

**Q1:** Oftentimes, people and agencies think about CPR training as one-and-done and do not focus on measurement of CPR quality. Since CPR is a complex psychomotor skill, if we don't continuously measure and improve, our quality will worsen. Given the importance of HP-COR, how can people ensure they have HP-CPR in their EMS system?

**A1:** Do HP-CPR. Encourage practice and simulation of this essential skill with immediate feedback. Data show that frequent intervals of training every couple of weeks or rapid simulation contributes significantly to improvements.

**Q2:** Which performance element of HP-CPR is the one where there should be the most focus?

**A2:** While all components are vital, special attention should be given to early recognition since it is the foundation on which all interventions are based.

**Q3:** The presentation noted that cardiac arrest is often confused with a seizure episode. Can these two be distinguished?

**A3:** Besides checking pulse (whether there is a delay greater than 10 seconds), it is hard to distinguish between the two events.

**Q4:** With the different types of individual skills required from each of the team members in HP-CPR delivery that contribute to quality metrics, what are some tips (besides vital simulation) to optimize choreography and achieve improvement?

**A4:** In addition to the assignment of roles ahead of time, agencies would benefit from identifying and designating an HP-CPR quality improvement champion and leader whose role is to look exclusively at CPR quality improvement metrics, such as compressions and ventilations, and ensure that all key parts are being done correctly. This person could further facilitate post-event debriefing, both hot and cold, with a non-punitive approach that reinforces continuous quality improvement.

**Q5:** For agencies that use mechanical CPR, is HP-CPR still important?

**A5:** Basic HP-CPR is always essential. A common misconception is that mechanical CPR, whether by a Lucas Device or AutoPulse, makes HP-CPR less important. Since the first few minutes during cardiac arrest are the most important and often involve some level of manual CPR before the mechanical alternative is possible, HP-CPR remains foundational. Additionally, studies of mechanical CPR have shown prolonged pauses (up to 2 minutes compared to the goal of less than 10 seconds) with corresponding poor outcomes, reinforcing the importance of HP-CPR proficiency.

**Q6:** What component of HP CPR is often underemphasized despite its importance?

**A6:** A common mistake is inadequate ventilation, which is often overlooked. Over-ventilation, in particular, often results from a “bag-hard-and-fast-is-better” mentality related to the stressful nature of cardiac arrest events. When patients are over-ventilated, a decreased venous return from increased intrathoracic pressure results in worse outcomes. A simple ventilation light indicator (~\$3 investment) can greatly prevent over-ventilation with real-time feedback. Also important is to ensure that the person assigned the ventilation role is properly trained in appropriate tidal volume and flow, especially since the least trained or experienced crewmember often assumes or is assigned this position.

**Q7:** Are certain cardiac arrest interventions recommended over others (e.g., SGA or ETT, continuous or non-continuous epinephrine delivery, etc.)?

**A7:** Minimizing pauses is particularly important and should be kept in mind with certain airway interventions. Many have found SGA easier to achieve initially than ETT, while it is probably best to refrain from overdoing epinephrine delivery, especially in refractory ventricular fibrillation. Although the answer is not entirely known, what is known is HP-CPR as the most effective treatment for cardiac arrest.