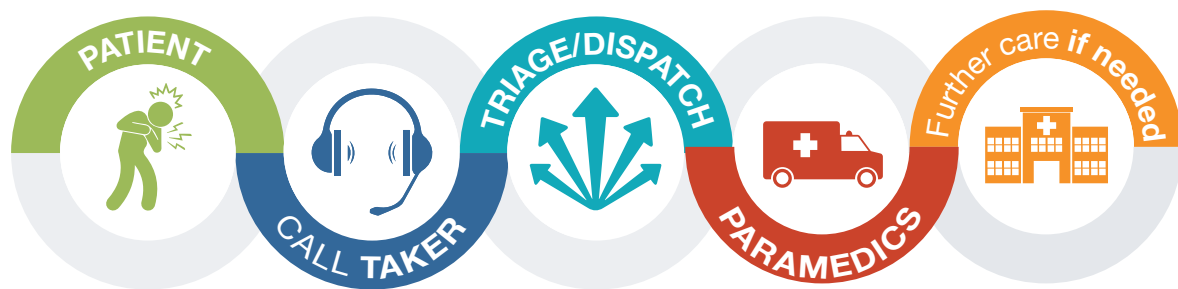


YEAR TWO Progress Report



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The Objectives of the Action Plan are to:

1. Improve emergency response time for urgent patients in all communities
2. Improve service and provide sustainable employment in rural and remote communities
3. Provide more appropriate clinical responses to non-urgent patients
4. Increase the resources available for emergency responses

The Evolution of BCEHS

Improving patient care across BC

Launched in 2017, the BCEHS Action Plan is a strategy to help respond to growing emergency health care needs across our province. With a six per cent year over year growth in demand, a 'one response fits all' model of care that includes ambulance dispatch and emergency department transfer for every 9-1-1 call wasn't sustainable.

The solution was an organizational transformation and shift from a focus on 9-1-1 emergency response and hospital transfers, to enabling BCEHS to be both a reactive and proactive integrated health partner in BC.

As we head into the third year of our plan, it is a good opportunity to look at how far we have come. In year two, with excellent engagement and support from leaders across the organization along with our talented front-line staff, we have made significant advancements.

We enhanced paramedic scope of practice, provided more dependable regular jobs for paramedics, upgraded and changed operational and technological systems, added more resources into our system, expanded roles and introduced new programs that have fundamentally changed our service.

Our community paramedicine program is fully implemented now, with paramedics providing care for patients with chronic health conditions along with preventative, proactive care for residents in communities in rural and remote BC. We are also now piloting rural advanced care paramedics in six sites as well.

These changes have enabled BCEHS to prioritize our most urgent responses for patients with life-threatening conditions, while at the same time offer expanded service and clinical advice for health concerns more minor in nature.

Significant change like this doesn't happen without a clear vision, careful planning, strong execution and incredibly motivated people. Thank you to each and every BCEHS team member for your passion and dedication to ensuring the success of this transition and continuing your unwavering focus on providing exceptional patient care.

A collaborative, integrated member of the health care system in BC, BCEHS is continuing our pursuit of opportunities to fill health care gaps where appropriate, create a sustainable, dependable service and provide the right care at the right time to our patients.

As we move into year three of the Action Plan, we are excited about the solid foundation we have now achieved and look forward to the additional work that will reinforce our organization as a meaningful provider of both emergency and community health care delivery in British Columbia.

Barb Fitzsimmons, Chief Operating Officer

Nancy Kotani, Chief Transformation Officer

Expanding At-Home Paramedic Treatment For Palliative Patients

Two Ministerial Orders issued in March 2017 enabled BCEHS to develop specific protocols to treat patient issues on-site without transport to hospital or transport to alternative destinations such as clinics. Treating and referring patients, thereby reducing unnecessary trips to emergency departments, is a key part of the Action Plan.

Marking the first step in trialing this expanded approach to care, the Paramedics and Palliative Care Project was launched this past year following funding from two federal agencies, the Canadian Partnership Against Cancer and the Canadian Foundation for Healthcare Improvement.

This last year, work began on developing the guidelines and procedures necessary to direct paramedics in delivering palliative care to patients accessing assistance through 9-1-1. Communication protocols were designed, changes to dispatch operations began and training launched.

Further development of the training program will be undertaken in year three to support the project's provincial roll out, and will include strategies for managing common palliative 911 scenarios.

Working collaboratively with palliative care partners, health authorities and primary care providers, this project will offer enhanced, accessible in-home palliative care when patients urgently need support or when regular care teams are unavailable. The goal of the project is to reduce pain and suffering and help patients living with life-limiting illnesses avoid unwanted emergency room visits so they can stay home with family and loved ones.



More Paramedics For Improved Patient Care

A strategic review of ambulance station-level resources and patient volume data has been occurring across the province to better match BCEHS resources with demand, and improve our ability to deliver exceptional patient care.

Following the announcement of 69 new regular full-time equivalent paramedic positions across the province in year one of the Action Plan, 46 additional regular paramedic positions were announced in year two.

- + **18 new paramedic positions and 2 ambulances** were added to **Kamloops** to address high call volumes, relatively low number of regular full-time positions and high volume of inter-facility transfers.
- + **16 new paramedic positions and 1 ambulance** were added in **Kelowna** and **4 positions added in West Kelowna** to better support the needs of these rapidly growing communities
- + **3 paramedic positions and 1 ambulance** were added to support the health of residents of **Trail** and surrounding areas
- + **3 paramedic positions were added in Chase** and **2 more paramedic positions were added in Lake Country** to provide regular staffing 7 days a week in these communities
- + **21 new paramedic positions** announced in year one of the Action Plan were rolled out this last year including: **4 each in Dawson Creek, Fort St. John, and Williams Lake; 6 in 100 Mile House and 3 in Castlegar.** As a result of these new plans, **2 ambulances** were also added in the **Peace River region**, one in **Williams Lake** and one in **100 Mile House** during peak times.

New resource plans for communities focused on supporting frontline staff, better matching shifts to times of peak demand, keeping ambulance units in their response areas, better managing inter-facility transfer work and creating regular permanent, sustainable paramedic jobs.

Six-month reviews of plans implemented last year in Vancouver and the Nanaimo area indicated that the balance of workload across shifts improved while response times for the most urgent calls remained strong. Evaluation reviews of new resource plans will continue in year three of the Action Plan and further changes will be considered where appropriate.

In the first two years of the Action Plan, BCEHS added:



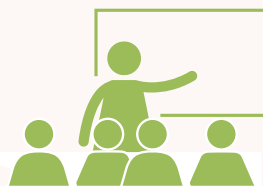
Improving Health Care In Rural And Remote BC

Year two of the Action Plan saw the final phase of the implementation of the community paramedicine (CP) program roll-out to 99 communities across the province. This accomplishment made BC the first province in Canada to have a provincial community paramedicine program to support primary health care, prevention and health promotion. Patients are referred by primary care physicians, nurse practitioners and other community health members for assistance with chronic disease management, palliative care or falls prevention.

The stats:



1,874 patients have been seen by BCEHS community paramedics and 24,447 patient home visits have occurred since the launch of the program in 2016.



9,712 community related services have been delivered since the launch of the program, of which 5,419 occurred in 2018. These include outreach and health promotion services, education and hands-on training to fill community knowledge and skill gaps.



346 emergency 9-1-1 calls have been responded to by a community paramedic on CP shift since the launch of the program. Community paramedics support emergency coverage in communities that don't have the volume of demand to warrant full-time emergency paramedic staffing.



39% drop in the number of 9-1-1 calls made by patients who received CP services.

This last year, we introduced new roles in the program, expanded services and continued to demonstrate the positive impact this collaborative and innovative approach is having on residents in rural and remote BC. Community paramedicine is filling health care gaps and stabilizing paramedic presence and emergency coverage.

In the past year:

6

Rural advanced care community paramedic positions were introduced as a joint research study between University of Northern BC and BCEHS to determine appropriate roles for these advanced care paramedics in rural and remote settings. To test different approaches to patient care and the potential impact of this enhanced service, the project launched in Valemount, Fort St. John, Prince Rupert, Campbell River, Cranbrook and on Saltspring Island.

21

CP mentors were positioned across the province to provide orientation, practice support and mentorship and to lead ongoing program innovation, development and best practices.

133

CP patients have received Home Health Monitoring while 175 in total have utilized this program since its launch. This telehealth service remotely captures patient's vitals allowing community paramedics to monitor and follow up with patients, and provide alerts to care teams as necessary.

85

Community paramedics received training this last year in palliative care to better support patients with advanced life-limiting illnesses.

3

New CP coordinators were added and use a new centralized system for booking community paramedic service to give community paramedics more time to focus on providing patient care.

Recent reviews of 9-1-1 calls from nine communities showed a 39 per cent drop in calls for patients who received BCEHS CP services, indicating that the support community paramedics provide helps patients better manage their health and reduces the need for emergency assistance.

The results of a comprehensive program evaluation will be shared in year three of the Action Plan and will detail the full extent to which the Community Paramedicine program has successfully supported improved health care for rural and remote patients across the province.

Ensuring the Right Care at the Right Time

All patients calling 9-1-1 have important medical concerns; however, not every patient needs immediate paramedic support or ambulance transport. In fact, 46 per cent of calls in BC are triaged as minor medical concerns, many of which may not require emergency department care or could be better suited for alternative types of care. Historically however, all 9-1-1 calls have received immediate ambulance dispatch.

To sustain service for our growing and aging population and ensure ambulance resources are available for residents with the most urgent concerns, BCEHS has made significant changes this past year to ensure the best and most appropriate care is delivered to every patient.

New Clinical Response Model (CRM)

In year two, BCEHS replaced the previous 9-1-1 call resource-assignment system with the new Clinical Response Model which better matches 9-1-1 callers with the most appropriate care. Six different colour codes in the CRM guide dispatchers in assigning resources needed for medical conditions with varying levels of type

and urgency of response. Purple, representing less than 2% of calls, is the most urgent and includes conditions such as cardiac or respiratory arrest, while the other categories of Red, Orange, Yellow, Green and Blue indicate less urgent conditions with each transition to the next colour.



Improved Red Median Response Times

When comparing the first six months of CRM data to the 2017 calendar year, the Red median response times, which represent the majority of the most urgent calls, decreased in Vancouver, Surrey and Kelowna by 34, 41, and 19 seconds respectively.




The CRM allows dispatchers to more accurately focus ambulances and paramedics on the most time critical situations, and it allows for the delivery of alternative solutions for patients with minor concerns. Since implementation, the CRM has helped contribute to improved purple and red response times in the highest volume communities across the province, which is significant when minutes and even seconds count for patients.


The CRM also prioritizes the use of Fire First Responders for the most urgent medical


emergencies, making this resource more available for patients with time-critical needs. Year Three of the Action Plan will see further engagement between BCEHS and fire service agencies to further refine dispatch procedures when both BCEHS and Fire First Responder resources are needed in response to a 9-1-1 call.


BCEHS continues to conduct clinical reviews to ensure the CRM remains updated to provide the best possible patient care.


CliniCall Secondary Triage

 The CRM helps identify patients who could benefit from further clinical assessment over the phone in order to connect them to definitive care as quickly as possible, and avoid unnecessary transport to hospital.

 BCEHS is trialling the use of secondary triage nurses in CliniCall, who are currently connecting with over 300 patients per month in selected areas of the lower mainland.

 Trial results to date show that between 15-20 per cent of calls that receive additional clinical investigation by nurses are upgraded to receive more urgent paramedic response while 10-15 per cent are resolved without sending an ambulance.

 CliniCall nurses provide self-care advice over the phone, suggest alternative transportation, or provide information on alternative care providers when appropriate.

 The least urgent calls continue to be directly transferred to nurses at HealthLinkBC (811).



Increasing Efficiency With Electronic Patient Records

Efficient transfer of care between paramedics and hospital emergency room teams is critical to ensuring patients receive the care they need. This past year, BCEHS completed the implementation of the ParaCARE project to streamline and automate the documentation and transfer of patient records and event details.

To replace paper-based documentation, this new system consists of an in-ambulance tablet coupled with patient care software called Siren. Paramedics use Siren to create electronic patient care records (ePCRs) which are provided to hospitals upon arrival or, with certain emergency departments, are transmitted prior to arrival.

When a patient calls 9-1-1, dispatchers pre-populate event information which pre-populates

the ePCR. Paramedics enter additional event information into Siren along with details about assessments and procedures undertaken, monitoring performed and ongoing status.

The completion of this project ensures efficient and effective transfer of patient care from the moment of crisis to hospital intervention. In addition, the transition to electronic records will enhance the ability to conduct clinical research, analysis on patient outcomes and evaluate the impacts of paramedic treatment protocols. Furthermore, it lays a foundation for future initiatives that will benefit from streamlined transfer of patient records with other healthcare providers, such as palliative care teams.



More than 3,900 paramedics are now fully trained and using Siren



All ambulance stations across BC now use the technology



Between 1400 and 1700 ePCRs are created each day

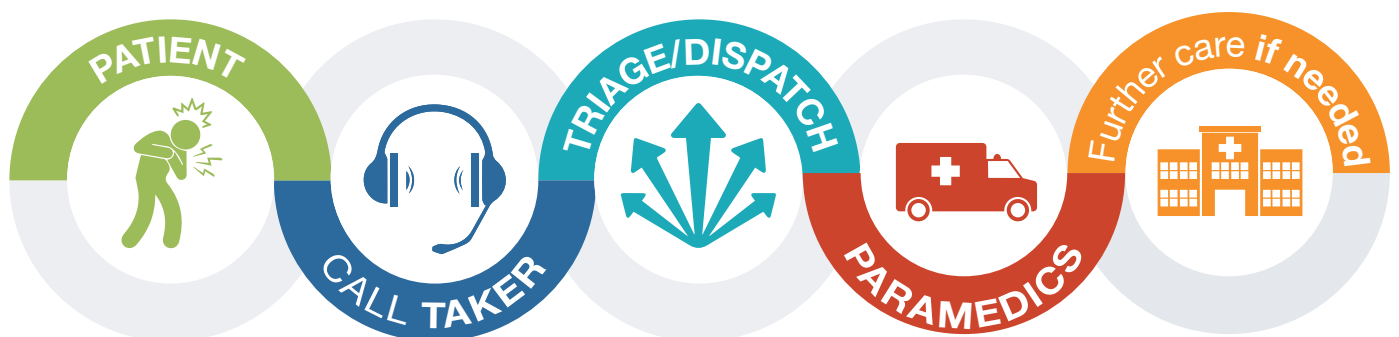


Cardiac monitor, electrocardiogram data and BC Service Card data is transferred into Siren and included in ePCRs

Questions / more information, please email us at:

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