

November 13, 2025

Letter from ACR Board: Advanced Cardiac Resuscitation operational guidance and the 2025 AHA/ILCOR mechanical-CPR update – practical implications and expectations

Dear ACR Community,

The recent 2025 AHA/ILCOR updates reaffirm that high-quality manual CPR remains the foundation of resuscitation, and routine replacement of manual compressions with mechanical devices is not recommended. ACR provides operational guidance emphasizing minimizing all pauses, strict choreography, and ongoing quality improvement.

Key clinical points:

- Begin immediate high-quality manual compressions for every adult cardiac arrest.
- Mechanical devices are an adjunct, not a substitute, and should be used in a manner that optimized Chest Compression Fraction (CCF).
- Limit interruptions in compressions – survival benefit is highly time dependent.
- If mechanical CPR (mCPR) is used, adhere to these strict requirements:
 - Manual compressions first until the device is ready for immediate deployment
 - Strict deployment protocols and role assignments with minimal pause time.
 - Track metrics and review every case for process improvement
 - Maintain documented training and quarterly simulation.

The 2025 AHA/ILCOR guidelines help us refine algorithms and system-level care by emphasizing bystander CPR, AED access, and QA. Mechanical CPR may be considered in certain circumstances, but these devices must be deployed in a consistent manner.

ACR recommendations for each EMS agency maintaining or introducing mCPR:

1. Develop a deployment SOP and rigorous training schedule.
2. Review all cardiac arrests using mCPR, focusing on deployment pause times and CCF
3. Demonstrate non-inferiority to manual CPR in outcomes and maintain oversight.

In summary, we recommend prioritizing immediate manual compressions, limiting any pause for device deployment, training continuously, and reviewing every case. ACR offers useful templates but must align with 2025 AHA/ILCOR recommendations and local quality data. ACR recommendations are not a substitute for local physician medical director protocols or agency policies.

Respectfully,

ACR Board of Directors

References

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