Survival from Sudden Cardiac Arrest More Than Doubles with ZOLL CPR Feedback Technology and Resuscitation Training

The Associated Press

CHELMSFORD, Mass.--(BUSINESS WIRE)--Feb 28, 2013--ZOLL Medical Corporation, a manufacturer of medical devices and related software solutions, announced today that a publication released in the reported that survival from one of the leading causes of death in the United States, out-of-hospital cardiac arrest (OHCA), more than doubled when emergency medical providers utilized ZOLL defibrillators as part of a focused effort to improve pre-hospital CPR quality and maximize survival from OHCA in Arizona.

In this study, ZOLL's defibrillators with CPR feedback technology, including Real CPR Help ® and CPR Dashboard ™, in combination with scenario-based training, more than doubled the odds of survival-to-hospital discharge and of achieving a favorable neurological outcome (adjusted odds ratio of 2.72 and 2.69 respectively).

Using ZOLL's proprietary technology, rescuers in Mesa, Arizona were able to significantly increase the depth of the compressions, apply the proper rate of compressions, limit compression interruptions, shorten their pre-shock pause, and better deliver ventilations at the recommended rate—all in compliance with the 2010 American Heart Association (AHA) Guidelines, which place a strong emphasis on high-quality CPR as a means of improving survival from cardiac arrest.

These results are the findings of the four-year endeavor called the Arizona Pre-hospital CPR Quality Improvement Project that was undertaken by the Mesa Fire/Medical Department in conjunction with the Save Hearts in Arizona Registry & Education (SHARE) Program.

"The fact that more than twice as many people returned home to their families after suffering a cardiac arrest is the outcome that most interests us in Arizona. The credit really goes to the Mesa Fire/Medical Department. It is remarkable that 56% of witnessed ventricular fibrillation OHCA victims in the City of Mesa survived with good functional outcome after they implemented the training and real-time audiovisual CPR feedback intervention," said Ben Bobrow, MD, Medical Director for the Arizona Department of Health Services' Bureau of EMS and Trauma System and lead author of the study.

"We know that maximizing blood flow to the heart and brain during cardiac arrest is paramount, but manual CPR without any feedback is often very poor with lots of interruptions and suboptimal compressions," Dr. Bobrow said. "We believe that these results clearly demonstrate how critical it is to measure CPR quality during cardiac resuscitation." "Health care systems need to continuously measure and improve their CPR quality during resuscitations in order to maximize survival. If EMS

systems were to achieve the Guidelines for CPR quality during cardiac resuscitation, as they did in Mesa, likely thousands of lives would be saved around the country each year," he added.

About Sudden Cardiac Arrest
SCA, an abrupt disruption of the heart's function, which causes a lack of blood flow to vital organs, occurs an estimated 380,000 times each year in the United States and claims more than one million lives globally each year. SCA is a leading cause of unexpected death in the world and often strikes without warning. Survival varies widely among communities, yet overall averages around 8% in the U.S. Implementing a system of care including early recognition, 9-1-1 CPR instructions, early defibrillation, and high-quality professional CPR, along with guideline- based, post-arrest care could save as many as half of these victims.

About ZOLL Medical Corporation
ZOLL Medical Corporation, an Asahi Kasei Group company, develops and markets medical devices and software solutions that help advance emergency care and save lives, while increasing clinical and operational efficiencies. With products for defibrillation and monitoring, circulation and CPR feedback, data management, fluid resuscitation, and therapeutic temperature management, ZOLL provides a comprehensive set of technologies that help clinicians, EMS and fire professionals, and lay rescuers treat victims needing resuscitation and critical care. For more information, visit www.zoll.com [1].

About Asahi Kasei
The Asahi Kasei Group is a diversified group of companies led by holding company Asahi Kasei Corp., with operations in the chemicals and fibers, homes and construction materials, electronics, and health care business sectors. Its health care operations include devices and systems for critical care, dialysis, therapeutic apheresis, transfusion, and manufacture of biotherapeutics, as well as pharmaceuticals, diagnostic reagents, and nutritional products. With more than 25,000 employees around the world, the Asahi Kasei Group serves customers in more than 100 countries. For more information, visit www.asahi-kasei.co.jp/asahi/en/ [2].

Source URL (retrieved on *12/12/2013 - 9:50pm*):
http://www.mdtmag.com/news/2013/02/survival-sudden-cardiac-arrest-more-doubles-zoll-cpr-feedback-technology-and-resuscitation-training?qt-video_of_the_day=0

Links:
[1] http://www.zoll.com
[2] http://www.asahi-kasei.co.jp/asahi/en/