The University of Alabama at Birmingham Health System CASE STUDY

In late 2015, the **University of Alabama at Birmingham Health System (UAB)** introduced the Resuscitation Quality Improvement® (RQI®) Program to enhance clinicians' ability to deliver high-quality CPR. Since then, RQI has become an essential part of the hospital's education program for employees, spurred by a close call with one of its team members. Michael Lovelace, former program coordinator and American Heart Association® training coordinator for UAB, realized the benefits of high-quality CPR when he had a heart attack.

Challenge

Before implementing the RQI Program, hospital employees completed CPR skills training once every two years in an in-person learning environment. Employees didn't receive feedback on their CPR skills; as a result, many employees' skills degraded. This can have serious consequences for patients, as clinicians with outdated CPR skills can't perform the task to the best of their ability, leading to poorer patient outcomes.

> "People are required to do their CPR skills 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."

This was one of the driving factors behind the hospital's decision to leverage the RQI Program. The RQI CPR training model includes high-frequency, low-dose education coupled with skills simulation. During the experience, learners receive real-time feedback to enhance their knowledge and improve their skills.

Solution

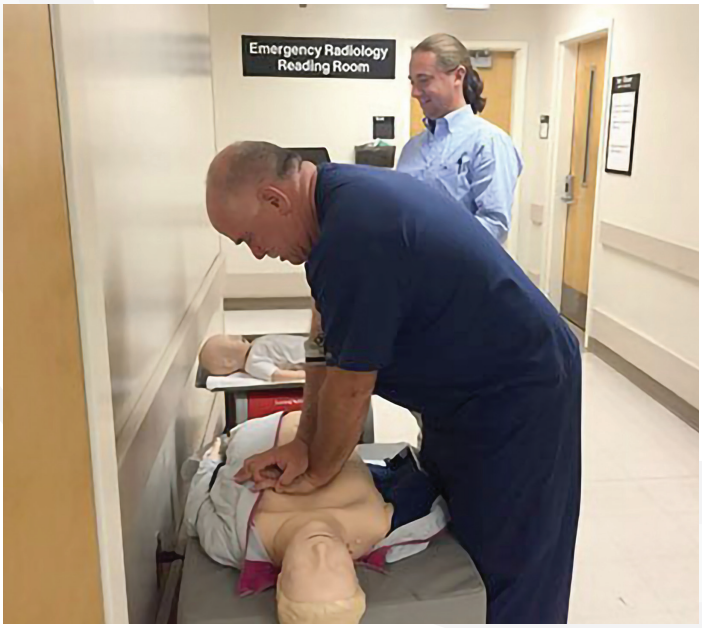
Lovelace was instrumental in adopting the RQI Program — and if anyone knows the importance of CPR skills mastery, it's him. In 2017, Lovelace was walking on the UAB School of Medicine campus when he began to experience severe shortness of breath. When his symptoms didn't improve, he drove himself to the emergency department for an electrocardiogram. That's when physicians determined he was having a heart attack.

Lovelace shortly became unconscious. **"I thought it was just sleep," he says. "I found out later that was a V-fib arrest. They shocked me a total of four times; three times while I was out. They performed CPR on me for about 18 minutes. They did proper CPR and broke ribs — six on the right and five on the left."**

Lovelace then spent almost a week rehabilitating in the cardiac care unit. He's around to tell his story today because the attending physicians' CPR skills were on point.

Following his experience, Lovelace introduced the RQI Program to others at UAB Hospital. Since then, the program has revolutionized how employees receive high-quality CPR training. Lovelace now works with all aspiring nurses in his department to introduce them to a unique approach: a "blind run" at the RQI Simulation Station to assess their CPR proficiency. Trainees perform up to two minutes of high-quality CPR without feedback from the station. Following this exercise, Lovelace provides constructive feedback and allows the trainees to use the system again. The station provides feedback on the second attempt.

This method helps students pinpoint areas where they can enhance their skills. Each simulation station gives users immediate feedback, which improves CPR performance. This helps maintain CPR skills and knowledge over time.



"What you're getting with RQI is high-frequency and low-dose [training]," Lovelace explains, "You're doing ventilations and compressions every three months on adult and infant [manikins]. It's the maintenance of competency — that's what RQI does."

Results

After implementing the RQI Program, staff members now demonstrate heightened confidence in their CPR skills. They readily come together to respond to medical emergencies. Additionally, the hospital has seen significant cost savings.

"I don't have to pay my staff to go to a class; I'm not having to pay for them to go to an external class or arrange for someone to cover them when they have to go to class. [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," says Lovelace.

Now, all nurses and patient care technicians must complete the RQI Program or they may experience changes to their scheduled work shifts. The RQI model engages clinicians once every three months; in many cases, employees complete the training within 30 minutes.

Looking Forward With Confidence

In addition to the benefits to hospital staff members, Lovelace firmly believes the most critical benefits are improved patient safety and outcomes. Because poor-quality CPR can have consequences, ensuring all healthcare employees receive proper CPR can significantly enhance patient outcomes.

> "If we can try to prevent them from dying by giving them proper CPR, we can give them that second chance," Lovelace notes. "Like me! I got a second chance, and that's all there is to it. I'm here because of proper CPR."