South Dakota

Cardiac Ready Communities

Program Guide

Last reviewed: June 2020

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The South Dakota Cardiac Ready Communities Program Guide was modeled after the Montana and North Dakota Cardiac Ready Communities Programs. The North Dakota Program was developed through the North Dakota Cardiac System of Care, which came from a partnership between the North Dakota Department of Health Division of EMS & Trauma and the American Heart Association. The Montana Program was developed through the Montana Department of Public Health and Human Services.

Introduction

In time sensitive emergencies such as a cardiac arrest, every second, every minute that passes without immediate intervention such as cardiopulmonary resuscitation (CPR) and/or the placement of an automated external defibrillator (AED) can mean the difference between life and death. In rural communities, the cardiac arrest survival rate is lower than in urban areas. In South Dakota (SD), ambulance response can range from a few seconds to well over 30 minutes in the most remote parts of the state, which often prevents even the best emergency service systems from arriving in time to help cardiac arrest patients.

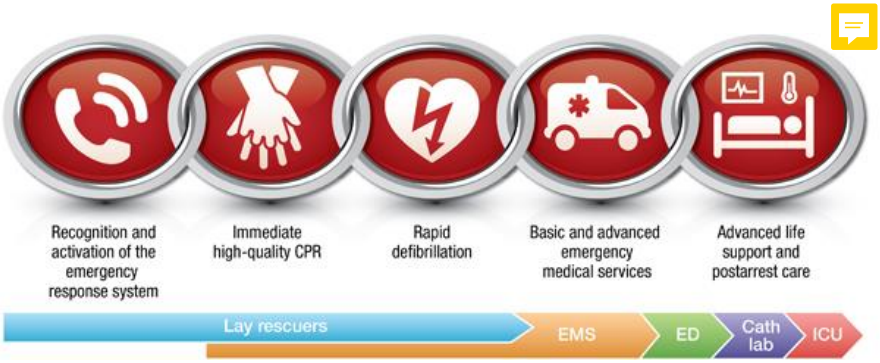
There are several important factors affecting rural survival rates such as whether there is a bystander trained in CPR who witnessed the event. An untrained bystander may be hesitant to begin CPR and/or deliver poor quality CPR. A trained 911 dispatcher can talk a caller through the steps of CPR, but most rural dispatchers lack the training to do so. Availability of AEDs in most rural areas is low. Some first responders carry AEDs; however, by the time they arrive on scene it may be too late to save the patient.

The focus of the Cardiac Ready Communities (CRC) Program is to educate, equip, and empower local community members to be better prepared and more confident in helping a patient experiencing a cardiac event prior to the ambulance arriving. This collaborative response to a public cardiac event is referred to as a System-of-Care, where laypersons, dispatchers, Emergency Medical Services (EMS), police, fire, and hospital staff all work together for the betterment of the community and its members.

The CRC Program runs through a partnership of the SD Department of Health (DOH) and the Cardiovascular Collaborative, a voluntary group of SD medical and public health professionals working to improve the quality of life through prevention and control of heart disease and stroke. The CRC Program promotes the American Heart Association (AHA) *Chain of Survival*, which can improve the chances of survival and recovery for victims of cardiac events.

Chain of Survival

- ~~Early recognition of cardiac emergency and~~ activation of the emergency response system
- Early CPR with an emphasis on high-quality chest compressions
- ~~Rapid~~ defibrillation
- ~~Effective basic and advanced emergency medical services (EMS)~~
- ~~Advanced life support and~~ post-cardiac arrest care



The CRC Program operates on the principle that better outcomes from a cardiac event are possible when every community member knows CPR and community resources are available (such as AEDs) to assist in resuscitative efforts before ambulance services arrive. The *Chain of Survival* in rural areas depends on community-wide involvement. Each citizen is extremely important in saving a life.

How to Become a Cardiac Ready Community

The CRC Program defines what a community must do to receive the *South Dakota Cardiac Ready Communities Designation*. The criterion supports the *Chain of Survival* through nine Focus Areas. A minimum score must be achieved in each area in order to receive designation.

Focus Area #1 – Community Leadership
Focus Area #2 – Community Awareness Campaign
Focus Area #3 – Community Blood Pressure Control Program
Focus Area #4 – CPR and AED Training
Focus Area #5 – Public Access AED Locations
Focus Area #6 – EMS Dispatching Program
Focus Area #7 – EMS Services
Focus Area #8 – Hospital Services
Focus Area #9 – CRC Program Evaluation and Sustainability

The community will work with the SD DOH Heart Disease and Stroke Prevention Program to utilize this Program Guide and ultimately achieve CRC Designation. This guide includes several important sections:

The **CRC Designation Criteria** on pages 5-16 lists the specific criteria that must be met in each of the nine Focus Areas. This is for the use of the community as well as the CRC Designation reviewer. The community will determine an initial score at the start of program implementation and a final score after completion of focus area activity initiation. The criteria in each Focus Area will note the minimum final score required to achieve designation, but communities are highly encouraged to exceed this and reach for the maximum score. Utilize the Scoring Table at the end of the CRC Designation Criteria on page 17 to track your initial and final scores and include in the CRC Designation Application as Attachment A. Designation is granted for three years. Communities are encouraged to achieve designation within two years of when the initial scores are determined.

The **CRC Implementation Checklist** on pages 18-35 walks a community through every step involved in program implementation, from building a community team to evaluation and sustainability. The checklist will also assist in compiling all the information necessary for the CRC Designation Application.

The **CRC Designation Application** on pages 36-41 is completed by the community and compiles all information necessary to justify the final score in each Focus Area. The application is submitted to DOH for review and determination of designation.

CRC Designation Criteria

Focus Area #1 - Community Leadership

It is essential that all necessary stakeholders are involved and have a vested interest in creating an effective *System-of-Care* in order to achieve CRC Designation. Identify a group or organization to be the principal lead. This group will ideally have an individual who becomes the "face" of the program in that community. This person is not "in charge" but will be the primary contact.

The CRC Program is designed to have a unified team lead the community effort with support from the entire population. This team will be responsible for data collection and reporting on CRC efforts.

Minimum score = 3

Select one:

There are no coordinated efforts to develop a CRC team.	0
Organizations are working independently to improve cardiac readiness within the community.	1
Several stakeholders have formed a CRC team in coordination with EMS.	2
A lead organization (i.e. fire, police, ambulance, board of health) is chosen to champion the CRC team involving multiple stakeholders and community organizations.	3
A lead organization is chosen to champion the CRC team, has involvement from all sections of the community, is integrated into the EMS system, and has a plan in place for data collection and reporting.	4
Initial Score: _____ Date: _____ **Final Score: _____**Date: _____	

Focus Area #2 - Community Awareness Campaign

Most people wait two hours or more to seek medical assistance after experiencing symptoms of a heart attack. Further, countless people travel to the emergency room by a privately owned vehicle. Both of these issues are contributing factors to the high mortality rate associated with heart attacks. Ideally, people experiencing symptoms, or those with someone experiencing symptoms, will dial 911 right away for the care and transport to a hospital in an ambulance.

An ongoing community awareness campaign can help to educate the public on how a person can reduce their risk of having a cardiovascular emergency, but just as importantly, what to do should it occur. The campaign must also include the development and implementation of a system to track and evaluate the effectiveness of various marketing tools and methods.

The CRC Program is designed to improve community awareness of the signs and symptoms of a cardiac event (heart attack, sudden cardiac arrest, or stroke) and to have citizens activate the 911 system instead of going to the hospital by a privately owned vehicle.

Minimum score = 3

Select one:

There is no awareness campaign.	0
The community is developing an awareness campaign specific to its needs and population that includes cardiovascular disease (CVD) prevention and initiating the *Chain of Survival* in case of a cardiac event.	1
The community has developed and implemented an awareness campaign focused around the CRC Program that includes CVD prevention and initiating the *Chain of Survival* in case of a cardiac event.	2
The community awareness campaign has been implemented and evaluated for effectiveness. Changes to the program are ongoing based on data.	3
Initial Score: _____ Date: _____ **Final Score:** _____ Date: _____	

Focus Area #3 - Community Blood Pressure Control Program

The leading risk factor for a cardiac event is high blood pressure, also known as hypertension. High blood pressure causes microscopic tears in your arteries. Uncontrolled high blood pressure can also cause problems by damaging and narrowing the blood vessels in your brain. Over time, this raises the risk of a blood vessel becoming blocked or bursting.

It is important to Check, Change, and Control:

- Know your numbers by **checking** your blood pressure
- **Change** your lifestyle with physical activity and healthy eating
- Work with your healthcare provider to get your blood pressure under **control**

Communities will be required to report on specific data such as the number of people who had a blood pressure screening, number of undiagnosed hypertensive patients determined through screening, the number of people who received referral to a primary care provider, etc.

The CRC Program is designed to get more community members aware, screened, and educated and to ensure proper screening, referral, and follow-up practices are in place.

Points must be earned in at least 3 categories.
Minimum combined score = 8

Select one from each category:

Education and Training on Blood Pressure Measurement and Algorithm

No survey has been conducted of area healthcare providers/screeners, so measurement skills and screening algorithm are unknown.	0
Assessment completed. Screening algorithm consensus in alignment with state recommendations.	1
Training plan developed and initiated to reinforce appropriate blood pressure screening skills among healthcare providers.	2
Training plan developed and initiated to reinforce appropriate blood pressure screening skills among community screening mentors.	3
Initial Score:_____ Date: _____ **Final Score:**_____ Date:_____	

Check: "Know Your Numbers" Awareness and Screening

No community-wide platform in place to support "Know Your Numbers" and why.	0
Some community screening and awareness to "Know Your Numbers" is available.	1
Combination of community and home screenings reaches at least 30% of the adult community.	2
Combination of community and home screenings reaches at least 40% of the adult community.	3
Combination of community and home screenings reaches at least 50% of the adult community.	4
Initial Score:_____ Date:_____	

Final Score:_____ Date:_____	

Change: Lifestyle change initiatives actively promoted and utilized within the community
(or adapt to percentages of those within the community blood pressure program)

Little or no community awareness as to lifestyle changes helping to reduce or control blood pressure.	0
A combination of community programs of physical activity or nutrition reaches at least 10% of adult population, with messaging addressing impact on blood pressure.	1
A combination of community programs of physical activity or nutrition reaches at least 20% of adult population, with messaging addressing impact on blood pressure.	2
A combination of community programs of physical activity or nutrition reaches at least 30% of adult population, with messaging addressing impact on blood pressure.	3
Initial Score:_____ Date:_____ **Final Score:_____** Date:_____	

Control: Those treated for hypertension are under medical provider care and controlling their blood pressure.

No tracking system in place.	0
Some measurement data available and shared with CRC team.	1
Referral/follow-up tracking system in place for individuals identified with hypertension.	2
Initial Score:_____ Date:_____ **Final Score:_____** Date:_____	

Focus Area #4 - CPR & AED Training

There are several different CPR courses available through the AHA and the American Red Cross. All provide valuable information for the general public. However, recent research has shown that Hands-Only CPR (no rescue breathing) for teens and adults is just as effective and is more likely to be implemented in a cardiac emergency. Having police officers and fire fighters trained in Basic CPR (compressions and rescue breathing) as well as being equipped with an AED decreases the time from initial collapse to having a shock delivered to the heart.

The CRC Program is designed to promote the *Chain of Survival*, which includes early recognition and initiation of CPR and does not differentiate between courses in which community members participate. Whichever course is implemented should also include a section on the use of an AED to meet another step in the *Chain of Survival*, having an electrical shock delivered to the heart within three to five minutes.

Points must be earned in at least 4 categories.
Minimum combined score = 10

Select one from each category:

CPR Instructors

There are no available CPR instructors in the community/region.	0
Instructors are unable to teach enough courses to meet needs/goals.	1
Instructors are teaching regularly scheduled courses, but not enough to meet need/goal.	2
There are an adequate number of instructors to fill need and reach goals for CPR courses. Courses are offered at a variety of times and days and cover the range of course levels as needed by the community as well as training on AED use.	3
There are enough instructors to have a regular schedule of CPR classes without overload and include training on AED use. The community tracks numbers of courses and students as an ongoing performance improvement indicator.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Hands-Only CPR and AED Training

It is unknown what percent of the adult population is trained in CPR and use of an AED.	0
Less than 10% of the adult population is trained in CPR/AED.	1
At least 10% of the adult population is trained in CPR/AED.	2
At least 25% of the adult population is trained in CPR/AED.	3
At least 50% of the adult population is trained in CPR/AED.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Business CPR/AED Training

No businesses in the community have employees trained in CPR and use of an AED.	0
Less than 25% of businesses in the community have CPR/AED trained personnel.	1
At least 25% of businesses have CPR/AED trained personnel.	2
At least 50% of businesses have CPR/AED trained personnel.	3
100% of businesses have CPR/AED trained personnel.	4
Initial Score:_____ Date:_____ **Initial Score:**_____ Date:_____	

Police Department CPR/AED

No Police Department vehicles responding in the community are equipped with an AED and have no officers trained in CPR and use of an AED.	0
Less than 25% of Police Department vehicles are equipped with an AED and have officers trained in CPR/AED.	1
At least 25% of Police Department vehicles are equipped with an AED and have officers trained in CPR/AED.	2
At least 50% of Police Department vehicles are equipped with an AED and have officers trained in CPR/AED.	3
100% of Police Department vehicles are equipped with an AED and have officers trained in CPR/AED.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Fire Department CPR/AED

No Fire Department responder vehicles in the community are equipped with an AED and have no personnel trained in CPR and use of an AED.	0
Less than 25% of Fire Department responder vehicles are equipped with an AED and have CPR/AED trained personnel.	1
At least 25% of Fire Department responder vehicles are equipped with an AED and have CPR/AED trained personnel.	2
At least 50% of Fire Department responder vehicles are equipped with an AED and have CPR/AED trained personnel.	3
100% of Fire Department responder vehicles are equipped with an AED and have CPR/AED trained personnel.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Focus Area #5 - Public Access AED Locations

The AHA reports that cardiac arrest victims who receive immediate CPR and an AED shock within three to five minutes have a much higher chance of surviving. Public access AEDs should be deployed in target areas throughout the community so a shock can be delivered within the recommended timeframe. Community members are encouraged to use an AED when the need arises.

The CRC Program is designed to have communities assess the locations of the AEDs currently available, report those locations to 911 dispatching and the local ambulance service, and develop a plan to acquire and distribute additional AEDs to adequately cover their community.

Points must be earned in at least 2 categories.
Minimum combined score = 6

Select one from each category:

Public Access Assessment Plan

There is no overall community plan to assess AED locations and needs.	0
Location of currently existing AEDs in the community is known.	1
A plan for assessing unmet AED needs and locations is being developed.	2
There is a developed plan to assess location and need of AEDs in the entire community.	3
There is a developed plan to assess dispersal and need of AEDs, a strategic plan for funding unmet needs is developed, and local dispatch and ambulance services are informed of all current AED locations and will be updated as new AEDs are placed in the community.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Church, Public, & School Building Assessment

No survey of AEDs has been conducted and % coverage is unknown.	0
Less than 25% of church, public, and school buildings have an AED available.	1
At least 25% of church, public, and school buildings have an AED available.	2
At least 50% of church, public, and school buildings have an AED available.	3
At least 75% of church, public, and school buildings have an AED available.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Private Business Assessment

No survey of AEDs has been conducted and % coverage is unknown.	0
Less than 15% of private businesses have an AED available.	1
At least 15% of private businesses have an AED available.	2
At least 25% of private businesses have an AED available.	3
At least 35% of private businesses have an AED available.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Focus Area #6 - EMS Dispatching Program

Every community is unique in how emergency services are delivered. 911 dispatching is a key element in this process. Having dispatchers trained as emergency medical dispatchers (EMDs) allows them to use predetermined medical protocols to both dispatch correct resources to an emergency scene and to give instructions to victims and bystanders before arrival of first responders. Recent studies have shown that simply having dispatchers coach a caller through the steps of Hands-Only CPR vastly improves the chance of survival while risks from doing CPR on someone who doesn't actually need it are relatively low. There is also strong evidence to show that dispatching police and/or fire department personnel, who may be closer to the emergency, greatly improves the chance of survival. ~~Emergency medical dispatching (EMD)~~ is a key component in the *Chain of Survival*.

Communities that have Enhanced 911 improve response by knowing where the call is originating from even without the caller telling them and are often times able to direct bystanders to the nearest location of an AED. Even without Enhanced 911, if communities know the location of all AEDs and share that information with dispatch, the ability to get the AED off the wall and onto the patient is greatly improved.

The CRC Program is designed to have all dispatchers trained in EMD, know the location of all community AEDs, have Enhanced 911 in every community, and have police and fire department personnel dispatched to emergencies as appropriate.

Minimum combined score = 4

Select one from each category:

911 Dispatching

911 personnel only dispatch EMS providers and provide minimal information to callers.	1
911 personnel stay on line with caller to relay information to EMS personnel while en route.	2
911 personnel are trained as EMDs.	3
911 personnel are trained as EMDs. Enhanced 911 is in place.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Police and/or Fire Department Dispatching

Police and/or fire personnel are not routinely dispatched to medical emergencies.	0
Police and/or fire personnel are dispatched only on request of ambulance personnel.	1
Police and/or fire personnel are routinely notified of cardiac emergencies.	2
Dispatch has an inventory or mapping capability of all community AEDs and the closest responders (public, police, fire, and EMS) are dispatched as primary responders.	3
Police and/or fire personnel are dispatched to all probable cardiac emergencies and the community has a performance improvement program to asses all responses.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Focus Area #7 - EMS Services

Having a well-trained EMS is critical for an out-of-hospital cardiac event. Utilizing High-Quality CPR, using an AED as soon as possible, and having access to a 12-lead electrocardiogram (EKG – a device that measures the electrical impulses generated by your heart muscle through 12 sensors placed on your torso) to alert the receiving hospital to the patient's condition are all vital steps in the *Chain of Survival*. Access to a Lucas Device (a portable device that delivers automated, guidelines-consistent chest compressions to improve blood flow in victims of cardiac arrest) will assist with High-Quality CPR.

Robust performance improvement through use of patient data and reports ensures emergency medical technicians (EMTs) are striving for better patient outcomes. Some defibrillators, including AEDs, and EKG monitors will print reports to determine the quality of CPR done during a response. An EMS patient record system that collects data on all aspects of a response, including times, treatment, and outcomes is used for performance improvement.

The CRC Program is designed to ensure that all EMTs are trained in High-Quality CPR and that all ambulances are equipped with an AED or other type of defibrillator. Further, services must engage in performance improvement through a planned program of data analysis.

Minimum combined score = 6

Select one from each category:

Ambulance Service

EMS personnel do not have an AED/defibrillator available for cardiac responses.	0
Only one AED/defibrillator shared between multiple ambulances.	1
Each ambulance is AED/defibrillator equipped.	2
Ambulance personnel use High-Quality CPR and are AED/defibrillator equipped.	3
Ambulance personnel are trained and use High-Quality CPR and are AED/defibrillator equipped; they do performance improvement on every cardiac arrest call.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

EMT Support

Local Medical Director provides minimal support to the EMS service.	0
Local Medical Director provides feedback to EMTs only when there is a problem/question.	1
Local Medical Director provides feedback to EMTs but not on a regular basis.	2
Local Medical Director provides feedback to EMTs on all cardiac arrest calls.	3
Local Medical Director is an integral part of service operations including data collection and benchmarking for performance improvement over time.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Focus Area #8 - Hospital Services

Hospitals that have improved cardiac survival rates are prepared for cardiac events and share common characteristics. They receive, interpret, and make decisions prior to patient arrival based on incoming EKG transmissions from transporting ambulances. Emergency department (ED) personnel are all trained and use High-Quality CPR. Critical access hospitals (CAHs) have established protocols for stabilizing and transferring patients. PCI hospitals (advanced cardiac care hospitals) are STEMI (ST-Elevation Myocardial Infarction) prepared. Constant data analysis drives performance improvement through informed decision making.

The CRC Program is designed to ensure all hospitals are trained and utilize High-Quality CPR and are using data analysis to drive performance improvement.

No Hospital. Minimum score = 4

Select one:

No hospital and no current plan in place to transfer to critical access or tertiary hospital.	0
No hospital, but transport plan in place to transfer to critical access or tertiary hospital.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Yes Hospital. Points must be earned in at least 2 categories.
Minimum combined score = 4

Select one from each category:

All Hospitals

Hospital is not working toward training in High-Quality CPR.	0
Hospital is initiating training in High-Quality CPR.	1
Some hospital ED personnel are trained and utilize High-Quality CPR.	2
Hospital ED personnel are trained and utilize High-Quality CPR.	3
Hospital ED personnel are trained and utilize High-Quality CPR and do performance improvement on each CPR incident.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Critical Access Hospitals (CAHs)

No specific treatment or transfer protocols for STEMI, cardiac arrest, and stroke patient care.	0
Are developing ED treatment and transfer protocols with PCI hospitals and EMS that emphasize AHA systems approach to STEMI, cardiac arrest, and stroke patient care.	1
Have treatment and transfer protocols but they have not yet been jointly coordinated with PCI hospitals and EMS.	2
Have developed ED treatment and transfer protocols coordinated with receiving/PCI hospitals and EMS that emphasize AHA systems approach to STEMI, cardiac arrest, and stroke patient care.	3

Have developed ED treatment and transfer protocols coordinated with received/PCI hospitals that emphasize AHA systems approach to STEMI, cardiac arrest, and stroke patient care. Hold multidisciplinary meetings with PCI hospitals and EMS to evaluate outcomes and performance improvement data.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

PCI Hospitals (advanced cardiac care hospitals)

Have no treatment and transfer protocols for STEMI, cardiac arrest, and stroke patient care with CAHs.	0
Have treatment and transfer protocols that have not been jointly developed with CAHs and EMS.	1
Are developing ED treatment and transfer protocols with CAHs and EMS that emphasize AHA systems approach to STEMI, cardiac arrest, and stroke patient care.	2
Have developed ED treatment and transfer protocols with CAHs and EMS that emphasize AHA systems approach to STEMI, cardiac arrest, and stroke patient care.	3
Have developed ED treatment and transfer protocols with CAHs and EMS that emphasize AHA systems approach to STEMI, cardiac arrest, and stroke patient care. Plans for reporting patient data and outcomes back to CAHs and EMS have been developed.	4
Initial Score:_____ Date:_____ **Final Score:**_____ Date:_____	

Focus Area #9 - CRC Program Evaluation and Sustainability

To ensure that the CRC Program is implemented and utilized effectively, periodic review needs to occur. Review and practice ensures that all steps in the *Chain of Survival*, as well as other components, are seamlessly combined and sustainable. By practicing scenarios that include bystander CPR, use of an AED within three to five minutes, dispatcher-aided CPR, appropriate dispatching of emergency response personnel, and use of High-Quality CPR by responders and the hospital, communities will be better prepared for a true emergency. Having a process in place to implement these practice scenarios, combined with review of the outcomes will identify gaps and errors, which will improve responses in the future. Further, reviewing all actual emergency responses to cardiac events will provide valuable information, provided a process is in place to ensure the review happens.

The CRC Program is designed to help SD communities improve their cardiovascular health and increase the likelihood that individuals suffering from cardiac events will have the best possible chance for survival.

Minimum combined score = 4

Selected one from each category:

Program Evaluation and Sustainability Plan

There is no evaluation and sustainability plan.	0
A plan is being developed to address how the team will continue to collect, review, and report data in each Focus Area.	1
A plan is being implemented to address how the team will continue to collect, review, and report data in each Focus Area.	2
A plan is being implemented to address and improve how the team will continue to collect, review, and report data in each Focus Area.	3
Initial Score:_____ Date:_____ **Final Score:_____** Date:_____	

Data Collection & Reporting System

There is generally no data available about cardiac events from EMS, hospital, and other components of the CRC Program.	0
Little data is collected and reported (i.e. EMS and/or hospital collect data, but generally there is no data about public response or dispatch training and response).	1
Data on each component of the program is collected. Prehospital data is collected by EMS services and entered into ImageTrend.	2
Data on each component of the program is collected and entered into ImageTrend. Data is reviewed by the CRC team and drives change.	3
Data on each component of the program is collected and entered into ImageTrend. Data is reviewed by the CRC team and drives change. Data is shared with all stakeholders including the public.	4
Initial Score:_____ Date:_____ **Final Score:_____** Date:_____	

CRC Designation Criteria – Scoring Table

Include as Attachment A in the CRC Designation Application

Focus Area	Minimum Score	Initial Score		Final Score	
#1 - Community Leadership	**3**				
#2 - Awareness Campaign	**3**				
#3 - Community Blood Pressure Control Program	**8** (combined score from 3 of 4 categories)	Education and training…		Education and training…	
		Check…		Check…	
		Change…		Change…	
		Control…		Control…	
		Total Score		Total Score	
#4 - CPR and AED Training	**10** (combined score from 4 of 5 categories)	CPR Instructors		CPR Instructors	
		Hands-Only CPR/AED Training		Hands-Only CPR/AED Training	
		Business CPR/AED Training		Business CPR/AED Training	
		Police Department CPR/AED		Police Department CPR/AED	
		Fire Department CPR/AED		Fire Department CPR/AED	
		Total Score		Total Score	
#5 – Public Access AED Locations	**6** (combined score from 2 of 3 categories)	Public Access Assessment Plan		Public Access Assessment Plan	
		Church, Public, & School Asmt		Church, Public, and School Asmt	
		Private Business Asmt		Private Business Asmt	
		Total Score		Total Score	
#6 - EMS Dispatching Program	**4** (combined score)	911 Dispatching		911 Dispatching	
		Police and/or Fire Dept Dispatching		Police and/or Fire Dept Dispatching	
		Total Score		Total Score	
#7 - EMS Services	**6** (combined score)	Ambulance Service		Ambulance Service	
		EMT Support		EMT Support	
		Total Score		Total Score	
#8 - Hospital Services	**4** - No Hospital **4** - Yes Hospital (combined score from 2 of 3 categories)	No Hospital		No Hospital	
		All Hospitals		All Hospitals	
		CAH		CAH	
		PCI		PCI	
		Total Score		Total Score	
#9 - CRC Program Evaluation and Sustainability	**4** (combined score)	Evaluation & Sustainability Plan		Evaluation & Sustainability Plan	
		Data Collection & Reporting		Data Collection & Reporting	
		Total Score		Total Score	

Last reviewed: June 2020

Cardiac Ready Community Implementation Checklist

To ensure effective implementation and subsequent evaluation, utilize the following checklist:

- ☐ Build a Support Team
- ☐ Identify a Champion
- ☐ Submit Letter of Intent
- ☐ Complete an Initial Assessment
- ☐ Select a Focus Area and Create an Action Plan
- ☐ Promote Your Efforts
- ☐ Monitor and Evaluate Progress
- ☐ Select Additional Focus Areas and Repeat
- ☐ Complete and Submit CRC Designation Application
- ☐ Final Meeting with DOH

It is important to note that although every community should utilize the checklist, each implementation plan will be unique. This is because each community has different strengths, and this will dictate unique strategies in each Focus Area.

As you complete the checklist, you must collect and organize specific lists, tables, and other information for the CRC Designation Application. It is highly recommended to be diligent in gathering this data so there will be adequate information to verify designation achievement.

Build a Support Team

Local stakeholder and public support is necessary to sustain an effective system-of-care. The CRC Support Team will be responsible for organizing and leading the community to CRC Designation. A successful team has representation from all sectors of the community. Broad community representation is necessary to secure buy-in and leveraging resources.

The CRC Support Team should consist of approximately five to 12 members. Research suggests keeping small groups within this range increases efficiency and prevents the onset of social loafing behavior (Futures, 2010). However, a balance must be struck between a manageable team size and ensuring representation from all community stakeholders.

Look to the following areas for representatives:

- EMS, Fire, and Police
- Hospital and Clinic Administrators
- Healthcare Professionals
- Dispatch or PSAP
- CPR Instructors
- City and County Officials
- Community Health Workers
- AHA/Red Cross
- School Administration
- Local Businesses/Chamber of Commerce
- Civic Groups and Faith Organizations
- Local Media
- Survivors and Their Family Members
- Other Public Representation
- Local Emergency Planning Committee or Tribal Emergency Response Commission

EMS, Fire, and Police Representatives

EMS is an essential component of the cardiac response process. EMS is responsible for patient stabilization and transport from the incident scene to the hospital. The EMS agency is responsible for overseeing daily operations as well as coordinating their department with other agencies (such as the fire department). Your EMS agency has the background to establish a strong presence on the team. If you are unaware how to reach the EMS squad leader in your area, contact the SD Department of Health EMS Program for assistance at (605) 773-4031.

The fire department contains additional resources for AED deployment as well as CPR trained first responders. The Fire Chief is a good point of contact as he/she is responsible for managing all activities within the fire district and for communicating with other local fire districts on a regular basis. If you are unsure how to contact the Fire Chief, contact your local sheriff's office and ask for the fire department's contact information.

The police department/sheriff's office contains additional resources for AED deployment as well as CPR trained first responders. The Police Chief/Sheriff is a good point of contact as he/she is responsible for managing all activities within their district and for communicating with other local police/sheriff districts on a regular basis.

Hospital and Clinic Administrators

Local hospitals are responsible for receiving, treating/stabilizing the patient, and patient transfer. Patient transfer is an important component of the cardiac response process and thus hospital representation is vital. Local hospitals are also a great resource for hosting education and CPR training, both of which are assets to the team.

To secure smaller hospital cooperation such as a critical access hospitals (CAHs), contact the hospital administration department. The administration department may refer you to the appropriate individual or they may have someone from administration get directly involved. For larger regional hospitals, contact the ED Director. The ED Director or another individual in the same department would be a good candidate to secure larger hospital involvement.

Healthcare Professionals

A physician or other healthcare representative will act as a leader on the clinical front as well as be the spokesperson for hospitals and EMS. The healthcare representative is also critical for implementing and monitoring quality improvement procedures and subsequently encouraging the continuous quality improvement process. To secure physician/healthcare representation on the support team, contact your local hospital or EMS agency.

Dispatch or PSAP (Public Safety Answering Points)

A representative from Dispatch or PSAP will have background knowledge about responding to emergency situations that will be helpful when working on several focus areas.

CPR Instructors

CPR instructors will play a key role in getting community members trained in CPR, an important part of CRC designation. They are likely already knowledgeable of the *Chain of Survival* and often times have a background in healthcare or are first responders.

City and County Officials

The CRC Support Team should include local government officials such as the city mayor, city council members, and county commissioners. County commissioners are directly responsible for making policy changes and therefore would be an ideal liaison with your local government (MRSC, 2015). If the county commissioner is unavailable, contact the county court house or city hall to secure local government presence.

City and county officials are in charge of resource allocation, which may help in obtaining funds necessary for the success of the CRC Program (such as purchasing AEDs). As policy makers, they will be able to influence change and move the CRC Program forward.

Community Health Workers

Community Health Workers serve as patient advocates and work closely with healthcare and multiple other community services. They can act as an easy bridge between various entities and are trusted by community members.

Local Emergency Planning Committee (LEPC) and Tribal Emergency Response Commission (TERC) Representatives

The LEPC and TERC have relationships with local government officials, first responders, and stakeholders. Often, the local Emergency Management Coordinator acts as the chair of the LEPC. To secure LEPC representation, contact the county administration office and ask to speak with the local Director of Emergency Services (DES) representative.

The local TERC has authority over tribal lands, which will be valuable when securing tribal participation. To secure TERC representation, contact the local tribal government office.

AHA/ Red Cross Representative

Both of these organizations are important because they are a tremendous resource for training volunteers and healthcare providers in CPR. They both have extensive experience in mobilizing volunteers. To find a member to participate in the team, contact the respective local representatives using the links below.

http://www.redcross.org/local/south-dakota/about-us/contact-us

https://www.heart.org/en/affiliates/south-dakota/south-dakota

School Representative

The school can act as a community hub to host CPR training courses. Plus, youth trained in CPR will increase the likelihood of bystander help, which is a critical component of an effective CRC Program. Youth involvement also acts as a catalyst in increasing parent/guardian awareness (Mandel & Cobb, 1985).

The local school principal or superintendent is an ideal choice to represent your school district. With extensive knowledge of the school system and its personnel, he/she will be able to put plans quickly into action. If neither is available, ask a teacher.

Local Business/Chamber of Commerce Representative

Business partners are able to promote and advertise the CRC Program. Collaborating with the Chamber of Commerce will aid in increasing awareness of the CRC Program through advertising on the organization's website and other social media. Realtors are also ideal partners to become involved. Their involvement is mutually beneficial because their advertisement of the community as Cardiac Ready will both promote the program as well as increase sale likelihood. A business representative can also help to assess and implement CPR trainings and AED placement in private businesses.

Civic Group and Faith Organization Representative

Local clubs and faith organizations have an active voice in your community and are skilled in mobilizing a community. They meet frequently, creating an ideal platform to inform members about the CRC Program, host CPR training sessions, and potentially secure additional funding, which is imperative to the success of the program. Local groups to consider include Kiwanis, Rotary, Elks, Lions, Knights of Columbus, Jaycees, Community Foundation, Economic Development Corporation, ministerial groups, and local youth groups.

Local Media Representative

The media will be able to promote the CRC Program and garner the necessary attention to raise needed funds and community support. Local media may include but is not limited to: radio, TV/news broadcasting, city website, social media, and the local newspaper.

Survivors and Their Family Members

Cardiac event survivors and their families make the CRC Program personal and can connect to the community through their survival story. Survivors are a living testament to the importance of the CRC Program. They may be willing to act as the face of the program as well as praise the importance of all components of the *Chain of Survival*.

Other Public Representation

Any member of the public can be a part of the CRC Support Team if they have a passion for the purpose and goals of the CRC Program.

The CRC Designation Application must include a list of all CRC Support Team members (Table 1.0). The list should include the contact information and corresponding positions of all members.

- **Identify a Champion**

Leadership is essential to the success of the CRC Program. First, you need to identify a champion who will be responsible for spearheading the efforts. The champion must be a strong, motivated problem solver who is knowledgeable about the community and the CRC Program (Kirkpatick & Locke, 1991).

Two suggested organizations that could be approached to assume this role:

- Your local EMS is well versed in the cardiac arrest protocol and – because of their central position in the cardiac arrest response – has established relationships with many other community agencies. This is very beneficial in securing community-wide cooperation. The EMS Medical Director could be an effective champion because of his/her relationship between EMS services and the hospitals (FEMA, 2012).
- Your LEPC will already be familiar with many of the major stakeholders in the cardiac care response. The LEPC's preexisting working relationship with these stakeholders will be a valuable asset. The county or town emergency manager could be an effective champion.

Identifying a champion from either of these organizations is a good choice because either would have extensive knowledge of the community, health care organizations, and health care regulations. Each also has networks to secure cooperation from other key community stakeholders. The champion will serve as the primary point of contact and will be responsible for providing progress updates as well as collecting any materials needed for designation.

☐ **Submit Letter of Intent**

After establishing the CRC Support Team and identifying a champion, the next step is to submit your CRC Letter of Intent:

It is the intention of the community of _____
to obtain designation as a South Dakota Cardiac Ready Community.

We have chosen _____
as the lead organization to oversee our effort towards our Cardiac Ready Communities Designation.

The chair/chairpersons for our Cardiac Ready Communities Program will be:

Name(s): _____

Address: _____

_____

Contact Number(s): _____

E-Mail(s): _____

Our goal is an ongoing Cardiac Ready Communities campaign. We want to have the best possible chance of survival for anyone suffering a cardiovascular emergency. This will be possible by raising awareness of the signs and symptoms of a cardiovascular emergency (heart attack, stroke or sudden cardiac arrest); educating residents to activate the 911 system for cardiovascular-related problems in lieu of going to the hospital by a privately-owned vehicle; and having the elements of the *Chain of Survival* in place.

Please return via mail or email to:

Liz Marso, RD, LN
Healthy Communities Coordinator
South Dakota Department of Health | Office of Chronic Disease and Health Promotion
615 E. 4th Street, Pierre, SD 57501
605.773.6607 | Liz.Marso@state.sd.us

Upon receipt of the Letter of Intent, DOH will contact the community chairperson(s) to arrange a meeting to discuss the criteria to achieve CRC Designation. We realize that each community is different, so we would like the opportunity to sit down and discuss what the specific criteria will be for each community.

☐ Complete an Initial Assessment

After meeting with DOH, the next step is to complete an initial community assessment of all Focus Areas. Every community is different, with unique challenges to forming a strong *Chain of Survival*. An initial assessment is essential to gauge the readiness of the community to implement the CRC Program and meet the designation criteria. The assessment will determine how close you are to meeting the criteria in each Focus Area and will assist in developing an action plan.

The initial assessment consists of two phases: using the CRC Support Team knowledge to arrive at an initial score in each Focus Area and then a validation of each score.

Assign Initial Scores for each Focus Area

Start by asking each team member to read the CRC Designation Criteria (pages 5-16) and become familiar with each Focus Area. Conduct an analysis of your community's current infrastructure and available resources. Think about which Focus Area the community may already be working on and the steps needed to meet the minimum designation criteria.

Assemble the team after each member has familiarized themselves with the scoring criteria. Work together and assign each Focus Area and individual category a score from 0 to 4. This first analysis does not need to be formal, rather a high-level overview.

Validate Focus Area Scores

The team members' experiences and beliefs are the basis for the initial scores. Therefore, it is important to validate the team members' intuition, so you are certain about the correct strategies to employ moving forward. As you validate each score, be sure to document the process. Action plans are discussed in the next checklist item and may be the perfect place to include and track notes and important information regarding the initial assessment and validation process.

- **Select a Focus Area and Create an Action Plan**

It is important to first select a Focus Area you feel is easiest for your community to successfully complete (one that you have already scored 3 or 4). You want the first activities to be a success, so it will increase morale and confidence amongst the team and community. Don't attempt to work on all Focus Areas at once. For each Focus Area, start by writing an action plan including SMART objectives.

Create an Action Plan

Begin by setting SMART objectives for each Focus Area to obtain at least the minimum score required to achieve CRC Designation. SMART stands for Specific, Measurable, Attainable, Relevant, and Time-Based. Then, create a written action plan that will show how the team will accomplish each objective.

Below is an example action plan that can be used to guide your work. You do not need to use this exact template or format. You can develop your own action plan as long as it includes SMART objectives, description of activities, who is responsible, resources needed, and timelines. An action plan for each Focus Area must be included in the CRC Designation Application as Attachment B.

It is important to keep cost in mind when creating the action plan. You may need multiple strategies to obtain the minimum score in each Focus Area and cost can quickly escalate. Consider ways to leverage resources in order to implement action plan activities and note this in the resources needed section.

See the following link to learn more about community action plans: http://ctb.ku.edu/en/table-of-contents/structure/strategic-planning/develop-action-plans/main

Example Action Plan

Include each Focus Area Action Plan as Attachment B in CRC Designation Criteria

Focus Area #4 - CPR and AED Training

Information From Initial Assessment:

- Less than 10% of the population is trained in hands-only CPR
- Instructors are unable to teach enough CPR courses to meet needs/goals
- Less than 25% of the local police and fire department vehicles are equipped with an AED
- All police and fire personnel are trained in CPR and AED use
- 10% of businesses hold routine staff trainings in CPR and AED use

Activities	Responsible Party	Resources Needed	Timeline
SMART Objective #1 – Compile a list of CPR Instructors currently offering classes within 30 days.			
SMART Objective #2 – Increase the population trained in Hands-Only CPR to 25% by the end of year 1 and 40% by year 2.			
SMART Objective #3 – Increase the % of police and fire department vehicles equipped with an AED to 50% by year 2.			
SMART Objective #4 – Increase the # of businesses that hold staff trainings in CPR and AED use to 25% by year 2.			

Keep the following in mind as you develop your action plan in each Focus Area. Take note of items you are required to collect and organize including lists, tables, and other information for the CRC Designation Application.

Focus Area #1 – Community Leadership

The CRC Support Team must have representation from all sectors of the community. Start by examining the team composition and its engagement level. Ensure the relationship between the champion and the team is strong.

The CRC Designation Application must include the CRC Support Team Meeting Minutes as Attachment C and a list of all CRC Support Team representatives (Table 1.0) to show the level of community engagement.

Focus Area #2 –Community Awareness Campaign

Begin by consulting the SD Heart Disease and Stroke Prevention Program website for information and educational materials. One of the primary goals of the program is to increase the number of adults in SD exposed to heart disease and stroke prevention education as well as cardiac emergency awareness campaigns. Follow the links below to the heart disease and stroke prevention website and SD DOH material ordering site.

South Dakota Department of Health Educational Materials Catalog
https://doh.sd.gov/catalog

South Dakota Heart Disease and Stroke Prevention Program
https://doh.sd.gov/diseases/chronic/heartdisease/

Suggested Community Awareness Campaign topics:

- Heart disease risk factors and prevention techniques
- "Know Your Numbers" to increase awareness of blood pressure's role in heart health
- Signs and symptoms of a cardiovascular emergency
- Importance of the *Chain of Survival*
- Importance of early activation of 911
- Importance of immediate initiation of CPR
- Reducing concern of catching a communicable disease through CPR rescue breathing
- Knowledge of public access AEDs and the importance of using one if available

After reviewing the information, consider the best techniques to spread your message to the public. Options can include but are not limited to, community-wide screenings and health fairs, newspaper advertisements, TV commercials, radio interviews, radio advertisements, billboards, and social media.

A strong social media presence is necessary to effectively reach the community members. Creating a website and Facebook page allows community members easy access to educational materials and the ability to share information with friends and fellow community members.

With all types of media and marketing, consider the best method(s) to evaluate its effectiveness such as number of Facebook followers, click rates for Facebook posts, attendance at events, newspaper subscriptions, etc. The CRC Designation Application must include the Community Awareness Campaign Advertising Information (Table 2.0) to track the methods of media and marketing utilized and how they are being evaluated.

Focus Area #3 – Community Blood Pressure Control Program

Establishing a blood pressure control program starts with providing education and training to healthcare professionals on consistent and accurate blood pressure measurement. Utilize the SD Community Blood Pressure Screening Algorithm to guide education and training. Adequate patient referral and follow-up are key components in the screening algorithm for those patients with a blood pressure over 130/80. Consider options for a tracking system to ensure referrals are made and follow-up is completed.

The next step is to get community members to the screenings to start the process of awareness, education, and ultimately control over their blood pressure. Provide frequent screening opportunities and community education programs specific to physical activity and/or nutrition and its impact on blood pressure.

Communities will be required to report on specific data such as the number of people who had a blood pressure screening, number of undiagnosed hypertensive patients determined through screening, and the number of people who received referral to a primary care provider in the CRC Designation Application.

Focus Area #4 – CPR and AED Training

Begin by determining the number of CPR registered instructors in your county. To get an accurate count, contact the following agencies/organizations:

American Red Cross http://www.redcross.org/local/south-dakota/about-us/contact-us

American Heart Association® https://www.heart.org/en/affiliates/south-dakota/south-dakota

After creating a list of CPR instructors, contact each and inform them of the CRC Program if this was not already done during the initial assessment. Ask whether they are holding regular CPR classes in your community and if so, to provide their list of attendees. Also inquire about whether or not information is included in the training about use of an AED.

Based on the number trained and community population, you can determine the percent trained in the community. If it is less than 50%, contact the list of instructors to ask if they can hold additional classes. If they are at capacity, reach out to the SD American Heart Association and American Red Cross for assistance in locating or recruiting more instructors. If you are having difficulties recruiting individuals to attend the CPR trainings, then you may wish to contact an organization that focuses on promoting Hands-Only CPR. This simplified version of CPR eliminates mouth-to-mouth resuscitation increasing the likelihood of community members completing a CPR training course. While Hands-Only CPR is beneficial, Basic CPR and AED familiarity is preferred.

Complete the same process when reaching out to the local businesses and police and fire departments. This will provide the necessary information to determine the percent trained in CPR and AED use.

The attendee tracking process for all individuals trained in CPR must include a breakdown into the following categories: Hands-Only CPR (no rescue breathing), Basic CPR (compressions and rescue breathing), and High-Quality CPR (administered by EMTs or a healthcare provider).

Communities will be required to report in the CRC Designation Application on the percent of community members, businesses, and police and fire department personnel trained in CPR and AED use as well as the percent of police and fire department responder vehicles equipped with an AED. Additional tracking information about number of instructors, community members trained, type of CPR training, etc. must be compiled and shared as Attachment D in the application.

Focus Area #5 – Public Access AED Locations

Create a comprehensive list of the AEDs in your community. Start by reaching out to the fire department representative on the CRC Support Team. The fire department may complete regular AED checks in the community and therefore would have information regarding the number and location of all AEDs. Ask the fire department to provide you with the results from the latest AED check.

Another option is to have an AED community scavenger hunt. Contact the local youth organizations as they may be interested in participating. A scavenger hunt aids in spreading awareness about the CRC Program. Participating community members and youth will become aware of the goals of the program while actively learning AED placement in the community.

As a guideline, AEDs should be in easily accessible and high traffic areas. Based on the current number and location of AEDs, determine the number of AEDs to be purchased. Consider deployment of AEDs in the following locations:

- City/town-owned facilities – a minimum of one AED per building
- Public, private, charter schools
- Multi-use community buildings
- Locations for large public gatherings
- Shopping centers
- Nursing homes
- Health clubs – OSHA required
- Aquatic facilities
- Churches
- Businesses/business parks
- Senior/community centers
- Tourist attractions

Upon purchase and distribution, mount AEDs on the wall at height children and/or those with disabilities can easily reach (New Hampshire Department of Safety, 2016). You may wish to enlist the help of the police or fire department to aid with distribution. This ensures all AED placement follows guidelines and regulations.

If you have difficulty funding the purchase of new AEDs, visit the Sudden Cardiac Arrest Foundation's website for more information on how to locate and access AED funding.

Sudden Cardiac Arrest Foundation

http://www.sca-aware.org/finding-funding

The CRC Designation Application must include a list of all publicly accessible AEDs (Table 3.0 and 3.1), a report on the percentage of AEDs available in churches, schools, public buildings, and private businesses, and a town map with AED locations as Attachment E.

Focus Area #6 – EMS Dispatching Program

Emergency medical dispatchers (EMDs) are essential to informing bystanders of correct CPR protocol before EMS arrival on scene. Having dispatchers properly trained in guiding bystanders through CPR is crucial to improving the odds of patient survival. Contact the county dispatch supervisor and ask whether the department provides bystander CPR instruction.

EMD certification courses are available to train dispatchers in a wide variety of topics regarding over the phone medical instruction. These courses cover dispatcher-assisted CPR protocol but include other subjects such as quality assurance and stress management. These additional topics may overwhelm dispatchers and distract them from focusing solely on the dispatcher-assisted CPR process. Thus, dispatchers only need to complete the dispatcher-assisted CPR relevant components of the EMD certification program. For more information

about dispatcher-assisted CPR training, use the link below to access a toolkit from the Resuscitation Academy.

http://www.resuscitationacademy.com/downloads/DACPRToolkit1010.pdf

Ensuring the continuous quality of dispatcher instruction is essential to avoid liability issues. An individual can take legal action if a dispatcher fails to follow standard protocol and withholds potentially lifesaving instruction (International Academy of Emergency Dispatch, 1991). To avoid these complications, ensure dispatchers undergo proper initial training as well as complete regular refresher training sessions. You may also wish to perform regular "mock calls" to the dispatchers to monitor the information given. Keeping a core of trained dispatchers can help when performing refresher-training sessions.

Focus Area #7 & #8– EMS and Hospital Services

The goal of High-Quality CPR administered by an EMT or healthcare provider is to increase the patient's odds of surviving neurologically intact. It is important all EMS and hospital emergency department (ED) personnel are trained in High-Quality CPR. If EMS received a mechanical CPR device, then they are High-Quality CPR trained.

High-Quality CPR Videos

- Pro CPR Training: https://www.procpr.org/training_video/adult-cpr
- American Heart Association: https://www.youtube.com/watch?v=qfrkv7Ayfwk

Medical Directors play an integral part in ensuring personnel are capable of providing High-Quality CPR by guiding the quality improvement process. The EMS Medical Director/Director of Emergency Services consists of a physician advisor, consultant, or officer who provides oversight of the system of emergency responders delivering medical care outside the hospital. He/she is responsible for ensuring and evaluating the appropriate level of quality of care throughout the EMS system. It can also be helpful to note what types of performance improvement strategies are in place for those individuals needing to improve their CPR skills.

Ideally, EMS should be trained and equipped to utilize High-Quality CPR, AEDs, EKG, and/or a Lucas Device in order to provide optimal patient care and to have the capability to send patient data and reports to the hospital ED prior to ambulance arrival. Hospital ED will also be trained and equipped to receive, interpret, and make decisions prior to patient arrival based on this information. Data analysis is essential to performance improvement for both EMS and hospital ED personnel.

Hospitals must also establish protocol for treatment and/or stabilization and transfer of patients depending on the hospitals level of care. Multidisciplinary meetings and/or patient

data reports can be used to communicate patient outcomes to all involved parties (EMS, CAHs, and PCIs).

The CRC Designation Application must include a list of EMS and hospital ED personnel trained in High-Quality CPR, Medical Director led Quality Improvement sessions, and Master Trainer sessions involving High-Quality CPR (Table 4.0, 4.1, and 4.2). The application must also include information about EMS use of patient data and reports to alert the hospital prior to arrival, hospital ED use of that data, documentation of established protocol for treatment and/or stabilization and transfer of patients, and reporting patient data to all parties (EMS, CAH, PCI) to evaluate outcomes.

Focus Area #9 – CRC Program Evaluation and Sustainability

To ensure the CRC Program is implemented and utilized effectively, periodic evaluation needs to occur. Data collection and review is necessary to ensure adherence to designation criteria and to drive change.

Prehospital data collected by EMS services should be entered into ImageTrend. ImageTrend is an electronic patient care reporting (ePCR) system supported by DOH's EMS Program. SD has been compliant with the National EMS Information System (NEMSIS) since 2009 when the state converted over to electronic reporting. Electronic run reporting allows ambulance services a safe and reliable central repository to collect, store, and report run data. Furthermore, the ePCR system allows the DOH access to run any number of reports necessary to support EMS initiatives.

Each CRC Team needs to develop an Evaluation and Sustainability Plan and report on it in the CRC Designation Application. The plan should address how the team will continue to collect, review, and report data in each Focus Area. For example, the team may require quarterly CRC Support Team meetings as a way to keep all members informed and involved in the process. There will be annual practice scenarios to ensure all steps in the *Chain of Survival* are still in place and effective. The team will utilize all available data to ensure continual performance improvement and review of cardiac success. The team will also utilize the data to inform all stakeholders including the public on progress and improvement.

Promote Your Efforts

After solidifying the strategies in your action plan, it is important to promote them. Community promotional events may include holding small press conferences or town hall meetings allowing community members to ask questions and learn how they can become involved. Social media has been suggested as a method of education and awareness, but it can also be an inexpensive and effective method of promotion. For example, if you have a community AED scavenger hunt, utilize your website and Facebook page to recruit youth and adult participants, share photos and live videos, post information about outcomes, and even reach potential funders for additional AEDs.

The CRC Designation Application must include a list of promotional efforts (Table 5.0).

Monitor and Evaluate Progress

There are two things to evaluate for each Focus Area: 1) The action plan is being implemented as intended and 2) you are meeting the Focus Area goal. Information gathered from these two evaluations is important in guiding your decisions (Renger, Bartel, Foltysova, 2013). For example, if you are struggling to meet your Focus Area goal and your strategy is being implemented according to plan, then the team should examine other strategies. On the other hand, if you are struggling to meet your goal, but your action plan isn't being followed, then you should direct your effort at improving the action plan implementation.

The evaluation of your action plan can be as simple as making a checklist and see if a step was missed. Then, the team should meet to discuss why and what corrective actions to take. You should use the same methods to evaluate ongoing progress toward your goal as you did to validate the score. By using the same methods, you can directly compare your initial baseline measurement to your current measurment and determine the effectivenss of your strategies. You can complete this process until each Focus Area meets the CRC Designation Criteria.

Select Additional Focus Areas and Repeat

Once you have achieved success in one or more of the Focus Areas, you can begin working on additional areas. Follow the same process of developing an effective and feasible action plan. Ensure to continue the strategies for the first Focus Areas while developing new action plans and strategies.

Repeat this process until you have satisfied all CRC Designation Criteria for each Focus Area.

Complete and Submit CRC Designation Application

Refer to page 36 to see the full application.

- **Final Meeting with DOH**

Once the application is received by DOH, it will be assessed to determine whether the community has met the criteria. The final step to achieve CRC Designation is to meet with DOH. DOH will contact the community's champion to discuss application information and verify any additional needed information.

If accepted, the community will receive a three-year designation. An Annual Summary Report with compiled data and Focus Area summaries will be required on the anniversary of designation. The Annual Summary Report template will be provided by DOH upon designation.

CRC Designation Application

Section A. Describe how your community has met their goal and achieved the minimum score in each of the nine Focus Areas. Include the final score you are giving your community and the individual scores in each category, if applicable, and justify your response.

Focus Area #1 - Community Leadership

[*Input Text Here*]

Focus Area #2 - Community Awareness Campaign

[*Input Text Here*]

Focus Area #3 - Community Blood Pressure Control Program
Remember to include specific data within your response, such as the number of people who had a blood pressure screening, number of undiagnosed hypertensive patients determined through screening, number of people who received referral to a primary care provider, etc.

[*Input Text Here*]

Focus Area #4 - CPR & AED Training
Remember to include the percent of community members, businesses, and police and fire department personnel trained in CPR and AED use, and the percent of police and fire department responder vehicles equipped with an AED. (Additional tracking information about number of instructors, community members trained, etc. must be compiled and shared as Attachment D.)

[*Input Text Here*]

Focus Area #5 - Public Access AED Locations
Remember to include the percentage of AEDs available in churches, schools, public buildings, and private businesses.

[*Input Text Here*]

Focus Area #6 - EMS Dispatching Program

[*Input Text Here*]

Focus Area #7 - EMS Services
Remember to include information about the use of High-Quality CPR, AEDs, EKG, and/or a Lucas Device by EMS to provide optimal patient care and to provide data and reports to alert the hospital prior to ambulance arrival. Note how data analysis is used for performance improvement for EMS personnel.

[*Input Text Here*]

Focus Area #8 - Hospital Services

Remember to include information about hospital ED use of EMS data and reports prior to patient arrival. Note how data analysis is used for performance improvement for ED personnel. Also include information about established protocol for treatment and/or stabilization and transfer of patients and for reporting patient data to all parties (EMS, CAH, PCI) to evaluate outcomes.

[*Input Text Here*]

Focus Area #9 - Cardiac Ready Communities Program Evaluation and Sustainability

Remember to include how the CRC Evaluation and Sustainability Plan will address how the team plans to continue to collect, review, and report data in each Focus Area.

[*Input Text Here*]

Section B. Complete the following tables. Add rows as needed to include all required and available information.

CRC Support Team

Table 1.0

CRC Support Team Members	Contact Name & Organization	Phone & Email	Project Role
Local Champion (Lead Organizer and Coordinator)			❖ Leads Effort ❖ Assists ❖ No Role
EMS Representative			❖ Leads Effort ❖ Assists ❖ No Role
Fire Dept Rep			❖ Leads Effort ❖ Assists ❖ No Role
Police Dept Rep			❖ Leads Effort ❖ Assists ❖ No Role
Hospital/Clinic Administrator			❖ Leads Effort ❖ Assists ❖ No Role
Healthcare Professional			❖ Leads Effort ❖ Assists ❖ No Role
Dispatch or PSAP			❖ Leads Effort ❖ Assists ❖ No Role
CPR Instructor			❖ Leads Effort ❖ Assists ❖ No Role
City and County Officials			❖ Leads Effort ❖ Assists ❖ No Role
Community Health Worker			❖ Leads Effort ❖ Assists ❖ No Role
Local Emergency Planning Committee or Tribal Emergency Response Commission Rep			❖ Leads Effort ❖ Assists ❖ No Role
AHA/Red Cross Rep			❖ Leads Effort ❖ Assists ❖ No Role
School Rep			❖ Leads Effort ❖ Assists ❖ No Role

Local Business/Chamber of Commerce Rep			❖ Leads Effort ❖ Assists ❖ No Role
Civic Group and Faith Organization Rep			❖ Leads Effort ❖ Assists ❖ No Role
Local Media Rep			❖ Leads Effort ❖ Assists ❖ No Role
Survivors and Their Family Members			❖ Leads Effort ❖ Assists ❖ No Role
Other Public Reps			❖ Leads Effort ❖ Assists ❖ No Role

Community Awareness Advertising Information

Table 2.0

Media Source	Duration of Advertisement	Estimated Audience	Evaluation
i.e. Posted information linking to an article on 'The Importance of the *Chain of Survival'* on the community Facebook page	January 1st – 31st (1 month)	200 Facebook followers	Article link had a click rate of 33%

Publicly Accessible AEDs in the Community

Table 3.0 - AED Locations in Church, School, or Public Buildings

	AED Location
1	
2	
3	
4	
5	

Table 3.1 - AED Locations in Private Businesses

	AED Locations in Private Businesses
1	
2	
3	
4	
5	

EMS or Hospital ED Personnel Trained in High-Quality CPR

Table 4.0 – List all trained personnel and note whether EMS or hospital ED staff

	Attendee	Date of Training (--/--/----)	EMS or Hospital ED Staff
1	i.e. John Smith	05/05/2018	EMS
2	i.e. Jane Smith	05/05/2018	Hospital ED
3			
4			
5			

Table 4.1 - List the Quality Improvement Sessions lead by the Medical Director involving High-Quality CPR, including the number trained

	Date of QI Session (--/--/----)	# Trained
1		
2		
3		
4		
5		

Table 4.2 – List the Master Trainer Visits involving High-Quality CPR, including the number trained

	Date of Master Trainer Visit (--/--/----)	# Trained
1		
2		
3		
4		
5		

Promotional Efforts

Table 5.0

Activity/Resource	Lead/ Info	Location Details	Project Role
i.e. Plan Award Ceremony – City Council Meeting, Public Event or Other			❖ Media ❖ Partner Participation ❖ Community Participation
i.e. Develop and Share Media Releases Regarding Award Ceremony			❖ Media ❖ Partner Participation ❖ Community Participation
i.e. Consider Additional Publicity of Success – City Website, Notices, Etc.			❖ Media ❖ Partner Participation ❖ Community Participation

Section C. Add the following attachments to the completed application.

A. CRC Designation Criteria Scoring Table
B. CRC Action Plan for each Focus Area
C. CRC Support Team Meeting Minutes
D. CPR and AED Tracking Information
    a. List of CPR instructors, number of community members trained, and the type of CPR training received (Hands-Only, Basic, or High-Quality)
        i. Note the percent of community members trained in CPR and AED use
    b. List of businesses that have staff trained and the type of CPR training received
        i. Note the percent of businesses in the community with staff trained in CPR and AED use
    c. List of police and fire department personnel trained, and the type of CPR training received
        i. Note the percent of personnel trained in CPR and AED use
    d. List the total number of police and fire department responder vehicles and the number equipped with an AED
        i. Note the percent equipped with an AED
E. Town map with AED locations
F. Additional documents, forms, reports, etc. may be added as deemed appropriate by your CRC Support Team

For further questions, please contact:

Liz Marso, RD, LN
Healthy Communities Coordinator
South Dakota Department of Health | Office of Chronic Disease and Health Promotion
615 E. 4th Street, Pierre, SD 57501
605.773.6607 | Liz.Marso@state.sd.us
https://doh.sd.gov/diseases/chronic/heartdisease/cardiacreadycommunities.aspx

Acronym Glossary

- **AED (Automated External Defibrillator)** – a portable defibrillator designed to be automated such that it can be used by persons without substantial medical training who are responding to a cardiac emergency.
- **AHA (American Heart Association)** – a national voluntary health agency that has the goal of increasing public and medical awareness of cardiovascular disease and stroke, and thereby reducing the number of associated deaths and disabilities.
- **CAH (Critical Access Hospital)** – a hospital in a rural area that has limited capacity and provides a limited number of services.
- **CPR (Cardiopulmonary Resuscitation)** – the manual application of chest compressions and ventilations to patients in cardiac arrest, done in an effort to maintain viability until advanced help arrives.
- **CVD (Cardiovascular Disease)** – any disease of the heart or blood vessels, including atherosclerosis, cardiomyopathy, coronary artery disease, peripheral vascular disease, and others.
- **DES (Director of Emergency Services) –** consists of a physician advisor, consultant, or officer who provides oversight of the system of emergency responders delivering medical care outside the hospital. He/she is responsible for ensuring and evaluating the appropriate level of quality of care throughout the EMS system.
- **ED (Emergency Department)** – an area of a hospital especially equipped and staffed for emergency care.
- **EKG (Electrocardiogram)** – the record produced by electrocardiography, a tracing representing the heart's electrical action derived by amplification of the minutely small electrical impulses normally generated by the heart.
- **EMD (Emergency Medical Dispatcher)** – a telecommunicator with training in medical care who is allowed to use predetermined medical protocols to both dispatch correct resources to an emergency scene and to give instructions to victims and bystanders before arrival of first responders.
- **EMS (Emergency Medical Service)** – a network of services coordinated to provide aid and medical assistance from primary response to definitive care, involving personnel trained in the rescue, stabilization, transportation, and advanced treatment of traumatic or medical emergencies.
- **EMT (Emergency Medical Technician)** – a person trained and certified to appraise and initiate the administration of emergency care for victims of trauma or acute illness before or during transportation of the victims to a health care facility via ambulance or aircraft.
- **ePCR (Electronic Patient Care Reporting)** – electronic reporting system used by the SD Department of Health EMS Program.
- **LEPC (Local Emergency Planning Committee) –** a committee responsible for community emergency planning and preparedness.
- **NEMSIS (National EMS Information System)** – the national database used to store EMS data.
- **PCI (Percutaneous Coronary Intervention)** – a non-surgical procedure used to treat narrowing of the arteries provided by advanced cardiac care hospitals.
- **PSAP (Public Safety Answering Point)** – a call center responsible for answering calls to an emergency telephone number for police, firefighting, and ambulance services.
- **STEMI (ST-Elevated Myocardial Infarction)** – the deadliest type of heart attack which is caused by a sudden complete blockage of the coronary artery.
- **TERC (Tribal Emergency Response Commission) –** a commission responsible for tribal community emergency planning and preparedness.

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