



COUNTY OF SAN DIEGO

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BOARD OF SUPERVISORS

1600 PACIFIC HIGHWAY, ROOM 335, SAN DIEGO, CALIFORNIA 92101-2470

AGENDA ITEM

2013 NOV 26 PM 3 30

CLERK OF THE BOARD
OF SUPERVISORS

DATE: December 3, 2013
TO: Board of Supervisors
SUBJECT: Empowering Citizen Heroes With A Smartphone App (DISTRICTS: ALL)

Overview

Nearly 1,000 lives are lost daily in the United States to Sudden Cardiac Arrest (SCA), a syndrome that often occurs in active, outwardly healthy people with no known heart disease or other health problems. In the County of San Diego, 668 people died last year of SCA, making it one of our region's biggest killers.

While SCA is a life-threatening condition, it also is one that can be treated through early intervention with cardiopulmonary resuscitation (CPR), defibrillation, advanced cardiac life support and mild therapeutic hypothermia. Medical experts report that CPR is most effective when provided within three to five minutes of the start of symptoms. Emergency response times can often take more than six minutes. Clearly, the faster first responders can get to the victims, the greater the opportunities for saving lives.

Fortunately, new technology allows for the use of advanced mobile applications to greatly expand the number of trained San Diegans available to quickly respond to cardiac-related incidents. Using location-based services built into smartphones, this technology will, in seconds, match the location of a victim with that of the nearest trained CPR provider, an individual who will then be notified by message on their smartphone and provided a map showing both the victim's reported location and closest Automated External Defibrillator (AED).

The U.S. pioneer in establishing these systems is the PulsePoint Foundation, founded from technology that emerged in California's Silicon Valley and has since been incorporated within the structure of a specially-focused 501(c)3 non-profit. Since its 2011 founding, the PulsePoint system and smart phone app have been adopted throughout the United States to great success.

The potential introduction of the PulsePoint smartphone app for use throughout San Diego County already has drawn the support of a diverse group of public safety, first response and emergency service providers, including CalFIRE, The American Red Cross San Diego/Imperial Counties Chapter, UC San Diego Health Sciences and San Diego Gas & Electric. In addition, the city of San Diego Fire-Rescue Department is in discussions with PulsePoint, as is the North County Dispatch Joint Powers Authority.

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By incorporating the PulsePoint app into the regional 9-1-1 emergency call system, the county will be empowering a new group of citizen first responders to help improve public safety and save lives.

Recommendation(s)

SUPERVISOR RON ROBERTS AND SUPERVISOR BILL HORN

1. Direct the CAO to initiate discussions with regional emergency response system operators and the PulsePoint Foundation to establish a County-wide smartphone CPR notification system to alert nearby off-duty CPR-trained first responders.
2. Direct the CAO to identify grants and other sources of funds to underwrite the system's start-up and initial operating costs and to take other actions needed to establish a County-wide smartphone CPR notification system in San Diego County.

Fiscal Impact

Funds for this request are not included in the Fiscal Year 2013-14 CAO Revised Recommended Operational Plan. If approved, the Chief Administrative Officer will work to identify grants and partner funding in the estimated amount of \$25,000 to \$50,000 to support the implementation of the project and an estimated amount of \$5,000 to \$7,000 for annual operations. Approval of these recommendations will result in no net General Fund cost and no additional staff years.

Business Impact Statement

N/A

Advisory Board Statement

N/A

Background

Nearly 1,000 lives are lost daily in the United States to Sudden Cardiac Arrest (SCA), a syndrome that often occurs in active, outwardly healthy people with no known heart disease or other health problems.

Cardiac arrest is among the leading causes of death among adults over the age of 40 in the United States according to the American Heart Association (AHA). In the U.S., the AHA reports that about 383,000 people of all ages will experience SCA this year, with nine out of 10 dying.

While SCA is a life-threatening condition, it also is one that can be treated through early intervention with cardiopulmonary resuscitation (CPR), defibrillation, advanced cardiac life support and mild therapeutic hypothermia. When trained bystanders intervene by providing CPR and using Automated External Defibrillators (AEDs) before Emergency Medical Services (EMS) arrives, the survival rate increases to four out of 10 victims.

The American Heart Association estimates that effective bystander CPR, provided immediately after sudden cardiac arrest, can double or triple a person's chance of survival. However, only about one quarter of SCA victims receive bystander CPR and even fewer receive a potentially

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lifesaving therapeutic shock from a public access Automated External Defibrillator (AED). Improving bystander CPR rates and access to AEDs is critical to survival.

Medical experts report that CPR is most effective when provided within three to five minutes of the start of symptoms. Emergency response times can often take more than six minutes. Clearly, the faster first responders can get to the victims, the greater will be the saving of lives.

Fortunately, new technology allows for the use of advanced mobile applications to greatly expand the number of trained San Diegans available to quickly respond to cardiac arrest incidents. Using location-based services built into mobile devices, this technology will, in seconds, match the location of a victim with that of the nearest trained CPR provider, an individual who will then be notified by message on their smartphone and provided a map showing both the victim's location and closest Automated External Defibrillator (AED).

The U.S. pioneer in establishing these systems is the PulsePoint Foundation, founded from technology that emerged in California's Silicon Valley and has since been incorporated within the structure of a specially-focused 501(c)3 non-profit. PulsePoint provides an enterprise-class specialty emergency notification system designed to support public safety agencies working to improve cardiac arrest survival rates through improved bystander performance and active citizenship.

Since its 2011 founding, PulsePoint has been adopted throughout the United States to great success. The PulsePoint smartphone application empowers citizens to provide life-saving assistance to victims of SCA. Application users who have indicated they are trained in CPR and willing to assist in case of an emergency are notified if someone nearby is having a cardiac emergency and may require CPR.

If the cardiac emergency is in a public place, the location-aware application will alert trained citizens in the vicinity of the need for bystander CPR simultaneous with the dispatch of advanced medical care. The application also directs these citizen rescuers to the exact location of the closest publicly accessible Automated External Defibrillator (AED).

Cataloging and identifying the locations of AEDs throughout the region is a critical component of the PulsePoint system. To move forward with PulsePoint, the region will have to perform an extensive inventory of all AED, including specifying their precise locations.

Adopting the PulsePoint system, along with continuously encouraging San Diegans to learn CPR through programs such as "Love Your Heart" and "Sidewalk CPR," will help us have a better-trained and healthier community.

The installation of the PulsePoint software as an add-on to the existing 9-1-1 system is only part of the overall effort. Along with identifying AED locations, the region's first-responder network will be invited to be part of an informational campaign that encourages CPR trained individuals such as firefighters, police officers, nurses, doctors, lifeguards, emergency medical technicians and others to sign up with the system and to download the PulsePoint application to their smartphones from either Google Play or the Apple App Store. When notified that they are the

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closest trained person to a person experiencing cardiac arrest, these enrolled individuals will be responding as private citizens. The California Good Samaritan Act says that “no person who in good faith, and not for compensation, renders emergency care at the scene of an emergency shall be liable for any civil damages resulting from any act or omission.”

The potential introduction of the PulsePoint system for use throughout San Diego County already has drawn the support of a diverse group of public safety, first response and emergency service providers, including CalFIRE, The American Red Cross San Diego/Imperial Counties Chapter, UC San Diego Health Sciences and San Diego Gas & Electric. In addition, the city of San Diego Fire-Rescue Department is in discussions with PulsePoint, as is the North County Dispatch Joint Powers Authority.

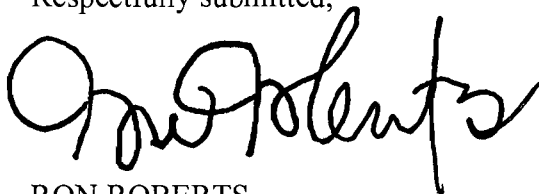
By incorporating PulsePoint into the regional 9-1-1 emergency call system, the addition of a new group of citizen first responders will improve public safety and save lives. This has been demonstrated in 14 states and more than 350 municipalities across the country. As of September 2013, the PulsePoint app had been activated on 1,500 actual cardiac emergencies informing nearly 6,000 nearby citizen rescuers. More than 75,000 people carry the PulsePoint app on their smartphones.

It is our recommendation that the Board of Supervisors direct the CAO’s office to open up discussions with PulsePoint to bring this technology to the County of San Diego, to work with the regional emergency response network to ensure it is seamlessly available countywide, and to work with the County’s Public Safety Group and Health and Human Services Agency to find third-party underwriting and sponsorships to cover the start-up and initial costs of this life-saving system.

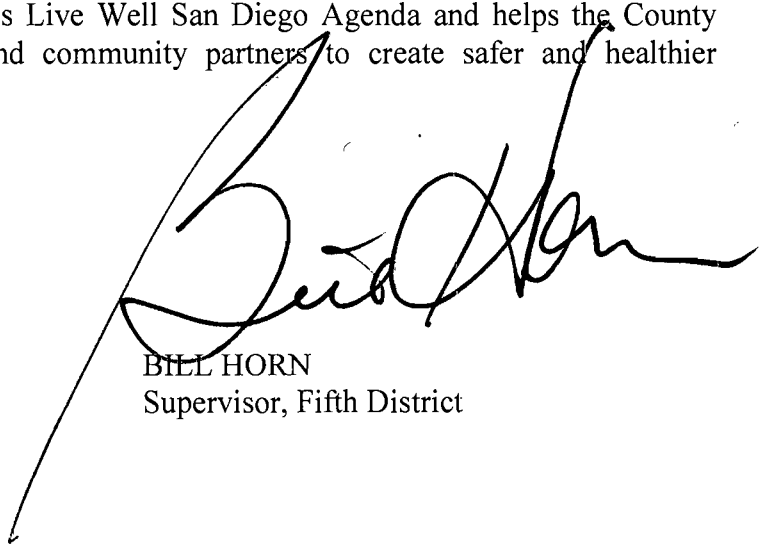
Linkage to the County of San Diego Strategic Plan

This effort is supportive of the County’s Live Well San Diego Agenda and helps the County work with participating government and community partners to create safer and healthier communities.

Respectfully submitted,



RON ROBERTS
Supervisor, Fourth District



BILL HORN
Supervisor, Fifth District

ATTACHMENT(S)

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AGENDA ITEM INFORMATION SHEET

REQUIRES FOUR VOTES: Yes No

WRITTEN DISCLOSURE PER COUNTY CHARTER SECTION 1000.1 REQUIRED

 Yes No

PREVIOUS RELEVANT BOARD ACTIONS:

BOARD POLICIES APPLICABLE:

BOARD POLICY STATEMENTS:

MANDATORY COMPLIANCE:

ORACLE AWARD NUMBER(S) AND CONTRACT AND/OR REQUISITION NUMBER(S):

ORIGINATING DEPARTMENT: Supervisor Ron Roberts and Supervisor Bill Horn

OTHER CONCURRENCES(S):

CONTACT PERSON(S):

Gabriel Gutierrez

Name

(619) 531-5544

Phone

gabriel.gutierrez@sdcounty.ca.gov

E-mail

Joshua Ramirez

Name

(619) 531-5555

Phone

joshua.ramirez@sdcounty.ca.gov

E-mail