



Presentation Title: Heart Safe Richland

Presented by: Joshua Smith, FF/Paramedic Richland Fire & Emergency Services

I. Formative Evaluation – Planning

At Richland Fire & Emergency Services (RF&ES), our mission is to “protect and enhance the quality of life.” Two of the top three key performance indicators that we use in measuring how well we meet our mission are the number of lives saved and the quality of life impacted. That is why Heart Safe Richland, a public education initiative aimed to increase bystander participation in out of hospital cardiac arrest (OHCA) is our most emphasized and supported program to date. Heart Safe Richland equips our community with the knowledge, skills and abilities proven to increase OHCA survival. In addition to the primary objective of increasing the number of neurologically intact survivors, we have the following data-driven goals.

- Provide training to 15% of our population annually.
- Certify 12 Heart Safe Campuses annually. A Heart Safe Campus is any school, business, church, HOA, etc. that has trained a minimum of 80% of their staff or population, as well as committed to hosting biannual training opportunities.
- Strategically place 12 automated external defibrillators (AED) within the community annually.
- Update the Richland Municipal Code (RMC) to reflect an emphasis on public access defibrillation.
- Enhance partnerships with those included in the chain of survival, as depicted by the American Heart Association (AHA) using established continuous quality improvement (CQI) mechanisms.
- Increase the amount of PulsePoint Respond downloads by 50% in 2020.

In 2018, RF&ES identified the need to improve OHCA survival rates within the City of Richland. According to the chain of survival, as depicted by the AHA, 60% of the survivability profile for OHCA victims is reliant upon early recognition and response from our lay public. In 2019, RF&ES responded to 57 OHCA and of those 57, 54 occurred within the City of Richland and therefore entered into the mycares™ cardiac arrest registry. Furthermore, of those 54 within the City of Richland, 29 or 54% were witnessed OHCA. After establishing a CQI process, we found that at least 28% of the witnessed cardiac arrest patients experienced a significant delay in care or no care at all due to the seizure-like activity and gasping respirations that distracted them from performing hands-only compressions.

Within every Heart Safe Richland class, we focus on five main points; Recognition, Emotional Preparedness, Hands-Only CPR, Proper use of an AED, and Public Access Defibrillation. Through meeting with various community groups on the topic of OHCA, we identified marketing strategies, as well as opportunities for training at homeowner’s associations, churches, businesses, schools, etc. In the spring of 2019, we launched a pilot program within our school district.

Having the support from administration, we then informed stakeholders of the need to increase bystander intervention as it relates to OHCA within the community. Informed stakeholders have allowed us to move

forward with a proclamation of support from our mayor, and a shared vision between RF&ES, the local hospital, school district, city council, and City of Richland executive leadership team.

II. Process Evaluation – Implementation

The Heart Safe pilot program at Chief Joseph Middle School included both a cognitive and psychomotor aspect. Throughout three, four-hour sessions, we provided the Heart Safe training to nearly 100% of both students and staff, totaling 667 people. Our youngest student was 11 years old and our oldest staff member was 61 years old. After the pilot program, the students, staff, and instructor cadre provided an overwhelming amount of positive anecdotal data. This data served as confirmation that Heart Safe Richland was a program ready to be delivered to our entire community. Using the advice and expertise of our communications and marketing department and research and development data, we developed the implementation process.

- Educate and receive buy-in from the members of RF&ES.
- Educate the community on the importance of bystander intervention.
- Present Heart Safe Richland to civic organizations.
- Schedule open enrollment classes.
- Ensure quality data with a weekly QA/QI report.

III. Impact Evaluation – Short-Term Results

Heart Safe Richland was officially launched on June 3rd, 2019. By the end of the year, we trained 8,299 community members (*14.5% of our population*) and certified 7 Heart Safe Campuses. In addition to the training, we enhanced our QA/QI of OHCA, solidified the ability to measure our program's success by adding specific key performance indicators within our records management system, and most importantly, developed strong relationships and a shared vision with our stakeholders.

IV. Outcome Evaluation – Long-Term Results

With less than a year of data, we are unable to quantify the success of Heart Safe Richland in terms of cardiac arrest survival. However, the qualitative and quantitative data gathered during research and development have provided a foundation to measure success as we move forward. Furthermore, the highly favorable anecdotal data that we continue to receive from all involved make us confident in our goal of reaching 25% survivability of all rhythms in OHCA by 2022.