Letters

Editor's Note

Automated External Defibrillators Are Only Effective If Put to Use

In their cohort study in this issue of *JAMA Internal Medicine*, Kolkailah et al[1] found that rates of bystander automated external defibrillator (AED) use were similarly low in both states that mandate and those that do not mandate such devices in recreational facilities: 19% vs 18%. The fact that cardiac arrests with ventricular tachycardia or ventricular fibrillation rhythms have significantly better odds of survival when early cardiopulmonary resuscitation is performed has likely motivated policies to expand AED availability.[2] However, availability alone does not guarantee appropriate use by bystanders.

To effectively increase bystander AED use, AED availability needs to be coupled with educational programs designed to reach broad community stakeholder audiences. A simple educational campaign might emphasize 4 key messages: (1) AED use saves lives, (2) anyone can use AEDs safely, (3) AEDs can and should be used before arrival of emergency medical services, and (4) the device itself provides step-by-step instructions to the bystander.

Policy interventions, such as the mandate for seatbelts or AED availability, can be potent tools to improve population health, particularly for high-risk health conditions and/or in places where a high-risk health condition is likely to occur. However, policies can only be effective when they are implemented with community stakeholder collaboration and training. While most US states have legislative mandates for layperson AED use training, only a handful of states required emonstration and monitoring for appropriate AED use, review of AED use data, and quality improvement planning. This study[1] demonstrates continued need for public access to AED education, training, and quality improvement initiatives and related implementation research, as called for by the Institute of Medicine.[3]

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1. Kolkailah AA, Chan PS, Li Q, Uzendu A, Khan MS, Girotra S. Automated external defibrillator use after out-of-hospital cardiac arrest at recreational facilities. *JAMA Intern Med*. Published online January 2, 2024. doi:10.1001/jamainternmed.2023.7248

2. Pollack RA, Brown SP, Rea T, et al; ROC Investigators. Impact of bystander automated external defibrillator use on survival and functional outcomes in shockable observed public cardiac arrests. *Circulation*. 2018;137(20):2104-2113. doi:10.1161/CIRCULATIONAHA.117.030700

3. Institute of Medicine. *Strategies to Improve Cardiac Arrest Survival: A Time to Act*. National Academies Press; 2015. doi:10.17226/21723