



What's the Latest in Resuscitation Science and Practice?

An interview with Ed Racht, MD, Chief Medical Officer for Global Medical Response (GMR) and Program Chair for the Cardiac Arrest Survival Summit (CASSummit), to be held this Dec. 3-6, in Phoenix, Ariz.

Q. This year is the 65th anniversary of CPR. How can we apply what we learned to treat sudden cardiac arrest (SCA) to other time-sensitive emergencies, such as overdose, uncontrolled bleeding and drowning?

A. Sixty-five years! That is something. This is a particularly pivotal year for resuscitation as the American Heart Association updates the CPR and ECC Guidelines for the first time in five years and Artificial Intelligence promises to upend our expectations for what is possible.

In terms of CASSummit, we expanded our Summit theme to apply not only to sudden cardiac arrest research, best practices and medical interventions but to other time-sensitive emergencies. In today's world, it has become very clear that the principles and practices developed for cardiac arrest can also be used to decrease morbidity and mortality from other life-threatening conditions.

Q. The scientific paper "Heart Disease Mortality in the United States, 1970—2022" was recently published as original research in the Journal of the American Heart Association. The results startled many people. What is your take-away from this?

A. We all know about the significant contributions of the research and implementation into those efforts and approaches that have substantially decreased the mortality from ischemic heart disease. Those efforts have clearly made a profound impact in cardiac disease. But the article also describes the increased mortality during that same time frame from arrhythmic events. Not just a small increase, but a worrisome jump in mortality.

We know, better than anyone, what 65 years of study, incremental improvement and community intervention can do, when applied systematically. The AHJ paper should be an important wake-up call for all of us to aggressively approach the challenges of arrest and optimize survival.

Q. As you mentioned, for the first time in five years, the American Heart Association is presenting new Guidelines on CPR and ECC, just weeks before the Summit. What should attendees expect?

A. The Program Committee received 205 submissions for presentation — the most, by far, of any Summit in the past. This is the most robust program in our history, including sessions addressing the new Guidelines. The American Heart Association will have two dozen of the experts who researched and wrote the guidelines in Phoenix to explain what changed, what didn't and why.

When the Guidelines are released in late October, it begins the process of review of the impact on local educators, healthcare providers and the systems in which they work. This "translation" of the Guidelines into action is a major focus of CASSummit. What works? What is promising but not yet ready? What's the science behind recommended best practices?

A critical part of the Summit is connecting with the brilliant researchers, educators, clinicians, social scientists, community leaders and patient advocacy groups to learn, share and emerge prepared to start the next chapter of managing these patients in our communities.

Q. All is rapidly transforming the landscape in many professions. How so in resuscitation?

A. Who would have ever imagined we would be discussing AI in management of cardiac arrest and time sensitive emergencies? While this tool is young, it's growing fast. We brought in experts to CASSummit to explore how every link in the Chain of Survival is or could be transformed by AI, including a physician who is also a Google scientist.

Q. It seems there is new awareness on vulnerability to youth and athletes when it comes to SCA, building on public incidents like Damar Hamlin, the NFL football player resuscitated on live TV. What are the challenges when it comes to this special population?

A. There is nothing more devastating than seeing a young person succumb to sudden cardiac arrest and nothing more inspiring than seeing a system working perfectly to bring them back to life. Because of public cases like Damar's and others, there is a tremendously growing interest in the management of a newly recognized population risk — our youth and athletes.

As such, CASSummit has dedicated a brand new track with leaders throughout the country who will concentrate specifically on this group. This "symposium within a conference" has three parts, covered over the course of two days:

- An update of the current science for SCA in the young
- Improving emergency preparedness in educational institutors
- Improving emergency preparedness on athletic fields and in the community as a whole

Led by Dr. Stu Berger and Dr. Jonathan Drezner, all moderators and speakers — more than 20 in all — are true experts and leaders in this field. I'm excited to learn how we can take their practical lessons back to our communities for implementation.

Q. What sets the Cardiac Arrest Survival Summit apart from other conferences?

A. I attend a lot of conferences, and I have to say this might be my favorite. It only happens every two years and is a true labor of love to all the volunteers who make it happen. It may sound corny, but it truly takes a village to save the life of a person suffering a time-sensitive emergency. From the bystander doing CPR for the first time — sometimes getting real-time training from an emergency medical dispatcher — to the EMS response, to the hospital care and all the educators, researchers, managers and specialists in between.

The people who attend CASSummit have a common passion — to save more lives. To hear their conversations in the classrooms, in the Exhibit Hall, in the hallways, is truly inspiring. Many say the special Survivor Celebration, featuring the stories of those who have been saved, is a highlight of the meeting.

It's topics are serious but it's also a fun Summit, all about rejuvenation. Phoenix in December, with sunshine and decked out for the holidays? I could think of worse ways to mix business with pleasure.