Cardiac Ready Communities

Barriers and Solutions

Community Level

Barrier: Lack of Bystander CPR	
EXAMPLES	SOLUTIONS
• Lack of recognition of cardiac arrest • Lack of knowledge of basic first aid emergency care/CPR • Apprehension about performing CPR correctly • Concern of contracting a communicable disease with mouth-to-mouth ventilations	• Identify community champion to drive change • Promote public education materials that are available • Teach Hands-only CPR • Increase Public Awareness Campaigns • Promote Hands-only CPR for community, schools and workplaces
Barrier: Lack of Public Access to Defibrillators	
• Lack of education on need • Lack of knowledge on how to use an AED • Lack of funding to purchase AEDs and train the public • No system for maintaining AEDs • Discrepancy of who "owns" AEDs for access, maintenance and repair	• Identify community champion to drive change • Community education and training on AED use (with CPR classes?) • Identify potential grants for purchasing AEDs • Strategically position AEDs and assign personnel responsible for upkeep and monitoring • Establish community standards for strategic AED placement in public settings • Dispatcher assisted identification of nearest AED location
Barrier: Lack of Resources to Implement Cardiac Ready Community Plan	
• Lack of understanding why change is needed • Lack of reallocation of resources: High effort-Low yield activities	• Identify community champion to drive change • Redistribute resources to Low effort-High yield activities
Other Community Barriers:	

Emergency Medical Dispatch

Barrier: Delayed Identification of the Cardiac Arrest Victim	
EXAMP:ES	SOLUTION
• Lack of formal dispatch protocols • Lack of training needed to recognize the need for CPR • Lack of Performance Improvement (PI) process	• Uniform training of all 911 dispatch operators • Implement a PI process that includes audits and feedback (data driven) • Adopt the first recorded time that the 911 system identifies the call as "time 0"
Barrier: Lack of Dispatch-Assisted CPR	
• **Lack of formal dispatch-assisted CPR protocols** • **Lack of training to instruct bystander CPR**	• Initial training and annual competency of dispatch operators to instruct bystander CPR • Dispatch instructs bystanders in Hands-only CPR
Other Emergency Medical Dispatch Barriers	

EMT/FIRST RESPONDER

Barrier: Lack of Implementation of Cardiac Ready Community Plan	
EXAMPLES	SOLUTION
• Insufficient integration of EMT/first responder training • Insufficient Professional Improvement for CPR	• Identify EMS champion to drive change • Provide training to EMTs and first responders • Develop a PI program for all Cardiac Resuscitation calls
Barrier: Providing High Performance CPR	
• Compressions are interrupted for interventions such as intubation and IV insertion • Compressions interrupted to move patient	• Update protocols to High Performance CPR • Implement use of Lucas Device • Dispatch sufficient number of responders with appropriate equipment • Develop a PI program for all Cardiac Resuscitation calls

Barrier: Lack of Destination Protocols	
• Lack of CPR designation for hospitals • No process to identify destination hospital • Need early alert to hospitals of arrival of a cardiac arrest patient	• 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 transport protocols
Other Barriers to EMS/First Responder System	

Critical Access Hospital

Barrier: Lack of Comprehensive Post-Cardiac Arrest Care	
EXAMPLES	SOLUTIONS
• Lack of active engagement from multidisciplinary team • Lack of multi-professional engagement • Lack of organization of in-hospital resources to care for CPR patients • Lack of established treatment protocols for CPR	• Identify hospital champion to drive change • Develop multidisciplinary, post-cardiac arrest PI plan • Transfer protocols for PCI hospitals • Utilize high performance CPR • Utilize Lucas Devices • Begin or continue hypothermia when indicated • Participate in CARES registry of data
Barrier: Post-Cardiac Arrest Limited staff	
• Limited Resources • Rural Geography	• Identify hospital champion to drive change • Build referral center relationship with PCI facility • Train staff on early recognition, rapid defibrillation, High Performance CPR, therapeutic hypothermia induction and rapid transfer
Other Barriers for CAH	

PCI/Receiving Hospital

Barrier: Lack of Comprehensive Post-Cardiac Arrest Care	
EXAMPLES	SOLUTION
• Lack of active engagement from multidisciplinary team • Lack of multi-professional engagement • Lack of organization of in-hospital resources for care of survivors • Lack of established treatment protocols for post-cardiac arrest survivors • Effect of increases in post-cardiac arrest survivors requiring PCI on hospital data and outcomes	• Identify hospital champion to drive change • Develop post-cardiac arrest PI program • Implement High Performance CPR protocols • Utilize Lucas Devices • Develop multidisciplinary, post-cardiac arrest teams • Provide early cardiology evaluation pPCI if needed • Continued hypothermia • Enter data into CARES registry
Barrier: Lack of Resources	
• Data measurement • Staffed infrastructure	• Solutions are individual to the community or system • Identify the foundation to build the system infrastructure early • Identify variables and measurement period • Assign staff at each level to collect data • Participate in CARES resgistry
Barrier: Lack of System-Wide Implementation	
• Need for qualified medical leadership • Conflicting interests • Lack of a reporting system • Reporting bias	• Identify a system champion to drive change • Integrate community involvement with the EMS, CAHs and PCI centers