## Medtronic News

Medtronic Foundation Commits \$15 Million in Unprecedented Effort to Reduce Sudden Cardiac Arrest Deaths

HeartRescue Project is first multi-state effort to systemically tackle one of nation's leading killers

MINNEAPOLIS, Mar 03, 2011 (BUSINESS WIRE) --

The Medtronic Foundation announced today a \$15 million commitment to reduce sudden cardiac arrest deaths in the United States. The HeartRescue Project assembles the country's leading emergency and resuscitation experts to expand successful city and county sudden cardiac arrest (SCA) response programs to statewide levels. The goal is to improve out-of-hospital cardiac arrest survival rates by at least 50 percent in five years within pilot states of Arizona, Minnesota, North Carolina, Pennsylvania and Washington.

More than 90 percent of Americans who experience SCA die in minutes. Over the past 30 years, the national survival rate of 8 percent has not increased, and depending where you live, the survival rate could vary by more than 500 percent.

HeartRescue Partners at the Universities of Arizona, Duke, Minnesota, Pennsylvania and Washington, and their partner agencies, will for the first time at a multi-state level coordinate proven protocols and high-tech treatments along three critical levels of response: bystanders, emergency medical services and hospitals.

HeartRescue Partners already have demonstrated that SCA is a treatable event and have made significant advances in their areas of research and expertise to help save more lives. The task now is to replicate that success on a statewide basis, and eventually nationwide.

"Extraordinary statistics call for extraordinary action," said Bill Hawkins, Medtronic chairman and chief executive officer. "Over the years, we've made progress in reducing deaths in other areas of heart disease, why not sudden cardiac arrest? We have a lot of work to do, but with the nation's leading experts now working together to implement proven response protocols and collecting data that will drive further improvements, we are hopeful we can save more lives."

SCA is a leading cause of death in the U.S.

Each year, an estimated 295,000 Americans die from SCA, as reported by the American Heart Association's Heart Disease and Stroke Update for 2010. For three decades, more than 92 out of 100 Americans who have suffered SCA out of the hospital have died -- an 8-percent survival rate that has not improved on the national level since 1979, according to a 2009 study from the University of Michigan.

Further confounding the landscape is a wide geographical disparity in SCA survival, with survival rates varying greatly depending on where you live in the country.

"There is a 500 percent variation in survival after cardiac arrest," said Dr. Graham Nichol, a HeartRescue Partner at the University of Washington. "Many people don't realize that cardiac arrest can be treated. In many regions, bystanders, emergency response and hospitals - are not working together to help the patient."

In Seattle, for example, the overall survival rate for all SCA patients is 16 percent, which jumps to 40 percent when only including patients in a shockable rhythm. This compares to a 3 percent overall survival rate in Alabama, or 8 percent survival of those in a shockable rhythm, according to a 2008 study published in the

Journal of the American Medical Association.

The HeartRescue Project

The Medtronic Foundation has committed more than \$15 million over the next five years to fund five state projects, with all HeartRescue Partners sharing the underlying strategy of a multi-layered, coordinated and comprehensively measured community-wide response to SCA events.

Their approach acknowledges that there is no single solution to improving SCA survival and relies on simultaneous delivery of best practices that include effective and early bystander response, increased access to automated external defibrillators, 911 dispatch-assisted CPR and therapeutic hypothermia.

Measurement and commonality in data collection also will be a critical component of the HeartRescue Project. Currently, there is no national standard for SCA performance and outcomes measurement, leaving communities to set their own data collection protocols. This makes it difficult to improve systems of care with no real benchmarking capability to determine successful practices.

In a promising first step toward a national standard, HeartRescue Partners have agreed on a common set of data collection points, and will use the Center for Disease Control's CARES Registry (cardiac arrest registry to enhance survival) to measure their progress. Over the next five years, partners will collect SCA data for all cases state-wide and report results on a yearly basis.

"It's been said before that you can't improve what you don't measure, and the same applies to sudden cardiac arrest," said HeartRescue Partner Dr. Lance Becker, University of Pennsylvania. "Until we bring the needed resources, research and national standards for data collection to the forefront, we won't know for sure what works, what doesn't or why."

The HeartRescue Project is one part of Medtronic's comprehensive global commitment announced in September 2010 to address the global burden of non-communicable disease.

About Medtronic and the Medtronic Foundation

Medtronic, Inc. (<u>www.medtronic.com</u>), headquartered in Minneapolis, is the global leader in medical technology - alleviating pain, restoring health, and extending life for millions of people worldwide. The Medtronic Foundation is committed to improving the lives of people around the world living with chronic disease. Its grant making is focused in three areas: health, education and community. Learn more about the HeartRescue Project at <a href="https://www.heartrescueproject.com">www.heartrescueproject.com</a>.

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Medtronic Foundation Rich Fischer, 763-505-2975 or Medtronic, Inc. Brian Henry, 763-505-2796

