BCEHS | BC Emergency Health Services

# COMMUNITY PARAMEDICINE IN BRITISH COLUMBIA


*Improving health care in rural and remote communities*

*September 2017*

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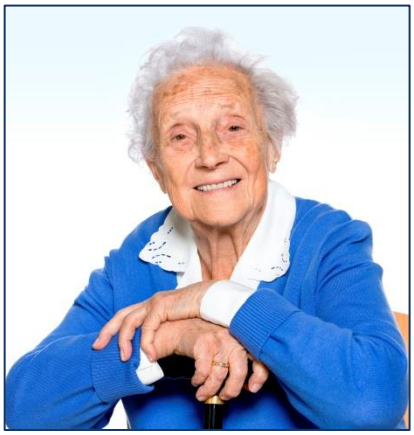
## Introduction



British Columbia is improving access to health care in rural and remote communities through the Community Paramedicine Initiative and an expanded role for qualified paramedics.

Community paramedicine reflects a transformation in the practice of paramedicine from an emphasis on pre-hospital emergency care to a model that includes prevention, health promotion and primary health care.

In BC, the Community Paramedicine Initiative is being implemented by BC Emergency Health Services (BCEHS) working in partnership with the Ministry of Health, regional health authorities, the Ambulance Paramedics of British Columbia (Local 873), the First Nations Health Authority, and others. It is the first program of its kind in Canada to be introduced province wide.

The objectives of the initiative are to:

1. Help stabilize paramedic staffing in rural and remote communities
2. Bridge health service delivery gaps in the community, identified in collaboration with local primary care teams.

Community paramedicine is integrated with other elements of the health care delivery system, with paramedics becoming part of a community-based team of health service providers.

### Emergency Services and Health Care Needs

The Community Paramedicine Initiative addresses two challenges facing rural and remote communities in BC: recruiting and retaining paramedics, and accessing health care due to both the distance to the nearest health care facility and the shortage of health care professionals.

Paramedic staffing levels in British Columbia are driven primarily by call volumes. As a result, paramedic services in rural and remote communities may be compromised because smaller populations often mean lower call volumes. This initiative is an opportunity to increase and stabilize staffing with community paramedics who may choose to take on additional shifts in emergency response.

The population health status of people living in BC's rural and remote communities is lower than that of their urban counterparts. Contributing factors are older populations with chronic health conditions, and potential delays in accessing the health care system that may lead to greater acuity and complications.

In addition, BC is home to the second largest Aboriginal population in Canada, with the most significant population in northern BC. The health status of First Nations communities is among the lowest in BC and Canada, and existing cultural barriers further reduce access to health services.

Other jurisdictions in Canada that have implemented community paramedicine in rural and remote communities have reduced the demand for acute care services, and have been able to support people to continue to live safely and independently in their homes and communities.

## Role and Scope of Community Paramedicine

Community paramedicine applies paramedic skills and training in a variety of community-based settings, including patients' homes and local clinics.

BC's initiative is being implemented within the existing regulatory framework and scope of practice. However, it means an enhanced role for qualified community paramedics applying their scope of practice in settings and contexts that are different from those for which they were originally trained.

### Principles of Community Paramedicine

- Community paramedics are BCEHS employees and will work collaboratively with local health care providers.
- BCEHS will assign an appropriate community paramedic to collaborate with the local health care providers and carry out the services requested.
- Patients will be referred by their physicians, discharge nurses or other community health care providers, following a referral process established in partnership with regional health authority partners.
- Community paramedics will practice under the direction of a care plan from an appropriate health care provider.
- Medical oversight will involve a combination of high level oversight by BCEHS Medical Programs (orientation, assignment of appropriate services, approval of practice support tools) and direct medical oversight provided by primary health care provider for the specific patient being cared for by the community paramedic.

### Building Blocks of Community Paramedicine

Community paramedics are participating in the following activities:

***Community Outreach & Awareness:*** Getting to know the local community and neighbouring First Nations communities, and helping them understand how community paramedicine can improve access to health care, is a priority. Community paramedics work with local health care providers to identify service gaps and ways of improving the health of residents, particularly older residents with chronic conditions.

***Health Promotion:*** Encouraging patients to take responsibility for managing their own care and treatment – where safe and appropriate to do so – is an important step in improving health outcomes. This is a role community paramedics can readily assume, along with providing seminars on cardiopulmonary resuscitation (CPR) and using an automated external defibrillator (AED).

***Wellness Clinics:*** Many communities host wellness clinics and/or medical check-ins for patients with specific health issues such as diabetes. By participating at these events, community paramedics can take on some of the services that allow others – doctors, nurses, nutritionists – to spend even more time with their patients.

***Wellness Checks:*** Older people living on their own, often with little or no support, may need someone to check in occasionally to see how they're doing. Regular visits from a community paramedic can help these patients safely live longer in their homes, reduce their reliance on medically unnecessary 911 calls, and help ensure they stay connected with their primary care physician. These patients are those impacted by chronic disease, specifically heart failure, chronic obstructive pulmonary disease (COPD) and diabetes. Patients are referred by their doctor or other community health care provider, with the service provided at no cost to the patient.

Services provided during Wellness Checks may range from measuring vital signs against criteria established by the primary care physician, to services that may be delegated acts from other health care providers and are within the community paramedic's scope of practice.

Services such as chronic disease monitoring, falls assessments and health system navigation can be provided based on the current scope of practice of paramedics, as can support services such as assistance with mobility, oxygen equipment and inhaled respiratory devices.

Additional services may be added as patient need is identified and in collaboration with the health authorities. See Appendix A: Services Provided by Community Paramedics.

## Project Implementation

The project plan calls for a phased implementation approach:

- Preparing for Practice: Ensure the completion of foundational initiatives necessary for the provincial rollout.
- Prototype Projects: Build on the competencies and skill sets of existing paramedics by introducing community paramedicine in nine prototype communities in Northern, Interior and Island Health.
- Provincial Rollout: Expand the program initially to 76 rural and remote communities, including the prototype communities, based on lessons learned from the prototype projects. The majority of the full-time equivalent (FTE) community paramedicine positions were allocated in this phase.
- Optimization: Allocate the balance of the FTE community paramedicine positions.
- Sustainment: Plan for the transition of community paramedicine into an integrated service of BCEHS Operations.

## Preparing for Practice

A number of foundational initiatives have been put in place to ensure that community paramedicine can effectively be rolled out across BC as an integrated component of the health delivery system.

- Regulatory change was achieved through a Ministerial Order enabling community paramedics to provide services in a non-emergency context of practice.
- A 14-week orientation program was designed in collaboration with the Justice Institute of BC (JIBC) utilizing current BCEHS paramedic training curriculum, subject matter expert content, and adapted materials from the North Central Emergency Medical Services Institute. The program

helps community paramedics develop the competencies for applying their current scope of practice in a primary health care setting, and involves both online and in-person orientation.
- New policies, procedures and practice support tools specific to community paramedicine were developed and validated in collaboration with regional health authorities and participants in the prototype projects.
- A medical oversight model was developed to ensure appropriate clinical oversight of community paramedics, including practice support tools, reporting structure and authorization of services, and educational requirements.
- A Privacy Impact Assessment (PIA) was developed to address how community paramedics can access patient records and share clinical documentation with health authorities. The PIA provides a comprehensive assessment of privacy, security issues and risks related to information flow, access and disclosure, as well as record storage, policies and processes.
- Because community paramedicine is a new program involving working alone in patients' homes, a WorkSafeBC Violence Risk Assessment was conducted, and policies are now in place to support the safety of CPs.

## Prototype Projects

The prototype phase began in April 2015 and included nine rural communities: Chetwynd, Fort St. James and Hazelton in the North; Creston and Princeton in the Interior; and Cortes Island, Port Hardy, Tofino and Ucluelet on Vancouver Island. These communities were selected in partnership with the relevant health authority based on a combination of community need and a supportive level of BCEHS and health authority infrastructure to ensure a successful beginning.

A paramedic in each of these communities worked with BCEHS leadership and local health care providers to define the scope of services required and develop a local service plan. They were also responsible for community outreach and awareness, health promotion, wellness clinics and wellness checks in their communities. These prototype projects served as a learning ground for developing, testing, and refining the processes and practices to support the subsequent provincial rollout stage.

## Provincial Rollout

This phase began in April 2016 with the announcement of the first 76 rural and remote communities selected to have the services of community paramedics, including the prototype communities.

### Community Selection

The selection model looked at communities defined as rural, small rural, or remote in the Ministry of Health's *Rural Health Services in BC: A Policy Framework to Provide a System of Quality Care*, and that are served by an ambulance station. The next consideration was those stations with on-call staff only and therefore in the greatest need for a more stabilized paramedic presence.

The selection model was reviewed and endorsed by the Provincial Advisory Committee; executive leads for Northern, Interior and Island Health; the Ministry of Health's Standing Committee on Health Services & Population; Ambulance Paramedics of BC (Local 873); and the First Nations Health Authority.

BCEHS is working with the regional health authorities and other stakeholders to identify communities to be considered for the optimization phase that will fill the balance of community paramedic positions. The optimization phase will be completed by March 31, 2018.

For a list of the selected communities, see Appendix B: Community Paramedicine Provincial Rollout Communities.

## Recruitment and Selection of Community Paramedics

The community paramedic role is best suited to qualified paramedics who want to live and work in rural and remote communities, enjoy working with patients in their homes, and have both the aptitude and interest in developing the relationships necessary with their patients as well as with the local care team.

The selection process is being carried out within the parameters of the Collective Agreement between the Ambulance Paramedics of BC (CUPE 873) and BCEHS. All applicants must hold at least a Primary Care Paramedic (PCP) license with an IV endorsement to ensure they have the training and experience to perform the basic tasks of a community paramedic. Priority is given to those currently residing in or attached to the communities where they are applying.

Community paramedicine positions are being deployed in three phases and across five regional health authorities.

| Health Authority | Communities | # FTEs Posted | # Regular Part-Time CPs | Scheduled Hire Date | Working in the Community |
|---|---|---|---|---|---|
| Prototype | 9 | 7.95 | 15 | July 2016 | October 2016 |
| Northern | 16 | 11.94 | 22 | August 2016 | November 2016 |
| Interior | 17 | 12.61 | 23 | February 2017 | May 2017 |
| | 12 | 8.62 | 16 | July 2017 | October 2017 |
| Island | 15 | 11.27 | 21 | September 2017 | December 2017 |
| Vancouver Coastal | 6 | 4.24 | 8 | September 2017 | December 2017 |
| Fraser | 1 | 0.53 | 1 | September 2017 | December 2017 |
| **Sub-total** | **76** | **57.16** | **106** | | |
| Optimization | TBD | 22.84 | TBD | January 2018 | April 2018 |
| | | | | March 2018 | July 2018 |
| **TOTAL** | **TBD** | **80.00** | **TBD** | | |

## Vehicles and Equipment

Community paramedicine vehicles are non-transport vehicles outfitted with communications equipment to enable crossover for emergency response use. The vehicles are assigned to stations, not the individual community paramedic.

In some communities, existing ambulances may be used for both emergency and community paramedicine purposes. This is determined on a community-specific needs analysis.

## Impact on Emergency Response

A key objective of community paramedicine is to provide a more stabilized paramedic presence for emergency response.

All CPs are trained as BCEHS emergency care paramedics. Because community paramedicine positions are regular part-time positions, the CPs are available the balance of the week to take on additional shifts in emergency response if they choose to do so. In communities with two regular part-time CPs, the CPs will be seeing patients on alternating days, and therefore one of them will be available to cover ambulance shifts when the other is working as a CP.


While on duty as a community paramedic, the CP will not be dispatched to an emergency response. However, if there is a significant incident and the CP is the nearest responder, they will be contacted by dispatch and, if they determine it is safe to leave their patient, will attend at the scene thereby improving the response time for significant incidents.

BCEHS protocols allow for CPs – while on duty as CPs – to respond to emergencies they come across while driving to and from scheduled patients' visits.

## Evaluation

An evaluation of the Community Paramedicine Initiative is underway to measure and assess outcomes and inform real-time quality improvements. An interim evaluation report will be delivered by the end of 2017, with a final evaluation report planned for April 1, 2019.

Key performance indicators are:

- Community paramedicine services provided
- Access to community paramedicine services
- Community paramedic staffing is adequate (i.e. available) for services requested
- Emergency department visits (pre/post the initiative) by patients
- Hospitalizations (pre/post the initiative) by patients

## Stakeholder Engagement and Governance

The success of the Community Paramedicine Initiative ultimately depends on the ongoing support of project sponsors and partner stakeholders. They are actively involved in all phases of implementation through the following:

- *Provincial Advisory Committee:* Facilitates integration of community paramedicine into the health delivery system, a critical component to enabling community paramedics to work in collaboration with local health care providers to bridge any gaps identified in a patient's health care plan. PAC reports to the PHSA/BCEHS Senior Leadership Committee, and is responsible for the activities of the Professional Practice Advisory Committee and the Evaluation Advisory Committee.

- *Professional Practice Advisory Committee:* Provides input, feedback and suggestions with respect to the practical and clinical implementation and integration of community paramedicine into the health care system.
- *Evaluation Advisory Committee:* Ensures the evaluation framework and corresponding data-related efforts are designed to answer the high-level questions identified.
- *Regional Steering Committees:* Established in each of the regional health authorities with the mandate of implementing the Community Paramedicine Initiative within the local communities.

Logos for project sponsors and partner stakeholders are shown in Appendix C.

## Appendix A: Services Provided by Community Paramedics

| Level One – CP |
| --- |
| • Assistance with mobility and activity:<br>  ○ Screening tool (NHA general assessment tool) to assess patient's ability to move about home to do simple daily tasks (such as bathing/showering, hygiene, dressing, toilet use), mobility, memory and daily decision-making. Assess and document whether task was completed independently or with assistance.<br>  ○ Recommendations for Care Plan.<br>• Assistance with oxygen equipment:<br>  ○ Check tank volume levels, litre flow rate (ensuring it is set as per care team treatment plan).<br>  ○ Check delivery equipment is in good working order (tubing is in good condition and is routed correctly throughout client's residence).<br>  ○ Discuss $0^2$ hazards in the home and proper storage and usage around open flame.<br>  ○ Outpatient checklist.<br>• Assistance with administration of inhaled respiratory devices:<br>  ○ Review the patient's current delivery devices and ensure the patient is using each device as per recommended use. (Check for missing parts or modifications.)<br>  ○ Report back to care team on any issues with compliance.<br>• Measure vitals against set criteria (measure and document reading):<br>  ○ Blood pressure<br>  ○ Heart rate<br>  ○ Blood glucose monitoring<br>  ○ Gastro-intestinal symptoms (e.g. bowel movements)<br>  ○ Skin assessment (e.g. regular, irregular, jaundice, pale, cyanotic, flushed, mottled, diaphoretic, hot, cold, lividity)<br>  ○ Basic neurological assessment (e.g. normal or abnormal gait, facial droop, seizures, slurred speech, tremors, left side weakness, right side weakness.<br>• High-level medications compliance/safety assessment:<br>  ○ General medication count.<br>  ○ Report all medication concerns back to the care team.<br>• Fall assessment<br>  ○ Assess home environment to optimize patient safety, identify risk factors for falls, and develop strategies to increase safe mobility in the home.<br>• Support for group medical assessments and/or education.<br>• Support discharge planning from hospital care.<br>• Infection prevention and control – hand hygiene protocols.<br>• Health system navigation<br>  ○ Provide information on how to access additional services available through the health system. |

| Level Two (Phase Two) – CP (Advanced) |
| --- |
| Chronic disease monitoring<br>• Oxygen administration<br>• IV therapy<br>• Blood glucose monitoring<br>• Advanced monitoring methods (e.g. spirometer).<br>Immunization<br>Antibiotic administration<br>Lab specimen collection<br>Suture removal<br>Health and safety teaching |
| **Level Three (Phase Three) – CP (Advanced)** |
| Chronic disease management<br>• Post-stroke assessment<br>• Post-discharge monitoring<br>• Monitoring patient condition<br>• Assessing pain level<br>Catheter and colostomy care<br>Assess, treat, refer (release) |

## Appendix B: Community Paramedicine Provincial Rollout Communities

**Island Health**

1. Alert Bay (Cormorant Island)
2. Cortes Island *
3. Denman Island (incl. Hornby Island)
4. Gabriola Island
5. Galiano Island
6. Gold River
7. Mayne Island
8. Pender Island
9. Port Alice
10. Port Hardy *
11. Port Renfrew
12. Port McNeill
13. Quadra Island
14. Sayward
15. Sointula
16. Tahsis
17. Tofino *
18. Ucluelet *
19. Zeballos

**Northern Health**

1. Atlin
2. Chetwynd *
3. Dease Lake
4. Fraser Lake
5. Fort St. James *
6. Granisle
7. Hazelton *
8. Houston
9. Hudson's Hope
10. Mackenzie
11. Masset
12. McBride
13. Queen Charlotte Village
14. Kitwanga
15. Southside
16. Stewart
17. Tumbler Ridge
18. Valemount
19. Wells

*Indicates a prototype community

**Interior Health**

1. Alexis Creek
2. Anahim Lake
3. Blue River
4. Clearwater
5. Clinton
6. Creston *
7. Edgewood
8. Elkford
9. Field
10. Fruitvale
11. Gold Bridge
12. Golden
13. Greenwood
14. Kaslo
15. Keremeos
16. Lillooet
17. Logan Lake
18. Lumby
19. Lytton
20. Midway
21. Nakusp
22. New Denver
23. Princeton *
24. Revelstoke
25. Riondel
26. Rossland
27. Salmo
28. Seton Portage
29. Sicamous
30. Sparwood
31. Winlaw

**Fraser Health**

1. Boston Bar

**Vancouver Coastal Health**

1. Bella Bella
2. Bella Coola
3. Bowen Island
4. Madeira Park
5. Pemberton
6. Texada Island

## Appendix C: Project Sponsors and Partner Stakeholders