

**Question: What recommendations would you give a community EMS agency wanting to improve their system and success with cardiac arrest survival?**

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**1) Define what it is that you want to accomplish:**



*Mary Elizabeth Mancini, RN, PhD, NE-BC, FAHA, FAAN, Professor, Associate Dean at University of Texas at Arlington, Undergraduate Nursing Program*

I think the most important thing is setting a clear, intentional goal. What is it you want to do? In the pre-hospital environment, it may be how you best educate the community to be the first responders and to help with bystander CPR.

**2) Identify the challenges in your own system:**



*Craig Baughnsmith, M.Ed, MICP, Training Center Coordinator, Northwest Medical Training Center*

I think the first recommendation is to be able to humbly look at your own system and be honest with yourself and ask “What are our challenges within our system?” And that’s sometimes a hard thing to do for people that are leaders in moving the program forward.

**3) Take a snapshot: Where are we now?**



*Karl Kern, MD, Chair, Sarver Heart Center Resuscitation Research Group, Professor at the University of Arizona*

Absolutely necessary: you’ve got to know where you stand today. Begin to keep accurate records of results. “So we worked so many cardiac arrests, we had an x percentage survival, and a y percentage not only survived, but were neurologically intact, returned to their normal existence.” And then you kind of look at your own chain of survival and decide for your system, where is the weakness?

**4) Measure to Improve – identify the Who, What, Where, When and HOW!**



*Vinay M. Nadkarni, MD, MS, Director, Center for Simulation, Advanced Education and Innovation, Children’s Hospital of Philadelphia*

Measure what you’re doing now. Figure out what’s happening, how prepared you are, and find out where things stand right now. Because when you’ve seen one organization, one community, you’ve only seen one. There’s not a one-size-fits-all fix that works in every community, but the concepts, just like for CPR – push hard, push fast, minimize interruptions, don’t over-ventilate, full release – the five things that really make a difference in CPR. . .but not every patient needs the same depth. . .it’s kind of personalized. It’s the same thing with every community, every office building, any place you go. How you’re going to get that job done varies a little bit, but figuring out how you’re going to get it done, that’s a one-size-fit-all – you’ve got to do that.

**5) Continue to collect, track and look at your data:**



*Henry C. Lee, MD, Assistant Professor, Pediatrics, Neonatal and Developmental Medicine, Stanford School of Medicine*

In order to improve outcomes, you need to have data. And so, collecting data - what are the things that you might have a problem with? Put data on it for a few months and see, oh, this is the problem that we can try to address, and then as you work to improve that, track that data and see, how can we do better? Are we doing better than we were before? So, measure these successes and failures on an ongoing basis.

**6) Find your Champions!**



*Edward Stapleton, Associate Professor of Emergency Medicine, Stony Brook School of Medicine*

Any system that wants to make a real change, has to have a champion-to really define a champion, or recruit a champion, or have somebody in the system. Somebody's got to be dogged and really work hard and get it done. Without that, it's just not going to happen.

**7) Let your data inform your changes, then measure and repeat...again and again!**



*Tom Aufderheide, MD, Professor of Emergency Medicine, Medical College of Wisconsin*

There is no magic bullet for improving outcome from cardiac arrest. It is a system of care. We all talk about the chain of survival. Well, the hard, cold reality is that optimal outcome requires every single link in that chain to happen quickly, happen well, and be coordinated in sequence for an optimal outcome. All of us have to understand that there are no easy answers, and no quick, single thing that we can do. We need to first measure our performance, and second, implement continuous, quality improvement processes - both real time and systematic feedback - in a very calculated way, to identify weaknesses in our performance, implement changes in that; measure our changes, and then repeat that process continuously. It is a difficult process, but evidence shows us today that we can at least double our survival rates...by implementing what we know works today, and implementing it consistently and well.