

Mission: Lifeline Cardiac Resuscitation Systems of Care

Barriers and Solutions

Community Level

BARRIER: Lack of Bystander CPR

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Lack of recognition of cardiac arrest• Lack of knowledge of basic first aid emergency care/CPR• Apprehension about performing CPR correctly• Concern of contracting communicable disease with Mouth to Mouth ventilations	<ul style="list-style-type: none">• Identify community champion to drive change• Promote public education materials such as Hands Only CPR website (www.handsonlycpr.org) and CPR Anytime educational kits• Health Care providers provide community CPR education• Promotion of Survivor Meetings• Increase Public Awareness campaigns• Promote CPR and PAD programs for the community, schools and workplaces

BARRIER: Lack of Public Access to Defibrillators

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Lack of education on need• Lack of knowledge on how to use AED• Lack of funding to purchase AEDs and train the public• No system for maintaining AEDs• Need for Local and State Government support and commitment for sustainability• Discrepancy of who “owns” AED’s for access, maintenance and repair	<ul style="list-style-type: none">• Identify community champion to drive change• Community education and training on AED use• Identify potential grant structure for purchasing AED equipment• Strategically position AEDs and assign personnel responsible for upkeep and monitoring• Community standards for strategic AED placement in public settings• Dispatcher assisted identification of nearest AED location

Emergency Medical Dispatch

BARRIER: Delayed Identification of the Cardiac Arrest Victim

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Lack of formal dispatch protocols• Lack of training needed to recognize the need for cardiopulmonary resuscitation• Lack of quality improvement process	<ul style="list-style-type: none">• Uniform training of all 911 dispatch operators consistent with AHA ECC guidelines• Implement a quality improvement process that includes the use of audits and feedback• Adopt the first recorded time that the 911 system identifies call as “time 0”

BARRIER: Lack of Dispatch Assisted CPR

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Lack of formal dispatch-assisted CPR protocols• Lack of training to instruct bystander CPR	<ul style="list-style-type: none">• Dispatch instruct bystanders in Hands only CPR <p>Initial training and annual competency of all dispatch operators to instruct the lay person on CPR</p>

Paramedic/First Responder

BARRIER: Lack of Resources to Implement Cardiac Resuscitation Systems of Care

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Lack of understanding why change is needed• Lack of reallocation of resources – High effort ☐ Low yield activities• Insufficient integration of first responder training• Insufficient quality review or quality improvement programs for cardiac resuscitation	<ul style="list-style-type: none">• Identify EMS champion to drive change• Redistribute resources to Low effort ☐ High yield activities• Paramedics provide training to first responders• Review outcomes and provide feedback to team on all cardiac resuscitation calls <p>☐</p>

BARRIER: Providing Uninterrupted CPR

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Compressions are interruption for performing various interventions such as intubation and IV insertion• Compression interruption to move the patient	<ul style="list-style-type: none">• Update CPR protocols to include new AHA CAB Guidelines (Compression, Airway, Breathing)• Provide continuing education for first responder providers on excellent chest compression technique• Dispatch sufficient number of providers with appropriate equipment (manual defibrillators) to the scene• Provide effective ALS training

BARRIER: Lack of Destination Protocols

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Lack of cardiac resuscitation designation for hospitals• No national certification process to identify destination hospitals• Need early alert to hospitals of arrival of cardiac arrest patient	<ul style="list-style-type: none">• Identify hospital champion to drive change• Develop and maintain relationship between EMS and hospitals• Establish a multidisciplinary approach to post cardiac arrest care• Identify destination centers for cardiac resuscitation develop destination plan

Referral Center

BARRIER: Lack of Comprehensive Post-Cardiac Arrest Care

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Lack of active engagement from multidisciplinary team• Lack of multi professional engagement• Lack of organization of in-hospital resources to care for cardiac resuscitation patients• Lack of established treatment protocols for cardiac resuscitation	<ul style="list-style-type: none">• Identify hospital champion to drive change• Identification and certification of specialized cardiac resuscitation centers• Develop an accreditation process to designation cardiac resuscitation centers• Develop multidisciplinary, post-cardiac arrest teams• Early transfer for PCI eligible to STEMI Receiving Centers• Begin or continue hypothermia when indicated• Address CMS and other National data reports to review methods of reporting OHCA survivor morbidity

BARRIER: Post-Cardiac Arrest Limited staff

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Limited resources• Rural geography	<ul style="list-style-type: none">• Identify hospital champion to drive change• Build referral center relationship with an identified comprehensive Cardiac Resuscitation receiving center• Train Referral Center staff on early recognition, rapid defibrillation, quality chest compressions, therapeutic hypothermia induction, and rapid transfer

Receiving Center

BARRIER: Lack of Comprehensive Post-Cardiac Arrest Care

EXAMPLES	SOLUTION
<ul style="list-style-type: none">• Lack of active engagement from multidisciplinary team• Lack of multi professional engagement• Lack of organization of in-hospital resources to care for survivors• Lack of established treatment protocols for post-cardiac arrest survivors• Effect of increases post-cardiac arrest survivors requiring PCI on nationally reported hospital data and outcomes	<ul style="list-style-type: none">• Identify hospital champion to drive change• Identification and certification of specialized cardiac resuscitation centers• Develop an accreditation process to designation cardiac resuscitation centers• Develop multidisciplinary, post-cardiac arrest teams• Provide early cardiology evaluation and if needed pPCI for those eligible• continued hypothermia

EXAMPLES	SOLUTION
	<ul style="list-style-type: none"> • Delay prognostication of functional outcome for at least 72 hours • Referral for AICD placement <p>Address CMS and other National data reports to review methods of reporting OHCA survivor morbidity</p>

System Level

BARRIER: Lack of Resources

EXAMPLES	SOLUTION
<ul style="list-style-type: none"> • Data measurement • Staffed infrastructure 	<ul style="list-style-type: none"> • Solutions are individual to the community or system • Identify the foundation to build the system infrastructure early on • Identify variables and measurement period • Assign staff at each level to collect data

BARRIER: Lack of System Wide Implementation

EXAMPLES	SOLUTION
<ul style="list-style-type: none"> • Need for qualified medical leadership • Conflicting interests • Lack of reporting system • Reporting bias 	<ul style="list-style-type: none"> • Identify a key system champion to drive change • Integrate community involvement with EMS, Referral and Receiving Centers