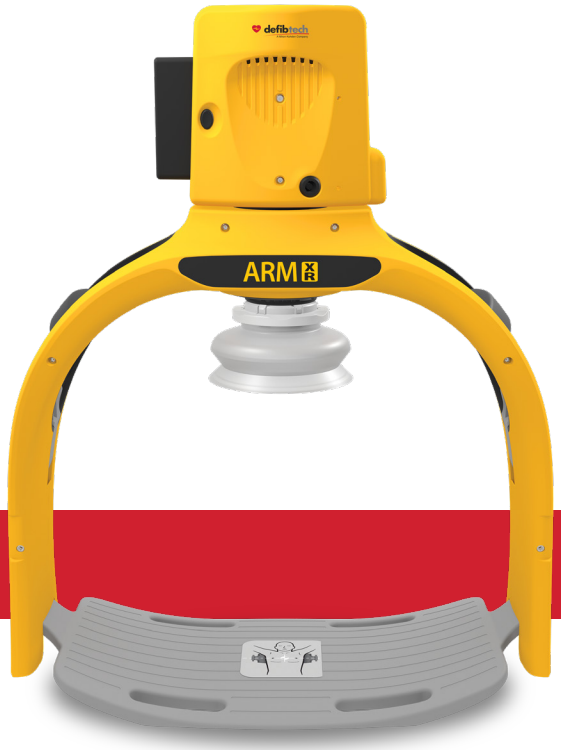
ARM XR CASE STUDY: PAFFORD EMS

TRANSFORMING CARDIAC ARREST RESPONSE WITH THE ARM XR AT PAFFORD EMS



BACKGROUND

Pafford Emergency Medical Services, a leading provider of emergent and non-emergent transport services, and its sister company operate across Louisiana, Mississippi, Arkansas, and Oklahoma. Founded in 1967 with a single ambulance in Magnolia, Arkansas, Pafford EMS has grown into a robust organization with over 250 ambulances, six helicopters, and three fixed-wing aircraft. They are recognized for their specialization in rural emergency medicine and their commitment to underserved communities. With more than 800 emergency calls and 100 ambulances on the road daily, Pafford's operations are high-intensity and high-volume. Cardiac arrests are a frequent challenge, sometimes occurring multiple times a day in a single region.

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THE CHALLENGE

Before acquiring mechanical CPR devices, Pafford EMS relied solely on manual chest compressions, which proved to be both exhausting and demanding. In many of the rural areas they serve, volunteer fire departments had limited resources—or none at all—to assist, resulting in a lack of sufficient personnel for prolonged, high-quality CPR. "When there are no firemen or first responders available, it's just two providers on the ambulance," said Gavin Hall, Education and Quality Assurance Manager at Pafford EMS. "Just a quick look at ACLS says eight people are optimal, and these human capital resources are more easily found in ERs and ICUs...and here we are with two people on ambulances across America."

In order to improve patient outcomes, drastic changes and significant investments had to be made in prehospital delivery of resuscitation.

THE SOLUTION: ARM XR DEVICE DEPLOYMENT

Four to five years ago, around the start of the COVID pandemic, Pafford EMS implemented their first mechanical CPR devices from Defibtech. They now have over 80 devices deployed, and used them approximately 2,000 times last year. In the last two years, Pafford EMS has begun to transition their fleet from using the earlier Lifeline ARM compression device to the new ARM XR model. The ARM XR offers fully automated, high-quality chest compressions, significantly reducing the burden on EMS providers. "When it came to selecting a mechanical CPR device, one brand came to mind – Defibtech. It just maximized our efficiency," said Hall. "As a provider, as a prehospital clinician, we know that the number one goal throughout the whole resuscitation process is to minimize pauses in chest compressions. That can be difficult to do when it's just the two of you and you have to manage an airway, you have to give medications, you have to do rhythm analysis, and as a top priority maintain a high awareness of safety. We know this device will continue to provide those good, high-quality chest compressions. There's no human factor in it. You make sure the battery is charged at the beginning of the day, and you're good to go. The ARM XR takes care of the hardest part of the whole resuscitation. Without the burden of physical labor, we can focus all of our efforts in other areas such as safety, airway management, medication administration, and ultimately achieve a return of spontaneous circulation."

KEY FEATURES OF THE ARM XR NOTED BY PAFFORD EMS

- Ease of deployment in the field and during transport.
- Battery swapping system that's intuitive and fast.
- Compact, durable frame, well-suited for rural operations.
- Stable patient transport on their stretchers.
- Reliable during transport, especially in rural areas where transport times to the hospital can be lengthy.

PATIENT IMPACT

The ARM XR has continued to contribute to successful resuscitations. "At a recent case, we arrived on scene," said Hall. "The fire department was doing good-quality chest compressions and immediately upon the ambulance's arrival, we applied the ARM XR, it started doing chest compressions, and within minutes we were able to successfully defibrillate the patient. Defibrillation and medications assist in the resuscitation, but none of it works if you're not doing good chest compressions. Within minutes of applying the

ARM XR, because we adequately perfused the patient, a pulse was restored, and they were discharged home after a week stay in ICU." Hall described that their team frequently hears stories or gets calls from hospitals reporting that patients had successful clinical outcomes. "While leaders typically credit our providers because they provided the care, we also know that we have provided them the necessary tools to be successful. The entire resuscitation, and its success, revolves around this device," said Hall. "Time and time again, we get calls saying, Hey, grandpa lived, my wife is alive, whatever the case might be, and it's because we've made this investment, and our providers love to use it because of the difference it makes in resuscitation."

PROVIDER IMPACT

Another impact of Pafford's commitment to providing their crews with automated chest compression devices is that teams no longer emerge from calls physically drained. The device allows clinicians to focus on airway management, medication delivery, and scene logistics instead of performing exhausting CPR. "When you are doing manual compressions, you're so tired," said Hall. "Crews are drenched in sweat. Now, with the ARM XR device taking care of all that, they're walking out to the ambulance after finishing a call, restocked, and they're ready for the next one. They don't need a shower and are good to go because we've removed that stress. So, our providers are huge fans."

RECOMMENDATION

Pafford is committed to equipping every 911 ambulance with an ARM XR. Hall explained, "It's not a recommendation, it's a requirement. This device offloads work and ensures every patient receives consistent, effective care."

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The ARM XR has received overwhelmingly positive feedback from field crews. "It's considered a 'must-have' piece of equipment at the start of every shift. Providers also take pride in knowing this technology is available in their communities. They always make sure the ARM XR is ready to go. It's a back saver and more importantly a life saver," said Hall.

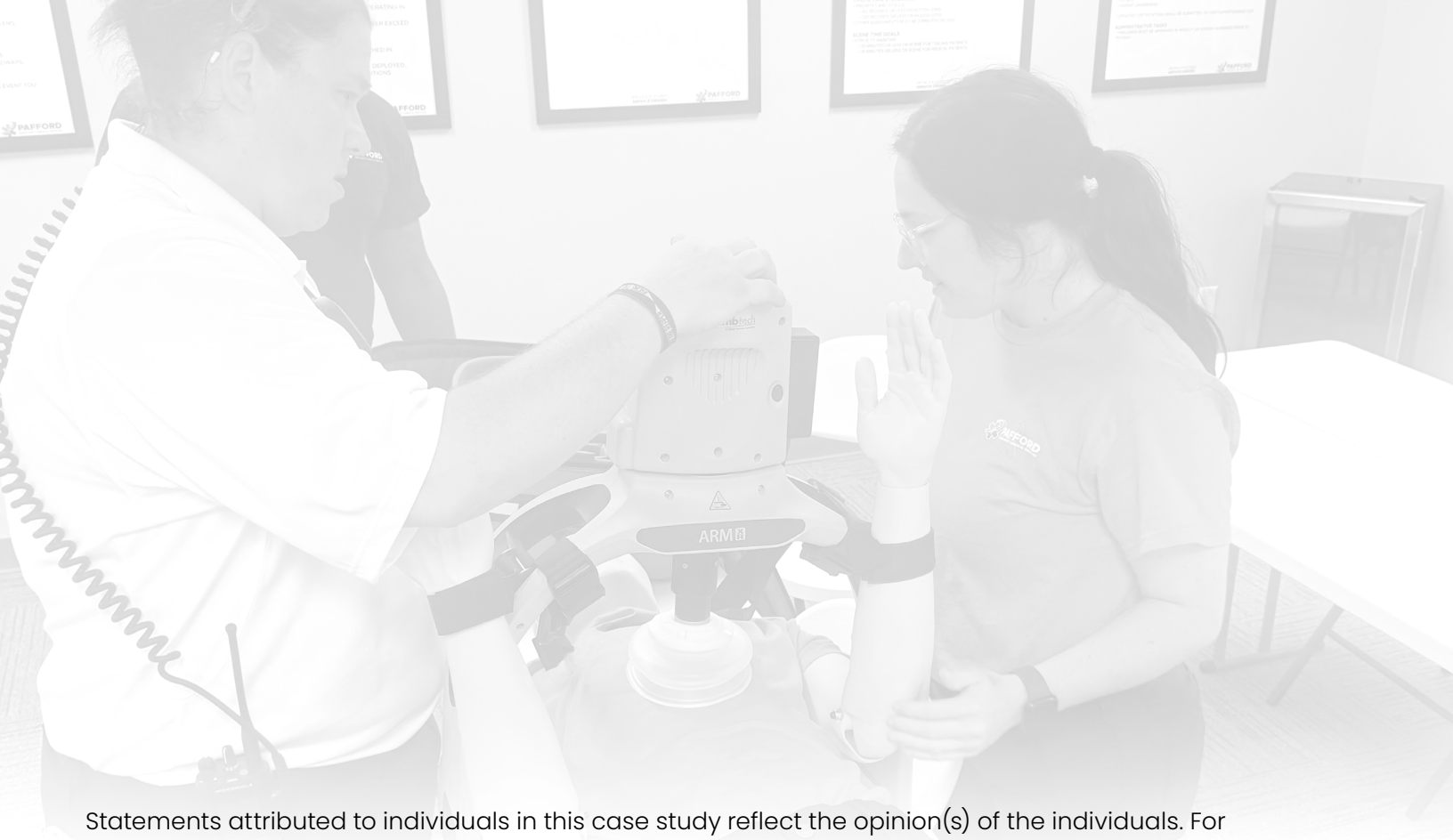
Moreover, Hall and the Pafford EMS leadership team strongly endorse the ARM XR. "If a department hasn't deployed this essential equipment," said Hall, "the question is: why not? It's not just best practice; it's the standard of care." Pafford has even donated Defibtech ARMs to local fire departments with high incidences of cardiac arrest responses to expand access to this critical technology and continues to advocate for industry-wide adoption.

CONCLUSION

Through its investment in ARM XR technology, Pafford EMS has:

- Dramatically enhanced patient care during cardiac arrest.
- Empowered its field teams to operate more efficiently and safely.
- Significantly reduced worker's comp claims and the physical strain on their crews.

As Pafford EMS continues to expand, the ARM XR remains a core tool in delivering high-quality emergency medical care, particularly in the rural communities that need it most.



Statements attributed to individuals in this case study reflect the opinion(s) of the individuals. For information about the ARM XR indications, contraindications, instructions for use and other important information, refer to the ARM XR User Manual.

USA: The RMU-2000 ACC is intended for use as an adjunct to manual cardiopulmonary resuscitation (CPR) on adult patients when effective manual CPR is not possible (e.g., during patient transport, or extended CPR when fatigue may prohibit the delivery of effective/consistent compressions to the victim, or when insufficient personnel are available to provide effective CPR).

International: The RMU-2000 Automated Chest Compressor (ACC) is to be used for performing external cardiac compressions, as an alternative to manual CPR, on adult patients who have acute circulatory arrest, defined as the absence of spontaneous breathing and loss of consciousness. The RMU-2000 should only be used in situations where chest compressions are likely to help the patient.

Local regulations may require restriction of this device to sale by or on the order of a physician.

Authorized European Representative:

EC REP
EMERGO EUROPE
Westervoortsedijk 60
6827 AT Arnhem
The Netherlands

UK Responsible Person:

Nihon Kohden UK Ltd.
Unit 3, Heyworth Business Park
Old Portsmouth Road, Peasmarsh
Guildford, Surrey GU3 1AF
United Kingdom

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CE 2797 UKCA 0086

Defibtech, LLC • Guilford, CT 06437 USA • 1-203-453-4507
1-866-DEFIB-4U (1-866-333-4248) • www.defibtech.com

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