## CASE STUDY

## Family, EMS Crew, and the AutoPulse Team Up for the Best Possible Outcome

Mike Snyder's parents were worried about the safety of their son, Jordan, 24, who was serving in Afghanistan. Little did they know that it would be Mike, their 27-year-old son living nearby in Richmond, Virginia, who would be the one at death's door.

It happened one December night when Mike, his wife, Jen, her brother Justin, and his girlfriend, and two cousins retreated to Justin's apartment after the group had spent the evening at a movie followed by a late dinner. Mike said he didn't feel well, so Jen went to get him a glass of water. By the time she arrived back at his side, Mike had collapsed and wasn't responding. Justin immediately called 911 while his cousin Caleb initiated CPR, setting the Chain of Survival process into motion.

With the Richmond Ambulance Authority (RAA) on the line, the family and friends put the phone on speaker so they could hear the life-saving instructions from emergency dispatcher Travis Gortney. This was Gortney's first cardiac arrest; he had joined the force four months earlier. After quickly assessing the information provided, Gortney concluded that Mike was in sudden cardiac arrest. What Gortney remembers most about that night is how surprisingly calm and adept at following his instructions this group was.

Firefighters from Richmond's Quint 18 were the first to arrive and continued CPR until paramedic



RAA emergency dispatcher Travis Gortney

Alex Klimenko and his EMT partner Jonathan Carroll arrived to deliver advanced life support. "We grabbed all of our equipment," says Klimenko,

"including the AutoPulse® Non-invasive Cardiac Support Pump, which is part of our protocol, and ran up the three flights of stairs to the apartment."

Finding Mike collapsed in the doorway to the bathroom with no pulse and not breathing, they quickly placed him on the AutoPulse for continuous, consistent chest compressions. In addition to compressions from the AutoPulse, Mike received seven defibrillating shocks from the ZOLL E Series<sup>®</sup>.

"By this time, Mike had been in sudden cardiac arrest for 30 minutes, and we had worked on him for 20, using everything we had, including medication and therapeutic hypothermia," said Klimenko. "Since we had the AutoPulse, we could carry him down the three flights of stairs while it continued chest compressions. Without the AutoPulse, getting him down those stairs would have been 10 times more difficult, and the outcome would have been different. The device makes an incredible difference, which is why we kept it on him during the 12-minute lights-and-siren drive to Virginia Commonwealth University Hospital."

Easy to use, trained staff can deploy the AutoPulse in less than 30 seconds.



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## RAA paramedic Alex Klimenko



"We used a lot of training and a lot of technology to save this man's life," said Klimenko. "In addition to the quick response of CPR, what also factored heavily into Mike's survival was the use of the ZOLL AutoPulse. It continued perfusion to his brain and delivered quality chest compressions, something we wouldn't have been able to provide without the device."

According to Klimenko, RAA has been using the AutoPulse since 2005. RAA was one of the first emergency services to adopt the device, and they've seen a significant increase in the number of patients who obtain return of spontaneous circulation (ROSC) as a result. "The AutoPulse is easy to use," he explains. "We can teach someone how to use it in 30 minutes. When we use the AutoPulse, it's a life or death situation, and it takes under a minute to deploy."

At Virginia Commonwealth University (VCU), Mike was handed over to the emergency department. Although he regained a pulse, Mike remained unconscious, which necessitated further treatment. He was moved to the VCU Advanced Resuscitation Cooling Therapeutics and Intensive Care (ARCTIC) unit where he was cooled to roughly 33 degrees Fahrenheit. After 24 hours, the highly skilled ARCTIC team slowly began rewarming Mike's cooled body and provided intensive support to ensure his ultimate recovery. He regained consciousness and was released from the hospital.

A month later Mike returned to VCU where he underwent an open heart ablation procedure to correct the rogue pathway that caused his arrest. Mike says that he was diagnosed with Wolff-Parkinson-White syndrome when he was young, after his dentist identified it as a possibility. People with this syndrome have an abnormal electrical pathway that can cause palpitations, dizziness, and other symptoms. Although rare, Wolff-Parkinson-White syndrome can also cause sudden cardiac arrest. Until his near-death experience, Mike had been asymptomatic for years.

"Mike was a heavy smoker and very particular about stuff," says Mike's wife, Jen. Now he is much more relaxed. He quit smoking; he works out more now. He enjoys running trails and loves to play golf."



RAA paramedic Alex Klimenko and survivor Mike Snyder

Mike is glad for the second chance at life:
"I get to see the sun rise every day and see my daughter smile. And I'm forever grateful to ZOLL and the team at RAA who saved my life."

For more information on the ZOLL AutoPulse, please call 800-804-4356 or go to www.zoll.com/autopulse.

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