



DCRI Center for Educational Excellence in
Collaboration with the American Heart Association

REGIONAL SYSTEMS OF CARE DEMONSTRATION PROJECT:
MISSION: LIFELINE™ STEMI SYSTEMS ACCELERATOR



The Duke Clinical Research Institute's Center For Educational Excellence is excited to announce the Regional Systems of Care Demonstration Project: Mission: Lifeline™ STEMI Systems Accelerator. This project will hope to be a final push to reform systems of care for the ST elevation myocardial infarction patient by engaging multiple systems that provide emergency medical care and reperfusion therapy within the same geographical region. The regional interventions will engage competitive regional systems through identification of key regional leaders into an altruistic educational and quality initiative that will improve the process and clinical outcomes of patients presenting with STEMI regardless of entry into the healthcare system. The initiative will involve the entire chain of care from emergency medical response to coronary intervention.

GENERAL INFORMATION

We expect that this initiative will be of great value to regions that are intent on improving their systems of care for STEMI patients and ultimately all vascular emergencies that need multidisciplinary team care and cross entities from pre-hospital to hospital (i.e., cardiac arrest, stroke, aortic dissection).

DEMONSTRATION PROJECT TARGETS:

- 1) Markedly accelerate the development of regional systems to diagnose and treat acute myocardial infarction. Regional systems will be composed of all hospitals and emergency medical service providers within a geographic region following agreed upon diagnostic and treatment protocols and supported by ongoing data collection and feedback. Building upon national guidelines and local consensus, these networks will facilitate the effective delivery of emergency cardiac care in a timely, coordinated and consistent manner.
- 2) Bring together leading health care providers and institutions in a collaborative fashion facilitated by professional organizations, national experts in the organization of regional systems, local key thought leaders in cardiology and emergency medicine, and leading emergency cardiac care businesses.
- 3) Identify and establish regional leadership in emergency cardiac care that includes leading physicians and administrators in hospitals, emergency medicine, and cardiology.

4) Specific Objectives:

- a. Increase the rate and speed of reperfusion, specifically from the time the STEMI patient accesses the health care system or self presents to the emergency department to reperfusion (preferred primary PCI first device deployed or fibrinolysis delivered when time goals for primary PCI cannot be met).
- b. Establish of a predetermined plan for identification of STEMI, acute treatment, and timely disposition to most appropriate hospital no matter where the STEMI patient enters the system
- c. Empower the EMS and non-PCI emergency departments to determine the best reperfusion plan and most appropriate destination protocol through the utilization of pre-hospital electrocardiogram and support on difficult diagnostic patients through a tertiary hot line.
- d. Improve the care of the high risk STEMI patient according to guideline directed, evidenced based medicine.
- e. Use baseline data to create an ideal plan for process improvements along with a continuous quality improvement monitoring (through a single data base) of the predetermined processes and clinical data elements on a quarterly basis for a minimum of one year.