INTRODUCTION

Out-of-hospital cardiac arrest (OHCA) is the leading cause of death among adults in the United States and Western countries. It is estimated that approximately 300,000 - 400,000 deaths occur every year. Most of these deaths are due to a fatal heart rhythm disturbance called ventricular fibrillation. Nationally, few communities actively monitor and report their survival rates from OHCA. The range of survival in these communities for ventricular fibrillation is anywhere - from 2% to 35%, a striking difference, since the approach to the care of these patients is uniform and there is no evidence that patients in one part of the country are different biologically from another.

The **CARES** (Cardiac Arrest Registry to Enhance Survival) Program is a collaborative effort of the Centers for Disease Control and Prevention (CDC), the American Heart Association (AHA) and the Emory University Department of Emergency Medicine, Section of Prehospital and Disaster Medicine. The CDC and the AHA are working together to reduce the death rate from heart disease and stroke by 25% from the years 2000-2010. One of the CDC's initiatives is to develop a model national registry to accurately measure our progress in the treatment of OHCA.

Using the Utstein style of statistics for OHCA, **CARES** is capable of identifying and tracking all cases of cardiac arrest in a defined geographic area. The ultimate goals of **CARES** is to help local EMS administrators and medical directors identify who is affected, when and where cardiac arrest events occur, which elements of the system are functioning properly and which elements are not, and how changes can be made to improve cardiac arrest outcomes. CARES utilizes an internet database system that reduces time involved in registering events, tracking patient outcomes with hospitals, and response intervals associated with First Responders and EMS providers. Multiple reporting features can be generated and monitored continuously through secure online access by **CARES** participants and allow for longitudinal, internal benchmarking.

Presently, the odds of surviving an episode of out of hospital cardiac arrest in the United States vary by a factor of 10 to 20, depending on the community in which it occurs. Disparities in outcome this extreme are unacceptable and are what the **CARES** project will be able to identify and allow communities to improve upon. As more communities participate in **CARES**, confidential, external benchmarking can occur between similar systems across the United States. Participating cities include Atlanta (GA) - including Georgia EMS Region III, Kansas City (MO), Anchorage (AK), Raleigh-Durham (NC), Austin (TX), Houston (TX), Baytown (TX), Cincinnati (OH), Columbus (OH), Nashville (TN), Boston (MA), Springfield (MA), Las Vegas (NV), Sioux Falls (SD), Oakland County (MI), and Ventura County (CA).

Please refer to the **CARES** website (https://mycares.net) for more information on the program. Do not hesitate to contact the **CARES** staff (cares@emory.edu) for additional questions and updates.