HEARTSafe Community

SELF-ASSESSMENT AND PROJECT PROGRESSION

TRACKING AND SCORESHEET

The Citizen CPR Foundation is striving to help communities improve their system of care for cardiac arrest to increase survival and improve outcomes. Community-wide interventions that will improve the overall quality and frequency of early bystander-initiated CPR and prompt defibrillation are critical aspects to reduce death and disability from cardiac arrest. The optimal strategy is one that actively engages a community at all levels.

This Self-Assessment and Project Progression Tracking and Scoresheet outlines tactical elements and actions, that when implemented and combined, can improve outcomes from sudden cardiac arrest.

Use of this Tracking and Scoresheet will help perform a baseline assessment as well as serve as an essential tool in the process of implementation and ongoing evaluation.

CORE STRATEGIES

- Strengthen local stakeholder collaboration
- Encourage data collection, analysis and dissemination
- Facilitate implementation of lifesaving strategies
- Promote public education and training
- Improve delivery of high-quality resuscitation and post-arrest care
- Enhance the impact of cardiac arrest therapies

Project Development through Progress Scoring

Based on and adapted from a self-assessment scale developed by the Institute for Healthcare Improvement (IHI), a progress score will allow you to track your improvement progress over time using a scale between 0.5 - 5.0; 0.5 defined as being 'signed up to participate' and 5.0 as 'showing outstanding sustainable results.' This is particularly useful in guiding and tracking the implementation and progression of the recommended tactical elements.

PROGRESS SCORES DEFINED

0.5 - Intent to Participate

The action/element has been identified, but the plan has not been completed nor team formed.

1.0 - Goal and Team Established

A goal has been completed and reviewed. Individuals or teams have been assigned, but no work has been accomplished.

1.5 - Planning for the Project has Begun

Organization of plan logistics has begun (such as: what resources or other support will be needed, initial focus, tools/materials needed, timelines developed).

2.0 – Activity with No Changes

Implementation has begun. Evaluation has not started.

2.5 - Re-assessment: No Improvement

Implementation is in progress. No measurable results have been achieved.

3.0 - Re-assessment: Modest Improvement

Implementation is in progress. Measurable results have been achieved.

Results are 20% complete.

3.5 - Re-assessment: Improvement

Implementation is in progress. Measurable results have been achieved.

Results are 30% - 40% complete.

Element 1: Establishing a High-Performance Lead Agency and Community Team

Sudden cardiac arrest is a communal problem and local issues demand local solutions. As such, a lead organization (e.g., police, fire, EMS provider, hospital or municipal office) is necessary for overseeing and coordinating localized HEARTSafe efforts.

The lead agency takes ownership of the project and enlists help and representation from other agencies and individuals as well as the community at large.

Most often, a public safety agency or healthcare institution will assume the role of a lead agency.

Goal: A lead agency and community team is established with broad representation from the community.

PROGRESS SCORE FOR THIS ELEMENT

 0.5 - Intent to Participate
 1.0 - Goal and Team Established
 1.5 - Planning for the Project has Begun
 2.0 - Activity with No Changes
 2.5 - Re-assessment: No Improvement
 3.0 - Re-assessment: Modest Improvement
 3.5 - Re-assessment: Improvement
 4.0 - Re-assessment: Significant Improvement
 4.5 - Re-assessment: Sustainable Improvement
 5.0 - Re-assessment: Outstanding Sustainable Results

Element 2: Using Data to Drive Regional Strategies and Localized Tactics

It is nearly impossible to improve something that is not measured. With this in mind, the Citizen CPR Foundation, with vast support from partner organizations, calls for the community to develop a plan for the collection and analysis of cardiac arrest data.

Enrollment and participation in the Cardiac Arrest Registry to Enhance Survival (CARES) is strongly and highly recommended. CARES helps communities measure performance and identify how to improve cardiac arrest survival rates. In those cases where participation in CARES is prohibited for any reason, locally developed and compatible methods are acceptable.

Goal: A process has been put into place for the collection, analysis and use of cardiac arrest data to measure performance.

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 3.0 - Re-assessment: Modest Improvement
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Element 3: Trained Citizen Rescuers

Building on local coordination, data collection and analysis, citizen CPR training plays a pivotal role in improving outcomes. Ideally, the entire citizenry is adept at recognizing cardiac arrest, has some form of hands-on experience and is willing to perform CPR when called upon. Recognizing the importance of bystander actions, this element calls for a minimum of 15% of the community population to receive some form of hands-on CPR training on an annual basis. All forms of training are acceptable, including hands-only CPR as well as certification at any level from any nationally recognized organization.

Viewing approved ultra-brief instructional videos produced by the American Heart Association and American Red Cross can contribute to your community's 15% goal but are not intended replace valuable hands-on experience.

Goal: 15% of the community population receives training in CPR annually.

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Element 4: Recognizing and Celebrating the Actions of Rescuers

Recognizing the actions of those who come to aid another person is essential and can help to promote your lifesaving efforts and reinforcing desirable behaviors. This positive reinforcement can take on many forms such as lapel pins, plaques, survivor-rescuer events and more. The key is to formally recognize all those involved for their efforts wherever and whenever possible and appropriate. A positive outcome is the goal; however, it is important to recognize bystander actions, even in cases of poor outcome.

Goal: A formal recognition process is in place for the celebration of lifesaving efforts.

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Element 5: Educated and Responsive Citizens

Element 5 calls for the community to develop and implement strategies to increase public awareness of sudden cardiac arrest, the encouragement of bystander intervention and public support for your lifesaving campaign. Examples include public demonstrations with hands-on practice, improving access to certification courses, utilization of social media and ultra-brief instructional videos, billboards, newspaper articles and other innovations.

Awareness campaigns can be organized to capitalize existing national awareness months such as National CPR and AED Awareness Week (June), Sudden Cardiac Arrest Awareness Month (October), World Restart a Heart Day (October) and Defibruary (February). Plan around these timeframes to capitalize on the exposure and increased general interest.

Goal: A public awareness campaign plan is established and sustained throughout the year using a combination of tactics.

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2.	5 - Re-assessment: No Improvement
3.0	0 - Re-assessment: Modest Improvement
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4.	5 - Re-assessment: Sustainable Improvement
5.0	0 - Re-assessment: Outstanding Sustainable Results

Element 6: Telephone Guided CPR and Utilization of AEDs

Telephone-guided CPR (T-CPR) can significantly improve bystander CPR rates. In order to meet this requirement, your emergency communications center or center(s) commit to providing effective T-CPR in accordance with the American Heart Association Telephone CPR Program Recommendations and Performance Measures.

In those cases where a community does not yet have T-CPR in place, the Citizen CPR Foundation requires community leaders to engage with local and state authorities to enact enabling regulations to support T-CPR. The American Heart Association and American Red Cross are likely partners to get T-CPR legislation on the priority list in your geography.

Dispatch-Assisted AED Locating and Coaching (T-AED), is an evolving strategy involving telephone guidance by emergency telecommunicators in the retrieval and use of nearby AEDs. At this time, there is limited research on this strategy. Although T-CPR has been associated with increased survival, most cases are not associated with AED retrieval.

Goal: T-CPR in accordance with AHA recommendations is in place. If not in place, formal efforts at implementation are required including regulatory reform and policy change.

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Element 7: Planned and Practiced Response to Sudden Cardiac Arrest

Schools, municipal buildings, businesses and public venues should have a Medical Emergency Response Plan (Medical ERP) that addresses the immediate need for medical assistance in the event of traumatic injury or illness including sudden cardiac arrest.

In addition to having well thought out and written plans, periodic drills should occur to validate the plan's effectiveness and identify areas needing improvement.

A comprehensive emergency action plan (EAP) or emergency response plan (ERP) is critical to facilitate a rapid and effective response to a cardiac emergency. Cardiac arrest should be suspected in any person that collapses suddenly and is unresponsive. All potential responders to a collapsed person should be trained in the recognition of sudden cardiac arrest (SCA), cardiopulmonary resuscitation and use of an automated external defibrillator (AED). AEDs should be accessible on-site to the victim location and with a response time to first compression and shock of less than three (3) minutes. The plan should be written, and a coordinator should be designated to foster compliance with training, practice, and rehearsal of the plan at least once annually. Different locations may require special considerations.

Goal: EAPs/ERPs are in place for all schools, municipal buildings, businesses and public venues and are tested through simulation/drills at least once annually.

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Element 8: Strategically Placed and 24/7 Accessible AEDs

Element number 8 addresses the permanent placement of AEDs in public or private congregate areas where there is a statistical likelihood of sudden cardiac arrest such as shopping malls, supermarkets, theaters, health clubs, parks, recreational centers, transportation centers and other venues.

Additionally, the Citizen CPR Foundation recommends that AEDs are accessible at all times, particularly those placed at athletic fields, parks, beaches and public gathering spots. Consider outdoor AED enclosures which make lifesaving equipment accessible to greater numbers of people, 24 hours per day.

Goal: AEDs are strategically placed in public locations where cardiac arrest is likely to occur and 24/7 accessibility is enabled wherever possible.

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Element 9: 911 Integrated AED Registry

Automated external defibrillators are proven lifesavers. In an effort to enable AED utilization, element 9 requires the community to establish or participate in an AED registry where AED locations are mapped and integrated with the 911 system and/or local Public Safety Answering Point (PSAP).

AED registries serve as the backbone of many novel solutions developed to facilitate rapid identification of the nearest resuscitation-ready AED in an emergency. AED registries, holding information on location and accessibility, may facilitate AED retrieval by enabling rapid identification of the nearest device. Integration of this data with the 911 system is essential. By doing so, bystanders can be directed to nearby and accessible AEDs by emergency telecommunicators, reducing time to first compressions and shock.

Mobile device applications (apps) such as GoodSAM (United Kingdom) and PulsePoint AED (United States) can crowdsource the development and maintenance of AED registries. Both apps allow users to photograph AEDs and upload their locations so that they can be verified and added to the local AED registry by emergency communications centers and systems.

Goal: Establish a 911 integrated AED registry and means for identifying and adding undiscovered and new AEDs.

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Element 10: First Responder Defibrillation

In many communities, equipping and enabling First Responders such as police officers and firefighters can significantly reduce time to first compressions and first shock. Accordingly, element 10 calls for first responder agencies to be defibrillation capable, undergo appropriate training, have device maintenance plans, and be able to distribute policies, event debriefing and medical direction.

Firefighters and Law Enforcement Officers are often able to deliver defibrillation in significantly shorter times than Emergency Medical Services. EMS systems should review their response times and consider instituting first-responder defibrillation as one means of reducing defibrillation intervals.

Goal: First responder agencies are defibrillation capable, undergo appropriate training, have device maintenance plans, dispatch policies, event debriefing and medical direction.

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Element 11: High-Performance Resuscitation

Among the essential components of a system of care for cardiac arrest victims is "high performance CPR" (HP-CPR).

High-performance resuscitation and improved outcomes are highly dependent on a foundation of high-performance CPR by prehospital care providers. Advanced cardiac life support must be positioned in a way that does not get in the way of, but instead enables this high-quality CPR. The approach requires a teamwork approach by EMS systems, agencies and providers alike.

High-performance CPR can boost survival outcomes significantly by ensuring that victims receive enough blood to their heart and brain. High-performance or high-quality CPR is an expectation for all those who are responsible the delivery of professional resuscitation. Recognizing the value of high-performance CPR, the Citizen CPR Foundation recommends that the local Emergency Medical Services (EMS) providers practice "high-performance" CPR and possess supportive protocols, technology and equipment for resuscitation and effective post-resuscitation care.

Performing high quality CPR, with minimal delays and interruptions is a core strategy to improving outcomes. Quality improvement strategies should aim to encourage, enable and direct the ongoing practice and pursuit of high-performance CPR.

Goal: Emergency Medical Services (EMS) providers practice "highperformance" CPR and possess supportive protocols, technology and equipment for resuscitation and effective post-resuscitation care.

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Element 12: Quality Improvement and Public Reporting

Similar to element 2 - data collection and analysis - element 12 focuses on an EMS provider agency's Quality Improvement (QI) process for cardiac arrest that includes data review, facilitated debriefing, access to patient outcome data and active medical direction. Additionally, these criteria call for the collection of public reporting performance and survival data by the lead agency. The goal here is to measure and improve, as well as provide transparency for the improvement of support by the community.

Goal: A process has been established for continuing quality improvement and public reporting of cardiac arrest data on an annual basis.

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Element 13: Meaningful Primary and Secondary Health Promotion and Prevention

Cardiovascular diseases result in millions of deaths around the globe annually, most of which are avoidable if identified early. Preventive healthcare has a major role in the fight against cardiovascular diseases.

The adage "an ounce of prevention is worth a pound of cure" is reflected in element 13. This element addresses the need for the community to establish primary and secondary public health measures that support cardiovascular wellness, such as education, prevention and systems of care for stroke and myocardial infarction.

Primary prevention refers to the steps taken by an individual to prevent the onset of the disease. This is achieved by maintaining a healthy lifestyle choice, to include diet and exercise. Secondary prevention focuses on reducing the impact of the disease by early diagnosis prior to any critical and permanent damage. This facilitates avoiding life threatening situations and long-term impairments from a disease.

Goal: Meaningful primary and secondary health promotions are in place and tailored for the community.

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