

## **Improving Out-of-Hospital Cardiac Arrest Care**

According to the Centers for Disease Control and Prevention, half of heart- and stroke-related deaths occur before a patient arrives at a hospital. This is very troubling news for South Carolinians as heart disease is the second leading cause of death in the Palmetto State. Creating a more effective out-of-hospital system of care for cardiac arrest patients could potentially lead to dramatic improvements in survival rates.

HSSC is working with South Carolina Department of Health and Environmental Control (SC DHEC), the state's Emergency Medical System (EMS) system, South Carolina Hospital Association (SCHA), and the Medical University of South Carolina (MUSC) to improve out-of-hospital cardiac arrest care in South Carolina. The program includes a statewide cardiac arrest registry to establish benchmarks, assess current standards of care and improve the overall system of care.

HSSC's plan is to model the cardiac arrest system of care after the highly successful South Carolina ST Elevation MI (STEMI) network. The 19 existing STEMI centers will be designated as Cardiac Arrest Centers and work at a regional level with local EMS agencies and referring hospitals to implement processes such as field-induced hypothermia as well as to establish bypass and transfer protocols to Cardiac Arrest Centers. Key background information will be gathered through HSSC's clinical data warehouse to evaluate care across the state for diagnoses, outcomes and interventions, as well as to evaluate patient characteristics to identify patterns of decision making post-cardiac arrest.

The project is in its early stages. MUSC is collecting and analyzing two years of cardiac arrest-related data. The effort will expand to include Greenville Health System, Palmetto Health and other HSSC member hospitals. The ultimate goal is a more effective system of out-of-hospital cardiac arrest care used by all of South Carolina hospitals and EMS to save lives.