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TEXAS CARES
Cardiac Arrest Registry to Enhance Survival
CARES Funding Partners

- American Red Cross
- American Heart Association
- Emory University
- Medtronic Philanthropy
- Zoll Corporation
- CDC (2004-2012)
CARES Mission Statement

To help communities determine standardized outcome measures for out-of-hospital cardiac arrest allowing for quality improvement efforts and benchmarking capability to improve care and increase survival.
CARES Vision Statement

To become the standard out-of-hospital cardiac arrest registry for the United States allowing for uniform data collection and quality improvement in each state and nationally.
2015 Footprint

- Over 90 million
- 28.72% US population
- > 1,100 EMS Agencies
- > 1,500 Hospitals
- 50 communities in 22 states
- 15 statewide participants

CARES Annual Call Volume

- Non-Traumatic Etiology
- Presumed Cardiac Etiology
CARES Participant Map

- States with Coordinator:
  - Green

- States with >50% population coverage with no State Coordinator:
  - Yellow
Focus States
Building a National Registry

**Community**
- Allows stakeholders to identify who, when & where of OHCA
- Provides measurement tool for quality improvement with minimal burden to local EMS agencies and hospitals

**State**
- Allows for additional benchmarking opportunities
- Local support from CARES-supported & trained coordinator

**National**
- Increased emphasis on OHCA data collection
- Need for a national registry
IOM Recommendations

1. **Establish a National Cardiac Arrest Registry**
2. Foster a Culture of Action Through Public Awareness and Training
3. Enhance the Capabilities and Performance of Emergency Medical Services (EMS) Systems
4. Set National Accreditation Standards Related to Cardiac Arrest for Hospitals and Health Care Systems
5. Adopt Continuous Quality Improvement Programs.
6. Accelerate Research on Pathophysiology, New Therapies, and Translation of Science for Cardiac Arrest
7. Accelerate Research on the Evaluation and Adoption of Cardiac Arrest Therapies
8. Create a National Cardiac Arrest Collaborative
IOM Recommendation to Establish a National Registry

“The Centers for Disease Control and Prevention (CDC)—in collaboration with state and local health departments—should expand and coordinate cardiac arrest data collection through a publicly reported and available national cardiac arrest registry, including both out-of-hospital cardiac arrest (OHCA) and in-hospital cardiac arrest (IHCA) data, to help increase federal and state accountability for current system performance and promote actions to improve cardiac arrest outcomes.”
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Cardiac Arrest Registry to Enhance Survival

AMR Amarillo
AMR Wichita Falls
University Med Center EMS
Frisco FD
Medstar
Southlake FD
AMR Hunt Co. and Collin Co.
AMR Arlington

Killeen FD
Williamson County EMS
Austin-Travis County EMS
San Antonio FD

McKinney Fire/EMS
Plano Fire-Rescue

St. Joseph Regional EMS
Montgomery Co. Hospital District EMS

Harris Co. EMS
Fort Bend Co. EMS

Baytown FD
Porrt Arthur FD
Pearland FD
CARES 2015
Texas Report Summary
Location of Arrest

National
- Residence: 69.6%
- Nursing Home: 19.8%
- Public Setting: 10.6%
N = 53,831

Texas
- Residence: 67.4%
- Nursing Home: 9.0%
- Public Setting: 23.6%
N = 4,699
Arrest Witnessed Status

National

- Bystander Witnessed: 36.9%
- Witnessed by 911 Responder: 12.1%
- Unwitnessed: 51.0%

N=53,830

Texas

- Bystander Witnessed: 35.4%
- Witnessed by 911 Responder: 11.9%
- Unwitnessed: 52.7%

N=4,699
Who Initiated CPR?

National

- Bystander: 40.6%
- First Responder: 31.1%
- EMS: 28.2%

N=53,826

Texas

- Bystander: 44.6%
- First Responder: 28.9%
- EMS: 26.4%

N=4,699
First Arrest Rhythm

- Vfib/Vtach/Unknown
- Asystole
- Idioventricular/PEA
- Unknown

Texas
National
Was an AED Applied Prior to EMS arrival?

### National
- Yes: 29.5%
- No: 70.5%

### Texas
- Yes: 29.4%
- No: 70.6%

- National: N=53,830
- Texas: N=4,699
Who First Applied AED?

**National**
- Bystander: 18.3%
- First Responder: 81.7%
- Total: 15,877

**Texas**
- Bystander: 20.6%
- First Responder: 79.4%
- Total: 1,382
Sustained ROSC

National

Yes: 32.9%
No: 67.1%
N = 53,825

Texas

Yes: 36.1%
No: 63.9%
N = 4,699
Field Hypothermia

National

- Yes: 10.4%
- No: 89.6%

N = 53,813

Texas

- Yes: 16.2%
- No: 83.8%

N = 4,699
Survival Rates: Overall Survival

- Survival to Hospital Admission: 30%
- Survival to Hospital Discharge: 15%
- Good to Moderate CPC: 10%
- Missing Hospital Outcome: 0%

Comparison:
- Texas
- National
Survival Rates: Bystander Witnessed Shockable Rhythm

- Utstein = Witnessed by bystander and found in a shockable rhythm
- Utstein Bystander = Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR by bystander and/or AED applied by bystander)