Improving Emergency Cardiac Care Saves Lives

CARES
Cardiac Arrest Registry to Enhance Survival

National Center for Chronic Disease Prevention and Health Promotion
Division for Heart Disease and Stroke Prevention
Each year, 300,000 cases of out-of-hospital cardiac arrest (OHCA) occur in the United States. Almost two-thirds are treated by emergency medical services (EMS) providers. Community rates of OHCA survival are generally low (2%–40%). Quickly implementing the “chain of survival” is crucial to surviving OHCA, but many communities cannot measure how effectively EMS providers activate the chain. Without adequate performance measures, these communities lose opportunities to improve emergency cardiac care and save lives.

The Cardiac Arrest Registry to Enhance Survival (CARES)

In 2004, the Centers for Disease Control and Prevention (CDC) collaborated with Emory University and the American Heart Association to develop a registry that could help increase OHCA survival rates.

CARES is a secure, Web-based data management system in which participating communities enter local data and generate their own reports. Communities can compare their EMS system performance to de-identified aggregate statistics at the local, state, or national level and discover promising practices that could improve emergency cardiac care.

Using the Chain of Survival

Rapid recognition and activation of EMS via 9-1-1.

CPR

CPR started quickly.
Helping Communities Identify Opportunities for Improvement

CARES helps local EMS administrators and community leaders answer such questions as:

• Who is affected in my community?
• When and where are cardiac events happening?
• What parts of the system are working well?
• What parts of the system could work better?
• How can we improve emergency cardiac treatment?

Working Together to Improve Emergency Cardiac Care

The CARES system:

• Uses a secure Web database with restricted access for authorized users.
• Has software that collects and links data sources to create a single de-identified record for each OHCA event.
• Uses a simple, HIPAA-compliant methodology to protect confidentiality.
• Accepts a variety of input methods, such as uploaded data files or online data entry.
• Collects 9-1-1 computer-aided dispatch data for EMS response times.
• Allows longitudinal, internal benchmarking of key performance indicators.
• Provides multiple reporting features, including charts, graphs, and maps.

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MISSION

Save more lives from OHCA.

Strengthen collaboration among 9-1-1 centers, first responders, EMS agencies, and hospitals.

Provide a simple, confidential, HIPAA-compliant process to determine patient outcomes.

Provide technical assistance to help community leaders identify and prioritize opportunities to improve EMS performance.

AED

Early post-resuscitative care.

EMS

Rapid delivery of advanced life support.
CARES

Reaching Across the Nation

CDC pilot tested CARES in the Atlanta metropolitan area in 2005. The next year, the registry expanded to six additional metropolitan areas. In 2011, CARES has 40 participating communities in 25 states.

These communities are located across the country, from Massachusetts to California and Alaska to Texas. Interest in CARES continues to grow, and more communities have expressed a desire to participate and are working to implement the registry.

Current CARES Sites

Saving Lives Through Improved Care and Prevention

CARES continues to enroll new sites at the state and community levels. In 2010, CARES began an expansion to statewide surveillance in Arizona, Hawaii, Minnesota, North Carolina, Pennsylvania, and Washington. This provides an opportunity for state-level intervention and benchmarking. CARES also has begun collaborating internationally with the Pan-Asian Resuscitation Outcome Study (http://www.scri.edu.sg/index.php/paros-clinical-research-network).

More information about CARES is available at http://mycares.net

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