



Arizona – T-CPR

## Telephone CPR in Arizona

## THE CHALLENGE

To increase the rate of Telephone CPR (T-CPR) and reduce the time to first chest compression 9-1-1 agencies in Arizona. T-CPR has been shown to increase rates of bystander CPR (BCPR) and is associated with improved survival from cardiac arrest. We aimed to increase the rate of T-CPR and reduce the time from call-receipt to first chest compression at three agencies that collectively serve approximately twothirds of the state population.

We implemented a bundle of care at these agencies. It included a guideline-based T-CPR protocol, T-CPR training modules and system quality-improvement reports and case-level feedback to individual providers. In an effort to increase and speed OHCA recognition, the protocol directs telecommunicators to ask two questions as early in suspected OHCA calls as possible: (1) "Is the patient conscious?" and (2) "Is the patient breathing normally?" Live and web-based trainings emphasized the importance of dispatcher assertiveness and identification of agonal breathing

## RESULT

The rate of T-CPR increased from 44% to 62% and the time to first chestcompression 178 seconds to 155 seconds after program implementation. Data from nine 9-1-1 centers indicated adjusted survival ORs of 1.6 and 1.4 for patients receiving BCPR and T-CPR before EMS arrived, respectively, vs. patients who did not receive CPR.

## **BIGGEST OBSTACLE TO IMPLEMENTATION**

The biggest obstacles to implementation was convincing agencies that there was a problem in the first place. When proposing our program, management would respond that their agency was already doing T-CPR. This essentially meant they had protocols in place for suspected OHCA calls and didn't see any real need to make adjustments. We emphasized that TCPR was not an either/or proposition and that known variation in T-CPR performance meant improvement was possible. We focused on demonstrating program value at a single agency. We offered to listen to audio recordings and provide reports on baseline and post implementation measures. These documented significant process improvements that underscored our case, made the agency the known local