BCEHS BC Emergency Health Services

ACTION PLAN

UPDATE The **BCEHS Action Plan** is a provincial strategy to transform how emergency health care services are delivered throughout BC. This regular update provides information on key project milestones as progress is made.



ONGOING RESOURCE REVIEWS AND CHANGES ACROSS THE PROVINCE

For the past year, BCEHS has been evaluating resources across the province to better match patient demand. Five areas were identified as top priority and formed Phase I of the project; a further three areas are now being addressed in Phase II and announcements for new resource plans for Kamloops and Kelowna were made last month.

Working groups, consisting of BCEHS area managers, front line supervisors and CUPE 873 representatives in Kelowna and Kamloops, began analyzing local demand data in March of this year. Both areas required a strategy to better meet patient demand, including the high volume of inter-facility transfers in and out of regional hospitals, while maintaining emergency coverage in all communities. The new resource plan for the Kamloops area, including Chase, Ashcroft, Barriere and Logan Lake, includes:

- 18 additional full-time paramedic positions in Kamloops, and 3 in Chase
- + 2 additional ambulances for Kamloops, increasing peak resources to 7 ambulances

Implementation of the new resource plan will take place in two stages with Chase in November of this year and Kamloops in January 2019. Work will continue with Interior Health to optimize inter-facility transfers between Kamloops and Kelowna. The new resource plan for Kelowna includes:

- + 16 additional full-time PCP positions in Kelowna, 4 in West Kelowna and 2 in Lake Country
- 1 additional ambulance for the area and a repositioning of one Lake Country ambulance to Kelowna, to increase peak resources from six to eight ambulances in Kelowna

Implementation is scheduled in two stages, with West Kelowna in November, and Lake Country and Kelowna in late January 2019.

The final area to be addressed in Phase II is the Fraser Valley including Abbotsford, Mission, Chilliwack and Agassiz. A working group has been established and initial analysis is under way.





Continuing with the goal of optimizing resources, the results from Phase I are being evaluated. Vancouver was the first to launch a new resource plan in January 2018 and a review of the first six months of data has been conducted to determine the impact of the new plan.

Results of the Vancouver review indicate a positive impact following implementation of changes:

- Response times for high acuity calls remained strong during, and after transition
- Investment in resources prior to implementation assisted in improving the crew utilization rate. This improvement has been solidified with permanent resources and current utilization is running at approximately 70%, compared to a historic peak of 74%
- Implementation greatly improved the balance of workload across shifts, especially the historic difference between day and night shifts
- Positive feedback has been received from employees regarding new shifts and positions

Additional recommendations for further improvements are being developed as a result of the sixmonth review.

Implementation in all Phase I communities is now complete, with final resources added to Trail in September. The next community in Phase I to undergo an evaluation of their new resource plan is Nanaimo.

With Phase I and Phase II implementations and announcements to date, we are pleased to have added a total of 115 regular full-time and part-time PCP positions across the province, and to have introduced Regular Part-Time for the first time.

To continue this provincial review of resources, we are now pleased to announce Phase III of the project. This phase will include the Burnaby/Tri-Cities area, Surrey/ Langley and Victoria. Working groups will be formed in each area and initial meetings are expected to start this fall.

For more information on resource changes happening across the province, email **actionplanideas@bcehs.ca**.

THE OBJECTIVES OF THE ACTION PLAN ARE TO

Improve emergency response time for high acuity patients in all communities

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Improve service and provide sustainable employment in rural and remote communities



Provide more appropriate clinical responses to low acuity patients



Increase the resources available for emergency responses



NEW CLINICAL RESPONSE MODEL: A FOUNDATION FOR BETTER PATIENT CARE

In March 2017, the Emergency Health Services Act was amended to extend the mandate of BCEHS. The change allowed for clinical assessment, advice and follow-up to be delivered over the phone to 9-1-1 callers. In addition, it allowed for paramedics to treat and resolve some medical issues without ambulance transportation to hospital emergency departments.

To support this expanded mandate, a more robust means of reviewing, prioritizing and assigning 9-1-1 calls was launched this past May to optimize the match between patient need and appropriate resource. The system, called the Clinical Response Model (CRM), introduces a new process for dispatching paramedics, ambulances and other resources to patients, and allows dispatchers to more accurately focus ambulances and paramedics on the most lifethreatening situations.

Replacing the Resource Allocation Plan (RAP) with its three levels of prioritization that assumes ambulance transport for every patient, the new model includes six colour-coded levels allowing for a greater variance in prioritization and response. All 9-1-1 calls continue to be assessed using the international standard Medical Priority Dispatch System (MPDS) and based on the principal patient condition identified, the call is assigned a colour of Purple, Red, Orange, Yellow, Green or Blue. The colour indicates the resource and response type for an event along with the relative priority of the call, with Purple being the highest priority and including conditions such as cardiac or respiratory arrest.

"The Clinical Response Model helps us to get to the most serious calls faster, when minutes and even seconds count, and at the same time it improves the experience for patients who don't require hospital care at all," said Neil Lilley, Senior Executive Director, Patient Care Communications and Planning.

For calls that are non-urgent, the CRM paves the way for the delivery of alternative solutions for patients. A patient calling with a minor infection or nausea concerns for example, can be given immediate care with advice from a nurse in the secondary triage trial, currently underway in dispatch. Plans are also in development regarding a trial whereby dedicated paramedic response units would provide patient treatment and issue resolution on-site, in community and home environments. These alternative care options improve patient care by providing more timely and appropriate treatment and, at the same time, increase the availability of paramedic crews for the most urgent calls.

In addition to improving patient care and resource availability, the Clinical Response Model has helped to refine the criteria under which Fire First Responders are called to an event. Co-responses, or times when both BCEHS and Fire First Responders are called to a scene. are focused on: Purple and Red calls that are life-threatening and the most time-critical; some Orange calls where ambulance response is likely to take more than 10 minutes; any call involving a motor vehicle accident, hazmat, drowning/near drowning or fire; and other specific scenarios where their expertise and tactical support is required.

"This new system aligns BCEHS with best practices globally and is another step toward transforming the organization from an ambulance transport service into an emergency health care service," continued Lilley.



NEW TRIAL BRINGS TRIAGE SUPPORT INTO DISPATCH

With a growing and aging population in British Columbia, demand on emergency services is increasing, and ensuring that the most critical emergencies are supported in a timely matter is a priority.

Matching the most appropriate response to patient need is crucial in optimizing patient care and supporting this priority. Given that 30% of 9-1-1 calls are non-emergent in nature, having alternative solutions for these low acuity patients allows for resources to be more readily available for every patient in need.

This past June, BCEHS started a trial that brought a nurse into the Vancouver dispatch centre to provide clinical assessment over the telephone to some 9-1-1 callers with non-urgent concerns. This service provides a secondary level of triage that, in some cases, allows for the resolution of concerns without involving paramedic care.

"Clinically assessing individuals with non-urgent medical concerns at this level allows us to deliver immediate support and direction, and at the same time, it often frees up our service to be available to patients who need urgent paramedic care," said Rene Bernklau, Clinical Operations Manager. This trial supports our continual goal of ensuring patients have the right kind of support, where and when they need it.

The long-standing partnership BCEHS has with HealthlinkBC continues to operate as usual. The calls that are unquestionably nonurgent (Blue calls) continue to be directly transferred to this service before they enter the BCEHS dispatch system. However, for the low acuity calls that require further information to more accurately identify the most appropriate response, the secondary triage nurses in BCEHS dispatch will follow up. BC residents should continue to utilize 8-1-1 for health advice regarding situations that are not urgent in nature.

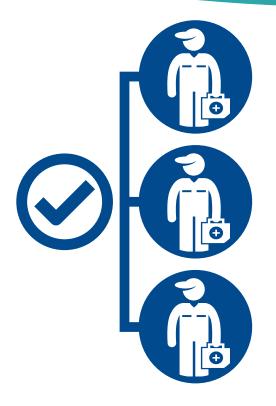
When other non-urgent calls are awaiting dispatch of an ambulance, the BCEHS secondary triage nurses may contact patients directly and provide a secondary assessment. When appropriate, the nurse will provide direction regarding the use of local community care providers, suggest alternative transportation options if medical oversight isn't required, or provide self-care advice. In some cases, patients are re-coded to receive more urgent paramedic care. If an ambulance is dispatched, the nurse assessment results in paramedics getting additional clinical data that provides a more thorough understanding of what the patient needs.

Currently, with one nurse, the trial is capturing 30% of low acuity calls in the lower mainland. The trial is set to expand by early December with the training of an additional five nurses, bringing the total to six, and introducing a supervisor role. This will allow the secondary triage team to provide support when the majority of lower acuity calls occur between 7AM and 11PM, seven days a week.

To learn more about the trial email **actionplanupdates@bcehs.ca**.







NEW MANAGEMENT TOOL FOR UNIT CHIEFS UNDER DEVELOPMENT

In March 2018, a three-month trial was launched to support unit chiefs in improving station level operational effectiveness. The trial introduced a new management tool, called the Unit Chief Performance Check-In tool, to track a variety of performance measures including staffing and operational impacts.

The trial was launched with 12 full-time unit chiefs and their area managers, representing stations of various sizes and in a range of locations from metro to rural. Following an orientation, the unit chiefs regularly reviewed performance data to identify trends and patterns, and had weekly meetings with their area managers to report station specific progress, discuss strategies to manage issues and identify opportunities to improve.

Over the twelve-week period, the utilization of the tool enabled unit chiefs to better identify issues and proactively make evidence-based decisions to mitigate them. Feedback from trial participants indicated that in just one month, improvements in operational effectiveness occurred. Additional feedback from the trial is being used to further develop the tool.

Email **actionplanideas@bcehs.ca** for more information.

COMMUNITY PARAMEDICINE EXPANDS TO IMPROVE PATIENT CARE

The introduction of community paramedicine into rural and remote communities across British Columbia is filling healthcare gaps and helping to stabilize paramedic presence. By delivering patient-focused, appropriate care in a home setting, patients are assisted in managing their own care and treatment, where safe and appropriate to do so.

Since the launch of the program in January 2016 to August 31, 2018:

- 108 primary care paramedics with IV endorsement (PCP IVs) have been recruited into community paramedic (CP) positions in 86 communities
- 1,246 patients have been seen by community paramedics, most of which were referred by a physician or nurse
- + 14,957 visits to patients' homes have been made by community paramedics
- Community paramedics have responded to 210 emergency calls while on a CP shift and have improved emergency response capacity by taking additional emergency shifts thereby reducing out of service ambulance hours



With a successful program underway, services provided by PCP IV community paramedics are expanding to include palliative care and home health monitoring. In addition, Advanced Care Paramedics (ACP) are now being introduced into the program as a research project to identify how to best incorporate ACPs into rural and remote communities, and build on their enhanced skill set to support emergency and community health. Called Rural Advanced Care Community Paramedics (RACCP), this role is positioned to support a wider range of care to patients with more serious medical issues in home, clinic and facility settings. Six communities including Fort St. John, Valemount, Prince Rupert, Cranbrook, Campbell River, and Ganges on Salt Spring Island, are the first that will be able to provide rural advanced care community paramedic services.

The RACCP in/on:

- Salt Spring Island has completed CP orientation and has been working in the community since June
- + Campbell River has completed CP orientation and is currently completing the BCEHS ACP Mentorship program
- Cranbrook is currently completing CP orientation and is expected to be working in the community by mid-November

The remaining rural advanced care community paramedicine positions will be reposted this month. Evaluation results of this new role will be shared when available.

Additional program changes are also underway with the transition from community paramedicine regional training officers (RTOs) to CP instructors/preceptors/ mentors (CP IPMs). RTO positions were established in 2016 as temporary two-year positions responsible for helping to define the CP role, establish treatment guidelines, and identify and support best practice. It was quickly recognized that this role was pivotal in supporting the program and as such, with the temporary roles ending, the new CP IPM ad hoc role was created to fill this need. New positions were posted in July and 19 successful candidates have now been hired, with training scheduled for November 2018. Stationed throughout the province, the CP IPMs will continue orientation, practice support and mentorship, and will lead ongoing program development and sustainment.

For questions, comments, or more information about changes in community paramedicine, email **CommunityParamedicine@bcehs.ca**.





PARAMEDIC PRACTICE LEADERS -PARAMEDICS LEADING PARAMEDIC PRACTICE

Three highly accomplished paramedics were recently hired to fill a new role at BCEHS, the role of Paramedic Practice Leader (PPL). Under the direction of Clinical and Medical Programs, this team is tasked with ensuring the highest standard of patient care is delivered throughout the province. While the team works together to continually assess, inform and develop clinical leadership, education and research, each PPL oversees a separate



portfolio of clinical specialties along with a specific geographic region.

"Bringing paramedics directly into the strategic oversight and development of how the profession delivers service is critical to optimizing patient care," said Joe Acker, Director of Clinical and Professional Practice. "Our newly appointed Paramedic Practice Leaders are a key component in our ongoing goal of pursuing excellence in paramedicine."

Responsible for leading the development of programs, guidelines, protocols and policies in clinical and professional practice, an important part of the PPL portfolio is gathering and interpreting feedback from paramedics and integrating those experiences into change initiatives. To initiate this process, the team has been touring the province meeting directly with individual paramedics and conducting Town Halls in stations to answer questions, act as a resource, engage front-line staff and share information about change initiatives. In addition, each PPL is in the field one day a week assisting with calls to ensure they are directly exposed to existing challenges and opportunities.

To further leverage their experience, Paramedic Practice Leaders are also providing clinical input into educational programs. Working with Learning Development and Medical Directors, this team is informing and supporting the delivery of education training initiatives. They are also tasked with establishing strong networks with academic institutions and other key partners to undertake and support research opportunities that support evidence-based practice initiatives. In collaboration with the **Emergency Medical Assistants** Licensing Branch, the team is working toward updating regulation and licensing processes to ensure national best practices are met and that paramedics in British Columbia provide the highest level of clinical and professional practice.

"This paramedic clinical leadership will prompt the development of impactful programs to further professionalize the practice," continued Acker, "it's an exciting time to be in paramedicine."

Watch the Action Plan Update for more news on the Clinical and Professional Practice team and the Paramedic Practice Leaders.



ROLLOUT OF PARACARE CONTINUES ACROSS BC

With the goal of improving patient care through the automation of patient care records, the ParaCARE project continues to be implemented across the province. The inambulance tablet, coupled with patient care software called Siren, allows crews to document highquality electronic patient records (ePCRs). Dispatchers pre-populate call information, Siren uploads patient details provided via their BC Services card, and paramedics capture full event details to the ePCR. Electronic patient care records improve the transfer of care between paramedic crews and emergency departments.

BCEHS paramedics are completing ten hours of training to fully utilize Siren for patient event documentation. Training is comprised of six hours of online learning, followed by a four-hour face-to-face field training session. This ambitious rollout has been supported by 26 paramedics training other paramedics across the province, on the use of the software. To date:

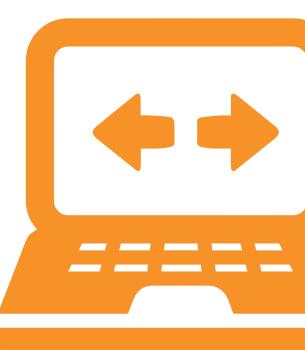
- + 68 stations are complete with deployments underway in a further 56 stations
- + 2,100+ paramedics have been trained on the new system
- Metro West, Victoria, and South Island are the first Siren-only districts, with all paramedics being Siren certified

Starting this month, deployments in the Kootenay West, Kootenay East and Boundary districts will begin. It is expected that deployments in the North West, North Central, North East and Nechako districts will start in January 2019.

Before the end of this year, patient care records will be further

expanded with the integration of cardiac monitor data. This addition will include the Physio-Control LP15 cardiac monitors and will enable the transfer of ECG data, drug information and vital signs into Siren.

While deployment continues, the system is being updated and improved continuously based on paramedic feedback. This automated patient record technology is expected to be fully deployed across the province by March 2019.



QUESTIONS / MORE INFORMATION please email us at actionplanideas@bcehs.ca or visit our website, bcehs.ca

