

Top Ten Things To Know CPR Quality: Improving Cardiac Resuscitation Outcomes Both Inside and Outside the Hospital

1. Every year in the US more than 500,000 adults and children experience a cardiac arrest, and less than 15% survive.
2. High-quality CPR is the primary component in influencing survival from cardiac arrest, but there is considerable variation in monitoring, implementation, and quality improvement.
3. A large gap exists between current knowledge of CPR quality and its optimal implementation, leading to preventable deaths from cardiac arrest.
4. The purpose of this consensus statement is to stimulate transformative change on a large scale by providing healthcare practitioners and healthcare systems a tangible framework with which to maximize the quality of CPR and save more lives.
5. Target CPR performance metrics include the following:
 - Chest compression fraction >80%
 - Compression rate of 100-120/min
 - Compression depth of at least 50 mm (2 inches) in adults and at least 1/3 the AP dimension of the chest in infants and children
 - No excessive ventilation (a rate of <12 breaths/min with only minimal chest rise)
6. CPR quality monitoring may be based on the resuscitation team's CPR performance or the patient's physiological response to resuscitative efforts, which should be continually adjusted according to the response.
7. Resuscitation teams should coordinate efforts to ensure high-quality CPR during cardiac arrest.
8. Every EMS system, hospital, and professional rescuer program should have an ongoing CPR continuous quality improvement program that provides feedback to the director, managers, and providers.
9. A national system for standardized reporting of CPR quality metrics should be developed.
10. Through better measurement, training, and systems-improvement processes of CPR quality, we can have a significant impact on survival from cardiac arrest and eliminate the gap between current and optimal outcomes.