UAB Hospital introduced Resuscitation Quality Improvement® (RQI) into its ED in October of 2015. Since then, UAB staff, specifically training coordinators, have spent a lot of time and effort ensuring their emergency team’s CPR skills are being properly maintained with RQI.

“I’m very particular with our people in the emergency department,” Michael Lovelace, Program Coordinator and AHA Training Coordinator, said. One of the first things Lovelace has any aspiring nurse in his department do is a ‘blind run’ at the RQI station to gauge their CPR skills. After instructing them to give him what they perceive to be two minutes of quality CPR, Lovelace turns the volume down so the students aren’t receiving feedback from the RQI program and lets his students demonstrate their skills. After they’re finished, he’ll review their performance and then let them use the system again, this time with feedback enabled. This approach, said Lovelace, is central in showing students where they can improve their skills. “When we turn the system on and let them use the machines with feedback, we could see that their skills performance just goes straight up. There’s no dip in their skills.”

RQI has become a crucial piece to UAB Hospital’s resuscitation education. “All of our nurses and PCTs have to do it or you won’t get scheduled,” said Lovelace. This is a major change in the hospital’s training strategies from only approximately two and a half years ago. “Prior to RQI implementation, [skills training] was in-person every two years. And [our training] was on the standard CPR manikin. There were no feedback devices, no monitoring, nothing like that… And that’s the way it’s been done and is still being done by a lot of people.”

Lovelace emphasized the decline of skills as a major challenge his staff had to face prior to implementing RQI. “I believe that skill is perishable if you do not do that skill on a routine basis,” he said. “People are required to do their CPR skills CONTINUED ON BACK
every two years. That’s the hospital standard. In two years you forget how deep you need to go, how fast you need to go, where your hands need to go. But what you’re getting with RQI is high-frequency and low-dose. You’re doing ventilations and compressions every three months on adult and infant [manikins]. I believe that has proven that you know how to do CPR. It’s the maintenance of competency – that’s what RQI does.”

If there is anyone who can appreciate the life-saving importance of quality CPR, it’s Michael Lovelace. When walking from his office between teaching ACLS and BLS classes at the UAB School of Medicine in April 2017, Lovelace began experiencing severe shortness of breath. “I did what any good nurse will do and I sat down under the air conditioning and said ‘Oh this will go away.’ It didn’t go away,” said Lovelace. Shortly after, he decided he needed to go the hospital immediately.

After driving himself to UAB Hospital, about four blocks away, Lovelace walked straight to the Trauma Center and requested an EKG. “One of the physicians said ‘We’re going to call it,’” said Lovelace. “Whenever they say that, if you run an EKG, it means you’re having a heart attack.”

Shortly after that Lovelace became unconscious. “I thought it was just sleep. I found out later that was a v-fib (ventricular fibrillation) arrest. They shocked me a total of four times; three times while I was out. They performed CPR on me for about 18 minutes,” said Lovelace. “I spent almost a week in CCU doing cardiac rehab. They did proper CPR and broke ribs – six on the right and five on the left.” Despite all of this, Lovelace remains positive. “I’m here to tell my story today,” he said. “I’m fortunate.”

Having experienced the benefits of RQI firsthand, Lovelace detailed how the implementation of this new quality improvement program has transformed the Emergency Department at UAB Hospital. “Staff are now so confident in their skills that when a code comes into the ED, everybody jumps in to help,” said Lovelace. “Now they want to take what they have learned and prove that they know it.”

Lovelace went on to name several other ways UAB Hospital has benefitted from RQI, including key areas such as staff satisfaction and cost savings. “The cost benefit [is] I don’t have to pay my staff to go to a class. They take that BLS class every three months, basically. So I’m not having to pay for them to go to an external class or arrange for someone to cover for them when they have to go to a class,” said Lovelace. “[Staff satisfaction is up] because you’re not leaving the department to go to a class. It takes five minutes every three months to keep your competency up. Real simple.”

According to Lovelace, though, none of those benefits matter when compared to improved patient safety and outcomes provided by RQI. “If you’re doing proper CPR you have better outcomes. Period. Without proper CPR, people die,” said Lovelace. “If you’re not pushing deep enough or fast enough, or letting the chest completely recoil, the patient’s outcomes won’t be as good. Patients are going to die; that’s a given. But if we can try to prevent them from dying by giving them proper CPR, we can give them that second chance. Like me! I got a second chance and that’s all there is to it. I’m here because of proper CPR.”

“It’s important to not only learn your skills, but to maintain your competency so that you can do it right. When I come in under cardiac arrest, I expect you to do it right.”

— Michael Lovelace