AHA Telecommunicator CPR (T-CPR) Advisory Statement FAQ

CPR & Emergency Cardiovascular Care

T-CPR Definitions

T-CPR	Telecommunicator CPR - previously described as dispatch CPR, dispatch-assisted CPR, or telephone CPR
Telecommunicator	The initial public safety interface with the lay public in a medical emergency (includes call takers and dispatchers)
PSAP	Public Safety Answering Point; the place where a call for service is received
OHCA	Out-of-hospital cardiac arrest
EMD	Emergency Medical Dispatch
AHJ	The Agency Having Jurisdiction; designation for the terminal PSAP responsible for dispatching emergency medical response to the lay public call for assistance
QI	Quality Improvement

General Questions

Q: What is T-CPR?
A: T-CPR leverages the skill of the telecommunicator to engage the caller (often a bystander or family member, not a medical professional), identify the cardiac arrest, and coach the caller to deliver effective CPR. T-CPR then provides a meaningful opportunity to improve survival from OHCA.

Q: Why is T-CPR so important?
A: Every year in the US, more than 350,000 people have sudden cardiac arrest outside of a hospital environment (also referred to as out-of-hospital cardiac arrest or OHCA). Unfortunately, only 1 in 10 victims survives this dramatic event. Early access to 9-1-1 and early CPR are the first 2 links in the chain of survival for OHCA. Although 9-1-1 is frequently accessed, in the majority of cases, individuals with OHCA do not receive lay rescuer CPR and wait for the arrival of professional emergency rescuers. Telecommunicators are the true first responders and a critical link in the cardiac arrest chain of survival. In partnership with the 9-1-1 caller, telecommunicators have the first opportunity to identify a patient in cardiac arrest and provide initial care by delivering CPR instructions while quickly dispatching emergency medical services.

Q: What is a telecommunicator?
A: Telecommunicators (including call takers and dispatchers) are the initial public safety interface with the lay public in a medical emergency. Consequently, telecommunicators have a formative role in the foundational links of early arrest recognition and early CPR. As the true first responder, the telecommunicator must partner with the caller to quickly identify the person experiencing cardiac arrest and, in turn, provide T-CPR instructions and rapidly dispatch the appropriate medical response.

Q: What is a Public Safety Answering Point, or PSAP?
A: The public safety answering point (PSAP) is the place where a call for service is received. These can be designated as primary (i.e., call received directly from lay public initiating the 9-1-1 call) or

secondary (i.e., call transferred from the primary PSAP) as is the case when the primary PSAP does not handle calls for EMS.

Q: **What does an effective T-CPR program look like?**

A: Effective T-CPR depends on well-prepared professionals trained to elicit information quickly, interpret that information, and provide direction.

An effective T-CPR program depends on several important operational commitments by the emergency response system, such as:
- Provide a high-quality program that includes measurement and performance goals
- Provide initial and ongoing education in T-CPR for all telecommunicators
- Conduct effective and continuous quality improvement (QI)
- Connect to an emergency medical services agency
- Designate a medical director
- Recognize outstanding performance

Q: **What is the AHA's T-CPR Advisory Statement?**

A: This advisory statement takes the recommendations from the previous ILCOR and AHA statements and provides necessary guidance for telecommunicators and local authorities to develop quality, effective T-CPR programs. Given the important public health implications of T-CPR, every emergency communications center should strive to achieve timely T-CPR instructions in all calls where an OHCA victim is identified.

Q: **How is this advisory statement different from previous statements and guidelines released on T-CPR?**

A: Previous statements from the International Liaison Committee on Resuscitation (ILCOR) and the AHA have addressed improved outcomes from T-CPR to increase lay rescuer CPR and improve OHCA outcomes. The advisory takes these previous statement, which have addressed improved outcomes from T-CPR to increase lay rescuer CPR and out-of-hospital cardiac arrest survival, and outlined the components that are needed to implement a science-based T-CPR program within a community.

Q: **How much of a difference does the AHA think these programs will make?**

A: Compared to no lay rescuer CPR, T-CPR is associated with a greater likelihood of survival after OHCA. Multiple investigations from heterogeneous populations and emergency medical systems have observed improved survival directly attributable to T-CPR. The benefit may depend in part upon the content and timing of the delivery of T-CPR instruction. A patient who suffers OHCA has a 64% higher likelihood of surviving upon to discharge if they receive TCPR than if they did not receive TCPR.

As municipalities seek to implement T-CPR programs to improve the public health, the cost-effectiveness of such programs is further enhanced by the availability of content and training

materials in the public domain. These resources include position statements from the AHA and other professional organizations. These statements provide credibility and a policy framework to complement the necessary work by physician medical directors, AHJ leadership, and elected officials to craft a locally relevant program.

FAQs for Telecommunicators and Public Safety Answering Points (PSAPs)

Q: **Does AHA have guidance for PSAPs/emergency communications departments regarding physician oversight?**

A: Physician oversight authority is essential both to issue dispatch protocols for T-CPR and to ensure protocols are locally relevant and consistent with guidelines as they evolve. The medical director providing physician oversight should review QI reports and can help set priorities for ongoing education. Ideally, the roles of EMS medical director and dispatch center medical director are combined.

Q: **Does the AHA have guidance for PSAPs to coordinate with a physician?**

A: Formal medical direction and supervision of the dispatch center is essential. An active, engaged physician provides qualified oversight of an EMD at large, including T-CPR and other prearrival instructions as well as quality-improvement practices related to these and other components of the system of care. Through active involvement, the medical director can support and implement T-CPR and other public health programs by communicating their importance to elected public officials and to the larger community.

If a center does not have a physician medical director, it may consider partnering with other EMS agency medical directors to provide oversight functions. These opportunities are often dependent upon jurisdictional boundaries and other logistical challenges in those communities. However, there is immense value in having unified medical oversight to ensure consistency and alignment across a resuscitation system of care that includes both the center and the responding EMS agencies.

Q: **What training do you recommend for telecommunicators?**

A: Once baseline T-CPR metrics are established, program development, including preliminary and ongoing training in cardiac arrest, CPR, and T-CPR, can occur. Unless telecommunicators hold EMS certification, 3 to 4 hours of initial T-CPR training is appropriate. Independent of experience or background, all telecommunicators should receive 2 to 3 hours of annual continuing medical education specific to T-CPR and cardiac arrest to ensure providers are up to date with contemporary guidelines. Relevant topics, such as anatomy and physiology, systems of care, OHCA recognition, and agonal respirations, as well as practical training exercises for special situations encountered by telecommunicators, should be included in this training. Such training should include opportunities for hands-on demonstration of psychomotor skills and interaction with other stakeholders within   system of care. Critical Incident Stress Management resources,

including employee assistance programs, peer support groups, and chaplaincy, to provide insight and awareness to telecommunicators should be offered.

Q: **What QI measures are recommended for an effective T-CPR program?**

A: In addition to training, implementation of a T-CPR program includes ongoing QI. These QI tasks include direct observation and real-time feedback to telecommunicators, call review of each identified cardiac arrest call for service, and ongoing data collection to measure progress. Timeliness of these tasks is essential to maximize their impact for each telecommunicator performing T-CPR and for the system of care as a whole. Furthermore, each of these reviews represents a chance for the ongoing training a T-CPR program requires. Reporting of metric benchmarks to T-CPR program stakeholders throughout the system of care provides accountability and opportunities to celebrate successes. Scripts for T-CPR, QI forms, checklists, and even video-recorded examples for scenario-based teaching are freely available from a number of public outlets.

Q: **How will this affect the way telecommunicators are trained? What are the current standards?**

A: Currently, there are no established guidelines for implementing T-CPR. The purpose of the statement is to create those standards.

Q: **How should telecommunicators/dispatchers identify patients in cardiac arrest?**

A: EMD protocols provide a systematic process for triaging calls and should pose 2 key questions as early in calls as possible:
1.   Is the patient conscious?
2.   And is the patient breathing normally?

If the answer to both of these scripted triage questions is "no," then telecommunicators should dispatch the appropriate EMS response and start CPR instructions without delay. This "no, no, go!" process for identifying OHCA has the potential to identify 92% of OHCAs when the telecommunicator has the opportunity to assess consciousness and breathing (e.g., not a dropped call, third-party call), and to triple rates of lay rescuer CPR.

Q: **What are the risks of starting CPR if a patient is not in cardiac arrest?**

A: Providing CPR instructions to people believed to be in cardiac arrest (unconscious and not breathing normally) is supported by the 2015 ILCOR treatment recommendations and the AHA. When in doubt about the presence or absence of signs of life, it is recommended to err on the side of initiating CPR. Because T-CPR instructions do not always result in CPR being performed on the patient, it is estimated that fewer than 11% of victims erroneously believed to be in cardiac arrest will ultimately receive CPR.

Q: **What is the optimal time between the telecommunicator receiving the call, the telecommunicator recognizing OHCA, and the telecommunicator directing the rescuer to begin CPR?**

A: According to the statement, the benchmark median time between the 9-1-1 call connection and OHCA recognition should be less than 90 seconds, and the benchmark median amount of time between the 9-1-1 call connection and first CPR compression directed by telecommunicator should be less than 150 seconds.

Q: **What's my liability as a dispatcher if I do or do not provide T-CPR?**

A: Legal liability is a very real concern as municipalities provide or delegate authority for public services. The employment of a physician medical director can assist in assessing and mitigating any perceived liability. Conversely, the writing group for the T-CPR Advisory Statement believes that failing to provide T-CPR in cases of confirmed OHCA is a significantly larger liability. Given the risk of the alternative (almost certain death), the potential benefit to resuscitate OHCA victims far outweighs the rare incidence of lasting harm from the performance of T-CPR.

Q: **What are the most common barriers to rescuers completing CPR instructions provided by a telecommunicator?**

A: Despite having well-trained and motivated telecommunicators, it may not always be possible to implement CPR instructions. Factors associated with the inability to successfully complete CPR instructions include the following: failure to recognize cardiac arrest (the most common reason), inability to initiate CPR instructions, and instructions being declined by callers.

Q: **What barriers to successful implementation of a T-CPR program were identified in the statement?**

A: Systemic barriers can slow the implementation of T-CPR programs. These barriers include but are not limited to a PSAP charter or perceived scope of practice, organizational culture, fear of liability, public relations concerns, and budget constraints. The AHA's T-CPR statement identifies and addresses ways to overcome common implementation barriers.

Q: **What is the AHA's guidance for how to implement programs with low budgets? In rural areas/areas without ample/adequate resources?**

A: Operationalizing T-CPR performance standards often remains a challenge for local communities. The variation among delivery of EMS resources across communities requires a commitment from local agency leadership to identify successful strategies for implementation. Local medical providers can champion and support adoption of the T-CPR performance metrics detailed here.

Most 9-1-1 centers have limited staff dedicated to quality-improvement activities. However, such activities as they relate to T-CPR can require little additional funding and have an enormous public health impact. AHJs can readily align quality-assurance activities within the training staff by evaluating a subset of OHCA calls. 9-1-1 centers could define a sustainable fraction of calls to evaluate, over time improving in increments the quality of the care they deliver. However, smaller systems may need additional personnel to support these activities or may need to share resources from their larger local medical community.