province and provided by the Home and Community Care (HCC) personnel, who include the primary care physician, home care nurses, and personal support workers. All patients receiving at-home palliative care are registered in the Ontario Health Shared Services (OHSS) Client Health and Related Information System (CHRIS). CHRIS currently has just over 10,000 patients in their palliative registry.	Paramedics are regulated under the Ambulance Act of Ontario. Paramedics are currently educated in a two-year program by colleges. One additional year for ACP's.	There is wide interest by many organizations to serve patients receiving palliative care which has improved the advancement of our project. • The province • Paramedic services • Home care providers • Hospitals Finally, the OHSS team and the CACC team have agreed to develop CHRIS and the CACC/CAD systems to download the database of patients receiving palliative care. This will automate the registration system for the province. We hope the automated registration will be available in Q1/Q2 2021.	Paramedic services are currently organized in Ontario as Emergency Management Services along with fire and police. Consequently, their information systems are separate from other health providers in the province. Although no political statements are in place, we are hoping that this will change to allow paramedics to part of the health care system. Currently many data sharing agreements must be signed to allow patient data to be transferred between groups.

Interlake-Eastern Regional Health Authority (IERHA), Manitoba

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Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
IERHA is a relatively small health service provider in MB, approximately 125,000 residents, covering a significant geographical area in the mid and eastern parts of the province. IERHA is comprised of 16 moderately sized communities, 17 Indigenous communities and 1 large urban city of Selkirk. The IERHA has one of the largest indigenous populations at roughly 27% and has a small Francophone population and Metis population.	During proposal development and the start of the project EMS services were directly delivered by the IERHA. Staff and direct operations have since transitioned to a provincial governing body called Shared Health (SH) which provides services province-wide (by service agreement within Winnipeg). There are 2 dispatch centres – one serving Winnipeg and 1 called Medical Transportation Coordination Center (MTCC) servicing rural regions including IERHA. EMS protocols used in IERHA are the same for all rural regions. Online Medical Support in rural regions is provided 24/7 by small pool of physicians that work with our air ambulance service. Winnipeg has their own set of protocols and OLMC is provided by an alternate service. This model is being reviewed by SH who may be establishing a provincial service soon. There are approx. 190 full time and part time paramedics. With casual staff, total staffing compliment is approx. 260. This program team is supported by a leadership complement including supervisors and a Program Director. The program operates approximately 35 ambulances and currently has a mixture of staffing arrangements including some communities with full staffing 24/7 while other smaller sites have a mixture of EFT positions with some attached on call.	Health Care governance in Manitoba had included the Ministry of Health providing funding, accountability, and provincial oversight along with and 5 Regional Health Authorities that operated/ delivered most, if not all, services within their boundaries. Manitoba is amid province wide health care transformation including the development of a Central governing body called Shared Health which will deliver services shared across all regions including Digital Health, clinical, and EMS services. Currently, the rate for EMS services in IERHA $250 when a transport is required, and $100 if not. This rate may be different in Winnipeg and may change as Shared Health evolves their service model. EPIC (Emergency Paramedics in the Community) that provides paramedicine services with no cost in Winnipeg RHA, which is not available in IERHA.	The IERHA Palliative Care program is a modest program staffed with one Program Manager, 3 Palliative Care Nurse Specialists, 2 Psycho Social Specialists, 2 palliative physicians, a Volunteer Coordinator and Community Liaison Worker. The program is embedded within the direct operations of the region's Home Care services and relies heavily on the home care team, including the home care nursing team, to support palliative clients at home. The Palliative team itself works primarily business hours, and extended hours through early evening and weekends are provided to clients /families/caregivers through the home care nurses. Home Care nursing within IERHA is not robust and there are smaller communities who do not have any evening and/ or weekend Home care nursing resources. Palliative clients/ families/caregivers have little after hours/weekend support and creates large holes in the support structure required for successful home deaths. Many palliative clients spend their last days and hours in hospital rather than their preferred choice of their home, largely due to the lack of after-hours support systems.	The Paramedic Association of Manitoba (PAM) is a voluntary membership professional association that provides resources, support, information, and benefits to paramedics in Manitoba. With over 1700 members, PAM offers paramedics a strong membership support network and is a key stakeholder working with other groups to promote the ongoing education and support of the paramedic workforce. Currently, paramedics are regulated by the province under the Emergency Medical Response and Stretcher Transportation Act. As of Dec 1, 2020, a new College of Paramedics will be the regulatory body for the profession of paramedicine regulating the practice of paramedicine in Manitoba in accordance with the Regulated Health Professions Act, the Practice of Paramedicine Regulation, and the College of Paramedics of Manitoba General Regulation.	As a small region, we can more easily collaborate and implement regional service in a timely manner which may lead to provincial spread. IERHA has a well established and dedicated palliative care team/program including a client registry and work closely with home care services to coordinate care and provide equipment	Although, there are provincial strategies in place to spread IT services throughout the province, IERHA has significant gaps not seen in some other regions including no Electronic Patient Care Record, no connectivity/equipment in ambulances, no shared access to electronic patient records. COVID-19 has resulted in delayed access to First Nations Communities. Provincial Health Care Transformation initiatives has made accessing provincial partners/resources difficult and planning is a moving target. Although palliative care physicians are on-call 24/7 in WRHA (for physician to physician/prescriber consults only), it is not available in IERHA constraining the service that can be provided by paramedics in the home.

Saskatchewan Health Authority, Regina Area (SHA), Saskatchewan

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Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
Population of approximately 1.2 million people with a mix of urban, rural, remote, and First Nations communities covering an area of 651,900 square kilometers. Approximately 135,000 ground ambulance calls for service annually. Saskatchewan has 2000 licensed members, including: Emergency Medical Responders, Primary Care Paramedics, Intermediate Care Paramedics, and Advanced Care Paramedics. Critical Care Paramedics are limited to fixed and rotary wing ambulance. ALS and BLS services are dependent on geography. Many rural and remote areas are limited to BLS providers.	Saskatchewan has 107 ambulance services with a relatively equal mix of SHA owned and operated services and contracted operators. Three Medical Communication Coordination Centres with 1 SHA owned and operated (South) and 2 contracted (Central and North). Provincial clinical practice protocols used by all paramedics. Community Paramedic endorsement available after completion of approved training. Online Medical Consult available locally. No protocols require OLMC but is available for consult purposes only.	Saskatchewan Health Authority (provincial health authority) responsible for health service delivery across the province, 3 operational EMS zones. Currently transitioning from 12 health regions to a single health authority. Flat rate for EMS service (transport) but differs for ALS and BLS services. Non-transport rates variable depending on former health region. No cost to patient to receive care at home when care provided by SHA owned and operated services. No contracted operators have implemented program as no compensation provided. Attempting to have care in home by paramedics added to palliative services covered by the Ministry of Health.	Variable across the province. Palliative care primarily managed by primary care physician with access to consult palliative care physician. Palliative care physician may manage some patients in absence of primary care physician. Specialized palliative care teams limited to urban centres. Some rural areas have palliative care coordinators, and services provided by home care teams. Access to specialized teams for consult available if needed. Services and hours dependent on geographic location. Access to pediatric care variable. Main palliative pediatric services offered in central Saskatchewan, but available for consult provincially. Pediatric palliative services delivered by home care services.	Paramedic practitioners regulated under Saskatchewan College of Paramedics, including the Paramedic Act. Delivery of EMS regulated by the Government of Saskatchewan: The Ambulance Regulations; OH&S Regulations; Health Information Protection Act.	SHA transition from 12 health regions to a single health authority. Working toward consistent and streamlined access to palliative care services across the province, and single policies and procedures. Provincial initiative to provide palliative education to a variety of healthcare providers to improve awareness and knowledge in providing a palliative approach to care. Access to a 24/7 palliative care physician on call via LINK (physician to physician consult only). Implementation of a College of Physicians and Surgeons Committee pertaining to policy development on End-of-Life Care.	Paramedic buy-in regarding the important role they play in providing a palliative approach to care. Saskatchewan College of Paramedic support and protocol development to support treating people in home without transport. Accessible palliative paramedic education for those in rural and remote locations (working toward a solution). Training costs and time. Limited paramedic access to electronic health records. Each former region still operating separately with electronic systems. High call volumes in some urban centres. Consistent access to paramedics in some rural and remote locations (many are out of service frequently).

Alberta Health Services Emergency Medical Services (AHSEMS), Alberta

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Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
Population of 4,100,000 with a mix of urban, suburban, and rural communities, and First Nations spanning 660,000 square kilometers. 500,000 service requests annually, with 5,600 Primary Care and Advanced Care Paramedics. ALS and BLS service dependent on geography (some rural areas with only BLS).	EMS delivered directly by Alberta Health Services (provincial health authority) and through contracts with 32 other ambulance operators (911 and interfacilty transfers). Centralized/ provincial EMS dispatch. Provincial EMS protocols (used by all operators). Provincial medical direction and 24/7 online medical consultation provided by small pool of physicians.	Alberta Health Services (provincial health authority) responsible for health service delivery across province, 5 operational zones (no longer multiple health regions). Flat rate for EMS service (set rate for transport or not transport events). No patient cost for EMS service (government program administered by Alberta Blue cross for those over 65 or registered on Palliative Blue Cross). Had to make adjustment to include non transport, EMS operations reimbursed set amount (less than regular billable rate).	Palliative medical care provided by primary care physician/nurse practitioner. Support from palliative care consult teams; services and hours dependent on geography. Adults - Specialized resource nurses and nurse practitioners in home care and assisted living support interprofessional teams in rural, suburban, and urban areas across the province. Specialized palliative home care interprofessional teams in metro areas of Calgary and Edmonton, days, evenings, weekends, with night RN on call. Pediatrics - palliative care provided by palliative care physician and interprofessional team (on call 24/7), 15 – 20 patients on case load across Alberta.	Paramedic practitioners regulated under Alberta College of Paramedics (Health Professions Act). Delivery of EMS regulated under Emergency Health Services Act (Emergency Health Services, Ministry of Health).	Provincial Advance Care Planning/Goals of Care Designations launched 2014. Provincial Palliative and End of Life Care Provincial Framework launched 2014 (commitment to 30+ palliative care initiatives). 24/7 palliative care physician on call (physician to physician resource currently, can be linked to via EMS OLMC physician – no EMS direct call currently). Expected Death in the Home policy and forms align with program.	No single electronic health record, (paramedics do not have access to palliative care charting, community does not have access to paramedic charts). Cost and time for training (EMS operational barrier). Minimal sustainability plan for community palliative care. Ongoing need for education, e.g., roles, medications, capacity, knowledge.

British Columbia Emergency Health Services (BCEHS), British Columbia

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Population, Call Volume, Staffing	EMS Service Delivery Model	Health System Delivery Model and Billing Info	Community Palliative Care Delivery Model	Paramedic Regulatory Landscape	System Enablers (for project)	System Barriers (for project)
Number of Paramedics (staff) – 3,700+ (4,000+) British Columbia Land Area – 922,503 Square Kilometers Population – 4,648,055 **Regional HAs** – Vancouver Coastal, Fraser, Vancouver Island, Northern, and Interior **Number of Communities** – 169 **Number of Ambulance Stations** – 184 **Number of Vehicles** – 565 **Number of Aircrafts** – 11 **Number of Calls Fielded per Year** – 500,000+	BC Emergency Health Services (BCEHS) oversees the: 1) BC Ambulance Service – specializes in expert pre-hospital care to patients when a medical emergency occurs. 2) BC Patient Transfer Service – provides pre-booked inter-facility transfers, critical care transfers for critically ill or injured patients, and infant transport team critical care transfers for pediatric, neo-natal and high risk obstetrics patients. 3) Community Paramedic Program – improves access to health care in rural and remote communities by enhancing the role of Community Paramedics. Centralized Provincial Dispatch Centers – Vancouver, Vancouver Island, Kamloops. Provincial 24/7 clinical support provided through CliniCall. Paramedic Specialists (ACPs/ CCPs) provide clinical support and technical advice to paramedics. Additional support can be provided by Emergency Physician Online Support (EPOS). Provincial protocols and clinical practice guidelines. Provincial regulatory oversight provided by the Emergency Medical Assistants Licensing Board EMALB.	BCEHS belongs to the Provincial Health Services Authority and provides services cross the province The costs – stipulated by the Emergency Health Services Regulation – for services are as followed: 1) 911 response fee - $50 2) 911 ambulance transport - $80 3) Inter-hospital transfer - $0 4) Inter-facility transfer- $80 5) Increase costs for individuals who are not beneficiaries of the BC Medical Services Plan	Palliative support structure varies depending on health authority. Generally, the interdisciplinary team includes the Division of Family Practice, Palliative Consult Physicians, Home and Community Care teams, and Regional Palliative Clinical Nurse Specialists. In 99 rural & remote locations, community paramedics work with the interdisciplinary teams to offer pre-scheduled visits to palliative patients to support clients in their homes and their caregivers.	The EMALB "is responsible for examining, registering and licensing all emergency medical assistants (EMAs) in B.C., including first responders. Under the authority of the Emergency Health Services Act, the Board sets licence terms and conditions. In addition, the board investigates complaints and conduct hearings where necessary." BCEHS provides provincial emergency health services under the Emergency Health Services Act.	Provincial 24/7 clinical support provided through CliniCall. Paramedic Specialists (ACPs/ CCPs) provide clinical support and technical advice to paramedics. Additional support can be provided by Emergency Physician Online Support (EPOS). Creation of Palliative / End of Life specific clinical practice guidelines. Development and implementation of BCEHS Palliative Patient Portal to share electronic patient care records with Health Authority partners to facilitated enhances continuity of care. Ministry of Health and BC Centre for Palliative Care support and representation of project Steering Committee and Evaluation Working Group.	Each of the five Health Authorities in BC have unique electronic patient care record governance, access, and structures that are not interlinked nor readily accessible to external parties. Cost and time to deliver paramedic education, coupled with a unionized landscape. Limited existing collaboration between care providers. Most of the workforce consists of PCPs who are limited in providing pharmacological remedies due to licensing restrictions.

Program Summaries

Summary of Program Model Components by Jurisdiction

Go back to How to Navigate This Change Package

Go back to Implementation Methodology

The program summaries that follow provide specific examples of how each jurisdiction designed and implemented their program. To compare model components between jurisdictions, see the Summary of Program Model Compenents by Jurisdiction table. For more information on each jurisdiction's legislation, regulation, system resourcing, and service delivery models, see the corresponding Jurisdictional Context Table.

- Eastern Health (EH), Newfoundland and Labrador
- Ambulance New Brunswick/Extra Mural Program (ANB/EM), New Brunswick
- Ottawa Hospital Research Institute (OHRI), Ontario
- York Region Paramedic Services (YRPS), Ontario
- Interlake-Eastern Regional Health Authority (IERHA), Manitoba
- Saskatchewan Health Authority, Regina Area (SHA), Saskatchewan
- British Columbia Emergency Health Services (BCEHS), British Columbia

Program Model Summary

Eastern Health (EH)

Jurisdictional Context Table

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Paramedics Providing Palliative Care (PPPC) began in the St. John's metro region of Newfoundland and Labrador (NL) in April of 2019. The St. Johns metro consists of a number of communities in the eastern part of the island with a total population of approximately 206,000. It was selected as the pilot site for the first PPPC program in NL for a variety of reasons. All paramedics in the metro are employees of Eastern Health (EH) and the paramedic complement consists of primary care paramedics (PCPs) and advanced care paramedics (ACPs).

Prior to the end of the 4 year collaborative, EH will provide a detailed project implementation plan to the other Regional Health Authorities in the province outlining recommendations on how to launch PPPC in their regions. The original project design was developed using an in-depth review of the palliative care services in the metro, however during project evaluation it was determined that the selected model may not work in the rural regions of the province for various reasons (e.g., lack of ACPs, use of emergency medical responders in place of paramedics, limited specialized palliative care teams etc.). Therefore, in year 2 changes were made to the project design based on the year 1 project evaluation with the intentions of piloting a new model in the metro and rural regions.

This summary is broken down to describe the program in both Year 1 and Year 2 in order to highlight the program changes.

Year 1

Model Description

In order to receive in home care, patients are required to be registered in PPPC. Once accepted into the program, patients receive a Special Patient Program (SPP) identification number and a home chart. To access the program, patients are instructed to call 9-1-1 and provide their SPP number. This ensures that the dispatcher will send an ambulance with palliative trained paramedics and that ambulance is dispatched without lights and sirens. While enroute, paramedics receive information regarding the patient and their background via the Computer Aided Dispatch system (CAD) and associated tablet. Once paramedics arrive at the patient's home, they deliver care according to the Palliative Care Guidelines developed to support this program.

The following options are available to patients within PPPC and decisions should be made based on shared decision making between the patient, caregivers and Paramedic:

1. **Remain at home:** Paramedics are able to use their Palliative Care Guidelines to treat patients in home without transport. There is no requirement to contact the Online Medical Control Physician (OLMC) if the paramedics operated within the guidelines or complete a Refusal of Care form if the person is treated in the home. Paramedics can consult OLMC at any time however for orders/recommendations for symptom management.
2. **Transport to palliative care unit:** In order to avail of this option in the greater St. John's region, a patient must first be pre-approved for a palliative care bed at the L.A. Miller Centre. If the patient has been pre-approved and this destination is chosen, paramedics are advised to contact the Palliative Care Unit to inquire if a bed is available and the patient can be transported there as opposed to the Emergency Department.
3. **Transport to the emergency department:** This may occur if the patient/family requests transport, if the Paramedic believes that the patients' needs cannot be met with outpatient resources or as directed by OLMC.

When a paramedic is dispatched to a patient enrolled in the this program, an email alert is automatically sent to the appropriate palliative care team members to ensure follow-up occurs without paramedics having to make special arrangements.

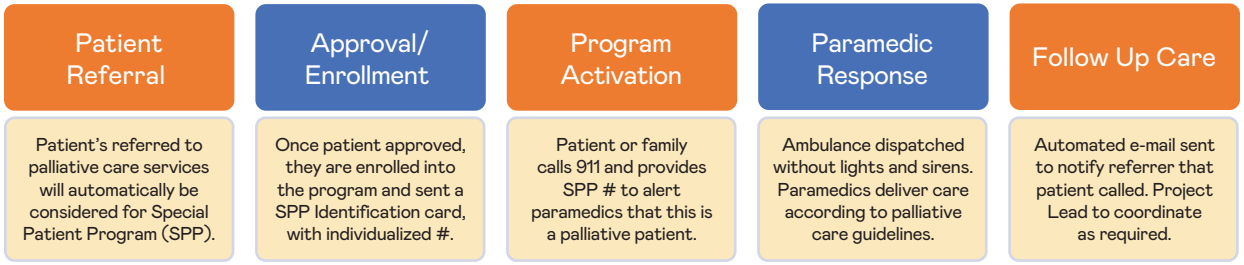

Figure 1: Program Design – Year 1

Key Components

There were a number of key components that were needed to launch the original program in the St. John's metro including:

Component	Description
Steering Committee/ Inter-Disciplinary collaboration	One of the first actions in preparation for the launch of PPPC was to create a Steering Committee composed of key stakeholders to guide the development, launch and evaluation of the program. The committee consists of representatives from government, Palliative care, community health, paramedicine, patient family representatives etc.
Clinical Guidelines/Dispatch Guidelines	See Education Plan for further description
Online Referral Form	Patients need to be referred to PPPC in order to receive treatment in home. An online referral form was created to feeds directly in to SPP. Info in the referral is used to create SPP# and patient profile that paramedics access in the field.
SPP/ CAD Integration	The SPP was developed within the CAD. This way when a patient calls into access the program, the CAD event is linked to their information. The Medical Communications Officer can then send the information directly to the tablet located in the ambulance for the paramedics traveling to the scene.
Follow up – automated email	With creation of CAD event, an automated email is sent to the patients' health care team (as noted in the referral) listing the special patient number of the patient asking for follow up.
New medications added to PCP/ ACP complement	Metoclopramide and Diphenhydramine were added to the approved medications for PCPs across the province. Morphine, Haloperidol, and Scopolamine were added to the approved medications for APCs in the metro to be used for palliative care only. A federal exemption was also received for ACPs to administer Hydromorphone to patients in PPPC.
OLMC	An OLMC physician is available 24/7 for consultation for all paramedics in the province. All OLMC physicians were offered LEAP training and have the ability to consult with the on call palliative care physician if required.
Home Charts	A home chart was created to facilitate inter-disciplinary communication within the home. The home chart contains information about the program and a place for paramedics, nurses, physicians etc, to document in home care. The home chart is mailed out to all patients accepted into the program.
Palliative Care Kits	Additional equipment/supplies were added to the ambulance in preparation for this program including: catheter supplies, additional medications, subcutaneous medication administration supplies, subcutaneous butterflys...

Population

Initially, referrals for patients (who must be over the age of 18) were taken from only two sources:

1. Palliative Care Consult Service – this groups consisted of specialized palliative care physicians and nurse consultants who see inpatients and outpatients in the St. Johns metro.
2. Community Health Palliative End of Life Program – community nursing program that supports patients in their last 8 weeks of life at home.

Both program use the "surprise question" when gaging if a patient would benefit from a palliative approach.

Nearing the end of Year 1, we were contacted by the Home Dementia Program who provides their own at home palliation for patients in their service, requesting the ability to refer into the PPPC. This was granted and a frailty criteria was set by the physician/ nurse practitioners associated with the program to dictate when their patients would qualify for PPPC.

Currently, we are working on a more detailed set of enrolment criteria that will be used in program expansion to allow other programs/physicians groups to refer into PPPC.

Year 2

Based on the evaluation of year 1 implementation and the unexpected impact of COVID 19, the model of the program was altered to better support palliative patient needs and ambulance availability. As the first year of PPPC came to a close, it was identified that there were a number of areas we could improve upon moving forward. Firstly, although the program received high uptake from the cancer community, we identified that we were not well connected to other chronic disease groups, including those working with older adults (see Figure 2).

EH has various levels of assisted living facilities for older adults referred to as Personal Care Homes (PCH) and Long Term Care (LTC). PCH in the region typically are reserved for people who require low levels of care (e.g., assistance with cooking/cleanings, assistance taking medications), while LTC offers total personal care and medical assistance with various levels of onsite health care professionals including registered nurses. In 2019, these facilities made over 1000 calls to 911, the majority of which could have potentially been managed in house.

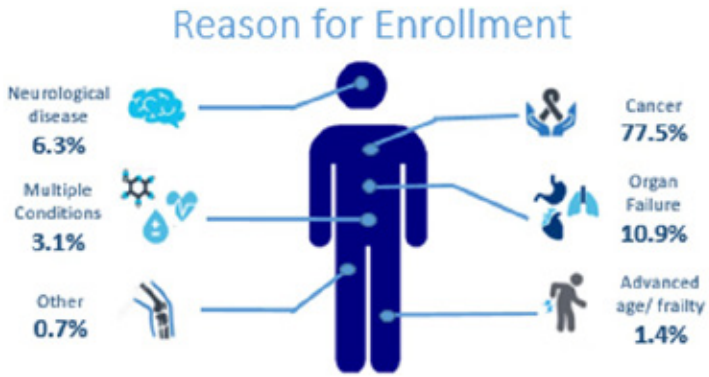

Figure 2: Year 1 Primary Conditions prompting enrollment to palliative care.

PPPC had only a small percentage of patient's enrolled living in PCH and none in LTC at the end of Year 1. This was viewed as an opportunity for improvement and it was decided to pilot a model of care tailored to provide collaborative in-home care to residents in of PCH/LTC while working to enhance connections/enrollment to palliative care and PPPC. It was also noted that for year 2 there should be a focus in making connections with other physician groups, including general practitioners (GPs) in the community to enhance PPPC enrollment and with community health nurses to support at home care.

The year 2 project plan was challenged in March 2020 with the onset of the COVID-19 pandemic. During this time, the PPPC calls increased from March to April by 30%. Preliminary data suggests this increase was correlated to changes in admission/visitation to the inpatient units and the increased desire for patients to die at home surround by their family. At this time we identified that we may not have the ambulance capacity to provide emergency and palliative care, and therefore with support of the Partnership, decided to trial a new model of PPPC that we felt would work better provincially.

Model Description

The new model for Year 2 was designed to offer 12 hour day-time care for patients in PPPC and residents living in PCH/LTC through a single ACP (referred to as ACP-C) in a clinical support unit (CSU). The decisions to create an ACP-C position was influenced by our Year 1 data which highlighted some challenges felt by PCP crews when responding to palliative care calls and the high number of ACP successes for treatment in home. The ACP-C uses the same clinical guidelines put in place for ambulance response, however they respond to palliative care calls independently in the CSU. Calls are taken from patients in PPPC in the same way but are redirected to the tablet in CSU from the hours of 0730-1930. During the nighttime hours, PPPC reverts back to the previous model of care with palliative trained ambulances responding to calls.

Additionally, we expanded on the protocols for treatment in home for residents living in PCH and LTC facilities. In order to do this, we created a specific set of criteria that the ACP-C could be dispatched for using the Pro QA. If a call is flagged through the CAD as a PCH/LTC low acuity call that fits within the outlined criteria, the ACP-C is dispatched with the ability to treat in the home and connect residents to palliative care and PPPC where applicable. Once dispatched, the ACP-C would independently respond, assess the resident, and create a treatment plan to address the needs for patients who may require care but not necessary transport. Physician consultation is required for treat in home of PCH/LTC residents and whenever possible, the ACP-C consults with physician working in the facility. If this physician is not available, they will consult with an OLMC. All decisions to leave the resident in the PCH after treatment shall be done in consultation with the physician.

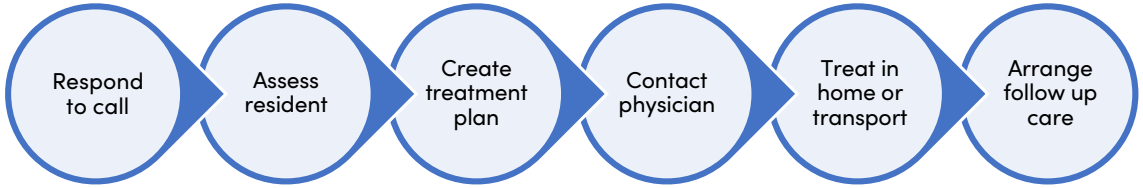

Figure 3: Process for Response to PCH/LTC Calls.

If transport is required, the ACP will call for backup and paramedic ambulance team will be dispatched. If multiple calls come in at once, we have created an option to stack calls and retrained the ability to send an appropriately trained ambulance until the ACP-C can respond.

Key Components

In order to successfully launch the new model, a number of changes were made and key components added, including:

Component	Description
Creation of ACP-C	Paramedic specialist role that was created to act as the lead of palliative care provision. Expression of interest was used to select ACPs with interest in palliative care and extra education was provide to prepare them for the role (see Education Plan).
CSU	For the purposes of the pilot, a Ford Escape was utilized as the CSU. The SUV was equipped with a tablet for CAD access, modified BLS and ALS kits, a cardiac monitor, palliative care modified kits etc… The SUV is not equipped with lights and sirens, so ACP-C is reserved for non-priority 1 response.
Paramedic PPPC Referral Process	A process was created that allows the ACP-C to work with other paramedics, nurses and physicians to connect patients with palliative care and refer them into the PPPC program. The ACP-C can be consulted on patients in the community who could benefit from/are interested in a palliative approach. They will then work to get them referred to palliative care and will compete the appropriate refers for community health nursing and PPPC.
Adapted diagnostic/ treatment processes	We are currently developing additional processes that the ACP-C can utilize to better assist patients in PCH/LTC such as: a fast tracked diagnostic imaging process, laboratory specimen collections and testing, and treatments for various infections.
Follow up appointment process	A process was created to allow the ACP-C to book patient follow ups as required. This includes the creation of a “priority 6” event within the CAD that is classified as “ACP-C Recheck”. Rechecks can be placed in the pending grid within the CAD created for the ACP-C and they can dispatch themselves on the call when they are ready to see the patient.

Component	Description
PCH/LTC triage criteria	In collaboration with MCC, the Medical Director and Assistant Medical Director for paramedicine developed a set of PCH/LTC criteria. This criteria outlines the specific types of calls the ACP-C can be dispatched for and when a traditional ambulance response will be required. PCH involved in the pilot will be flagged in the Computer Aided Dispatch (CAD) system, so once the Medical Communications Officer selects the location they will receive a prompt to remind them to send the ACP-C, where applicable.
Partnership with PCH/LTC and associated GPs	Partnerships were made with the PCH first, as it was decided to start with these facilities. Each owner/operator was met with and expressed interest to participate. Criteria for participation simply asked that the physician working with the facility was on board to collaborate with the ACP-C and they would make themselves available for telephone consults as required. The success of this model is dependent on collaboration with these physicians.
Designated OLMC	For the purpose of the pilot, there will be an additional designated OLMC physician available 12 hours a day to handle palliative care and PCH/LTC related calls.

The Year 2 program model will be trialed and continuously evaluated over a 6 month period. The Year 2 pilot was designed to consist of three phase:

1. Phase 1 will resume pre-COVID expansion/ sustainability planning and will work to pilot the new model of care in all PCH in the metro
2. Phase 2 will have the program expand in to LTC and focus on working with other physician/disease groups to enhance enrollment in PPPC
3. Phase 3 will have this model tested in a rural setting over a 6 month period.

Changes to project design will be made as required to enhance success and eventually the Year 2 model will be piloted at a second rural site.

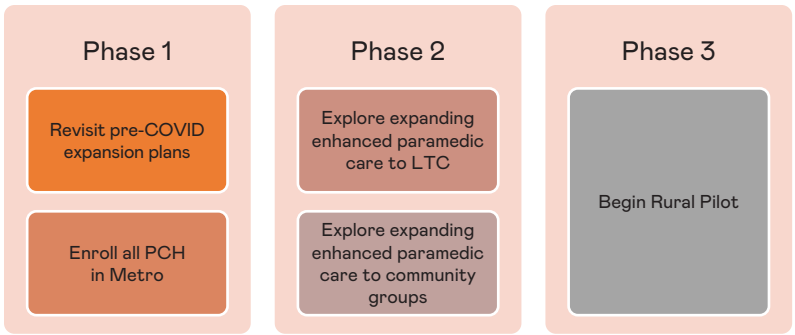

Figure 4: Year 2 expansion plan for PPPC

Program Model Summary

Ambulance New Brunswick/Extra Mural Program (ANB/EM)

Jurisdictional Context Table

Go back to list of Jurisdictions

Purpose: To include summaries from each participating jurisdiction describing their program model in the change package. Together, summaries from all jurisdictions will provide a set of examples on how the new practice may be developed and implemented across different geographies, contexts and service models.

Format: One or two page summary, visually appealing (final formatting, graphics, layout TBD)

Directions: Consider the following content headlines and prompting questions when describing your program model. The headings and prompting questions below are provided as a guide for the content you may include when describing your model.

Key Components

- Clinical Policy
  - Developed to guide patient care; contains clinical guidelines for paramedics
- Operational Policy / Procedures
  - Developed to guide the process for increased EM/ANB collaborative practice in caring for EMP palliative patients.
  - Includes dispatch guidelines and communications protocols for ANB paramedics and EMP healthcare providers
  - A “standard operating procedure” was developed for EMP healthcare providers to include increased collaboration with ANB paramedics
- Clinical Guidance / consultation
  - Paramedics are asked to connect with the EMP healthcare provider to collaborate on care options / communicate care decisions
  - EMP healthcare providers connect with the palliative patient’s Primary Care Provider / Specialists as needed for updates / changes to medical orders
  - Paramedics continue to use the ANB 24/7 access to online medical consultation (OLMC); this is a group of ED physicians who are available to provide clinical support as needed via telephone

- Palliative Registry / Dispatch
  - All EMP palliative patients are "flagged" in the Computer Aided Dispatch (CAD) system; this enables us to identify palliative requests for service at the time of the 911 call. This information is relayed to the responding paramedic team.
  - We have updated our Dispatch transfer protocols to better meet the needs of palliative transfer requests (booked as "urgent" / within the hour)
  - We are working on new protocols for our dispatch centre to enable an appropriate response (non-lights and sirens) and appropriate pre-arrival instructions with respect to resuscitation / CPR.
- Clinical Practice change
  - Education program included the introduction of the Palliative Performance Scale (PPS) and the Edmonton Symptom Assessment Scale (ESAS) to paramedic practice. Paramedics were also sent information to enable them to install the Pallium Palliative Care App on their mobile device as a reference tool.
  - Addition of two medications for ANB Paramedics (PCP and ACP):
    - Ketorolac (Toradol®)
    - Ondansetron (Zofran®)
- Collaborative Practice Model:
  - Paramedics are asked to communicate with the EMP healthcare provider to ensure continuity of care. This includes the provision of a continuity of care report when palliative patients are not transported / treatment provided in place
  - Paramedics leave a written copy of their Patient Care Report (PCR) with the EMP provider when the EMP provider is present on scene.
  - EMP providers, in consultation with the Primary Care team, may arrange for direct admission (via ambulance transport) to a palliative care unit or hospice instead of ED

Inclusion Criteria/Population

- This service is available to pre-enrolled EMP palliative patients who are in the CAD Registry, with no age restrictions. It also includes EMP palliative patients who are in the process of being added to the Registry.
- Any other patient with palliative goals of care / life limiting illness that ANB paramedics encounter are referred to EMP for assessment. These patients could be left at home with signature of a "refusal of transport" form and the referral to EMP until such time as they are enrolled in the program.

Model Description

- Activation
  - Patients living with life-limiting illness are admitted to the Extra-Mural Program (EMP) "Hospital without Walls" by their Primary Care provider, and are designated as palliative with a life expectancy of six months
  - EMP administrators complete an online form to register palliative patients in the ANB ambulance dispatch system
  - Patients are encouraged to call their EMP provider when they need assistance, but are also able to call 911 in any crisis situation
- On Scene Activities
  - These patients are under the regular care of EMP healthcare providers who are familiar with their Care Plan / Goals of Care
  - ANB telephone collaboration / consultation / communication with EMP provider
  - Where possible, EMP will leave a "Shared Care Plan" on scene for paramedic reference and for EM/ANB inter-disciplinary communication. This is an interim solution until such time as NB has an electronic healthcare record accessible by all providers
  - ANB paramedics follow clinical policy / practice guidelines
- Call Closure/Referral
  - ANB paramedics are expected to connect with EMP providers via telephone / recorded line through the dispatch centre to provide a "continuity of care" report following each request for service
  - Paramedics are no longer required to complete "refusal of care" documentation for EMP palliative patients when care is provided "in place"

Overview of Model/Program Implementation

- This program was implemented province-wide on March 2, 2020
- Steps in the implementation process included:
  - Development of "model of care", including input from stakeholders
  - Development of clinical and operational procedures
  - Development and delivery of education
  - Project launch / province wide
  - Ongoing follow-up / feedback / communication
  - Ongoing education

- The Extra-Mural program and Ambulance New Brunswick (EM/ANB) are managed by Medavie Health Services NB (MHSNB) under contract to the Provincial Department of Health. EM/ANB front-line staff (paramedics, dispatchers, flight nurses, EMP healthcare professionals) are employees of the provincial government.
- The New Brunswick Extra-Mural Program (EMP) delivers primary health care services to New Brunswickers of all ages in their homes and communities.
  - The EMP team delivers acute, palliative, chronic, rehabilitative and supportive care services, as well as providing patients with access to additional services including medical, occupational therapy, physiotherapy, respiratory therapy, social work, clinical dietetics, speech language pathology, pharmacy, as well as nursing care available on a 24/7 basis.
  - EMP, known by many as the “hospital without walls”, includes a team of over 850 professionals who provide quality home health care services to eligible residents when their needs can be met safely in the community.
  - EMP operates on a client and family centered model with a focus on building and maintaining partnerships with clients and their families, physicians, agencies, departments and other service providers to best meet patient needs.
- Ambulance New Brunswick (ANB) is the organization responsible for providing land and air ambulance services to New Brunswickers and their guests.
  - With a team of over 1,000 highly-skilled emergency medical dispatchers, paramedics and flight nurses, ANB responds to over 100,000 calls for help and inter-facility transfers each year.
  - Providing the best-possible care to patients on the scene and ensuring their safe and timely transport to hospital is our priority, as we strive to do our part in creating safe and healthy communities across the province.
  - Ambulance New Brunswick has been operating as the provincial ambulance service provider since 2007. Our authority and license is granted by the New Brunswick Department of Health.

Program Model Summary

Ottawa Hospital Research Institute (OHRI)

Jurisdictional Context Table

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The Ottawa Hospital | L'Hôpital d'Ottawa

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The Ottawa Hospital Research Institute (OHRI) is working to implement a new model for paramedics providing palliative care in three regions in Ontario. This is a patient-centered initiative, that provides a choice to the patients receiving palliative care, to have symptoms managed within their home without transport to hospital. We expect that patients and their families will express a higher level of satisfaction with the paramedics during these cases. We also expect that there will be benefits to healthcare service providers – home care palliative teams will see increased support for their patients; paramedic services will reduce transports to hospital impacting offload delays and reduce total time on task; hospitals will reduce unnecessary Emergency Departments visits and acute care admissions.

This initiative will encompass the nine Ambulance Service Operators (ASO's) in the Regional Paramedic Program for Eastern Ontario (RPPEO), the nine ASO's in the Health Services North (HSN) region near Sudbury, and the nine ASO's in the Centre for Paramedic Education and Research (CPER) region near Hamilton and Niagara. Preparation for rollout will be complete by end of 2021 and results tracked to March 2023. It is anticipated that the work completed on this project can provide a framework to ensure a consistent sustainable implementation across the remaining Base Hospital regions of Ontario. This will ensure that all palliative patients in Ontario will receive consistent care and can benefit from the program.

The new model required changes to several 911 processes to allow paramedics to treat symptoms of a palliative care patient and provide patients and their family the choice to remain in their home. All methods have been approved by the Ontario Ministry of Health and supported through the quality frameworks in place. We have begun with the Ottawa pilot and will continue to implement in the other regions to ensure consistency across Ontario. Changes that we will discuss further in this document include:

1. A registration service linked to the Ontario database of home care patients called Client Health and Related Information System (CHRIS), ensuring the palliative patient knows they will be part of the program and that their patient information will be shared with the ASO's and paramedics to ensure safe and appropriate care.
2. A new 911 call process that flags the patient in the Centralized Ambulance Communications Centre (CACC) system with a warning in the address field. This will be an automated process coming from the CHRIS system. This arrangement will allow the CACC Communication Officers to notify the 911 paramedic that they will see a palliative patient.

3. A new Medical Directive, which is the Ontario approach to clinical guidelines. It describes the processes for the paramedic to follow during a visit with the patient with palliative needs - determination of the patient's complaint; options for symptom relief and medications to assist; orders to refer the patient to the regular palliative care team; and the option for the patient to remain at home.
4. Several new medications to be stocked in the ambulance to help with symptoms.
5. Referral relationships with the home care nurse and the team currently providing ongoing care to the palliative patients.
6. A Quality Assurance program to track all palliative care visits and ensure measurement, tracking and reporting of the services.
7. Quality Improvement Plan-Do-Study-Act (PDSA) cycle to evaluate and improve process throughout the implementation process.
8. A training program for all paramedics covering all the above changes.

Patient Enrollment and Registration Services

Patients in the paramedic palliative care project will be enrolled at the beginning of their home-based palliative care by the Home and Community Care (HCC) coordinator. When the HCC interviews the patient to set-up of their home services, the HCC will advise the patient about the nursing services and personal care services they will receive. They will also advise that in the case of an emergency, that a paramedic who is trained for palliative care will attend to their needs. They will gain consent that their patient information can be shared with the paramedic organization to ensure the frontline paramedics have details around DNR status and their goals of care. The HCC will enter the patient's choice in the Client Health and Related Information System (CHRIS) database, which is an Ontario Health (OH) system keeping a record of all Ontario home and community care patients.

CHRIS, at the request of the OHRI team, was developed to take a daily snapshot of the patients who are on the HCC palliative caseload (caseload 95 in CHRIS terms) and create a list of those patients (who provided permission and have a DNR) for referral to the CACC. The CHRIS system will automatically load the file of patients to the Ministry of Health file-sharing site where the provinces 22 CACC's (all CACC's across Ontario) will pick up each record. The Centralized Ambulance Dispatch (CAD) system will set a warning flag in the patients address field, that there is patient who qualifies for, and has consented to the program, living at that address. The warning flag will highlight at the beginning of each call to the CACC that this patient may have special symptoms to be treated.

This system is in development and will complete in September 2021. In the meantime, we have implemented several methods for manual registration of patients so we could get started in offering palliative care services.

New 911 Call Processes

Patients who are enrolled by the HCC, will be flagged in the CACC system that their home address has a patient who is on the palliative care roster. This will be done by the CHRIS update. When a 911 call comes in from the address, the CACC Communication Officer will see the warning flag and will ask if the call is about the palliative patient. The dispatcher will inform the paramedics responding of the call type.

New Medical Directive and Paramedic Onsite Visit Processes

All paramedics will be trained (PCP and ACP) and the operation will be a 24/7 service.

Upon arrival at the scene, the paramedic will verify the patient identity, confirm that they are palliative and have a palliative care team and inform the patient of the services they can provide. The new medical directive covers symptoms including Pain or Dyspnea, Hallucinations or Agitation, Nausea or Vomiting, and Terminal Congested Breathing. Procedures and medications for each symptom are described in the medical directive.

The paramedic will gain patient consent to perform an assessment and provide any directed intervention or treatment. When patients are not rostered or are presenting with conditions that are not within the scope of the Special Project Palliative Care Medical Directives, paramedics will proceed per the usual ALS PCS and BLS PCS directives. If the patient requests transport to the hospital at any point during the call, paramedics will initiate transport and resume care per the usual ALS PCS and BLS PCS directives.

If the patient or substitute decision maker (SDM) demonstrates capacity, indicates a preference for receiving treatment at home and presents with symptoms that are within the scope of the medical directive, paramedics will initiate treatment at home. Paramedics will record their actions in the Ambulance Care Report (ACR) using the new codes assigned by the MOH for palliative care symptoms. Where applicable, the paramedic will also update the in-house patient care binder, used by the home care nurse, of the visit and outcome. Paramedics are encouraged to call the Base Hospital Physician if questions or need for support. Paramedics will call the nurse or physician on-call for the palliative patient, and update them about the patient's current clinical status, the treatment administered, and the destination (home or hospital).

At the end of the call the paramedic will confirm with the patient or SDM that they prefer to remain at home, if they fit the criteria defined in the medical directive and refer the case back to the palliative home care nurse. Transfer of care back to the primary care team occurs in two manners, first via the phone call to the patient's nurse or physician on-call, and secondly via the addition of a note in the patient's care binder about the care provided by paramedics.

New Medications

The Special Project Palliative Care Medical Directive contains new medications to assist with symptoms for patients with palliative care needs. morphine, hydromorphone and salbutamol will be used for pain or dyspnea. Haloperidol and midazolam will be used for hallucinations or agitation. Haloperidol, ondansetron and dimenhydrinate will be used for nausea and vomiting. Lastly, glycopyrrolate and atropine will be used for terminal congested breathing.

Several of these medications are new to the ambulance service and paramedics and have been authorized to stock and for use by the Ontario MOH. We will monitor their use and effectiveness during the study feedback cycle to determine the usage of each drug and the need for each, using quality improvement methodology and plan-do-study-act (PDSA) cycles.

New Relationships with the Palliative Care Teams

The new processes put in place to serve patients with palliative care needs has opened communications between the home care palliative teams and the paramedics. At the beginning of the patient's palliative care, the HCC coordinator will explain the services provided by the home care team and the availability of the paramedic service for an emergency. The HCC will qualify that the home care team are the first people to call, but that paramedics are available for emergency visits when required. At the end of the paramedic visit there will always be a referral of the paramedic care quoted back to the home care team. This ensures follow up after a paramedic visit and that care is provided by the home care palliative team and the paramedic is only involved for emergency intervention.

Quality Assurance Program to Monitor the Implementation

Monitoring the effectiveness of the program will be important to its success. We have plans in place to view all aspects of our pilot and implementations. We will monitor the following:

1. Determine the effectiveness of the education curriculum
2. Determine the effectiveness of the Medical Directive
3. Determine the effectiveness of the IT solution
4. Determine the effectiveness of changed processes
5. Determine the effectiveness of the overall program
6. Determine patient outcomes

Education

The education package was developed by the lead physician on the OHRI initiative, Dr. Valerie Charbonneau in consultation with palliative care experts in the Ottawa region. The intent of the training was to ensure paramedics had the knowledge and tools to manage complex patients with palliative care needs. These registered palliative care patients require a different approach to assessment and treatment that reflects their goals of care.

The presentation covers the following areas:

Module 1: Introduction

Module 2: Death and Dying

Module 3: Communications

Module 4: Special Project Exemptions

Module 5: Dyspnea

Module 6: Pain

Module 7: Hallucinations and Agitation

Module 8: Nausea and Vomiting

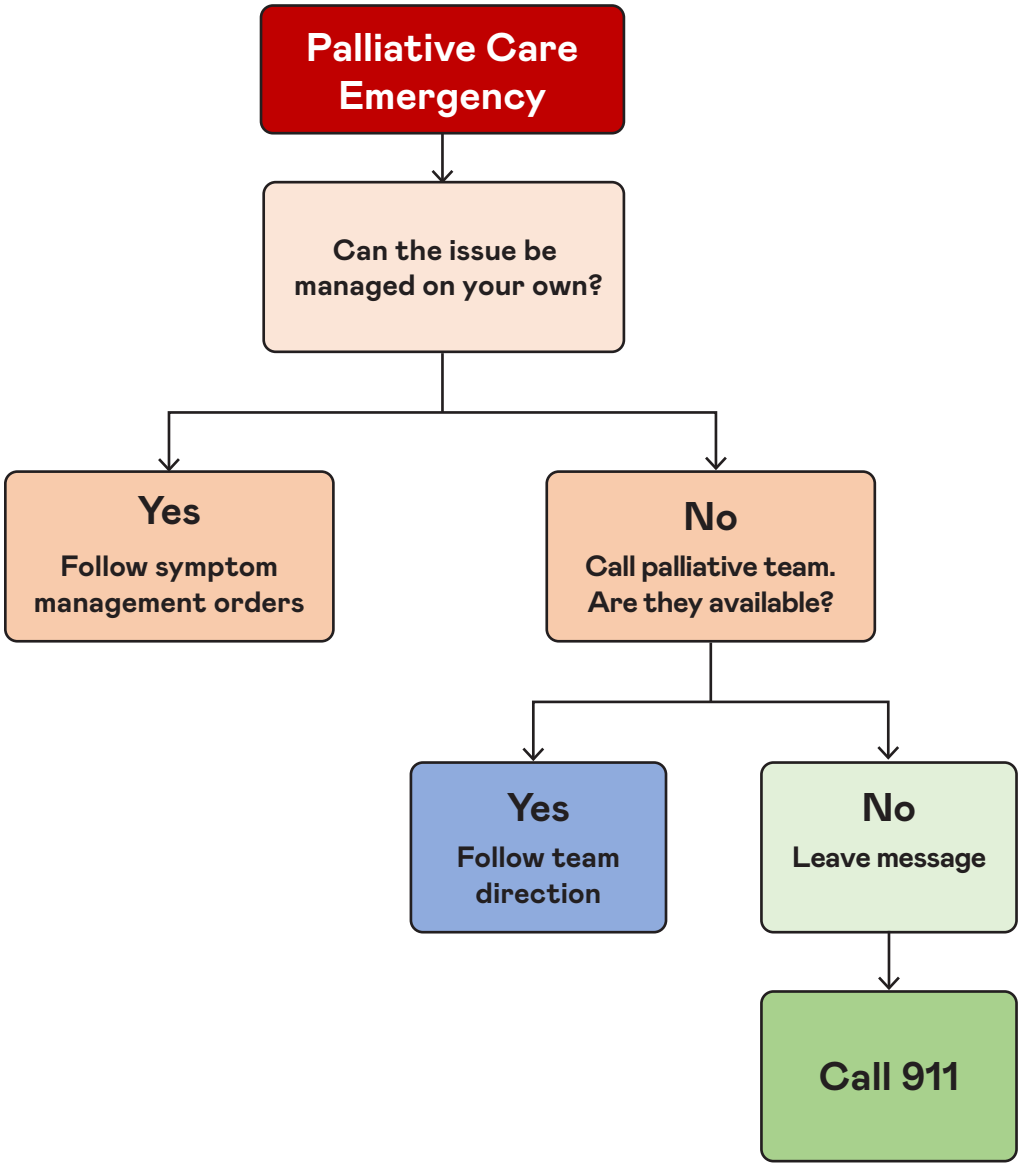
Module 9: Treat and Refer

Module 10: First Nations

Module 11: Overview of a 911 Call for a Patient Receiving Palliative Care

Each module is a separate video introducing the topic and subject. It is followed by questions to ensure an understanding of the content. All training is tracked within the Learning Management Systems (LMS) to ensure the paramedic has completed the models. All Ontario Base Hospitals and Paramedic Services have LMS have similar facilities to provide the training.

Appendix 1 — Education to Patients and Caregivers



Program Model Summary

York Region Paramedic Services (YRPS)

Jurisdictional Context Table

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Model Description

In working with Home and Community Care partners we have developed processes to identify patients receiving palliative care in the community. When these patients call 911, they will be registered on-site with York Region Paramedic Services (YRPS).

Upon arrival and assessment, the paramedics will determine if the presenting conditions are within the scope of the Special Project Palliative Care Medical Directives. If they are, the paramedics will inform the patient and/or SDM about receiving treatment at home as an alternative to transport to the emergency department. If the patient or SDM demonstrate capacity and indicate a preference for receiving treatment at home, the paramedic will obtain consent on the electronic patient care record (ePCR). The paramedics will verify that the patient is receiving care from the Home and Community Palliative Care Team by reviewing the patient home care binder and a valid MOH DNR. The paramedics will then initiate treatment at home and refer to the home and community palliative home care team for follow-up.

If these documents are not available or are incomplete, or if the presenting conditions are not within the scope of the Special Project Palliative Care Medical Directives, the paramedics will proceed as per the usual ALS PCS and BLS PCS directives. These patients may be referred to Home and Community Care through YRPS's Paramedic Referral Program led by the Community Paramedicine group upon patient consent. This will also support early identification of patients in the community that would benefit from a palliative approach taken to their care.

During the treatment, if necessary, the paramedics have an opportunity to consult with the Palliative Care Physician. If the advice given by the Palliative Care Physician is outside of the Special Project Palliative Care Medical Directives, the paramedics will patch to the Base Hospital Physician to obtain authorization to treat. The referral to the home and community palliative care team is done via phone call/voice mail message to the patient's care coordinator. Lastly, the paramedics will also complete a Palliative Care Call treatment summary comprised of a carbon copy form. One copy will be left in the patient's home care binder for an immediate method of communication to the Palliative Care Team and any other visiting health care providers to reference. The other copy will be sent back to YRPS headquarters for review.

If the patient requests transport to hospital at any point during the call, the paramedic will initiate transport and resume care as per the BLS PCS. Special Project Palliative Care Medical Directives can be continued if the patient's goals are to remain in palliation. If the patient/family decides not to follow the palliative care approach, the paramedic will resume care per the ALS PCS and BLS PCS. Any treatment that falls outside of the ALS PCS will be a mandatory patch point.

Patient Rostering

In working with Home and Community Care partners we have developed processes to identify patients receiving palliative care in the community. When these patients call 911, they will be registered on-site with YRPS. Upon arrival, the paramedics will verify that the patient is receiving care from the Home and Community Palliative Care Team by reviewing patient home care binder and a valid MOH DNR. The paramedic will verify patient identity and confirm the documents are complete.

Medical Directive

For this project, Special Project Palliative Care Medical Directives were created, for both Primary Care Paramedics and Advanced Care Paramedics. The Medical Directives were presented and endorsed by the Medical Advisory Committee in May 2019.

When the 911 call is made, paramedics on scene will assess the capacity of the patient or the Substitute Decision Maker (SDM) in cases where the patient does not have capacity. The paramedics will inform them about receiving treatment at home as an alternative to transport to the emergency department and obtain consent for any treatment provided. The consent will be recorded in ePCR.

If neither the patient nor the SDM can demonstrate capacity, paramedics will transport the patient to the emergency department.

The paramedics are asked to document the details of these conversations and their capacity assessment on ePCR.

The ACR codes have been updated by the MOH with coding specific to palliative care treatments. They will be used to describe the actions taken by the paramedics on scene. A copy of the new codes is attached. We are in the process of updating our ePCR with these new codes and the paramedics will receive training on them.

Program Model Summary

Interlake-Eastern Regional Health Authority (IERHA)

Jurisdictional Context Table

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Key Components

With Manitoba in the midst of province wide health system transformation and IERHA being a relatively small service provider in Manitoba, the Paramedics Providing Palliative Care at Home (PPPCaH) service was designed and built considering regional constraints in an environment of significant and changing provincial constraints and assumptions with the intent of rolling out a service that may grow and spread province wide. Please note that the service described here-in and developed to date does not include components unique to our First Nations communities and does not reflect anticipated features associated with a more robust supporting IT services. Planning and design of these components will occur in upcoming phases.

The key components of the Paramedics Providing Palliative Care at Home (PPPCaH) service as designed/built to-date include:

Regional Palliative Care Registry – IERHA's pre-existing regional palliative care program requires the clients seeking palliative care to register for the service. The PPPCaH project leveraged the existing electronic registry and modified it to include a unique identifier called a Special Patient Program (SPP) number.

SPP Number – The SPP number is used by clients/families/care givers calling 911 for emergency palliative care services to self identify to the dispatch center that the call is for a client registered with the palliative care program. It also enables paramedics to confirm registration with the program in order to use the new IERHA palliative care EMS care map.

Changes to Regional Palliative Care Registration process – The PPPCaH service leverages the existing IERHA Palliative Care program registration process to ensure clients registering in the IERHA palliative care program were aware of the PPPCaH service and were provided the tools and support to use it.

In-home tools and materials – All clients are provided with a decal to be adhered to their fridge that includes: their name and SPP #; instructions to self-identify when calling for emergency palliative care; and the location of their in-home documentation. They are also provided a wallet card to be used when not at home.

Changes to workflows of in-home care team – Members of the care team working in the home including palliative care and home care staff were trained to inform clients of the program; the maintenance of the decal; and all in-home documentation including their in-home paper chart and their Emergency Response Information Kit (ERIK).

Changes for Clients when calling for emergency palliative care – All registrants to the IERHA Palliative care program are made aware of the process to call for emergency care when their normal care team is not available. As per the decal on their fridge, they are asked to self identify and provide their SPP number when they call for care.

Dispatch process changes – Staff at Manitoba's rural Medical Transport Coordination Center (MTCC) were trained to document the SPP# and let the responding unit know the SPP# so they are aware of the nature of the call.

Confirmation of Registration – Upon arrival to the scene, SH paramedics working in IERHA are trained to confirm program registration using the decal or wallet card prior to using the IERHA palliative care protocol.

IERHA Palliative Care map – A new EMS care map was developed to be used only with clients registered in the IERHA palliative care program by Shared Health paramedics working in IERHA that have been trained in best practises or providing palliative care at home, as well as the new care map and associated medications and delegated acts. The new IERHA EMS care map introduced 2 new medications and 2 new delegated acts to manage/provide pain and symptom relief including:

- Medications: Scopolamine patches and. Ondansetron
- Procedures: Paramedics will be able to initiate a subcutaneous line for medication delivery if the client has lost their ability to take medication by the oral route. They will be able to provide injectable medication through this route either with medications they carry in their pouch or those that have been prescribed by a primary care provider and provided by pharmacy and left in the clients home. Paramedics will now also be able to flush a Foley catheter that has lost patency. assigned to them.

Trained Paramedics – All active full and part time SH paramedics working in IERHA have been trained in Canada's Pallium LEAP Paramedic, the new IERHA palliative care protocol, associated medications and procedures, as well as related workflow/documentation changes. Most casuals have also been trained with on-going training scheduled to address the remaining medics. Paramedics employed by First Nation communities are also being trained.

Treat and Release – Prior to this service being implemented, paramedics were required to have patients sign a refusal of service if patient did not want to be transported. This service enables paramedics to treat on site and release, without a refusal of service to be signed. This service also supports treat and transport as required.

Information Sharing – Paramedics attending calls for confirmed clients will leave a copy of the paper Patient Care Record (PCR) with the in-home chart to ensure that other in-home care team members are aware of the event and the care provided. Following the call PCRs are faxed to the palliative care program manager for followup as required. Collaboration between programs will increase as information sharing will be two way and multimodal using progress notes in the in home client file, client updates via telephone to case coordinators (if paramedics identify that the client requires increased home care supports or additional equipment to maintain safety in the home), and palliative care staff and via fax to share the PCR.

Benefits/Economic Evaluation – Until such time as electronic PCRs are introduced, information from related paper PCRs is entered into an electronic repository to facilitate, monitoring, evaluation and reporting to support continuous improvement and funding partner reporting requirements.

Paramedic Support – Paramedics may call on-call supervisors who have been provided LEAP Paramedic and LEAP Core training for support. On-call medical support is also available, but we currently do not have access to on-call palliative care physicians. Paramedics have been provided with information to access the online resource MyGriefToolBox.ca and have been taught steps to take including conversation starters to check in with each other post call. All paramedics working in the IERHA have access to counselling via Employee Assistance Program which offers ten free sessions per year. All of these tools were stressed during in-class training sessions.

Sustainability – Several paramedics working in IERHA, including our EMS educator and a Supervisor, have been certified as Pallium LEAP Paramedic facilitators to support the program for on-going training of paramedics.

Inclusion Criteria/Population

- Only clients registered with the IERHA palliative care program with a SPP number can access this service.
- Paramedics must confirm registration prior to using the IERHA Palliative Care protocol.
- Only trained Shared Health paramedics working in IERHA can use the IERHA Palliative Care protocol.

Model Description

Activation: All clients registered with the IERHA Palliative Care program are provided a decal and a wallet card that describes the process to follow to seek emergency care. When they are in crisis and require emergency care, a call would be made to 911 (or their local number in some cases). They are required to self identify and provide their Special Patient Program (SPP) number to the call centre. The call centre will let the responding unit know of the SPP #.

Confirmation of Registration: Once on scene paramedics, can verify registration in the IERHA Palliative care program by confirming the SPP number on the in-home decal, wallet card, and written on the on the envelope of the in home chart.

Providing care using a palliative approach: With the education, tools and conversation tips provided during education sessions Paramedics are able to provide care to clients at home that would otherwise be transported to an acute care center, allowing clients to remain at home longer in the space they want to be with the people they choose surrounding them. Trained paramedics are now able to identify that the client is registered on the palliative care program, access the client' in home chart and emergency response information kit to understand the clients care plan and goals of care wishes. They can provide a palliative approach to care to manage pain and symptoms following a Palliative specific protocol and provide psychosocial support to the client and family. In accordance with the new palliative care protocol, some paramedics can provide added medications to support clients at end of life (scopolamine patches and Ondansetron IV). They can also flush the urinary catheter of clients registered on the Palliative Care Program.

Outside of the palliative care protocol, all paramedics have been trained to slow their work down, make a smaller ripple in the client's environment and take time to listen to the issues affecting the client considering the client as a whole- physical, mental, spiritual. All paramedics can use techniques outside of pharmacological management, such as environmental changes to calm clients, placing a fan at the end of the bed to create air movement, ensuring any hearing or visual aids are provided and assessing cultural or religious beliefs that would be of most importance to the client and family during end of life.

Call Closure: The paramedic on the scene will describe care provided in the PCR and leave a copy of same in the in home chart which is maintained in the client home. They will provide the date and time as well as their name and license number in the progress notes of the chart, phone messaging will be left for clients case coordinator or palliative care nurse. Once back at the station the PCR will also be faxed to a shared fax folder which is access by palliative care staff.

Acceptance of Treatment: the PCR has an area to indicate that the client was treated in place, checking this box does not require the client or family to sign the PCR indicating that they refused transport to an acute care center.

Paramedic Support and Self Care: Beyond the psychosocial support of clients and families, paramedics have also been trained in techniques to support one another after a difficult client encounter and have been provided information on the new my grief toolbox website that was created by virtual hospice. These tools can be utilized in many situations not just those calls that involve a client registered on the Palliative care program.

Overview of Model/Program Implementation

As of Oct 19th, 2020 the service as described herein has been implemented region-wide in Interlake-Eastern Regional Health Authority. Due to COVID-19 impacts, we have had to delay planning/design/rollout to our First Nations communities; as well as implementation of any supporting IT solutions. These components of the service will be addressed in on-going and subsequent phases. As described in the Context documentation, this service was designed and developed considering regional constraints in a provincial environment that is undergoing transformation. It is anticipated that the service will change once we are able to engage with provincial partners to enhance IT services. Spread to the rest of the province would also result in changes to the service with potential access to more robust IT and on-call medical support.

Program Model Summary

Saskatchewan Health Authority (SHA)

Jurisdictional Context Table

Go back to list of Jurisdictions

Program Goals

Primary goals of the Paramedics Providing Palliative Care in the Home program are:

- Early identification of patients wanting to receive a palliative approach to care
- Provide urgent care during symptom crisis and at end-of-life in patients location of choice
- Reduce avoidable transports to the ED and acute care usage
- Foster inter-disciplinary collaboration
- Improve patient and family satisfaction
- Improve paramedic knowledge and comfort when managing patients with life-limiting illness and goals of care that align with a palliative approach

Patient Population and Inclusion Criteria

All patients with a life-limiting illness and have goals of care that align with receiving a palliative approach to care, are eligible for inclusion. Program delivery will vary by region based on geographic location, presence of a palliative or home care program, and availability of paramedic resources.

Inclusion Criteria:

- Patient receiving a palliative approach to care managed by a physician, care team, or both
- Patient presents with goals of care consistent with treatment in place of choice, comfort and symptom management
- Patient and family agree to treatment in the home
- Symptoms are related to the patient's palliative condition
- Follow-up can be arranged to support the patient after the event

Response Models

EMS Paramedics

Paramedics working EMS are primarily responsible for symptom management during a symptom crisis and at end-of-life. Paramedic response is activated through the 911 system by either a patient or family member or a healthcare provider. All care that is provided uses a collaborative care model between paramedics and patient care teams, including:

- Family Physician or Most Responsible Provider
- Palliative Care Physician
- On-line Medical Consult
- Nurse Practitioner
- Registered Nurse with a palliative or primary care team

After event closure, ongoing care is provided by the patient care teams, and the paramedics will clear from the call.

Community Paramedics

Community Paramedics have a broader and more comprehensive role with the palliative care population.
The key components for community paramedicine in this initiative are:

- Early identification of patients wanting to receive a palliative approach to care
- Initiating goals of care conversations
- Patient and family education
- Interim symptom management
- Referring to appropriate and available services

Community paramedics use a holistic approach to ensure that patients and their families are supported in the home. Additionally, the community paramedic teams work closely with primary care providers to provide non-urgent symptom management and address after-hours care needs.

Community paramedics may also work alongside EMS paramedics to provide care during a symptom crisis and at end of-life, and may have the capacity to assume care during prolonged on-scene times and provide follow-up after crisis events.

Program Model Summary

British Columbia Emergency Health Services (BCEHS)

Jurisdictional Context Table

Go back to list of Jurisdictions

Key Components

1. **Assess, See, Treat and Refer (ASTaR) Palliative Clinical Pathway** – the foundational BCEHS policy and practice that permits patients with palliative needs who wish treatment in place, to remain in their homes safely and avoid conveyance to ED.
    - **Clinical Practice Guidelines** – created palliative/end-of-life (EOL) specific clinical practice guidelines for emergency palliative care based on current best evidence, available to paramedics of all license levels, and do not require license adjustments.
    - **Entonox and Proposed Ketamine trial** – for Primary Care Paramedics (PCP) who are unable to administer opioids due to licensing restrictions.
    - **Referral/Follow Up Process** –Electronic patient care records (ePCR) linked to a BCEHS Palliative Patient Portal that automatically notifies health authority (HA) partners and BCEHS Rural Advanced Care Community Paramedics, for patient follow-up (virtual health visit) within 24-48 hours.
    - **Improved Access to Care Plan Information in the Home** – engagement with HA partners to ensure paramedic-access to care plan information (i.e. Goals of Care, MOST, Expected Death in the Home, DNR) and contact numbers available, to satisfy a collaborative approach to care.
2. **911 Call Intake and CliniCall Desk Activation** – introduced 911 procedure that includes a systemic way to identify and appropriately flag palliative/EOL patients for secondary triage assistance by LEAP-trained Paramedic Specialists.
3. **Transport to Alternative Destinations** – Introduced a BCEHS policy permitting alternative transport to hospice beds (where coordinated/confirmed bed is available).

Treatment in Place Enablers

Clinical Governance

1. **Ministerial Orders 146 and 147** – allowed for the expansion of paramedic scope to treat patients on scene without transport to emergency department. The Ministerial Orders (MO) also requires that we follow-up on all patients who are not conveyed to ED.
2. **ASTaR Palliative Clinical Pathway**
3. **BCEHS Palliative Patient Portal** – Facilitates a continuity of care by making available the ePCRs of patients entering into the ASTaR Palliative Clinical Pathway for patient follow-up, thus satisfying the risk mitigation requirement as stipulated by MOs 146 and 147.

Education[1]

Palliative education has evolved as the project has progressed to meet the current needs; this includes transitioning from the LEAP in-person course to the BCEHS-Pallium online course which was implemented in Spring 2020. BCEHS specific clinical education continues to be completed by paramedics to supplement the implementation of the program.

Summary:

a. Clinical Education:
   i. LEAP Paramedic Course
   ii. BCEHS-Pallium Paramedic Online Course – Palliative Care – The Essentials (for PCP), and Palliative Care – Advanced Practice (for ACP).
   iii. Canadian Virtual Hospice MyGrief Toolbox course
   iv. BCEHS Schedule 2 Endorsement course for Administration of Palliative Medications
   v. BCEHS – Subcutaneous Access Maintenance and Administration

b. Operational Education:
   i. BCEHS Assess, See, Treat and Refer (ASTAR) Palliative Clinical Pathway Course
   ii. Palliative/End of Life Standard Operating Guidelines
   iii. BCEHS clinical practice guidelines
   iv. BCEHS alternative destination guideline (Transport to Hospice)

1 See Education Summary document for details of the BCEHS education rollout/methodology.

Inclusion Criteria / Population

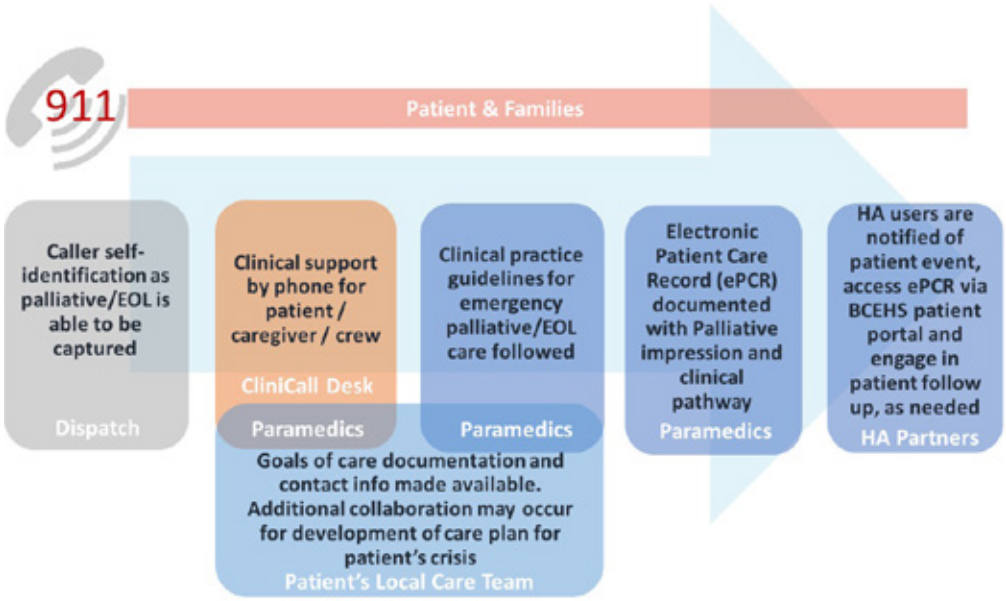
During 911 Call

- Anybody who calls 911 and self-identifies as palliative will trigger the CliniCall Desk activation which may offer immediate clinical telephone support for patients/caregivers.

On Scene

- Patient is diagnosed with an advanced life-limiting illness; OR
- Care is currently focused on comfort and symptom management, rather than curative interventions; AND
- Presenting symptoms are considered related to the patient's palliative condition; AND
- Patient/Caregiver agree to treatment in place

Model Description



Organizational Context

- Number of Paramedics – 3,700+
- British Columbia Land Area – 922,503 Square Kilometers
- Population – 4,648,055
- Regional HAs – Vancouver Coastal, Fraser, Vancouver Island, Northern, and Interior
- Number of Communities – 169
- Number of Ambulance Stations – 188
- Dispatch Centers – Vancouver, Vancouver Island, Kamloops
- Number of Vehicles – 565
- Number of Aircrafts – 11
- Number of Calls Fielded per Year – 595,000

Implementation Methodology

There are two primary components to implementation:

a) Education: This entails offering palliative education to paramedics, which includes the courses listed above or in the Education Summary Document.

b) BCEHS Palliative Patient Portal Onboarding: Local Home Health/Community Health teams must be onboarded to access the BCEHS portal. This involves implementing a specific process for their team in regards to who receives the patient information and how they complete the follow-up contact with the patient. BCEHS then coordinate access to the portal for outlined individuals by creating an IDIR account, providing training on use of the portal and supporting the teams through the launch.

In June 2020, BCEHS launched one pilot community per health authority with the intention of gathering lessons learned, leveraging key successes, and utilizing regional HA palliative leads as champions to scale the program across the province by March 31st, 2022.

Initial plans revolved around expansion to a further five to ten sites, however due to COVID-19 and additional funding received, the project was able to expand even further[2]. There are currently 13 active sites where the project in live, with an additional 47 expansion locations where BCEHS Palliative Patient Portal onboarding is in progress with plans to launch before March 2022.

Additionally, due to the COVID-19 pandemic, the ASTaR Palliative Clinical Pathway has been made available to all Critical Care, Advanced Care and Primary Care paramedics in BCEHS.

2 COVID-19 was a catalyst for scaling the project across the province. The difference between pilot communities and non-pilot communities is the latter does not have local HA support for follow-up to paramedic visits. Instead, during Spring 2020 – Summer 2021 Rural Advanced Care Community Paramedic followed-up with a virtual health visit within 24-48 hours post non-conveyance of a patient with palliative needs. This follow-up is now completed by Paramedic Specialists, as of September 2021.

Education Summaries

Go back to **How to Navigate This Change Package**

Go back to **Education Awareness**

Go back to **Sustainability**

Go back to **Clinical and Operational Education**

From developing their own in-house training, to using commercial and free training products, jurisdictions employed different strategies in developing and delivering education to support the program. The education summaries that follow describe each jurisdiction's education strategy to support the implementation of their program.

- Eastern Health (EH), Newfoundland and Labrador
- Ambulance New Brunswick/Extra Mural Program (ANB/EM), New Brunswick
- Ottawa Hospital Research Institute (OHRI), Ontario
- York Region Paramedic Services (YRPS), Ontario
- Interlake-Eastern Regional Health Authority (IERHA), Manitoba
- Saskatchewan Health Authority, Regina Area (SHA), Saskatchewan
- British Columbia Emergency Health Services (BCEHS), British Columbia

Education Summary

Eastern Health (EH)

Jurisdictional Context Table

Go back to list of Jurisdictions

Paramedics Providing Palliative Care (PPPC) began in the St. John's metro region of Newfoundland and Labrador (NL) in April of 2019. At the end of the 4 year collaborative, Eastern Health (EH) will provide a detailed project implementation plan to the other Regional Health Authorities in the province outlining recommendations on how to launch PPPC in their regions. Therefore, the education plan outlined in this document was specifically tailored for the metro region. The lessons learned from this process will be used to further inform the development of educational recommendations for the rest of the paramedics in NL.

Education Content

The education plan originally designed to provide paramedics in the St. John's metro with palliative care training consisted of two components: Pallium LEAP Paramedic training and self-directed in-house training on the new Palliative Care Guidelines that were developed to support implementation of this project.

LEAP Education

To provide education on palliative care for paramedics, EH offered the Pallium LEAP Paramedic course to all paramedics working in the St. Johns metro and all Online Medical Control Physicians (OLMC) working in NL. LEAP consists of an 8 hour online component and an 8 hour in-class session covering topics such as:

- Taking ownership in palliative care
- Decision making and Advance care planning
- Pain, dyspnea, psychosocial distress, nausea and vomiting, and delirium in Palliative care
- Palliative Emergencies
- Last days and hours of life

Palliative Care Guidelines and Protocols

In collaboration with the Office of the Provincial Medical Director and the Palliative Care Unit located at the Miller Centre, EH developed and implemented Palliative Care Guidelines in addition to the existing Primary Care Paramedic (PCP) and Advanced Care Paramedic (ACP) clinical protocols. The 2 sets of guidelines were designed to give paramedics in the metro the ability to treat patients in the home independently based on the symptoms exhibited by the patient.

The guidelines included treatment options for the following:

** Please note the treatment options within the guidelines may change based on the scope of paramedic they were written for (e.g., PCP vs. ACP)*

General approach to palliative care	Palliative Dehydration
Palliative Care destination guidelines	Palliative Secretions
Palliative pain	Terminal Hemorrhage (ACP only)
Palliative nausea and vomiting	Pain Scale
Palliative breathlessness	Palliative Performance Scale
Palliative Delirium/agitation	Edmonton Symptom Assessment System (ESAS-r)
Palliative Seizures	Definitions surrounding DNRs
Palliative Constipation	Medication Formulary

Additionally, education packages were designed and distributed to cover the new components of care added to the Palliative Care Guidelines. These were designed by the Office of the Provincial Medical Director and the Project lead. Education models included information on:

Advanced Care Paramedic (ACP)

- Medication Module: Morphine and Hydromorphone
- Medication Module: Scopolamine
- Medication Module: Haldol
- Urinary Catheterization
- Subcutaneous Port Insertion

Primary Care Paramedic (PCP)

- Medication Module: Diphenhydramine
- Medication Module: Metoclopramide
- Subcutaneous Port Insertion

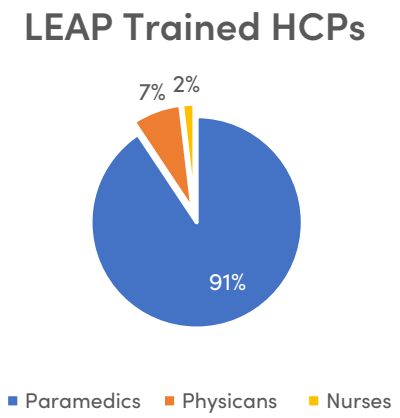
Specific education was also developed for the Medical Communication Officers (MCO) working to dispatch ambulances in the Medical Communications Centre (MCC). This education was tailored to the operation of the Computer Aided Dispatch system (CAD) and the creation of events for palliative patients enrolled within this program.

Implementation

LEAP Education

Prior to the launch of Paramedics Providing Palliative Care, Pallium LEAP Paramedic had not been offered in NL. Therefore, in collaboration with Pallium EH began LEAP training by offering a 1 week blitz of training sessions. The blitz week occurred 3 months before the scheduled launch of the program.

In order to become self-sufficient in offering LEAP Paramedic, a Master LEAP facilitator travel from Ottawa to train LEAP facilitators and Master LEAP facilitators in the area. LEAP facilitator training was offered to a variety of health care providers (HCPs) in NL, including 3 ACPs, 5 registered nurses, and 2 physicians working within EH. Those who lived outside the metro region were required to travel for this in-person training. LEAP Master facilitator training was also offered to 4 HCPs living in various regions across the province. These 4 now have the ability to train other LEAP facilitators, which would be needed to offer LEAP Paramedic provincially.



While in NL, the Pallium Master facilitator also worked with new EH facilitators to fully certify them by offering our first 4 LEAP Paramedic sessions.

After the blitz week, a number of LEAP Paramedic sessions were scheduled over the 3 months leading up to the launch of the program. It was planned to have 50% of all ground paramedics trained by April 1 2019, a goal which was accomplished. All LEAP sessions were structured to have one paramedic facilitator and one content expert facilitator (e.g., a palliative care practitioner such as a nurse or physician with general palliative care knowledge) as per Pallium requirements.

LEAP was made mandatory for all paramedics working on the ground in the metro but was also offered to the MCOs working in our MCC, nurses involved with the program, and to all of our Online Medical Control Physicians.

Paramedics were required to complete the online component a head of time and once completed, they could sign up for one of the in-class sessions being offered. The participating paramedics were asked to originally come in on their day off. Where possible, paramedics working were replaced so they could attend the training day. There was a fee of $60.00 for each person registered for LEAP that was paid for by EH. In addition, the paramedics were compensated with straight time pay for the online training and overtime where applicable for the in-class. Training continued after the program launch and is still ongoing.

As highlighted in table at right, there was a total of thirteen LEAP Paramedic training sessions delivered during the first year of implementation with a total of 107 providers trained including 97 paramedics, 8 physicians, and 2 nurses.

Number of paramedics that **completed** palliative care training as of April 2020	Number of paramedics **eligible to participate** in palliative care training as of April 2020
97	**119**

Palliative Care Guidelines and Protocols

Education on the Palliative Care Guidelines consisted of a combination of self-directed and in-person training. PCPs and ACPs were sent the guidelines and additional education modules listed above via email and were asked to independently review them. There was no quiz or examination associated with these modules. Two modules were also accompanied by hands on training. Both catheter insertion and subcutaneous port insertion required the paramedics to watch a demonstration and then repeat the demonstration on models specifically designed for these skills.

The education for MCOs on the new processes associated with Paramedics Providing Palliative Care was designed to assist them with navigating the CAD and Special Patient Program linkages. Education materials were emailed out and hands on training was provided by in-house personnel. MCOs were also given access to a test version of the CAD to practice on linking patients in the program to CAD events.

LEAP PARAMEDIC TRAINING

Date of Session	Participants
February 18, 2019	11
February 20, 2019	4
February 21, 2019	10
February 22, 2019	7
March 7, 2019	9
March 19, 2019	22
June 13, 2019	6
July 29, 2019	3
August 9, 2019	3
August 15, 2019	3
October 10, 2019	6
December 3, 2019	9
December 12, 2019	14
TOTAL	107

Sustainability

LEAP training and palliative care guideline education has since been added into the orientation plan for new staff and EH is currently exploring the possibility of having it added to the PCP/ACP curriculum at the college level.

Paramedic comfort and confidence in providing palliative care is assessed using a number of surveys. Paramedics are asked questions to determine both their comfort and knowledge of providing palliative care immediately pre and post LEAP as a part of Pallium's evaluation. In addition, in collaboration with the Newfoundland and Labrador Centre for Health Information (NLCHI) an in-house survey was developed to capture paramedic confidence in delivering palliative care during early implementation and will be assessed on an annual basis throughout the 4 year collaborative. From the information captured, numerous areas have been identified to support paramedic comfort and confidence, including additional education on:

- Opioids (e.g., how to select the appropriate medication/dosing, how to treat pain in palliative patient, using adjunctive therapies etc.....)
- Managing nausea (e.g., how to selected the appropriate medications)
- Palliative emergencies (e.g., when you transport vs. treating at home, what constitutes a palliative emergency)
- Identifying transition to end of life
- Who is appropriate to refer to palliative care

Based on this feedback, EH is continuing to collaborate with the Palliative Care team and the Office of the Provincial Medical Director to develop and deliver supplemental education to cover these topics. EH plans to offer a Paramedic Palliative Care education day yearly that will be an optional in-person event paramedics can sign up for if interested. The education day will be redesigned each year based on paramedic feedback and will be led by one of the palliative care physicians.

In June 2020, program delivery was adapted to better reach residents living in personal care homes and long term care facilities. In order to ensure paramedics were prepared to provide care to older adults, a 3 day education plan was created for select advanced care paramedics who were interested in specializing in palliative care. This education plan consisted of both self-directed and in-class education, covering a variety of topics such as:

- Continuing education on pain management, Palliative Care Performance Scale, Advanced Care Planning, and death in the home for palliative patients

- Caring for the older adult with focus on:
  - Enhanced fall assessment
  - Interpretation tests
  - Clinical Assessment of Older Adults/Atypical presentations
  - Cognitive impairments
  - Pharmacology
  - Caring for simple wounds
  - End of life and symptom management
- Laboratory testing
- Inter-disciplinary care and community program orientation

Key Learnings

Training was originally conducted in this manor due to the small amount of personnel that were being trained in the St. Johns metro region. The cost of LEAP was covered with the funding secured through the Partnership. Methods already familiar to paramedics were utilized in palliative care education plan, for example providing modules to paramedics electronically. Due to the geography of the province and the scheduling difficulties associated with in-class education, most provincial paramedic education is provided electronically and therefore this method was previously familiar to the paramedics in the metro. We identify however that there are some benefits and limitations to the way we conducted palliative training, these are described below:

Benefits

- LEAP Paramedic was developed by paramedic content experts.
- Paramedics felt LEAP education was good introduction into palliative care and enjoyed the online learning component.
- LEAP provides access to previously developed learning materials.
- Pallium provided measurement tools for gaging paramedic knowledge, skill, and confidence.

Limitations

- Trained 50% of paramedics prior to implementation of program, leading to a limited number of practitioners available to answer palliative calls.
- Scheduling difficulties/coordinating schedules created challenges in hosting LEAP.
- Cost of LEAP plus paramedic compensation.
- Education isn't customized to NL HC delivery.
- Paramedics wanted more details and hands on training (medications selection, dose calculation, catheterization, and difficult conversations).
- Limited number of facilitators and access to palliative content experts was challenging.

Education Summary

Ambulance New Brunswick/Extra Mural Program (ANB/EM)

Jurisdictional Context Table

Go back to list of Jurisdictions

- LEAP Paramedic program:
  - Initial cohort of ANB paramedics / ANB Operations Managers (~1,000 trained)
- LEAP CORE program:
  - Provided to Extra Mural Program (EMP) front line staff who had not yet taken this training (majority already trained)
- ANB palliative education "bridging" program
  - All ANB paramedics who were not part of the initial cohort; this includes new hires / paramedics returning from leave
  - We developed this program to "bridge" the gap until such time as graduates of paramedic educational programs have attained these competencies at entry to practice
- Operational education (policies, processes, etc.)
  - All ANB paramedics / ANB Operations Managers
  - All EMP front-line health care providers, Managers and staff
  - All ANB Emergency Medical Dispatchers (including new hires) and Managers
- Clinical education (palliative specific interventions, clinical guidelines/protocols)
  - All ANB paramedics (PCP, ACP) / ANB Operations Managers
- Informative project brochures, "1 pagers" / infographic
  - Patients, families and caregivers
  - Physicians
  - Allied healthcare providers
- The Paramedic Association of New Brunswick is in the process of developing a Competency profile for paramedic palliative education. It's expected that this will become a requirement of accreditation for all NB accredited paramedic programs

Implementation

- Initial education sessions were delivered in the classroom format
- Ongoing education / updates are provided through the EM/ANB Learning Management System (Source / Itacit)
- Communication of project progress has been made via the EM/ANB newsletter In The Loop which is sent out to the EM/ANB and MHSNB team via e-mail on a regular basis
- The following groups have been / are being trained:
  - ANB Paramedics (PCP, ACP)
  - EMP Healthcare Providers
  - MHSNB Managers (EM/ANB)
  - MCMC Dispatchers and Managers
- Palliative education was provided by the ANB Training and Quality Assurance team (TQA), using our team of Field Training Paramedics (FTPS). The LEAP Paramedic course was delivered by an Advanced Care Paramedic FTP along with an EMP RN experienced in the provision of a palliative approach to care.
  - LEAP Paramedic facilitators were required to complete Instructor training, including a mentorship / team teaching first course with an Instructor-Trainer
  - All FTPs who delivered the training also took part in a mandatory Train the Trainer session for EM/ANB content
- ANB paramedics / Managers were trained following development of the EM/ANB "model of care" and all related policies and procedures and prior to project launch.
  - A total of 48 sessions were held throughout the province over approximately two and a half months (October 2019 to mid-December 2019)
  - Sessions were offered in either French or English
  - Project updates have been communicated through the EM/ANB newsletter (distributed via e-mail and Intranet)
  - Ongoing education has been provided though e-learning / Source (Itacit) LMS site

- Implementation of this education followed our usual plan for regularly scheduled paramedic classroom in-service sessions:
  - One session per day per Region (North, South, East, West); this is a total of four sessions per day (maximum)
  - Paramedics attend training sessions on their days off and are generally paid at the OT rate (exception: casual staff)
  - This was required education for all ANB paramedics; as a result, the training is also provided as part of our "Return to Practice" program for all paramedics returning from a period of leave as well as to all new hires
- Clinical education included the addition of two medications to the PCP scope of practice (Ketorolac and Ondansetron)
  - This education was provided to all ANB Primary Care Paramedics and Managers at the Fall 2020 in-service training sessions (in person)

Sustainability/Refresher/New Employees

- Any new / refresher content as well as project updates were provided to paramedics either through e-learning or through "clinical updates" provided at regularly scheduled in-service training sessions and EMP staff meetings
- Palliative education is currently included as part of the ANB New Employee Orientation (NEO) program
- Paramedics returning from leave who otherwise missed the palliative education sessions are provided with this education as part of the ANB "return to practice" process
- ANB is working with PANB towards including palliative competencies as part of post-secondary curriculum

Key Take-Aways or Learnings

- Palliative education should closely match practitioner scope of practice; the LEAP Paramedic program at the time was geared more towards the Advanced Care Paramedic, rather than the Primary Care Paramedic.
- Given that our project involves a collaborative approach to palliative care, it was beneficial to have the education sessions delivered by an experienced RN along with an Advanced Care Paramedic.
- Don't underestimate the need for communication; very important to identify effective communication strategies, and to communicate to the front line team on a regular basis.
- This project has clearly been the first stepping stone in developing a more collaborative practice among EMP home healthcare providers and ANB paramedics.

Education Summary

Ottawa Hospital Research Institute (OHRI)

Jurisdictional Context Table

Go back to list of Jurisdictions

The Ottawa Hospital | L'Hôpital d'Ottawa

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u Ottawa

The goal set out for the Ottawa Hospital Research Institute (OHRI) is to introduce paramedics to palliative care to the Ambulance Service Operators (ASO's) in 27 regions in the Base Hospital territories of Regional Paramedic Program for Eastern Ontario (RPPEO), in Health Sciences North (HSN - Sudbury and north) and in Centre for Paramedic Education and Research (CPER - Hamilton and Niagara area). This means training to over 3,300 paramedics. The long-term goal of the program would be that the training can be applicable to all Base Hospitals in 7 territories across Ontario (10,000+ paramedics).

The first objective of the project was to develop the Medical Directive (the clinical guidelines for Ontario paramedics) for Primary Care Paramedics (PCPs) and Advanced Care Paramedics (ACPs). This was developed and approved early in the project so that the training could focus on the elements of palliative care and the actions prescribed in the Medical Directive.

We established a palliative care overview that could be delivered online in about 4 hours. It has been delivered to over 2,800 paramedics. It covers each symptom presented by a patient (pain and dyspnea; hallucinations and agitation; nausea and vomiting; end-of-life congested breathing) and the recommended treatment by a paramedic. The training is aligned with the Ontario Palliative Care Competency Framework and has been reviewed by provincial palliative stakeholder as well as authorized by the education subcommittee of the Medical Advisory Council (MAC) for distribution to all Ontario paramedics.

Content

The education package was developed by the lead physician on the OHRI initiative, Dr. Valerie Charbonneau in consultation with palliative care experts in the Ottawa region. The intent of the training was to ensure paramedics had the knowledge and tools to manage complex patients with palliative care needs. These registered palliative care patients require a different approach to assessment and treatment that reflects their goals of care.

The presentation covers the following areas:

Module 1: Introduction

Module 2: Death and Dying

Module 3: Communications

Module 4: Special Project Exemptions

Module 5: Dyspnea

Module 6: Pain

Module 7: Hallucinations and Agitation

Module 8: Nausea and Vomiting

Module 9: Treat and Refer

Module 10: First Nations

Module 11: Overview of a 911 Call for a Patient Receiving Palliative Care

Each module is a separate video introducing the topic and subject. It is followed by questions to ensure an understanding of the content. The training models are compatible with all Learning Management Systems (LMS) and completion can be tracked, Ontario Base Hospitals and Paramedic Services have LMS facilitate to provide the training.

Implementation

Education was originally developed as an in-person session for the Ottawa Paramedic Service and was delivered in-person to all 480 paramedics in October 2019 to February 2020. With the COVID Pandemic, we had to re-plan our distribution and immediately started to develop the online program. The online models were completed and the RPPEO used this material in there fall 2020 Continuing Medical Education (CME). 1,350 paramedics in the eastern region completed the course. The same online course was delivered to CPER and HSN. HSN has completed the course in June 2021 (800 paramedics). CPER is delivering training to the paramedic services in their region and will complete in December 2021.

Other paramedic services in Ontario have demonstrated an interest in the palliative training and have been provided with the online models. Discussions have begun at the provincial level to determine the minimum standard for palliative care training in Ontario to ensure a standard approach across the province.

Sustainability / Refresher / New Employees

The availability of the online version of the palliative care education will serve the sustainability of this training. It is stored and available for download on the OBHG server (managed by the education subcommittee of the Medical Advisory Committee) for ongoing viewing and distribution to other base hospitals.

We have introduced the program to colleges in Ontario via the Algonquin College program leader. The has introduced it to all 18 colleges and 5 of them have decided to offer the online training to their students. We hope this roll-out will continues and will eventually become part of the overall education for paramedics ongoing.

Education Summary

York Region Paramedic Services (YRPS)

Jurisdictional Context Table

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Training and Education

LEAP Core was provided to some of the staff, which includes all the Superintendents, Platoon Leaders, Education Leads, Community Paramedics and 16 front line paramedics.

The education leads developed the curriculum for training and education for the entire service which is based on the Ontario Palliative Care Network Competency Framework, as well as, the content developed by Dr. Valerie Charbonneau to train the paramedics in Ottawa. Patient consent and goals of care are heavily stressed in our education program. Paramedics are being taught to obtain consent on-scene and to continually confirm/obtain consent for each intervention used. The paramedics are trained and asked to document all on-scene events into the Electronic Patient Care Record (ePCR) system. The education is broken down into the following three phases:

Phase 1: Jan-Feb 2020

- Introduce Palliative Care (What is Palliative Care and What is not Palliative Care)
- How a call could change
- Palliative Care concepts to consider
- Introduce the draft directives – short case study rounds
- In-depth Dyspnea and Pain directive learning through case scenarios

Phase 2 and 3 were planned from March to June 2020, however due to COVID-19, the delivery of these phases was delayed. York Region was hit hard by COVID-19 and the it was decided to delay the implementation of the program to 2021. During this time, online content was created from the original curriculum. During the summer of 2021, 16 lead paramedics completed the online content. In fall 2021, in partnership with Base Hospital Central East Prehospital Care Program, education was delivered to the remaining service.

Education Summary

Interlake-Eastern Regional Health Authority (IERHA)

Jurisdictional Context Table

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Front Line Paramedic Training

- IERHA adopted the Pallium LEAP Paramedic program for the core material for our in-house 1 day classroom course.
- IERHA trained 2 IERHA paramedics (our EMS Educator and a Supervisor) as Certified Pallium LEAP Paramedic facilitators to ensure sustainability of training. We also trained multiple paramedics in other regions as certified facilitators in other regions to encourage spread. Paramedics trained as LEAP paramedic facilitators attended LEAP CORE, LEAP Paramedic and LEAP Facilitator training followed by the completion of multiple coached training sessions.
- All training was planned and facilitated by the EMS educator working in IERHA.
- Prior to the 1 day in-class training, all paramedics were given training packages to read about the new medications and procedures and asked to complete the 6-8 hours of Pallium online training.
- The 1 day in-class course was lead by a certified LEAP paramedic facilitator and certified LEAP CORE facilitator (who happens to be the manager of our palliative care program) and included the following:
  - **IERHA Palliative care program review** — the components of the IERHA Palliative care program and how care is currently given in the home by palliative and home care staff.
  - **In-home Documentation** — discussed the documentation used by patients/caregivers in this region involved with the program.
  - **New EMS palliative care map** — discuss the new care map (protocols) created specifically for the PPPCaH service. This discussion reviewed the guidelines for accessing specific levels of care, medication administration, documentation, and changes to how ambulances may be dispatched to Palliative care clients needing assistance.
  - **New medications/procedures** — two new medications were added to our formularies as well as two new procedures that our paramedics are able to use in the field.
    - Medications: Scopolamine patch and Ondansetron.
    - Procedures: Urinary catheter irrigation and Subcutaneous line initiation with medication administration.

- **Pallium LEAP Paramedic curriculum** — a blended learning course for paramedics and Emergency Medical Service professionals that teaches the essential practical knowledge, attitudes, and skills to provide a palliative care approach on-site LEAP Paramedic is taught by local paramedic experts and experienced palliative care practitioners including:
  - 6–8 hours of online learning
  - 6 hours of case-based face-to-face discussions
  - Interprofessional approach
  - Built by Canadian palliative care experts
  - Course materials include a downloadable manual and the Pallium Web App

  Upon completion of LEAP Paramedic, learners should be able to:

  - Identify patients who could benefit from a palliative care approach earlier in the illness trajectory
  - Describe a framework to assist in making clinical decisions related to palliative and end-of-life care
  - Assess and recommend an initial treatment plan for pain; delirium; dyspnea; and nausea, vomiting, and hydration
  - Recognize signs and symptoms of palliative care emergencies
  - Perform essential discussions related to palliative and end-of-life care in daily work
  - Recognize signs of imminent death and describe your role in preparing patients and families for last days and hours

  Modules include: Taking Ownership, Decision Making and Advance Care Planning, Pain, Dyspnea, Nausea, Vomiting, and Hydration, Palliative Emergencies, and Psychosocial Distress

  As we progressed through the Pallium material we further discussed medication use and took time to discuss when we would want/need to use the medications specific to Palliative care.

- **Hands-on Training** — After the Pallium material students were then given directed “hands on” training of the new skills of starting a Subcutaneous line and administrating medication through the subcutaneous route. They were also instructed on the process of flushing a urinary catheter in accordance with the already existing IERHA policy/procedure guidelines with the understanding that these new skills (subcutaneous therapy and urinary catheter irrigation) are to be used only for palliative care patients registered within the IERHA.

Paramedic Supervisor Training

Supervisors attended the same training as frontline medics and also attended Pallium LEAP CORE training in order to be better equipped to support paramedics.

- **Pallium LEAP CORE curriculum** — an interprofessional course that provides health care professionals with an in-depth learning experience on essential skills and competencies of the palliative care approach. LEAP Core is taught by local experts who are experienced palliative care clinicians and educators including:
  - Two days, 14 hours in total
  - Face-to-face learning with group discussion and case studies
  - Interprofessional approach
  - Built by Canadian palliative care experts
  - Course materials include a downloadable manual and the best-selling resource, the Pallium Palliative Pocketbook

  Upon completion of LEAP Core, learners should be able to:

  - Describe the importance of self-awareness when providing palliative and end-of-life care
  - Identify patients who could benefit from a palliative care approach earlier in the illness trajectory
  - Assess and manage pain; delirium; gastrointestinal symptoms, hydration,
  - and nutrition; and respiratory symptoms
  - Promote and undertake Advance Care Planning discussions
  - Develop plans to address spiritual, religious, or psychosocial needs
  - Initiate essential discussions related to palliative and end-of-life care in daily work
  - Prepare patients and families for last days and hours
  - Understand and apply the criteria to be met before initiating palliative sedation

  Modules include: Being Aware, Taking Ownership, Decision-making, Gastrointestinal, Nutrition, and Hydration, Advance Care Planning, Delirium, Respiratory Symptoms, Psychosocial and Spiritual Care, Grief, Essential Conversations, Last Days and Hours, Palliative Sedation, Resources and Quality Improvement.

Dispatch Centre Staff Training

Staff at Medical Transportation Coordination Center (MTCC) which services IERHA and other rural regions in Manitoba were trained internally to collect the Special Patient Program (SPP) number from caller self identifying and to provide it to the dispatched unit.

Palliative Care and Home Care Staff Training

All Palliative and Home Care staff were trained in the following:

- New processes to maintain the Palliative Care Patient referral registry including generation of the Special Patient Program (SPP) number
- Processes to complete, distribute and maintain the fridge decal to be located on client's fridge, including patient information, SPP number, and location of ERIK and in home chart
- Maintenance of in-home documentation including the addition of the SPP number on the envelop which houses the in home client paper chart
- Identification/interpretation of paper Patient Care Records (PCRs) left by EMS in the in home chart
- Processing of PCRs faxed to the palliative care program folder for review/followup
- Ramping up the process to ensure all forms required for EMS to provide care within the client's goals of care are current, inside the Emergency Response Information Kit (ERIK) and located as indicated on the decal.

Implementation

Paramedic Training

All active EMS personnel were trained. We started our training by educating all the managers and supervisors in both LEAP paramedic and LEAP core to give them an extended education base to better assist our paramedics in the field. Once this was completed we began training all of our active duty front line Paramedics.

All Paramedic levels were trained from EMR to ACP. For all staff this education was made mandatory and all full time staff were assigned a class date to attend. For casual staff they were notified that this was mandatory training and were able to pick dates based on personal availability. As this was mandatory training, staff were paid for their time in class.

The class day was delivered by EMS education personnel alongside a palliative care nurse- Tammie-Lee Rogowski RN, CHPCN, CCHN who is a Leap Canada Master Facilitator and Coaches physicians, nurses as well as paramedics in the delivery of Leap courses both in person and online. The EMS education personnel from different regions of the province completed their facilitator training then were able to be signed off as Facilitators of Leap Paramedic. The majority of the training of front line medics in IERHA was done by IERHA palliative care and EMS Education department personnel. The initial training plan included training all active paramedics in just under three months but was halted due to COVID in March of 2020 and resumed with smaller size classes in September 2020.

Training resumed and continued for 1 month for the remainder of paramedics prior to the Oct 19th "go live To refresh the initially trained paramedics, materials were reviewed with EMS staff via online resources (informational booklets on new medications, documentation and clinical guidelines, and procedures) and practical hands on skills (Subcutaneous lines/urinary catheter irrigations) were reviewed in skills training days available to all staff.

Dispatch Centre Staff Training

Training of Manitoba's Medical Transportation and Communication Center (MTCC) staff was delivered in house embedded in their exiting on-going training curriculum.

- Palliative care and home care nurses, case coordinators, resource coordinators, scheduling clerks, home care attendants and program managers as well as patient representatives and clients were all required to attend training.
- Training was delivered by the regional manager of the palliative care and home care nursing programs online via MS Teams. Training materials and content is stored on the IERHA home website accessible for staff and public.
- Three online virtual sessions were held to inform the home care staff of launch, share changes within the program (SPP #, decal, EMS leaving PCR in the chart) and presented via Power Point Presentations.
- Before launch home care and palliative care staff we informed of the project, throughout launch patient representatives were brought on and informed and information was shared publicly. Ongoing communication with project updates were shared amongst the above mentioned home care staff and pt advisors
- Education was implemented this way as our 16 home care offices are spread across the region. Online training decreases travel and maximizes efficiency and utilization of time spent working and providing care to clients.

Sustainability/Refresher/New Employees

Palliative Care and Home Care Staff Training

Ongoing check-ins are being made with nurses and social workers to confirm processes while collecting feedback about the service and processes to support continuous improvements

Relate processes are embedded in orientation of new hires for nurses and managers and home care assistants.

Palliative Care and Home Care Staff Training

For ongoing training, the Leap Paramedic online modules remain online and accessible for all paramedics that have taken the training skills sessions are still accessible for Paramedics to maintain competency in practical skills. All participants were given information binders which they were able to keep for future review. New hired paramedics are required to attend the 1 day in-class training including the pre-class review of materials.

EMS education department will be sending out monthly ongoing online training to help paramedics maintain competencies within this program. Live online refresher training is being developed to enable help paramedics to review the actual skills/procedures used when caring for these patients.

The Paramedic Association of Manitoba (PAM) is actively working with paramedic training bodies to seek inclusion in their curriculum.

Key Take-Aways or Learnings

Once we had the training program rolling it was a good experience overall. Many of our Paramedics enjoyed the different format of teaching as it was a much more interactive form of learning than what they are used to. Paramedics also liked the dynamic of being taught by both a Paramedic and a nurse as it gave different perspectives to their questions as well as a more diverse pool of experience to learn from. Lunch was provided which was very popular as well as the binders given to every paramedic in class filled with all the course reference material and paper copies of the regional EMS specific material for future reference.

The biggest challenge was ensuring people completed their pre-classroom training. Many paramedics were not overly eager to do training on their own time even though they were given permission/ strongly encouraged to do review pre-course material while on shift. Constantly checking to make sure people enrolled and completed their material online was a daily struggle that would sometimes result in a supervisor needing to talk with staff members to ensure they completed their pre-course material on time.

The biggest success during the education process was seeing a great change in perspective in our paramedics towards palliative care. Some front line workers had somewhat of a negative attitude towards care of these patients as their past experiences were usually very difficult situations with little resources available except transport (which many patients/family members did not want). After the class day many paramedics had a different opinion towards care of this patient demographic, especially after being able to discuss their concerns/difficulties in previous cases in class and were given more tools to assist palliative patients.

Education Summary

Saskatchewan Health Authority (SHA)

Jurisdictional Context Table

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Initial implementation of palliative care education was completed in Regina and will be replicated throughout the remainder of the province's participating EMS services. The mode of delivery will be dependent on the geographic location of the EMS service and available resources.

Current Education Delivery Models

LEAP Paramedic

LEAP Paramedic is the primary education source using the current mixed model format, and it has been trialed using virtual delivery. Based on the LEAP post-course feedback, the preferred model is the mixed model format; with the understanding this may not be feasible in some rural and remote areas.

Online Modules

In addition to LEAP, additional areas were identified that required further education. Protocol and process specific education was developed by a working group consisting of advanced care paramedics. The additional areas identified were:

- Advanced Care Planning
- Cultural Competence and Sensitivity
- Prognostication
- Protocols – Palliative Treat and Refer, Opioids for Breathlessness, Palliative Pain Management.
- Medical Information
- Drug Reference Cards
- Symptom Assessment Scales
- Delirium

- Subcutaneous Medication Administration*
- Dispatch Communication*
- Identification of New Clients*
- EMS Process Map*

** Education will vary depending on the area of EMS service and provider level*

Practical Application

Offered as an elective, paramedics are provided the option to partner with a palliative care provider in the community and acute care setting.

Stakeholder Education

- Provided informative letters to unions and provincial Primary health Care and EMS teams, with encourage discussion.
- Quarterly updates to project teams, leadership, SCoP, and Ministry of Health.
- Media releases using local and health authority news sources.
- Brochures for patients and their families/caregivers.
- Regular engagement of Patient Family Advisors and implementation of patient and family satisfaction surveys post paramedic encounter.
- Provide physicians with a narrated PowerPoint presentation about the program.
- Provide presentations at leadership and team meetings for Primary Health Care networks and teams.
- Provide regular program information updates, success stories, and outcomes to the associated EMS services and health care employees in person, at huddles and virtually.
- Continuous engagement with the Saskatchewan College of Paramedics regarding palliative care protocol development.
- Engage with paramedic students attending provincial education institutions to promote Paramedics Providing Palliative Care in the Home; and, enhance knowledge of the evolving role of paramedicine in the province.

Planned Future State

Palliative care education delivery

- To ensure a sustainable palliative care education model, the development of a paramedic online palliative care course to replace LEAP Paramedic (scheduled for implementation January 2022).
- Co-development of palliative care education with provincial education institutions to implement into applicable paramedic programs.
- Added to ACP curriculum starting fall 2021 semester.

Scenario-based learning

- Inter-disciplinary scenario-based learning between paramedics and palliative care teams to facilitate a collaborative approach to care and communication.

New employee orientation

- Incorporate online palliative care education modules into new employee orientation sessions (started effective spring 2021 for participating program areas).

Continuing education

- Potential Palliative Care Telehealth Grand Rounds.
- Continuing palliative care education integrated into ongoing continuing medical education schedules.
- Updates provided when changes to protocols or clinical practice guidelines occur.
- Added as a topic at Provincial EMS Q&A sessions to provide updates and education opportunities.

Education Summary

British Columbia Emergency Health Services (BCEHS)

Jurisdictional Context Table

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What was Developed or Used for Education?

Competency Profile

- Development of the BCEHS Paramedic Competency Framework-Paramedic Approaches to Palliative Care (attached).

Clinical Education

- Foundationally began with Pallium Canada's *LEAP Paramedic* course for ACP, and some PCP paramedics, included in initial prototype communities (2-day blended online/in-person course).
- In 2020, we collaborated with Pallium and co-created BCEHS-specific online paramedic courses – *Palliative Care – The Essentials* (for PCP), and *Palliative Care – Advanced Practice* (for ACP). This enabled the education to be offered to more paramedics across the province and to reflect paramedic practice in BC, allowing for:
  - Recognition of BCEHS specific response considerations such as geography, local resources and PCP and ACP scope of practice.
  - Incorporation of BCEHS Palliative Clinical Practice Guidelines directly into case studies to allow learners an opportunity to work through treatment plans that are BCEHS specific.
  - Cases focused on pain, dyspnea, palliative emergencies, delirium as well as nausea/vomiting /hydration, and included information on advance care planning as well as documentation specific to BC such as EDITH (Expected Death in the Home) and MOST (Medical Order for Scope of Treatment) forms.
  - PCP and ACP versions designed to ensure content was within scope of practice and clinically relevant.

- Supplementary Education:
  - Access to Canadian Virtual Hospice My Grief Toolbox course online.
  - BCEHS *Schedule 2 Endorsement* course for Administration of Palliative Medications – open to Advanced Care Paramedics to administer prescribed patient medications to patients with palliative needs, that are normally out of license scope. Once complete the ACP receives a license endorsement from the Emergency Medical Assistants Licensing Board. Medications administered after consult with the Emergency Physician Online Support.
  - BCEHS – *Subcutaneous Access Maintenance and Administration* – Paramedic Specialists (ACP) course for re-establishing a subcutaneous route for medication administration and/or fluid replacement in non-emergency situations in the home.

Education	Paramedic Completion Total
LEAP Paramedic Course (Pallium Canada)	283
BCEHS-Pallium Paramedic Online Course Palliative Care – The Essentials (for PCP), Palliative Care – Advanced Practice (for ACP).	573 *(ongoing, figure up to October 2021)*
Canadian Virtual Hospice My Grief Toolbox course	245
BCEHS Assess, See, Treat and Refer (ASTAR) Palliative Clinical Pathway Course	4009
BCEHS Schedule 2 Endorsement course for Administration of Palliative Medications	309 (Original target of 280 ACP)
BCEHS – Subcutaneous Access Maintenance and Administration	~20 Paramedic Specialists (ACP), pending further rollout to Community Paramedics (PCP, ACP)

Operational Education

- BCEHS-Pallium Paramedic Online Course:
  - Operational guidelines such as recommendations and requirements around accessing clinical support from paramedic specialists and physicians.
  - Recommendations for contacting and collaborating with palliative care teams and patient's physicians for assistance with development of care plans and follow up care.
- BCEHS *Assess, See, Treat and Refer (ASTAR) Palliative Clinical Pathway Course* – foundational training for paramedics to comprehend the BCEHS approach to the non-conveyance of patients, the Palliative Clinical Pathway, and to understand the importance of a collaborative approach to care. This course is offered online through the PHSA/BCEHS Learning Hub.

- Operational resources created:
  - Palliative/End of Life Standard Operating Guidelines
  - BCEHS clinical practice guidelines
  - BCEHS alternative destination guideline (Transport to Hospice)

Education for non-frontline staff

- Inclusion of physicians, dispatch educators, and managers who provide online support through the EPOS (Emergency Physician Online Support) program into LEAP training opportunities has occurred.
- Feedback is provided directly to paramedics and their managers, after engagement with palliative patients that resulted in a non-conveyance to ED and activation of the ASTAR palliative clinical pathway.

Implementation

Education Format

- Pallium's LEAP Paramedic course is blended with 8 hours online and 8 hours face-to-face workshop. The workshop is run by a Pallium trained facilitator and subject matter experts from BCEHS (ACP paramedics). A train-the-trainer model is available through Pallium for this course, however we did not pursue that option as the intention was to move to the BC-specific version of the LEAP Paramedic course.
- BCEHS-Pallium Paramedic Online Course is an 8 hour online course which is completed through the Pallium website but was specifically created with BCEHS scope of practice in mind. The training contains various modules with a mixture of written content, videos, and questions. There is a pre and post course knowledge quiz for participants to complete as well as other evaluation elements.
- The additional courses utilized to support this palliative education were primarily online based through the PHSA/ BCEHS LearningHub.

Participants

- A wide range of staff were targeted with a primary focus on ACPs and PCPs, as well as Secondary Triage staff: Paramedic Specialists & Nurses, Educators, Practice Leaders, EPOS Physicians, and Managers/Leaders.
- The BCEHS-Pallium Paramedic Online Course was originally compensated for Paramedics in the communities involved within the project, however further funds were received to support unpaid education for specific cohorts of paramedics in Fall 2021.

Delivery

- Major challenge with education delivery and implementation of palliative approach with size of workforce (4,000+). As such, focus on training paramedics in initial, pilot communities and leverage of online training modalities.
- Select cohorts were trained prior to launch including key clinical support stakeholders (secondary triage staff), educators and practice leaders.
- Paramedics and managers were trained prior to Prototype Community launch, and staff who couldn't attend took the BCEHS-Pallium Paramedic Online Course.
- All Paramedics going forward now complete palliative education through the BCEHS-Pallium Paramedic Online Course.
- Continuous delivery of the various online courses will occur across the province, along with response to palliative patients being embedded in continuing competence days (related content) delivered by the BCEHS Learning department.

Sustainability/Refresher/New Employees

- Ongoing online, with some face-to-face training for key stakeholders, on use of the ASTAR Palliative Clinical Pathway with plans for virtual webinars as system matures.
- Semi-annual paramedic education days are being considered for future continuing education opportunities.
- BCEHS-Pallium Paramedic Online Course has now been embedded into new hire orientation.
- Discussions with post-secondary institutions have led to palliative education being integrated into the syllabus; JIBCC have agreed to implement this into the PCP program and there are ongoing conversations with other institutions around implementation of this education.

Key Take-Aways or Learnings

Reflection on Education and Implementation

Identifying the appropriate education model that fits our large workforce, spread-out over a large and vast province, has been an early challenge. While we identified early on that LEAP-Paramedic met our needs, the financial challenges to deliver this two-day, face-to-face course were insurmountable. As such, we contracted Pallium Canada to construct a BC-specific online course with similar content to LEAP-Paramedic, but with specific attention to the unique license structure and roles of paramedics in British Columbia.

Significant changes occurred in line with pressures brought forward due to COVID-19 which led to a requirement for the palliative education to be online. The BCEHS-Pallium Paramedic Online Course was implemented in Spring 2020 and has remained the format for palliative education for paramedics across BC. This has allowed BCEHS to offer the education to paramedics across the province, in rural and remote locations, as well as being able to provide safe access to training during the pandemic.

At the same time as rolling out paramedic and palliative education, we launched the BCEHS Assess, See, Treat and Refer (ASTAR) Palliative Clinical Pathway. The ASTAR approach represents an alternative to the "see and transport" model that BCEHS traditionally employed for all patients. Knowing that many palliative patients would prefer to stay at home after assessment and treatment by paramedics, the ASTAR palliative clinical pathway provides this flexibility. Education surrounding this approach has also been released with great uptake by paramedics.

Key Takeaways / Learnings

In order to implement an improved paramedic approach to managing patients with palliative needs, we equally had to address the medico-legal responsibilities of non-conveyance (ASTAR), and communicating this within our multiple Health Authorities.

Launching both the education for paramedics around palliative care and the new approach to non-conveyance for palliative patients (ASTAR) helped make sense of the ultimate objective-provide better care for our patients with palliative needs and to offer pathways of non-conveyance or alternative destinations.

This project has been an immense success and is well-respected within the organization. The achievements have been many and are helping to lead and champion a new approach to care for patients.

Person/Family/Caregiver Resources

Working with P/F/C Partners

Meet Your Partners Where They Are

In all cases it is important to meet people where they are and ask questions about how they would like to participate. Talk about how their input and feedback will be solicited and how you will work together. Every time you get together spend time preparing and thinking through specific questions for person/family/caregiver partners and create space for them to respond. Avoid broad questions where agreement is really the only tactful response. As discussions unfold, consider pausing the group to ask for input from all stakeholders so you are not always singling out P/F/C partners.

Some specific questions to consider in determining how you will work together:

- How would they like to communicate (text, email, phone)?
- What time of day works best for meetings? Would they like reminders?
- Are they comfortable speaking up or being asked ad hoc questions in meetings?
- Are they comfortable interjecting their ideas in a meeting with leaders and clinicians?
- Do they like to ponder on information and formulate their thoughts before responding or are they comfortable providing feedback as information is presented (in real-time)?
- How much time do they need for information/meeting requests? (Are last minute requests okay?)
- For in person meetings:
  - Ask about meal preferences, location preferences, transportation/parking cost reimbursement.
  - How you/they will management Covid-19 concerns.
- What supports would help them in their participation?

Create Team Protocols

1. Educate the team and participating stakeholders on the role of the P/F/C partner and expectations around working together.
2. Consider co-creating a team protocol and terms of reference in a way that acknowledges:
    a) Respect and Dignity
        i) Every person's knowledge, values, culture and lived experience is valuable.
        ii) P/F/C perspectives and choices should be listened to and honoured as an important part of the planning and delivery of healthcare.
    b) Information Sharing
        i) Every person should have the information they need that is received in a way that makes sense to them.
    c) Participation
        i) Every person contributes to a level they are comfortable with in an 'all teach – all learn' environment.
    d) Collaboration
        i) Every person works together for the mutual benefit of all and shares in decision-making.
3. Set clear expectations
    a) For working together (see section above)
    b) For documentation
        i) Reading through long extensive paperwork, while may be an expectation of the team, is a big demand and time-consuming for a P/F/C partner. Consider walking them through the highlights.
4. Allow for Flexibility
    a) Person/family/caregiver partners are terrific at thinking 'out of the box' and brainstorming strategies and ideas. Things could come up that you may not have considered. Time must be flexible enough to lean into those rich conversations.

5. Consider sensitivity of language
    a) When working together with P/F/C partners language is important. Consider the following examples that can easily lead to miscommunications or unclear understanding. Make no assumptions that partners understand the language because they have experienced palliative care. Taking the time to provide information up front to all stakeholders in a way they can comprehend it will ensure equal footing on the project.

SHIFT FROM	SHIFT TO	RATIONALE
Clinical jargon	Lay language	• When working together with P/F/Cs word choice can create unintended power dynamics. • Shift the focus to lay language to ensure inclusivity.
Assumed definitions	Clearly defined terms	• Provide clear definitions for commonly used terms to build awareness and ensure common understanding.
Acronyms	Provide a list of common terms/ acronyms to all stakeholders	• Avoid acronyms where possible for clarity of understanding.

Practical Person/Family/Caregiver Resources

7 Quick Tips for Working with P/F/C Partners in Co-design

2 minute video: Learn 7 quick tips for working with P/F/C partners in under 2 minutes.[25]
www.youtube.com/watch?v=7MX7zjEMSBs

Principles of Partnership

The Manitoba Institute for Patient Safety has created a Declaration of Patient [Person] and Family Engagement which includes these principles of partnerships between healthcare providers and persons/families/caregivers.
www.mbips.ca/mt-patient-and-family-engagement.html

Healthcare Partner Resources

Patient voices network (British Columbia) has developed some quick skill building resources to increase your comfort in engaging person/family/caregiver partners. Guides, tips, checklists, and presentations can be found here:
patientvoicesbc.ca/healthcare-partners/resources/#engaging-patient-partners

Patient Engagement Resource Hub

A collection of tools and information collected by the Canadian Foundation for Healthcare Improvement (now Healthcare Excellence Canada). www.cfhi-fcass.ca/innovations-tools-resources/patient-engagement-resource-hub

How to Partner with Patients

The 'For Healthcare Partners' section of this webpage has a list of valuable resources for engaging person/family/caregivers in improving both patient safety and quality of care. www.mbips.ca/mt-patient-and-family-engagement.html

Patient Engagement in Research

The Canadian Institute of Health Research has an extensive list of resources and practical guidelines: cihr-irsc.gc.ca/e/51916.html. There are als o several SPOR — Strategy for Patient Orientated Research — Support Unit / communities across Canada.

Recruiting Person/Family/Caregivers – Provincial Organizations List

Please find following a list, organized by province/territory, of organizations experienced in matching vetted person/family/caregiver partners with healthcare partners.

Province	Organization
Newfoundland and Labrador	Quality of Care NL Patient Partners NL Support (partners for research)
Nova Scotia	Engage4Health – Nova Scotia Health
Prince Edward Island	Health PEI Volunteer Patient and Family Partners
New Brunswick	Horizon Health Network
Quebec	Centre of Excellence on Partnership with Patients and Public
Ontario	Ontario Caregiver Association
Manitoba	Public & Patient Engagement - Winnipeg Regional Health Authority
Nunavut	Nunavut Model of Care (may inform where to engage partners)
Saskatchewan	Saskatchewan Health Authority Patient & Family Partners
Northwest Territories	NWT Strategy for Patient-Oriented Research (SPOR) Unit
Alberta	Patient & Family Engagement – Cancer Care Alberta Primary Health Care Virtual Patient Engagement Network
British Columbia	Patient Voices Network BC Support Unit (partners for research) BC Cancer Pathway to Finding a Person/Family/Caregiver Partner
Yukon	Engagement Leader, Health System Improvement and Transformation

Relevant Publications

(as of December 31, 2021)

Carter AJE, Harrison M, Arab M, Jensen J, Houde K, Urquhart R. Providing palliative care at home aligns with the professional identity of paramedics: A qualitative study of paramedics and palliative health care providers. *CJEM 2021*: pending (submitted)

Carter AJE, Harrison M, Kryworuchko J, Kekwaletse T, Wong ST, Goldstein J, Warner G. Essential elements to implementing a paramedic palliative model of care: An application of the Consolidated Framework for Implementation Research (CFIR). J*ournal of Palliative Medicine* 2021: pending (submitted)

Carter AJE, Arab M, Cameron C, Harrison M, Austin M, Pooler C, McEwan I, Helmer J, Ozel G, Heathcote J, Reardon N, Anderson E, Shaw Moxam R, Crick S. A national collaborative to spread and scale paramedics providing palliative care in Canada: breaking down silos is essential to success. *Progress in Palliative Care*. 2021,29(2); published online March 4 2021.

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Carter AJE, Arab M, Harrison M, Goldstein J, Stewart B, Lecours M, Sullivan J, Villard CX, Crowell W, Houde K, Jensen JL, Downer K, Pereira J. (2019). Paramedics providing palliative care at home: A mixed methods exploration of patient and family satisfaction and paramedic comfort and confidence. *CJEM*. 21(4): 513-522.

Carter AJE, Harrison, M, Goldstein J, Arab M, Stewart B, Lecours M, Sullivan J, Villard C. Paramedics providing palliative care at home: Mixed-methods exploration of patient and family satisfaction in two provincial systems. (abstract) *PEC* 2018, 22:1(101-150)

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Carter AJE, Arab M, Harrison M, Lecours M, Crowell W, Houde K, Goldstein JP, Sullivan J, Villard C, Downer K. Paramedic comfort and confidence with providing palliative support: Pre-launch survey. (abstract) PEC 2016; 20:1 (137-173)

Cameron C, Sullivan J, Graham A, Hillier T, Swain J, Goldstein J. The Canadian paramedic competency profile for the provision of palliative and end of life care: Time for a change? *Canadian Paramedicine*, August/September 2016.

Carter AJE, Arab M, Harrison M, Cameron C, Sullivan J, Lecours M, Villard C. Providing palliative care brings paramedicine to the next level: A review and comparison of how three provinces have incorporated palliative care into EMS. *Canadian Paramedicine*, August/September 2016.

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