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**To place an electronic embedded link to this study in your story:** Link will be live at the embargo time: <http://cardiology.jamanetwork.com/article.aspx?doi=10.1001/jamacardio.2016.0251>

***JAMA Cardiology***

**Implementation of Telephone CPR Program Results in Improved Cardiac Arrest Outcomes**

Implementation of a guideline-based telephone cardiopulmonary resuscitation (TCPR) program was associated with improvements in the timeliness of TCPR, survival to hospital discharge, and survival with favorable functional outcome for patients who experienced an out-of-hospital cardiac arrest, according to a study published online by *JAMA Cardiology.*

Out-of-hospital cardiac arrest (OHCA) is a major public health problem in the United States. Bystander CPR (BCPR) has been shown to double or even triple survival from OHCA. Despite decades of public CPR training, in most communities fewer than half of all individuals with cardiac arrest receive any BCPR, and bleak survival rates persist. In response, both the American Heart Association and the Institute of Medicine have emphasized the importance of telecommunicators (9-1-1 call takers and dispatchers) identifying cardiac arrest and assisting lay rescuers in providing BCPR to improve survival.

Bentley J. Bobrow, M.D., of the Arizona Department of Health Services, Phoenix, and colleagues examined the effect of implementing a bundle of care, including a guideline-based telephone CPR protocol, interactive telecommunicator training, detailed data collection with 9-1-1 call auditing, and telecommunicator feedback for OHCA in 2 regional dispatch centers serving metropolitan Phoenix. Audio recordings of OHCA calls were audited and linked with emergency medical services and hospital outcome data. The study was a before-after, observational analysis of patients with OHCA between October 2010 and September 2013.

There were 2,334 out-of-hospital cardiac arrests in the study group. The researchers found that the TCPR program was associated with significant improvements in several important aspects of resuscitation care, including increased TCPR rates (from 44 percent to 53 percent), a reduction in the time to first bystander chest compression (from 256 to 212 seconds), an increase in survival (from 9 percent to 12 percent); and an increase in favorable functional outcome (from 5.6 percent to 8.3 percent).

“These results suggest that the TCPR bundle, deliberately implemented and measured as part of a system-wide public health intervention, was an effective method to increase BCPR rates and survival on a large scale. This observation is a key finding because most previous work evaluating the effect of TCPR has been done in high-performance systems in the setting of strict research randomization protocols, where the investigators were closely linked to the functioning of the local systems. Therefore, our findings add momentum to the current literature by being implemented in the real world across a large number of emergency medical services (EMS) agencies and communities and thus may carry optimism that successful implementation is possible in typical EMS systems,” the authors write.

(*JAMA Cardiology*. Published online May 4, 2016; doi:10.1001/jamacardio.2016.0251. Available pre-embargo to the media at <http://media.jamanetwork.com>.)

**Editor’s Note:** Please see the article for additional information, including other authors, author contributions and affiliations, financial disclosures, funding and support, etc.

**Note**: Also available pre-embargo at the For The Media [website](http://media.jamanetwork.com/) is a commentary, “The Resuscitative Power of a Telephone Call,” by James T. Niemann, M.D., and Roger J. Lewis, M.D., Ph.D., of the Harbor-UCLA Medical Center, Torrance, Calif., and an editor’s note, “Process Improvement and Adopting the 2015 American Heart Association Resuscitation Guidelines,” by Clyde W. Yancy, M.D., M.Sc.

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