council on health promotion

PulsePoint Respond app available in BC

he PulsePoint Respond smart phone app is ready to turn bystanders into potential lifesavers when a sudden cardiac arrest occurs in a public place in BC. BC Emergency Health Services (BCEHS) launched the free app in January throughout the province. The app provides vital information in the case of cardiac arrest, where minutes count in reducing suffering and preventing death.

The goal of the PulsePoint Respond app is to engage additional bystanders in the lifesaving acts of cardiopulmonary resuscitation (CPR) and automated external defibrillator (AED) use. Currently, only one-third of sudden cardiac arrest victims receive bystander CPR, and, where available, publicly accessible AEDs are used less than 3% of the time. The app provides support to the internationally, clinically recognized chain of survival (Figure 1), increasing the chances of immediate CPR and rapid defibrillation.

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In less than 6 months from the province-wide launch, almost 7000 users have downloaded the app and 604 "CPR Needed" alerts have been sent on 154 potential out-of-hospital cardiac arrests. This means that anyone who may suffer a sudden cardiac

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arrest in BC now has an increased chance of survival. BC is the first to have a province-wide program for this public notification service; however, other Canadian provinces are keen to follow if it proves to be successful. PulsePoint Respond covers all communities and municipalities in BC, and while it does rely on mobile phone coverage, it processes calls automatically, meaning there are no delays or changes in how paramedics are dispatched after 9-1-1 calls are received (Figure 2).

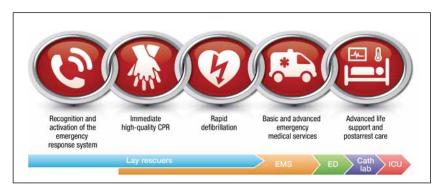


Figure 1. The chain of survival.

How the app works

Smart phone users who have downloaded the app are automatically connected to the BCEHS emergency dispatch system. When a sudden cardiac arrest is reported through 9-1-1, BCEHS dispatchers automatically send a notification of its location to all app users. Next, a "CPR Needed" alert flashes on the smart phone screen of each user who is within 400 metres, accompanied by a distinctive alert tone. Opening the alert loads the app with the following information:

- The app user's current location.
- The general reported location of the cardiac arrest victim.
- The location of any nearby AEDs.

To receive the "CPR Needed" alert, an app user must have the "CPR Needed" alert option turned on in the settings menu of their device, and they must be within walking distance of the reported sudden cardiac arrest (Figure 3).

The "CPR Needed" alert shows users a map pinpointing the location of nearby AEDs, which are an important tool that the general public can use safely before paramedics arrive.

We recognize that it may not always be possible for those receiving an alert to respond, and neither Pulse-Point nor BCEHS keeps records of who receives or responds to alerts. No identifiable health information (e.g., the name, birth date, or personal health number of the patient, or details about the app user) is known or stored by the app or BCEHS.

The safety of our staff, patients, and bystanders is of utmost concern to everyone at BCEHS. While there have not been any reports of adverse incidents in the 3000-plus communities using PulsePoint Respond, we do not ask anyone to go anywhere where they may feel unsafe. Also, it is im-



Figure 2. How the PulsePoint Respond process unfolds.

portant to remember that the response process begins because someone has called for an emergency ambulance, is speaking to a BCEHS call-taker, and is most likely still on scene. As the response process unfolds, the BCEHS call-taker will remain on the line and provide support until crews are present. If there is cause for concern, the police and other appropriate agencies will be alerted as well.

How you can help

The greatest advocates for PulsePoint Respond are health care providers who see the impact of sudden cardiac arrest and understand the benefits of early CPR and AED use. Survival from sudden cardiac arrest is led by bystanders. BCEHS paramedics and dispatchers will ensure a rapid response; however, without bystander CPR and AED use the chances of survival are low.

Please spread the word among your family, friends, patients, and fellow health care professionals about the PulsePoint Respond app and its benefits. Put up posters where the public can see them and educate them to understand the benefits of early CPR and AED use.

The app can be downloaded from www.pulsepoint.org for iOS and Android. For PulsePoint Respond promotional materials to use in your practice, contact peter.thorpe@bcehs.ca.

-Peter Thorpe, PGDip **Director, Strategic Program** Development, Clinical & **Medical Programs, BCEHS**



Figure 3. "CPR Needed" alert screen showing the location of the app user, cardiac arrest victim, and AED.

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